

Appendices  
February 2015

## **Appendix A**

### **Existing Permits and Registry of Joint Stocks**

# Profile

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**PROFILE** - NATIONAL GYPSUM (CANADA) LTD. - as of: 2014-10-28 01:36 PM

<b>Business/Organization Name:</b>	NATIONAL GYPSUM (CANADA) LTD.
<b>Registry ID:</b>	1002925
<b>Type:</b>	Extra-Provincial Corporation
<b>Nature of Business:</b>	
<b>Status:</b>	Active
<b>Jurisdiction:</b>	Canada
<b>Registered Office:</b>	1959 UPPER WATER STREET STE.1100 HALIFAX NS Canada B3J 3E5
<b>Mailing Address:</b>	PO BOX 2380 HALIFAX NS Canada B3J 3E5

## PEOPLE

Name	Position	Civic Address	Mailing Address
SAMUEL A. SCHIFFMAN	Director	4704 BINFORD'S RIDGE ROAD CHARLOTTE NORTH CAROLINA 28226	
GEORGE W. BECKWITH	Director	1709 ROSEBARK LANE CHARLOTTE NORTH CAROLINA 28226	
JEFFREY D. NEWTON	Director	1707 #2 HIGHWAY MILFORD STATION NS B0N 1Y0	
THOMAS C. NELSON	PRESIDENT	652 HEMPSTEAD PL. CHARLOTTE NC 28207	
RICHARD G. PARKHURST	TREASURER	2164 COLONY ROAD CHARLOTTE NC 28209	
SAMUEL A. SCHIFFMAN	SECRETARY & VICE PRESIDENT	4704 BINFORD'S RIDGE ROAD CHARLOTTE NC 28226	

JOHN M. CORSI	VICE PRESIDENT	4008 FOXCROFT ROAD CHARLOTTE NORTH CAROLINA 28211	
GEORGE W. BECKWITH	CHIEF FINANCIAL OFFICER	1709 ROSEBARK LANE CHARLOTTE NORTH CAROLINA 28226	
ANTHONY CHAPMAN	Recognized Agent	SUITE 1100, 1959 UPPER WATER STREET HALIFAX NS B3J 3E5	BOX 2380 HALIFAX NS B3J 3E5

ACTIVITIES

Activity	Date
Annual Renewal	2014-04-25
Annual Statement Filed	2014-04-24
Annual Statement Filed	2013-06-25
Annual Renewal	2013-04-17
Annual Statement Filed	2013-03-22
Annual Renewal	2012-05-01
Annual Statement Filed	2012-05-01
Appoint an Agent	2011-09-30
Annual Statement Filed	2011-05-09
Annual Renewal	2011-04-13
Annual Statement Filed	2010-05-10
Annual Renewal	2010-04-09
Annual Statement Filed	2009-03-25
Annual Renewal	2009-03-25
Annual Statement Filed	2008-04-24
Annual Renewal	2008-04-22
Annual Renewal	2007-05-01
Annual Statement Filed	2007-05-01
Annual Statement Filed	2007-05-01
Annual Statement Filed	2007-05-01
Annual Renewal	2006-04-25
Annual Statement Filed	2006-04-25
Annual Renewal	2005-04-21

Annual Statement Filed	2005-04-20
Annual Statement Filed	2004-04-23
Annual Renewal	2004-04-20
Change of Directors	2003-08-13
Annual Renewal	2003-05-28
Annual Statement Filed	2003-05-27
Annual Renewal	2002-04-02
Annual Statement Filed	2002-03-28
Appoint an Agent	2002-02-08
Annual Renewal	2001-05-30
Annual Statement Filed	2001-05-30
Annual Statement Filed	2000-05-05
Annual Renewal	2000-04-26
Annual Statement Filed	1999-07-06
Annual Renewal	1999-04-06
Annual Renewal	1998-05-11
Annual Statement Filed	1998-05-08
Annual Renewal	1997-05-22
Annual Statement Filed	1997-05-12
Annual Report Filed	1996-06-03
Change of Directors	1996-06-03
Agent Filed	1973-10-18
In Business Since	1937-01-25
Registered	1937-01-25
Incorporated in Other Jurisdiction	1929-04-30

Show All [Collapse](#)

**RELATED REGISTRATIONS**

There are no related registrations on file for this company.

Nova Scotia



**Department of the  
Environment**

**Application for Approval  
of  
Industrial Waste Treatment Works**

**National Gypsum (Canada) Ltd.**  
**(Name of Company or Other Owner)**

**File No.:** 11-89-0140

**Approval No.:** 89-100

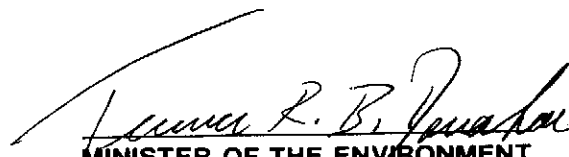
**Project Description:** National Gypsum (Canada) Ltd.  
Gypsum Operation  
Dutch Settlement  
Halifax County

**Stipulations:** Please refer to the attached "Stipulations  
Sheet".

**Recommended:**



**Approved:**

  
**MINISTER OF THE ENVIRONMENT**  
**Date Approved:**

## STIPULATIONS SHEET

### Nova Scotia Department of the Environment

**Project:** National Gypsum (Canada) Ltd.  
Gypsum Operation  
Dutch Settlement, Halifax County

**File Number:** 11-89-0140

**Approval Number:** 89-100

#### **Stipulations:**

This application is recommended for approval subject to the following stipulations:

##### 1. Scope of Approval

This approval relates to National Gypsum (Canada) Ltd. and the application to continue to operate a gypsum quarry at Dutch Settlement, Halifax County.

##### 2. General Stipulations

- a) The applicant, National Gypsum (Canada) Ltd., shall operate their quarry in accordance with the provisions of the:
  - i) Environmental Protection Act, RSNS, 1989;
  - ii) Water Act, RSNS, 1989;
  - iii) Dangerous Good and Hazardous Wastes Management Act;
  - iv) Local municipal environmental bylaws and zoning restrictions; and
  - v) Regulations pursuant to the above Acts.
- b) The Minister reserves the right to modify amend, or add stipulations to the Industrial Permit.
- c) This Industrial Permit is not transferrable without the written permission of the Minister.
- d) National Gypsum (Canada) Ltd. shall prepare a contingency plan to deal with accidental spills of hazardous material or wastes on-site. This plan shall be submitted to the Nova Scotia Department of the Environment for approval by July 1, 1992.

- e) National Gypsum (Canada) Ltd. shall notify the Nova Scotia Department of the Environment prior to any major process changes, increases in production or waste disposal practices which are not approved under authorization of the permit.
- f) National Gypsum (Canada) Ltd. shall secure general liability insurance in the amount of \$1 million and produce a Certificate of Insurance to the Department as proof that such insurance has been acquired. National Gypsum (Canada) Ltd. shall secure coverage for any damages, claims or suits to any public or private dwelling, road, transmission line or water supply which may be damaged as a result of surface quarrying operations.
- g) National Gypsum (Canada) Ltd. shall bear expenses incurred in carrying out the monitoring of surface water, blasting, dust, noise and pre-blast survey requirements.
- h) National Gypsum (Canada) Ltd. shall be required to secure legal access agreements to adjoining properties prior to advancing any quarry activities within 100 feet of their property boundary.

### 3. Particulate Emissions

- a) Particulate (dust) emissions shall not exceed the following limits at the site property boundaries:

Annual Geometric Mean -  $70 \mu\text{g}/\text{m}^3$   
Daily Average (24 hr.) -  $120 \mu\text{g}/\text{m}^3$

Note: Monitoring shall be conducted using high volume samplers at the request of the Nova Scotia Department of the Environment.

- b) The generation of fugitive dust from site shall be suppressed with water sprays or other appropriate dust suppressants.

### 4. Sound Levels

Sound levels measured at the property boundaries shall not exceed the following equivalent sound levels (Leq):

(Leq) - 65 dBA (0700-1900 hrs) Days  
60 dBA (1900-2300 hrs) Evenings  
55 dBA (2300-0700 hrs) Nights

Note: Monitoring shall be conducted at the request of the Nova Scotia Department of the Environment.

5. Surface Water

- a) The site shall be maintained to prevent siltation of the surface water which is discharged from the property boundaries into the Shubenacadie River, Big Pond Brook, and MacLennan Brook. This includes the installation of soil erosion and sedimentation controls designed to meet the specifications of this Department if required.
- b) National Gypsum (Canada) Ltd. shall establish one compliance monitoring station for quarry dewatering located at station #2 on Figure F-1, Nolan Davis and Associates, July 1989 Project H89224. This liquid effluent discharge station for quarry dewatering into the Shubenacadie River shall be designated NG-1. Final effluent shall be monitored at the frequency described and meet the following limits:

**Final Effluent Discharge Limits**

Parameter	Maximum in a Grab Sample	Quarterly Arithmetic Mean	Monitoring Frequency
pH (units)	5.0-10.0 (range)	6.9-9.0 (range)	monthly
Suspended Solids Mg/l	50.0	25.0	monthly
Oil & Grease mg/l	1.0	1.0	monthly
Toxicity	Pass	Pass	semi-annually
Ammonia as Nitrogen mg/l	---	---	monthly

- Note:
- The Quarterly Arithmetic Mean is the arithmetic mean of all values obtained in the last three months for an individual parameter.
  - Toxicity testing shall be conducted using the 96 hour Acute Lethality Test of Effluent to Rainbow



Trout, Environment Canada Reference Method EPS  
1/RM/13.

- c) All other surface water run-off discharged from the site into Big Pond Brook, MacLennan Brook and the Shubenacadie River shall meet the water quality limits established in 5b.
- d) Water samples taken for toxicity testing shall be taken on the same day as those water samples taken to determine parameter concentrations in 5b.
- e) Should the Quarterly Arithmetic Mean Limit or Grab Sample Limit established in 5b be exceeded, then the sampling frequency shall immediately increase to weekly and continue until such time as both limits are met.
- f) The Nova Scotia Department of the Environment shall be immediately notified of any non compliance to limits established in 5b and National Gypsum (Canada) Ltd. shall undertake immediate mitigative action to resolve the problems.
- g) Copies of monitoring results shall be submitted to the Nova Scotia Department of the Environment within 30 days following the month of sampling. Results shall be forwarded to Ms. D. Coish, Central Region Office, P.O. Box 36, Bedford, N.S., B4A 2X1 and Mr. B. Matlock, P.O. Box 2107, Halifax, N.S., B3J 3B7

6. Blasting

- a) The blast design shall ensure that the following parameters are not exceeded at the nearest residential dwelling:  
  
Concussion (Air Blast): 128 dBA  
Ground Vibration: 12.5mm (0.5 inch) per second maximum
- b) Every blast shall be monitored and a monthly summary of results from the blasts shall be submitted to the Nova Scotia Department of the Environment within 30 days following the end of the month. Results shall be forwarded to Ms. D. Coish, Central Region Office, P.O. Box 36, Bedford, N.S., B4A 2X1 and Mr. B. Matlock, P.O. Box 2107, Halifax, N.S., B3J 3B7.
- c) A pre-blast survey shall be conducted by a consultant at each residence which is within 0.5 mile of a point of blast disturbance in the quarry.

- d) National Gypsum (Canada) Ltd. shall be required to change blasting methods to meet the limits established in 6a if so directed by the Department.
- e) National Gypsum (Canada) Ltd. shall be required to change the location of their blast monitoring stations if so directed by the Department.

7. Reclamation

- a) A security in the amount of \$700,000 shall be submitted to the Nova Scotia Department of the Environment in a satisfactory form on or before August 15, 1992 to cover reclamation and rehabilitation of the site.
- b) A site plan indicating the extent of mining and reclamation activities shall be submitted on or before the third anniversary date of this permit and every three years thereafter. At that time the reclamation bond shall be reevaluated by the Nova Scotia Department of the Environment.
- c) The bond shall be returned to National Gypsum (Canada) Ltd. and they shall be released from further obligation once this site receives a final inspection and approval of the Nova Scotia Department of the Environment.
- d) The site shall be progressively reclaimed and rehabilitated where possible by grading, contouring, infilling and revegetating the disturbed land.
- e) National Gypsum (Canada) Ltd. shall submit a preliminary reclamation plan with an estimate of the cost of implementing the proposed reclamation plan, to the Nova Scotia Department of the Environment on or before the third anniversary date of this permit.
- f) National Gypsum (Canada) Ltd. shall submit a final reclamation plan with an estimate of the cost of implementing the proposed reclamation plan, to the Nova Scotia Department of the Environment one year prior to abandonment of the site.

DSF/lk

1. In this Non-Mineral Registration, "Act" means the *Mineral Resources Act* and regulations as amended, or replacements thereof, and except where the context otherwise requires, words in this Non-Mineral Registration have the same meaning as in the Act.
2. The Registrant must comply with the Act, and must, during the term of this Non-Mineral Registration, work any mine upon the lands in a prudent and efficient manner.

3. The holder of a Non-Mineral Registration for gypsum must pay to the Minister any tax that is due and payable as prescribed by or under the *Gypsum Mining Income Tax Act*.
4. The Registrant must file an annual report on mining operations in Form 16 on or before March 1 in each year of this Non-Mineral Registration specifying all work performed on the area covered by this Non-Mineral Registration during the previous calendar year.
5. The Registrant must indemnify and save harmless the Province from any and all claims, demands, losses, damages, actions or other suits that may hereafter arise out of, or as a result of, any exploration, mining, milling or any other act or omission.
6. The Registrant must not assign, transfer, sublet or in any way divest itself of this Non-Mineral Registration, in whole or in part, without the prior written consent of the Minister of Natural Resources.
7. Any notice given pursuant to this Non-Mineral Registration is valid if given in accordance with Sections 15, 16 and 17 of the *Mineral Resources Regulations*, by registered mail, postage pre-paid, and addressed to the Registrant at P. O. Box 57, Milford Station, NS B0N 1Y0 Attention: Mr. Jeff Newton, and to the Department of Natural Resources, P.O. Box 698, Halifax, Nova Scotia, B3J 2T9, Attention: The Registrar.
8. The Registrant must be registered to do business in Nova Scotia and must maintain the registration in good standing during the term of this Non-Mineral Registration.
9. The provisions of the Non-Mineral Registration are binding on the Registrant and its successors and permitted assigns.
10. The Registrant shall provide the Registrar with written notification
  - (a) whenever it is anticipated that production will be suspended for longer than 60 days,
  - (b) immediately following a production suspension of longer than 60 days; or
  - (c) whenever the Registrant intends to resume production.
11. The Registrant must hold and maintain in good standing all approvals required by the Nova Scotia Department of Environment and Labour and all permits required under all other applicable legislation.
12. Time is of the essence in this Non-Mineral Registration.
13. If there is any inconsistency between any provisions of the Act and this Non-Mineral Registration, the Act prevails over this Non-Mineral Registration to the extent of the inconsistency.

Executed in the name of the Minister of Natural Resources on July 4<sup>th</sup>,  
2013, at Halifax, in the County of Halifax.

In the presence of

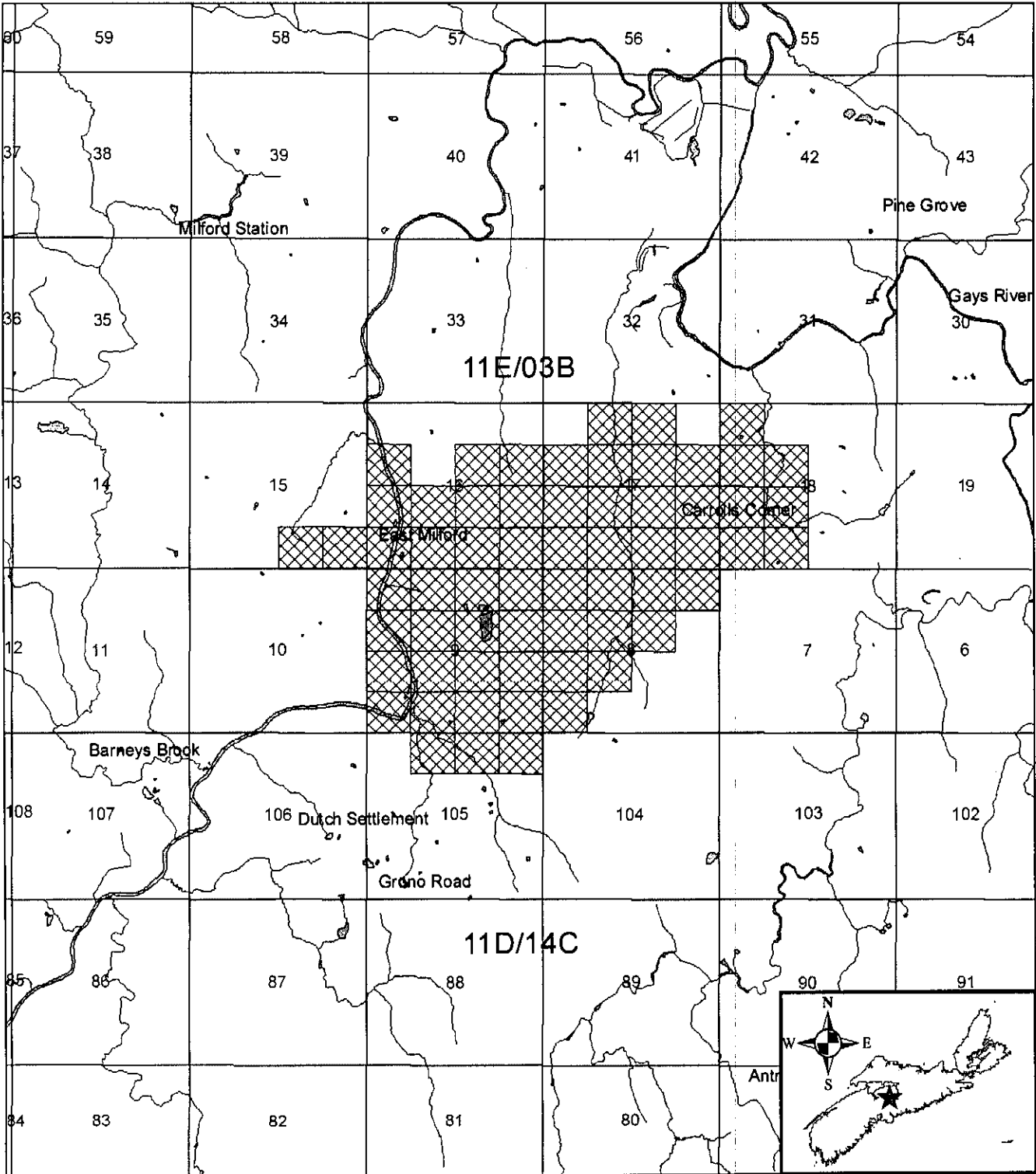
Vasili Babooam  
Witness


Charlie Parker  
Minister of Natural Resources

Mills  
Witness

Jeff Newton  
Registrant

Schedule "A"  
Non-Mineral Registration  
No. 012



**11D14C, 11E/03B**  
**Halifax County, Nova Scotia**  
 National Gypsum NMR012

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Natural Resources  
Canada

Metals Sector

Explosives  
Regulatory  
Division

Ressources naturelles  
Canada

et des métaux

Division de la  
réglementation des  
explosifs

RECEIVED SEP 18 2014

File XP7025-N2-F0022

2014-09-11

Lee Goodick  
National Gypsum (Canada) Ltd.  
1707 - #2 Highway PO Box 57  
Milford Station, Nova Scotia  
B0N 1Y0

**RE: Renewal of Division 2 Factory Licence F0022**  
Located at Milford Station, Nova Scotia

Enclosed is the licence covering your explosive operations. You will notice that the certificat is now an F licence.

The following are enclosed : F05-02A (1 page), F05-03 (1 page), F05-02B (2 pages), F05-02D ( 1 page) and F05-02E (1 page)

A current version of this license must remain at the base site at all times

Sincerely yours,

Pierre Rail  
Inspector of Explosives/ Inspecteur des explosifs  
Explosives Regulatory Division/ Division de la réglementation des explosifs,  
Natural Resources Canada/ Ressources naturelles Canada  
10th floor  
580 Booth Street  
Ottawa ON K1A 0E4  
Tel: 613-948-5175 Fax: 613-948-5195  
Email/Courriel prail@nrcan.gc.ca

**Headquarters:**

580 Booth St. 10<sup>th</sup> Floor  
Ottawa, ON  
K1A 0E4  
Tel.: 613-948-5200  
Fax: 613-948-5195  
ERDmms@nrcan.gc.ca

**Western Region:  
(Perforating only)**

214 - 755 Lake Bonavista SE  
Calgary, AB  
T2J 0N3  
Tel.: 403-292-4766  
Fax: 403-292-4689  
ERDwestern@nrcan.gc.ca



Natural Resources  
Canada

Minerals and  
Metals Sector

Explosives  
Regulatory  
Division

Ressources naturelles  
Canada

Secteur des minéraux  
et des métaux

Division de la  
réglementation des  
explosifs

F05-03


Protected B

### Division 2 Factory Licence and Terms and Conditions

Name and Address of Applicant  National Gypsum (Canada) Ltd. 1707 - #2 Highway PO Box 57 Milford Station, Nova Scotia B0N 1Y0	Site  Milford Station, Nova Scotia	File Number  XP7025-N2-
	Expiry Date  30-sep-2015	Licence Number  F0022

As per Section 7(1) of the *Explosives Act*, the Minister has issued the above licence.  
The following terms and conditions (if any) pursuant to Section 7(2), in addition to those prescribed by the *Explosives Regulations, 2013* apply to this licence.

1. The ammonium nitrate and fuel oil shall be blended and loaded directly into prepared blast holes.
2. There shall be no storage, packaging or transportation of the blended explosive.

FOR OFFICE USE ONLY	Date Licence Issued  SEP 10 2014	Amendment No.  15-00	Approved by  For the Minister of Natural Resources Canada
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## Division 2 Factory Licence or Manufacturing Certificate Application

<b>1. APPLICANT INFORMATION</b>						
Applicant Name National Gypsum (Canada) LTD.						
Address 1707 Hwy #2, Milford Station, N.S. B0N 1Y0						
Contact Person Lee Goodick			Email Address lgoodick@nationalgypsum.com			
Telephone (902) 883 2224 ext 226			Fax 902 758 3955			
<b>2. TYPE OF LICENCE OR CERTIFICATE (check appropriate boxes)</b>						
<input type="checkbox"/> New Licence		<input checked="" type="checkbox"/> Existing Licence Number: XP7025-N2-S0022AM		<input checked="" type="checkbox"/> Renewal <input type="checkbox"/> Amendment <input type="checkbox"/> Renewal with changes		
Division 2: <input checked="" type="checkbox"/> Factory Licence <input type="checkbox"/> Manufacturing Certificate		Specify changes:				
Period Requested for Certificate: 1 year		Start Date October 1, 2014		End Date September 30, 2015		
<b>3. SITE CONTACT INFORMATION AND LOCATION</b>						
Contact Person Lee Goodick			Email Address lgoodick@nationalgypsum.com			
Telephone 902) 883 2224 ext 226			Fax 902 758 3955			
Address (street / road / highway, municipality, township, county, province) 1707 Hwy #2, Milford Station, N.S. B0N 1Y0						
Geographical Coordinates of Site Milford Quarry		Latitude: N 45-00-49N		Longitude: W 63-25-54W		
<b>4. SCOPE OF OPERATIONS</b>						
Describe the types of explosives or items to be manufactured or stored using generic names and descriptions. State the nature of the process(es) to be carried out. Max 742 characters. Attach any additional information if more space is needed.  Base site for the manufacturing of ANFO in support of quarry operations only. Support buildings, associated equipment and storage facilities are noted on F050-02B. Support buildings for general mine operations are noted as Item #1 through Item #9 on the Site Plan dated Sept 12, 2008.						
<b>5. LIST OF FORMS ACCOMPANYING THIS APPLICATION</b>						
	F05-02B	F05-02D	F05-02E			
New page numbers submitted						
Unchanged page numbers not submitted	2	1	1			
<b>6. LIST OF PLANS AND DRAWINGS (specify date and revision number)</b>						
Site Plan	Area Plan	Building Layout	Process Schematic	Equipment Layout		
Sept 12, 2008	Sept 12, 2008					
<b>7. LIST OF DOCUMENTS (if applicable)</b>						
	Document(s)	Date	Rev.	Document(s)	Date	Rev.
Operating Procedure(s)	QO #07-001	07/14		Spill Contingency Plan(s)	Attachment C	02/14
Maintenance Procedure(s)	QMO79	08/14		Emergency Response Plan(s)	Attachment A	09/14
Destruction Procedure(s)	NA					
<b>8. APPLICANT'S DECLARATION</b>						
Applicant declares that the information provided is true and accurate. If applicant is a corporation, the person signing the application must be authorized to act on the corporation's behalf.				Fee: \$ Send to: Cheque payable to the Receiver General for Canada NRCan - Explosives Regulatory Division 580 Booth Street, Ottawa (Ontario) K1A 0E4 Phone 613-948-5200 Fax 613-948-5195 ERDmme@nrcan.gc.ca www.nrcan.gc.ca/explosives		
Date (year/month/day) 2014/09/10		Applicant Name, print Lee Goodick		Applicant Signature 		
For Office Use Only	Date Application Completed SEP 10 2014	Date Licence Issued / Denied SEP 10 2014		Reviewed by Inspector 		
	Fees \$	Cash Blotter No.		Amendment # 15-00		





## Site Description (Division 2)

Applicant Name	Site	Page #	Licence or Certificate No.
National Gypsum (Can) Ltd.	1707 #2 Highway, Milford, Nova Scotia	1	XP7025-N2-00022AM E
Reference number, letter or distinctive name of every process unit, magazine, building and structure on plans or drawings attached to licence.	a) A description of the workplace, all equipment in the workplace that is related to the manufacture of explosives and all protective barriers in the workplace; and  b) A description of all equipment in the workplace that is not related to the manufacture of explosives, but could increase the likelihood of an ignition.		
S-1	<b>AN Storage</b> AN is stored in one 80 tonne elevated cube type silo. The silo is equipped with an electrical bucket elevator.		
P-1	<b>ANFO Truck Parking for NGC Unit #5112 ERD Licence / Certificate #T-131220-01</b> Truck is parked in our quarry in a fenced off area on a crush stone pad. There are no combustibles within a minimum of 25 meters. The AN Truck is 674m from S-1 (AN storage) and 560m from the F-1 (fuelling station). The vehicle is parked, as empty as practical (heel of 50kg) at the end of the operating day. The master switch is off and all loading hatches and control valves are locked.		
F-1	<b>Diesel Fuel Storage</b> Above ground 50,000 liter, double walled, UL approved fuel tank. Mounted on a cement pad.		
F-2	<b>Gasoline Fuel Storage</b> Above ground 10,000 liter, double walled, UL approved gasoline tank. Mounted on a cement pad.		
G-1	<b>Maintenance Shop</b> 26.2m x 45.8m x 10m is located on site. Construction of the garage is concrete blocks and aluminum siding. Electrical feed to the garage is 400A/600V and a 200A/240V both which can be disconnected at the sub-station. The garage is heated with oil hot water. The furnace room is located at the northwest corner of the garage. The oil tank is outside which is a 9,100 liter, double walled, UL approved fuel tank. Mounted on a cement pad. Major repairs and Hot Work will be conducted at G-1 or at the Metro International garage as noted on the Letter of Agreement.		
G-2	<b>Service Shop</b> 12.6m x 17.2m x 10m is located on site. Electrical feed to the garage is 100A/600V and a 100A/240V both which can be disconnected at the sub-station. The shop is heated by oil forced air. The furnace is located on the east wall. The oil tank is located outside which is 900 liter, above ground, single wall UL approved fuel tank. Light Repairs and Oil changes will be conducted at G-2.		
WF	<b>Wash Facilities</b> External concrete wash pad is 15m x 12m and is equipped with a ramp for easy undercarriage cleaning. The pump has the capability of delivering a high volume of water through a 2" fire hose with 100psi. The water that runs off the pad travels to a settling pond before leaving the site.		
M1	<b>M-1 Explosives ( blasting) Magazine – Tag No. AO240</b> Magazine Location Lat 45-01'-02" N Long 63-25'-20 W. Site Security measures is a monitored alarm system. Magazine Standard Type 4, licensed for storage of 10,000kg 6.1m x 4.3m x 2.4 m ( L x W x H) Measured Distances; road/rail -1650m, Inhabited building 607m, Magazine 61m		
<b>FOR OFFICE USE ONLY</b>			
Date Application Completed SEP 10 2014	Date Licence Issued / Denied SEP 10 2014	Amendment # 15-00	Reviewed by Inspector 



### Site Description (Division 2)

<b>Applicant Name</b> National Gypsum (Can) Ltd.	<b>Site</b> 1707 #2 Highway, Milford, Nova Scotia	<b>Page #</b> 2	<b>Licence or Certificate No.</b> XP7025-N2- <del>5</del> 0022AM
<b>Reference number, letter or distinctive name of every process unit, magazine, building and structure on plans or drawings attached to licence.</b>	<b>a) A description of the workplace, all equipment in the workplace that is related to the manufacture of explosives and all protective barriers in the workplace; and</b> <b>b) A description of all equipment in the workplace that is not related to the manufacture of explosives, but could increase the likelihood of an ignition.</b>		
D-1	Detonator Magazine – Tag No. AO241 Magazine Location Lat 45-01'-02" N Long 63-25'-20 W. Site Security measures is a monitored alarm system. Magazine Standard Type 4, licensed for 12,000 detonators. 3.0m x 2.4m x 2.4 m ( L x W x H) Measured Distances; road/rail -1698m, Inhabited building 650m, Magazine 61m		
<b>FOR OFFICE USE ONLY</b>			
Date Application Completed SEP 10 2014	Date Licence Issued / Denied SEP 10 2014	Amendment # 15-00	Reviewed by Inspector 



## Manufacturing Operations Description (Division 2)

Applicant Name National Gypsum (Can) Ltd.	Site 1707 #2 Highway, Milford, Nova Scotia	Page # 1	Licence or Certificate No. XP7025-N2-00022AM
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Reference number, letter or distinctive name of every process unit, magazine, building and structure on plans or drawings attached to licence.	A description of the operations to be carried out in each process unit and factory magazine.	The type and quantity of explosive to be manufactured or stored.	The number of people authorized in the workplace when explosives are present.
S-1	AN Storage	80 tonnes of AN	2 operators 2 visitors
F-1	Diesel Fuel Storage Tank	50,000 Litre of fuel oil.	2 operators 2 visitors
F-2	Gasoline Storage Tank	10,000 Litre of gasoline	2 operators 2 visitors
P-1	ANFO Truck Parking Area	50kg heel	2 Operators
WF	Area the ANFO Truck is washed and decontaminated. In accordance with Form 6R.	50kg heel	2 operators 2 visitor
G-1 Maintenance Shop	Decontamination of the ANFO truck is carried out prior to repairs. Hot Work is carried out here in accordance with Form 6R and NGC's Standard Operating Procedures (QM079)	50kg heel	20 persons
G-2 Service Shop	Light repairs and oil changes.	50kg heel	2 persons
ANFO Truck	Blending of A.N. and diesel fuel to manufacture ANFO for direct discharge down the borehole.  Loading Procedure: The process vehicle fuels up at the fuelling station (F-1). Then proceeds to S-1 where the truck is loaded by opening a sliding hatch and is gravity filled.  Mixing procedure: Truck arrives at the bench where Blending of AN and diesel fuel is mixed to manufacture ANFO for direct discharge down the borehole.	A.N. - 4536kg. Fuel - 379 Litres NEQ - 2 2680kg	2 operators 2 visitors  1  n accordance with Form 6R
M-1	Explosives blasting storage magazine Tag No. AO240.	10,000 kg	2 operators 2 visitor
D-1	Explosives detonator storage magazine Tag No. AO241.	12,000 units	2 operators 2 visitor

FOR OFFICE USE ONLY			
Date Application Completed SEP 10 2014	Date Licence Issued / Denied SEP 10 2014	Amendment # 15-00	Reviewed by Inspector 

**Distances (Division 1)**  
Between Process Units, Magazines and Vulnerable Places

<b>Applicant Name</b> National Gypsum (Can) Ltd.	<b>Site</b> 1707 #2 Highway, Millford, Nova Scotia	<b>Page #</b> 1	<b>Licence or Certificate No.</b> XP7025-N2-S0022AM-
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Reference number, letter or distinctive name to all explosives locations	Distances in meters to: Public roads, railways and other transportation infrastructure.  Pipelines and energy transmission lines.			Distances in meters to: Any building in which people live, work or assemble.  Any place where a substance that increases the likelihood of a fire or explosion is likely to be stored			Distances in meters to: Magazine and ammonium nitrate (AN) storage.			Distances in meters to: Process unit.		
	QD Type	Required meters	Actual meters	QD Type	Required meters	Actual meters	QD Type	Required meters	Actual meters	QD Type	Required meters	Actual meters
P-1	Highway #277(5)	180	895	Dwelling (D7)	270	989	M-1 (D4)	175	707	G-1		
				S-1	28	674	D-1 (D4)	68	747	WF		
				F-1	25	560						
				F-2	25	672						
WF	Highway #277(5)	180	1320	Dwelling (D7)	270	630	M-1 (D4)	175	742	P-1,G-2		
							D-1 (D4)	68	808			
G-2	Highway #277(5)	180	1290	Dwelling (D7)	270	645	D-1 (D4)	68	851			
M-1	Highway #277 (D5)	320	1409	Dwelling (D7)	480	607	D-1 (D2)	52	81	P-1,WF		
D-1	Highway #277 (D5)	180	1412	Dwelling (D7)	270	650	M-1 (D2)	52	61			

## FOR OFFICE USE ONLY

Date Application Completed SEP 10 2014	Date Licence Issued / Denied SEP 10 2014	Amendment # 15-00	Reviewed by Inspector 
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Explosives Regulatory Division  
580 Booth Street, 10<sup>th</sup> Floor  
Ottawa, Ontario K1A 0G1

PLANT, BUILDINGS AND EQUIPMENT

Licence /Certificate No.: **T-131220-01**

File Registry Number: **XP7025-N2-T**

Company and Location: **National Gypsum Ltd, Milford Station, NS**


Date of Application: **20 December 2013**

Page **3** of **3**

Reference distinguishing number, letter, and/or name of building, room or work on plans or drawings attached to licence.	<ol style="list-style-type: none"><li>1. Geographical coordinates of one location on the site, e.g. Bldg. M1 N45°000' W75°000'.</li><li>2. Description of site and/or building security measures such as fencing, gates, signs, match-lighter collections box.</li><li>3. Size and nature of construction of building, mound or work, and in the case of each building or work, when applicable the lighting, heating-ventilation system, electrical code classifications, grounding, fire protection and means adopted for protection from lightning. Include special design features such as dyking, sumps, blowout panels, blast containment, etc.</li><li>4. Principal process equipment details and description.</li><li>5. Special safety features such as dyking, instrumentation, alarms, pressure relief, control systems.</li><li>6. Mobile equipment description and how powered.</li><li>7. For bulk and satellite sites, any deviation from the current ERD Standard for Bulk Explosives must be described here.</li></ol>
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2.11 Augers	<p><b>AN bin Auger</b></p> <p>a) The auger is 6 inch in diameter constructed from 304 stainless steel.</p> <p>b) The housing for the auger is constructed from 2inch schedule 40 stainless steel pipe.</p> <p><b>Verticle Auger</b></p> <p>a) The auger is 9 inch in diameter constructed from 304 stainless steel.</p> <p>b) The housing for the auger is constructed from 2 inch schedule 40 stainless steel pipe.</p> <p><b>Discharge Auger</b></p> <p>a) The overhead discharge auger is 6 inch by 18 ft long constructed from 304 stainless steel.</p> <p>b) The housing for the auger is constructed from 2 inch schedule 40 stainless steel pipe.</p>
2.12 Controls	<p>a) A master soleniod operated control valve, activated by the electronic control panel, permits simultaneous starting and stopping of all ingredients.</p> <p>b) Truck delivery system can be operated by hand held remote eliminating the need for an operator to be in the cab.</p> <p>c) If the electronic control panel fails to operate properly, the unit may be manually unloaded using the manual control valves. If operated this way, all calibrations will be maintianed.</p>
2.13 Hydraulics	<p>The mainual hydraulic controls are located on the passenger fender.</p>
2.14 Other Information	<p>A Vesco dewatering system with 100' hose reel with a model S310 pump is installed on the rear of the truck.</p>

APPROVED / APPROUVÉE

FOR OFFICE USE ONLY	Approved by:  For the Minister of Natural Resources Canada	Date <b>DEC 20, 2013</b> at OTTAWA	AMENDMENT No. <b>0</b>
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Canada

Inspector of Explosives /  
Inspecteur des explosifs  
ERD-04-2000(MSW)



Explosives Regulatory Division  
580 Booth Street, 10<sup>th</sup> Floor  
Ottawa, Ontario K1A 0G1

PLANT, BUILDINGS AND EQUIPMENT

Licence /Certificate No.: **T-131220-01**

File Registry Number: **XP7025-N2-T**

Company and Location: **National Gypsum Ltd, Milford Station, NS**

Date of Application: **20 December 2013**

Page **2** of **3**

Reference distinguishing number, letter, and/or name of building, room or work on plans or drawings attached to licence.	1. Geographical coordinates of one location on the site, e.g. Bldg. M1 N45°000' W75°000'. 2. Description of site and/or building security measures such as fencing, gates, signs, match-lighter collections box. 3. Size and nature of construction of building, mound or work, and in the case of each building or work, when applicable the lighting, heating-ventilation system, electrical code classifications, grounding, fire protection and means adopted for protection from lightning. Include special design features such as dyking, sumps, blowout panels, blast containment, etc. 4. Principal process equipment details and description. 5. Special safety features such as dyking, instrumentation, alarms, pressure relief, control systems. 6. Mobile equipment description and how powered. 7. For bulk and satellite sites, any deviation from the current ERD Standard for Bulk Explosives must be described here.
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	<p>Rear left to right (picture attached)</p> <ul style="list-style-type: none"><li>• 20 lb fire extinguisher</li><li>• AN verticle auger</li><li>• AN prill auger</li><li>• Dewatering hose reel</li><li>• The access ladder.</li></ul> <p>Front (left to right) (Picture attached)</p> <p>Top of unit (Picture attached)</p> <p><b><u>Manufacturing Process</u></b></p> <p>The AN auger delivers prills to the verticle auger. The verticle auger then transfers the prills to the discharge auger. Once the prills are in discharge auger fuel is pumped from the process fuel tank via the process fuel oil system. After the AN and fuel are mixed ANFO moves down the discharge auger to the discharge hose then into the borehole.</p>
2.1 Ammonium nitrate or AN/FO bins	a) Truck has a single compartment bin with a V cover over the auger. AN is loaded through a single top hatch screened opening. b) AN Pill tank is 200 cuft. The AN tank capacity is 4,536kg at a density of 0.82 g/cc c) AN bin is constructed of 12 gauge type 304 Stainless Steel.
2.2 Pneumatic AN/FO Transfer Units	NA
2.3 Other Dangerous Goods Bin if Applicable	NA
2.4 Explosives Tank	NA
2.5 Process Fuel Oil Tank	a) Tank is a SMC (small means of containment) capacity is 379 L. b) The tank is fitted with a fill/vent fusable cap. c) There is a shut off valve at the front outlet. d) There are no site gauges. e) The fuel pump is a hydraulically driven gear type pump. The system has a pressure relief valve at the main hydraulic pump. A master solenoid operated valve, activated by the electronic control panel permits simultaneous starting and stopping of all ingredients.
2.6 Gassing Solution Tank	NA
2.7 Other Tanks or Containers	a) The truck is fitted with one hydraulic reservoir located on the right hand (passenger) side of the truck. The tank has a capacity of 208 L.
2.8 Progressive Cavity Pump if Fitted	NA
2.9 Delivery Hose reel	NA
2.10 Other Explosives Pump	NA

APPROVED / APPROUVÉE

FOR OFFICE USE ONLY	Approved by:  For the Minister of Natural Resources Canada	Date <b>DEC 20 / 2013</b> at OTTAWA	AMENDMENT No. <b>0</b>
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Explosives Regulatory Division  
580 Booth Street, 10<sup>th</sup> Floor  
Ottawa, Ontario K1A 0G1

PLANT, BUILDINGS AND EQUIPMENT

Licence /Certificate No.: T-131220-01

File Registry Number: XP7025-N2-T

Company and Location: National Gypsum Ltd, Milford Station, NS

Date of Application: 20 December 2013 Page 1 of 3

Reference distinguishing number, letter, and/or name of building, room or work on plans or drawings attached to licence.	1. Geographical coordinates of one location on the site, e.g. Bldg. M1 N45°000' W75°000'. 2. Description of site and/or building security measures such as fencing, gates, signs, match-lighter collections box. 3. Size and nature of construction of building, mound or work, and in the case of each building or work, when applicable the lighting, heating-ventilation system, electrical code classifications, grounding, fire protection and means adopted for protection from lightning. Include special design features such as dyking, sumps, blowout panels, blast containment, etc. 4. Principal process equipment details and description. 5. Special safety features such as dyking, instrumentation, alarms, pressure relief, control systems. 6. Mobile equipment description and how powered. 7. For bulk and satellite sites, any deviation from the current ERD Standard for Bulk Explosives must be described here.
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1.1 Identification	<b>Unit Identification and general description</b>  a) Unit number 5112, ERD Auth # b) NA c) Make International Model 7300 SFA 4x4 Year 2013 d) Serial # 1HTWBAAR3EH777338 e) GVW - 15 421 kg f) Type of Unit - ANFO Truck g) Total Capacity Ammonium Nitrate, UN 1942, Class 5.1 - Quantity 4 536 kg at a density of 0.82 g/cc Diesel Fuel, UN 1202, Class 3 - Quantity 379 litres NEQ - 2,268 kg h) How product transferred to unit: Ammonium Nitrate is gravity loaded from an overhead silo.
1.2. Automotive	<b>Automotive</b>  a) Once a year, a certified mechanic does a mechanical fitness check and sign's off on the check. The check follows and completed the ERD Mobile Process Unit Inspection Guide. b) Vehicle is equipped with air brakes from the manufacture. c) The exhaust on the vehicle is extended vertically behind the cab and discharged away from the vehicle production facilities The exhaust is protected by a heat shield. d) The chassis fuel tank is the original UL approved as supplied by International and fitted with non-spill fusible fuel tank caps. e) All fuel lines are fitted with easy shut-off valves accessible to the operator and protected against damage. f) Electrical wiring and lighting systems that extended behind the cab of the truck are completely enclosed with threaded compression type connectors. g) The battery circuit is equipped with a master disconnect switch connected to the positive side of the battery. The switch is located behind the passenger step approx. 1ft from the battery. The switch is labeled "Master Shutoff".
1.3. General safety and compliance	 a) An engineered Ansul fire suppression system model LT-A-101-30 is installed on the truck. The 30 lb. fire suppression system is mounted on the driver's side of the truck. The 30lb system operates the following nozzles; four nozzles directed at the engine, fifth nozzle directed at the PTO / hydraulic area and a sixth nozzle directed at the exhaust / transmission. The system can be activated from within the cab or at the rear on the passenger side. The vehicle also has two portable fire extinguishers; one 20lb unit is mounted on the rear of the vehicle and 10lb unit mounted in the cab. b) Applicable TDC placards are in place on all four sides of the vehicle. c) The top sliding hatch cover is equipped with a lockable arm mechanism using a brass free lock. The tank has an interior screen in the hatch opening to keep foreign matter and lumps out. d) There is no exposed brass or copper on the truck.
2.0 Criteria for Specific Mobile Process Unit	<b>Process Unit</b>  Drivers Side front to rear (picture attached) <ul style="list-style-type: none"><li>Vehicle fuel tank is located below the drivers step.</li><li>Fuel oil pump and motor are directly located behind drivers step.</li><li>Process fuel tank is located behind the fuel oil pump and motor located on the frame rail.</li><li>AN bin.</li><li>Fire suppression system.</li><li>On / Off switch for the remote control.</li><li>Process control valves, located above the fender.</li><li>Dewatering reel controls located on the fender to the rear of the process control valves.</li></ul> Passengers Side front to rear (picture attached) <ul style="list-style-type: none"><li>Battery box is located behind the passenger step.</li><li>Master disconnect is located behind the battery box.</li><li>Hydraulic tank</li><li>Tool box is located ontop of fender.</li><li>Fire suppression actuator is mounter to the rear of the tool box.</li><li>Control handle to operate the fall protection handrail.</li><li>Ladder to mount the top of the tank is located to the rear of the passenger fender.</li></ul>

APPROVED / APPROUVÉE

FOR OFFICE USE ONLY	Approved by:  Date <u>DEC 20, 2013</u> For the Minister of Natural Resources Canada at OTTAWA	AMENDMENT No. <u>0</u>
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**AUTHORIZED EXPLOSIVES  
MANUFACTURE AND STORAGE**

Licence /Certificate No: **C0022AM**

File Registry Number: **XP7025-N2**

Company and Location: National Gypsum (Canada) Ltd N.S.Date of Application **27 January 2014**

Page 1 of 1

**PART I: AUTHORIZED EXPLOSIVES**

**A) Manufacture or Processing of:**

UN Proper Shipping Name	Manufacturer's Designated Name (from List of Authorized Explosives)	Date of Authorization (yyymmdd) OR Authorization File No.	UN Number	UN Hazard Classification
Explosives Blasting Type E	ANFO		UN0331	1.5D

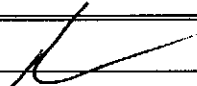
**B) Storage of:**

UN Proper Shipping Name	UN Number	UN Hazard Classification
Explosives, Blasting Type E	0332	1.5D
Boosters, without Detonator	0042	1.1D
Detonator Assemblies, non-electric for blasting	0360	1.1B
Detonator Assemblies, non-electric for blasting	0500	1.4S
Lead in Line	0349	1.4S

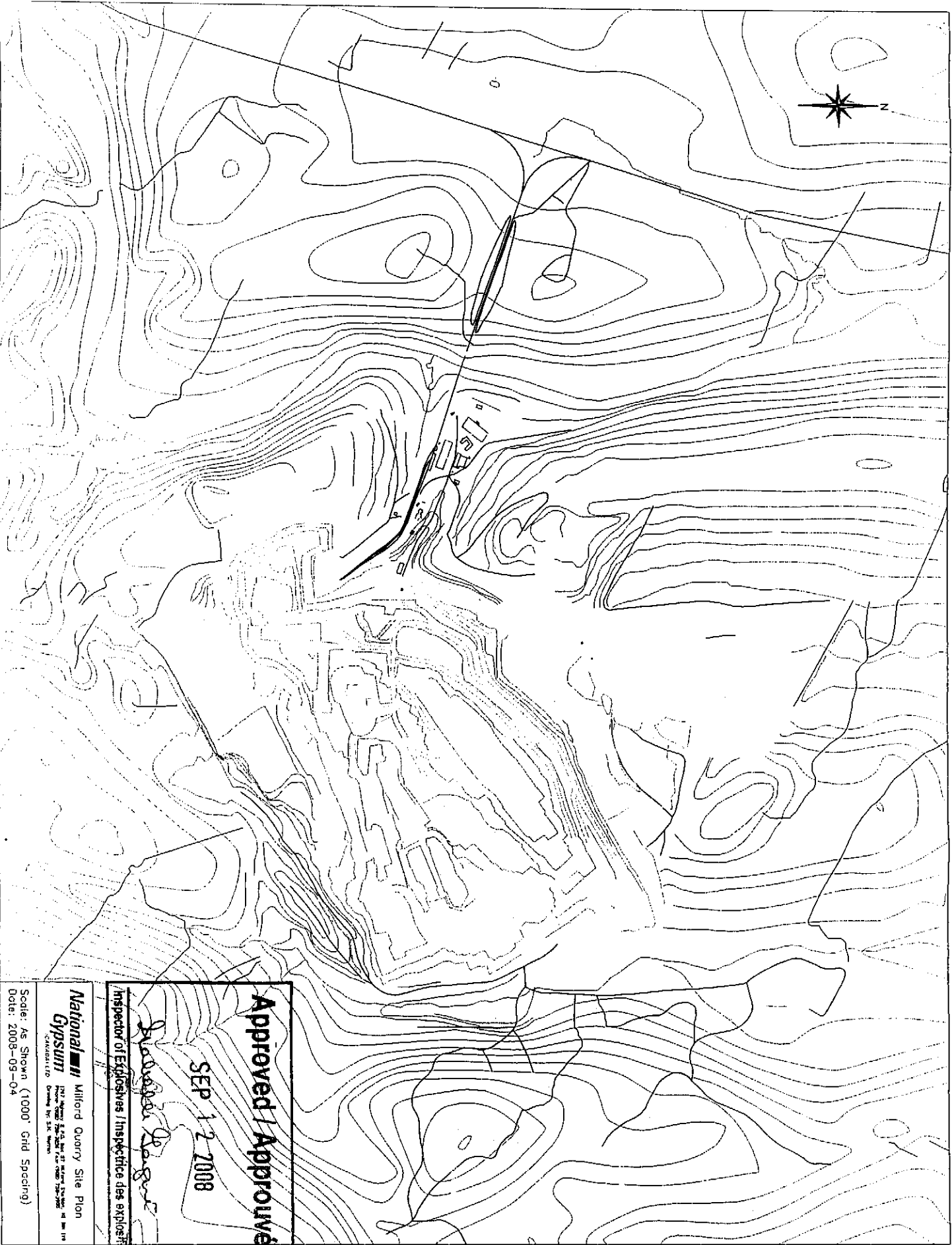
**PART II: CUSTOMER INFORMATION**

**Client Information:**

Name, Address, Contact	Client Site	Approximate distance from base factory site, km	Where applicable, approximate distance from satellite site, km
Owner and operated by National Gypsum (Canada) Ltd.	On site quarry	0	

<b>FOR OFFICE USE ONLY</b>	Approved by: 	Date <u>27 Jan, 2014</u>	<b>AMENDMENT No.</b> <u>14-02</u>
	For the Minister of Natural Resources Canada	at OTTAWA	







Approved / Approuvé

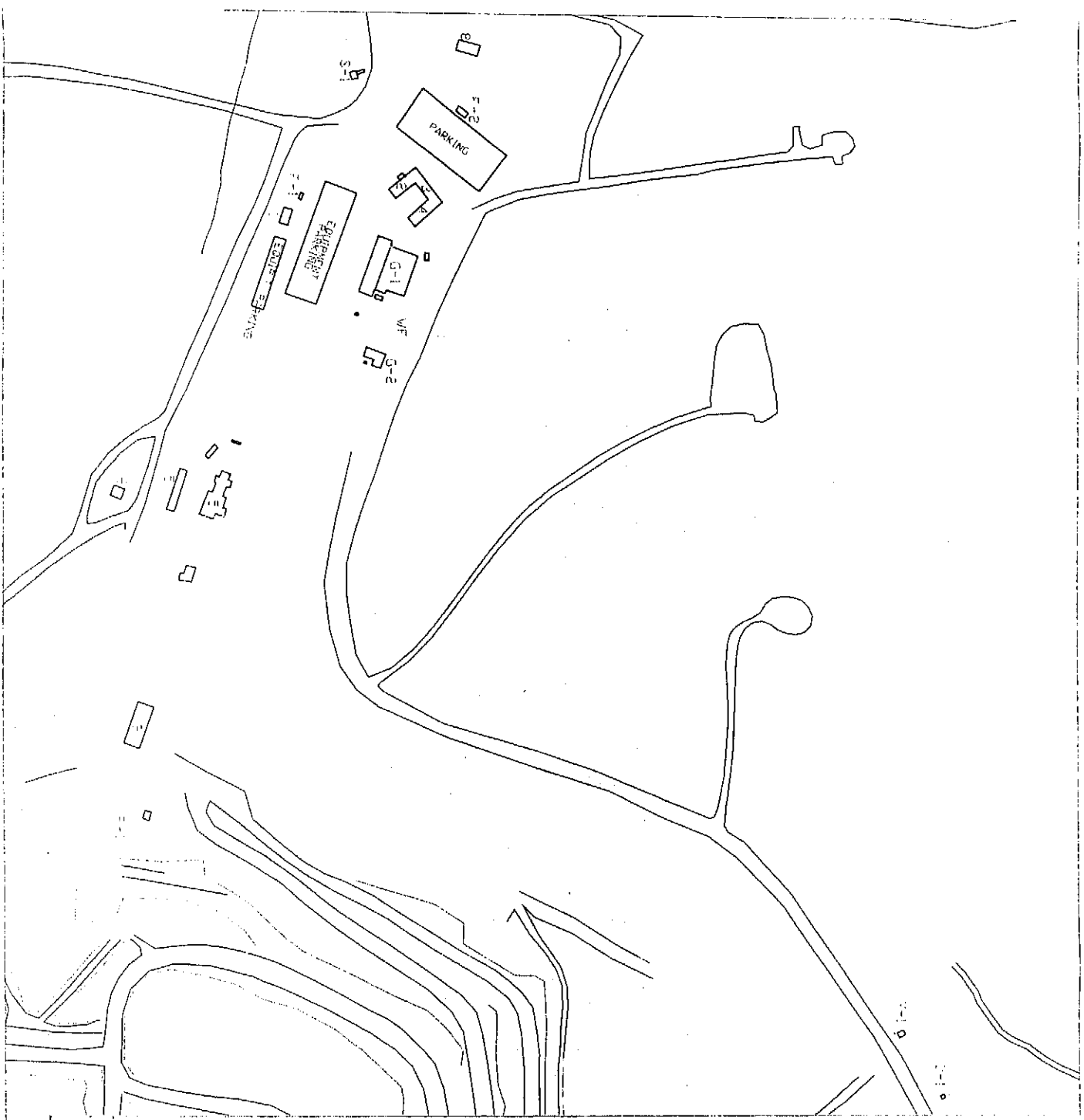
SEP 12 2008

*Philippe Dague*

Inspector of Explosives / Inspecteur des explosifs

**National**  **Gypsum**  **Milford Quarry Site Plan**  
1211 Highway 245, St. John's, NL A1B 1X8  
CANADA  
Drawing by: S.K. Smith

Scale: as Shown (1000' Grid Spacing)  
Date: 2008-09-04



5-1 AN. SIB  
5-1 ANFO TRUCK PARKING  
F-1 DIESEL FUEL TANK  
F-2 GASOLINE FUEL TANK  
G-1 MAINTENANCE SHOP  
G-2 SERVICE SHOP  
D-1 DETONATOR MAGAZINE  
M-1 EXPLOSIVES MAGAZINE  
WF WASH FACILITIES

- |       |  |
|-------|--|
| ITEM1 | SHOWER SHED                                    |
| ITEM2 | OFFICE   |
| ITEM3 | WAREHOUSE                                      |
| ITEM4 | DRY FACILITIES                                 |
| ITEM5 | MIL GRINDING AND RAIL CAR<br>LOADING BUILDINGS |
| ITEM6 | SUBSTATION                                     |
| ITEM7 | PUMP HOUSE                                     |
| ITEM8 | MAINTENANCE STORAGE BUILDING                   |
| ITEM9 | PRIMARY CRUSHER                                |

**Approved / Approuvé**

SEP 12 2008

James Hargrett

Inspector of Explosives / Inspecteur Explosieven

**National Gypsum**  
(CANADA) LTD.

1. The first group of variables includes the demographic characteristics of the respondents, such as age, gender, and education level. These variables are used to control for potential confounding factors that may influence the relationship between the independent and dependent variables.

**judith**  
**(CANADA) LTD**

Nova Scotia



**Department of  
the Environment**

PO Box 2107  
Halifax, Nova Scotia  
B3J 3B7

Our file no:

**18-88-0125-09.2**

**88-W-410**

3 July 1990

National Gypsum (Canada) Limited  
Attn: Gary MacEwen  
PO Box 57  
Milford Station  
Halifax County, NS  
B0N 1Y0

Dear Mr. MacEwen:

**RE: PERMIT UNDER THE NS WATER ACT - BIG POND BROOK,  
HALIFAX COUNTY, NOVA SCOTIA**

Attached is your Permit under the Nova Scotia Water Act authorizing the diversion of the flow of the watercourse from the natural channel into the quarry as depicted on Nolan, Davis and Associates Drawing No. H88160-01.

This permit or a copy is to be kept on-site at all times during construction, and it is your responsibility to ensure that all personnel directly involved in the project, including heavy machinery operators, are made fully aware of the conditions which pertain to this approval.

Please call at once if you have any questions about the conditions to the approval, especially those that pertain to the actual construction. You may reach our office by telephone at 424-5300, or by mail to the above address.

Yours truly,

A handwritten signature in cursive script that reads "John A. Theakston".

J.A. Theakston, P.Eng.  
Surface Water Management Section

/s/   
Enclosure

cc: D. Cox, Fisheries & Oceans  
A.D. Cameron, Manager  
D. Coish, Manager  
Bruce Wilmschurst, Lands & Forests  
Warden Lichter, County of Halifax



## Permit Under the Water Act

National Gypsum (Canada) Limited  
PO Box 57  
Milford Station  
Halifax County, NS  
B0N 1Y0

is/are hereby granted permission to undertake work in or near the following watercourse, in accordance with the conditions stated on this Permit and subject to the conditions and restrictions contained in the Water Act and the regulations under that Act.

Name of watercourse      Big Pond Brook  
Tributary to                Gays River  
Location of works        Quarry at East Milford, two kilometers west of Carrolls  
Corner, Halifax County, NS.  
Map 11E/3, grid reference 679 842.

Work authorized by this Permit is strictly limited to:  
the diversion of the flow of the watercourse from the natural channel into  
the quarry as depicted on Nolan, Davis and Associates Drawing No. H88160-01.

### THE CONDITIONS OF THIS PERMIT ARE SET FORTH BELOW AND IN SCHEDULE "A".

a) The work must be carried out within the following time limits:

Starting Date subject to c) and d) Completion Date none specified  
Should this work not be completed by the date specified, the Permit will become void.  
An extension of time may be authorized as per clause 2.01 of Schedule "A".

- b) The Permit Holder shall maintain normal (non-peak) flows upstream of the diversion and shall stabilize the slopes of existing and any future waste dumps or disturbed land in the upstream area so as to control siltation.
- c) Prior to the diversion of the watercourse, the Permit Holder shall make provisions for a minimum maintenance of flow of 3 litres per second in the watercourse downstream from the quarry at all times so that property owners downstream may continue to use the watercourse for agricultural purposes, primarily the watering of cattle, as they have in the past. Prior to any shutdown or abandonment of the quarry, the Permit Holder shall make provisions to the satisfaction of the Minister that flow of water will be restored or maintained in the watercourse in the future.

...2

Expiry Date In Perpetuity

  
Minister of the Environment

Date June 28/90

Conditions of permit continued

- d) Maintenance flows shall be provided by the construction of a storage pond having a V-notch weir as depicted on Nolan, Davis and Associates Drawing No. H88160-01. Thorough erosion and sediment control measures must be implemented and maintained throughout construction of the pond to prevent siltation of Big Pond Brook.
- e) Since water is to be diverted from the watercourse into the quarry, the Permit Holder must apply for an Industrial Waste Permit from the Department of the Environment and ensure that the effluent from the quarry is in compliance with the limits to be set out in that Permit.
- f) Since the watercourse diversion will result in the loss of fish habitat, the Permit Holder must comply with all provisions under the Fisheries Act of Canada, and policies and requirements of the Department of Fisheries & Oceans in relation to fish habitat. The Department of Fisheries & Oceans must be notified prior to the watercourse diversion so that staff of that Department are present when the diversion takes place.

**SCHEDULE "A"**

**1.0 DEFINITIONS**

1.01 "Permit Holder" includes the authorized heirs, successors and assigns of the Permit Holder.

1.02 "Minister" means the Minister of the Environment or his designated agent.

**2.0 EXTENSION OF TIME**

2.01 The time within which the work authorized by this Permit must be completed may, at the option of the Minister, be extended, subject to any changes in the conditions set forth in the Permit and provided the Permit Holder has complied with these conditions.

**3.0 PERMIT HOLDER'S COVENANTS AND CONDITIONS**

3.01 The Permit Holder may alter the watercourse, or store water in any watercourse as authorized herein and, without limiting the generality of the foregoing, shall not alter or use the watercourse so as to:

- a) prejudice the rights of any owner or of any person lawfully in possession of or holding any lands abutting the watercourse or any rights therein;
- b) suffer or permit any damage to adjoining and nearby land and shall not cause or permit any nuisance to adjacent or nearby properties.

3.02 The Permit Holder shall not at any time or for any purpose place a pecuniary value on or claim any pecuniary value for the rights and privileges granted by this Permit, whether considered alone or in conjunction with any other property rights or privileges, over and above the amounts, if any actually paid to the Minister by the Permit Holder for said rights and privileges.

3.03 The Permit Holder shall not assign or transfer this Permit without the written consent of the Minister, whose consent may be withheld for any reason, and any assignment or transfer shall be subject to such terms and conditions as the Minister may impose.

3.04 The Permit Holder shall comply with all Municipal, Provincial and Federal laws and regulations including but not limited to those laws and regulations relating to the Environment, Fisheries, Public Health and Fire Hazards.

3.05 The Permit Holder shall be responsible for obtaining and paying the costs of any and all approvals, permits, services, easements, rights of way and authorizations of any kind necessary for the performance of any activities undertaken pursuant to this Permit. The Minister does not covenant that such approval, permits, services, easements, rights of way and authorizations of any kind will be issued by the Province of Nova Scotia, any other body or person.

- 3.06 Work undertaken by the Permit Holder to relocate a watercourse or build, alter or add to any bridge, culvert, dam, sluice, flume, conduit or other structure in or on the watercourse shall at all times conform with the conditions of this Permit.
- 3.07 The Permit Holder shall maintain any bridge, culvert, dam, sluice, flume, conduit or other structure built or used in or on the watercourse in a state of good repair and in a clean and tidy condition to the satisfaction of the Minister. The Permit Holder shall conform to any and all directions of the Minister concerning the restoration of a watercourse or the construction, reconstruction, maintenance, removal, operation and location of any bridge, culvert, dam, sluice, flume, conduit or other structure built, used or maintained in and on the watercourse.
- 3.08 The Minister and all persons designated as Inspectors pursuant to the **Water Act** or the **Environmental Protection Act** shall have free access at all times to the watercourse, any structure built or maintained in and on the watercourse and to land under control of the Permit Holder to ensure these terms and conditions are being fulfilled.
- 3.09 The Permit Holder shall indemnify and save harmless the Minister against any loss, cost or damage occasioned by the Permit Holder's relocation of a watercourse or the construction of or alteration or addition to any culvert, bridge, dam, sluice, flume, conduit or other structure. Such indemnity shall include, but not be restricted to, all losses, costs or damages occasioned by the improper or faulty relocation of a watercourse or the improper or faulty construction of or alteration or addition to any culvert, bridge, dam, sluice, flume, conduit or other structure in or on the watercourse, or by any trespass of the Permit Holder or his agents or by the neglect or wilful act of the Permit Holder or any guests, invitees or visitors of the Permit Holder.
- 3.10 On the expiry or termination of this Permit or at the end of the useful life of the structure, as determined by the Minister, the Permit Holder shall immediately cease operations and peaceably and quietly yield up and deliver possession of the watercourse in a condition satisfactory to the Minister, and the Minister shall incur no further expense, liability or cost in this regard.
- 3.11 The Permit Holder shall remove any bridge, culvert, dam, sluice, flume, conduit or other structure or remnants thereof and any equipment or personal property, built, used or maintained in and on the watercourse at the expiration of this Permit, to the satisfaction of the Minister. In the event the Permit Holder fails to remove such bridge, culvert, dam, sluice, flume, conduit or other structure or remnants thereof and any equipment or personal property the Minister may, without any attaching liability, remove or demolish the same in whatever manner the Minister deems necessary. The Permit Holder shall pay all expenses and costs of such removal or demolition.
- 3.12 This Permit shall not be changed, modified or discharged orally. Any changes shall be made in writing and, when agreed upon by both parties, shall be incorporated and form part of this Permit.
- 4.0 **TERMINATION**
- 4.01 If at any time during the term of this Permit there be any default, breach or nonobservance by the Permit Holder in respect of any covenant, proviso, condition or reservation herein contained, or the Permit Holder has failed to use the watercourse as stipulated in the Permit, the Minister may cancel the Permit at which time the Permit shall cease and the term created be at an end.

**5.0 GENERAL TERMS AND CONDITIONS**

- 5.01 This Permit shall enure to the benefit of and be binding upon the Minister, his successors, assigns and authorized representatives, and upon the Permit Holder, his heirs, administrators, executors and permitted assigns.
- 5.02 The failure of the Minister to insist upon a strict performance of any covenant, proviso, condition or reservation contained in this Permit shall not be deemed a waiver of any rights or remedies that the Minister may have and shall not be deemed a waiver of any subsequent breach or default in the covenants, provisos, conditions or reservations contained in this Permit.
- 5.03 It is recognized and agreed that this is a Permit only, and the Minister reserves the right to use the watercourse and water therein for any purpose and to allow others to use the watercourse and water for any purpose, provided that such use or purpose does not constitute a substantial interference with the rights granted to the Permit Holder hereunder.
- 5.04 Any notice or document required to be given by this Permit shall be sufficiently given if delivered or mailed postage prepaid:
- a) to the Minister at the Department of the Environment, P.O. Box 2107, Halifax, Nova Scotia, B3J 3B7 or at such other address as the Minister may direct from time to time;
  - b) to the Permit Holder at the address shown on the front of this permit.

The Permit Holder shall notify the Minister in writing of any change in the above address.

Any notice or document mailed to the Minister or Permit Holder shall be deemed to have been received three days following the day such notice was posted.



30 Damascus Road, Suite 115  
Bedford, N.S. B4A 0C1

Phone: (902) 424-7773  
Fax: (902) 424-0597

Process RSN Number: 7445731

## **INSPECTION REPORT**

### **Inspection**

APPLICATION/APPROVAL HOLDER: NATIONAL GYPSUM (CANADA) LTD.  
APPLICATION/APPROVAL NUMBER: 89-100  
ISSUED TO: Jeff newton  
INSPECTION DATE: August 30, 2013  
MAILING ADDRESS: 1707 HIGHWAY #2 MILFORD STATION, NS B0N 1Y0  
SITE NAME: National Gypsum (Canada) Ltd.  
SITE ADDRESS: 140 NELSON HILL RD. MILFORD, NS

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#### **OVERVIEW OF INSPECTION**

Inspectors Cuthbert and Randell conducted an inspection of the watercourse at the National Gypsum site. The original location of the water course was identified. A request to divert the watercourse was made in the 1990's. A Permit was issued for the water course alteration in July 1990. The terms and conditions of the Permit were completed during the 1990's including the construction of a fish ladder and maintenance of 3 litres per second in the watercourse downstream. Following the compensation; the watercourse naturally diverted through karst topography and is entering the mine through the existing working face.

It has been identified that the water incursion is currently posing a health and safety issue. The water is causing employees to get wet, as well as some slippery conditions. This will be more dangerous when temperatures drop below freezing. The water also poses some risk to the heavy equipment tires, and risk of puncture.

The proposed diversion is of a relatively shorter and more direct path than originally proposed during the 1990's application.

A diversion of a watercourse is an activity that would not be considered for approval. However; based on the risk to human health and safety, the completion of compensation, no expiry date on the Permit, a site inspection and a review of the existing information; it has been determined that the watercourse diversion can be completed under the existing Permit.

Appropriate erosion and sedimentation control measures should be undertaken in the construction of the watercourse alteration.

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**The inspection report has been received by:**

**Signature:**

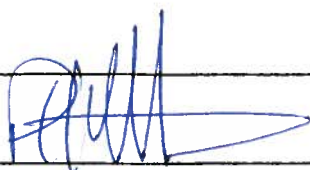
**Print Name of Person Signing:**



**Date:**

**Signature of Inspector:**

**Date:**

  
\_\_\_\_\_  
\_\_\_\_\_  
September 9, 2013

This inspection was conducted by Robert Cuthbert, Inspector Specialist with Nova Scotia Environment, who may be contacted at:

Nova Scotia Environment  
30 Damascus Road, Suite 115  
Bedford, N.S. B4A 0C1  
Phone: (902) 424-7773  
Fax: (902) 424-0597  
<http://www.gov.ns.ca/nse/>

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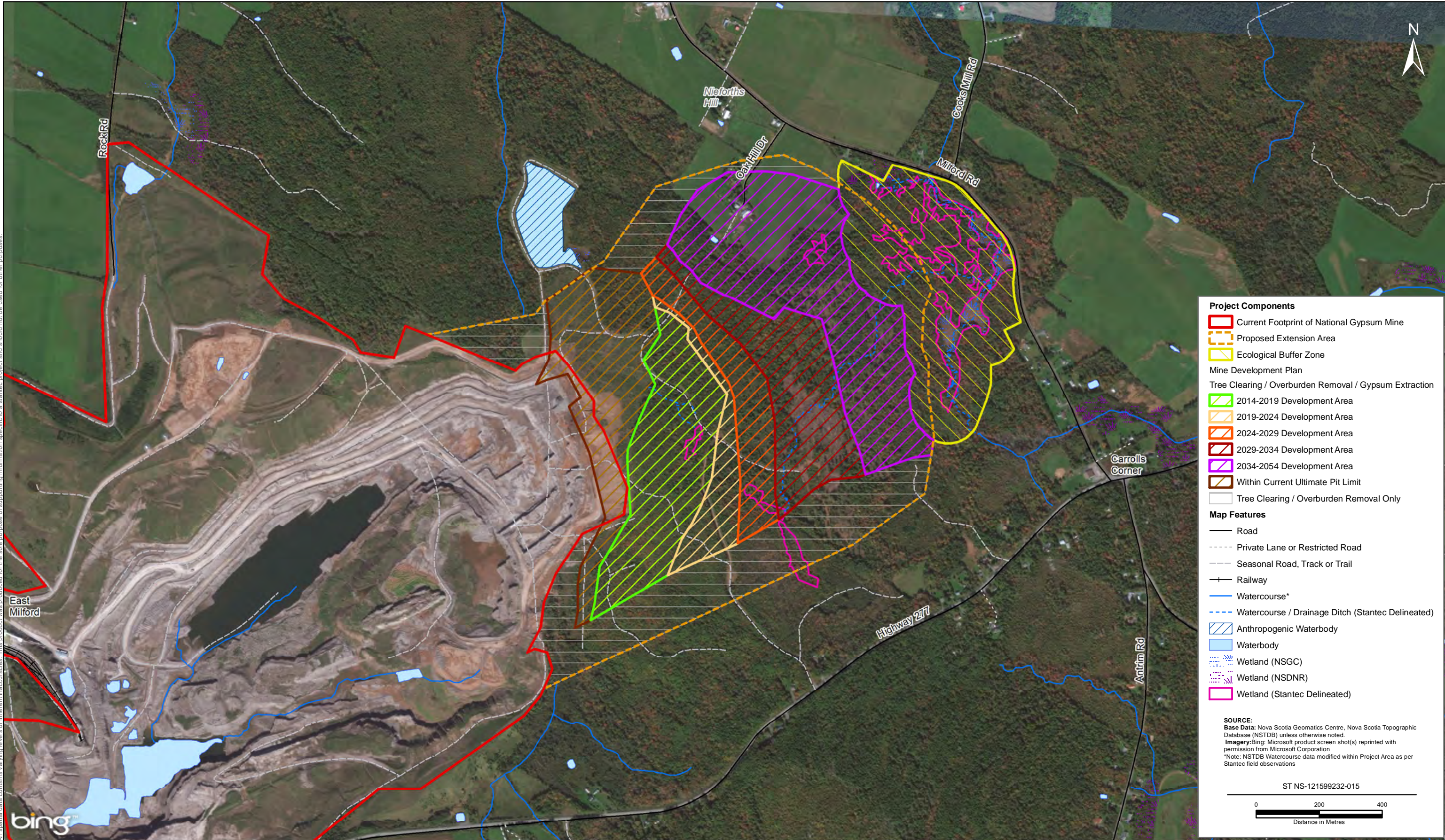
Folder RSN: 2306737


Appendices  
February 2015

## **Appendix B**

### **Proposed Mine Development Plan**






PREPARED BY:	R Sutcliffe
REVIEWED BY:	M Huskins-Shupe
CLIENT:	

National Gypsum Mine Extension

Proposed Mine Development Plan

FIGURE NO.:	B1
DATE:	Nov 05, 2014
	



Appendices  
February 2015

## **Appendix C**

### **Environmental Management Plans**

## Environmental Policy

National Gypsum Company will comply with all relevant laws, regulations, and standards relating to protection of the environment, and conduct its operations worldwide in such a manner as to provide appropriate protection for health, safety, and the environment.

National Gypsum is also a green manufacturer by choice, committed to the development and implementation of sustainable green building policies, standards and practices; to attaining the highest level of ecological responsibility and utilization of resource-efficient technology.



For more information on National Gypsum's sustainable products, visit [nationalgypsum.com](http://nationalgypsum.com).

9/10/2013

Attachment "A"

**National Gypsum (Canada) Ltd.  
1707 Highway # 2, PO Box 57,  
Milford Station, NS  
B0N 1Y0**

**Emergency Procedures Plan**

**SCOPE:**

A means to ensure a quick, safe and immediate response in times of an emergency, using an effective chain of command that will coordinate the efforts needed to relieve an emergency situation and ensure production interruption is at a minimum.

**DEFINITION:**

Emergency - any unexpected occurrence or situation demanding immediate action.

**PROCEDURE:**

These procedures are to be followed by all employees of National Gypsum (Canada) Ltd. whenever an emergency arises. (accident, fire, or natural disaster etc.) Practice drills will be conducted by each supervisor at least quarterly each year.

**ACTION PLAN:**

- 1) The following is a list of possible crises that may occur at the workplace:
  - a) Injury, requiring first - aid or medical attention
  - b) Fire, requiring outside assistance
  - c) Evacuation of persons with disabilities
  - d) Flooding
  - e) Engulfing or collapses of a structure with people still inside
  - f) Equipment roll over trapping operators inside
  - g) Spill of a hazardous material
  - h) Equipment struck by rock falling from face, trapping operator
  - i) Blasting accident
  - j) AN or ANFO Spill
  - k) Power failure - emergency phone at shop office
  - l) Bomb threats
  - m) **Hostage Situations**
- 2) This plan will be reviewed and updated every year .The plan will include equipment lists of required items, names of qualified personal, amounts of hazardous materials, storage areas, floor plans, emergency phone numbers, notification procedures and evacuation routes.
- 3) The following is a list of buildings and the designated areas for evacuees to gather in an emergency or practice drill involving the affected area:
  - Milford main office ----- in front of the office / visitor parking lot
  - Mobile repair shop ----- truck parking lot
  - Grease shed ----- truck parking lot
  - Shunter shed ----- truck parking lot
  - # 2 Crusher ----- steps to Car loader
  - Car loader ----- large doors at # 2Crusher
  - #2 Drive house ----- beside the storage building
  - #1 Crusher ----- in front of the truck hopper
  - Quarry ----- Trucks will respond to the loader they haul from.

All buildings will have a floor plan posted, showing escape routes and designated areas for employees to gather, at all exits.

4) The notification procedure shall be as follows;

FIRE - in all cases call the fire department - 911

POLICE - RCMP - -911 (non emergency 883-7077)

AMBULANCE - EMC - -911

POISON CONTROL - -911

HOSPITALS - Colchester - 893-4321 Dartmouth - 465-8333 QEII – 473-2043

ENVIRONMENTAL EMERGENCIES - 1-800-565-1633 Dartmouth - 426-6030

### **NOTIFICATION PROCEDURES :**

When an emergency occurs remain calm and follow these steps to ensure the quickest and safest response possible. There are different requirements for each type of emergency and therefore the requirement for separate procedures for each emergency.

### **INJURY :**

- 1) Whenever a First - Aid emergency arises follow the emergency action principals. These steps should be followed only by trained First - Aid Attendants.
- 2) Survey the scene, determine if it is safe to approach , and try to identify what happened .
- 3) Check the person for responsiveness, shake and shout. If the person does not respond, call 911.
- 4) Do a primary survey (A= open airway, B= check breathing, C= check for pulse circulation).
- 5) Do a secondary survey.
- 6) Keep monitoring the person's condition for life-threatening problems while waiting for EMS to arrive.
- 7) Help the person rest in the most comfortable position and give reassurance.
- 8) Appoint someone to meet the outside agencies at the bridge and escort them to the scene.

### **FIRE :**

- 1) Immediately sound the alarm at the pull station, by radio, phone, or by shouting. If the fire is located in an occupied building start an immediate evacuation.
- 2) Appoint someone to call the fire department (911) and have them come back to let you know that this has been completed.
- 3) Try to determine the size and location of the fire and if it can be extinguished using a portable fire extinguish.
- 4) If it can be done safely then do so, but if not, do not attempt, wait for the fire department to arrive.
- 5) Have someone wait at the bridge to escort the fire department to the emergency scene.
- 6) Notify the supervisor and maintain control of the scene.
- 7) If practical start the fire pump and use hand lines to protect any exposures with water.
- 8) If medical aid is required for anyone make sure a first aid attendant is notified and call for an ambulance if required.



## **EVACUATION OF PERSONS WITH DISABILITIES:**

### **Limited Mobility:**

- 1) The person(s) should be assisted in exiting the building through the nearest exit.

### **Visual Disabilities:**

- 1) In the event of an emergency, most persons with visual disabilities will be familiar with the immediate area they are located in. And so, tell the person about the nature of the emergency and offer to guide him/her.
- 2) As you walk, tell the person where you are and inform them of any obstacles as you approach them.
- 3) When a safe area is reached, orient the person to where he/she is and ask if further assistance is needed. Remain with them until the emergency is over.

### **Persons with Hearing Disability:**

- 1) Persons with a hearing disability may not perceive emergency alarms and an alternative warning technique is required. Two methods of warning are:
  - Writing a note telling them what the nature of the emergency is and the nearest evacuation route (i.e., "Fire - go out the rear door to the right and down, now).
  - Turning the light switch off and on again to gain their attention, then indicating through gestures or in writing what is happening and what to do.

## **FLOODING:**

- 1) When flooding occurs notify the Quarry Supervisor and the Pumpman (S. Rose).
- 2) If the flooding is or looks like it might flood # 1 Crusher, contact the Maintenance Manager.
- 3) Move any equipment or materials out of the flooding zone if possible.
- 4) If damming or water diversion is possible attempt to do so.
- 5) If the high water alarm sounds at # 1 Crusher, notify maintenance supervisor.

## **STRUCTURE COLLAPSE :**

- 1) If a building or other type of structure collapses with employees inside notify the Fire Department, Ambulance, and First - Aid Attendants as well as the Supervisor.
- 2) Do not attempt to enter the structure until it has been determined that it is safe to do so.
- 3) Appoint someone to meet the outside agencies at the bridge and escort them to the scene.

## **EQUIPMENT ROLL OVER:**

- 1) Follow the same procedures as in injury.
- 2) Notify the Quarry Supervisor, and First - Aid Attendants as well as any outside emergency response groups. (Fire, Ambulance etc.)
- 3) Make certain that the piece of equipment is stable and not about to roll over causing more damage or injury.
- 4) If the operator is unconscious do not move him until he is examined by a trained First - Aid Attendant

## **HAZARDOUS MATERIAL SPILL:**

- 1) Locate the source of the spill and where possible stop the flow and contain the product.
- 2) Determine the hazard potential. If it exists, shut off power supply and warn employees to vacate the area.
- 3) Contain the spill, block ditches, and cover any floor drains, surround product with floor dry, oil boom, or improvise as necessary.

- 4) Recover visible product, dig small pit, pump into barrels, and remove any contaminated soil and place in barrels as well.
- 5) All spills must be reported to your supervisor and any spill over 100 liters must be reported to the Department of Environment.
- 6) Spills of 10 liters or more must have an incident report completed identifying the cause and recommending a solution to prevent reoccurrence.

**EQUIPMENT STRUCK BY ROCK, TRAPPING OPERATOR:**

- 1) Do not attempt to enter area until it is determined safe to do so. Sound the alarm and notify first aid attendants if required.
- 2) If the operator is trapped notify the fire department.
- 3) Do not move the operator until a qualified person gives the go ahead unless it is determined the operator is not breathing (follow the ABC's of a primary survey).
- 4) Appoint someone to wait at the bridge to escort the responding emergency response team (s) to the site.

**BLASTING ACCIDENT:**

- 1) If an employee(s) is injured from a blasting accident follow the same procedures as set out in dealing with an injury.
- 2) If equipment is damaged, notify the Supervisor and keep all people away from the area until an investigation has been completed.
- 3) Report all blasting accidents immediately as per the regulations.
- 4) If the Anfo Truck has a fire emergency activate the automatic extinguisher system and evacuate the area for at least 3000 feet in all directions. Call 911 but **NO** attempt to fight the fire must be made.

**AN SPILLS OR OTHER AN EMERGENCY'S**

- (1) Any accident or incident, including theft of explosives or materials will be immediately reported to the Chief Inspector of Explosives as per the license requirements.
- (2) Hot work required to be completed on the Anfo Truck can only be done through a permit from the Explosives Regulatory Division. Power tools may only be used on the non-explosive part of the vehicle.
- (3) Emergency repairs may be allowed after notification and approval of the Explosives Regulatory Division.
- (4) If a contaminated vehicle has broken down and cannot be decontaminated in situ, and required repairs that decontamination is needed, the vehicle may be towed to a place for decontamination once the Explosive Regulatory Division's permission has been obtained.
- (5) Clean up of spilled material, AN or Anfo shall be done in accordance with the requirements of the Department of Environment and Labour and Natural Resources Canada.

**BOMB THREATS:**

- 1) If a bomb threat is received it is to be treated as a serious condition and the area affected is to be evacuated as set out in the building evacuation procedure.
- 2) The R.C.M.P. is to be notified (911) and their instructions are to be followed.
- 3) No one is to re-enter the building until the RCMP has given the clearance to do so.

**HOSTAGE SITUATION:**

- 1) Be patient. Time is on your side. Avoid drastic action.
- 2) The initial 45 minutes are potentially the most dangerous. Follow instructions and be alert.
- 3) Do not make sudden gestures or actions which could jeopardize your well-being.

- 4) Do not speak unless spoken to and then only when necessary.
- 5) Do not talk down to the captor who may be in an agitated state. Avoid appearing hostile. Do not stare at the captor.
- 6) Comply with the instructions as well as you can. Avoid speculating or arguing.
- 7) Be observant, without being antagonistic. Try to remember all distinguishing characteristics of your captor, such as tattoo, scars, clothes, hair colour, etc.
- 8) Be prepared to answer the Police on the phone.
- 9) Be patient. Attempt to establish rapport with the captor upon request from the Police.
- 10) If medications or first aid is required by anyone, say so. The captors may not wish to harm anyone; they may have taken hostages as a defensive posture or to gain something from the authorities.

### **CN BLOCKING BRIDGE:**

If a CN Train is blocking the bridge during an emergency and access is required to the roads the following action must be taken:

- 1) Contact the R/C Shunter Operator and have him use the Basket Radio in the Shunter to contact CN Driver and instruct him that an emergency exists and he must immediately clear the bridge.
- 2) The CN Driver can be reached on Channel # 1.
- 3) If the R/C Shunter Operator cannot be reached or is not on site, the supervisor must make contact as above.

### **EQUIPMENT LIST:**

- 2 – 12 yard front – end loaders
- 1 - 7 yard front-end loader
- 6 - 70 ton off highway dump trucks
- 3 - track type bulldozers
- 2 - excavators
- 1 - road grader
- 1 - water truck (1500 gal.)
- 1 - fuels - lube truck
- 1 - anfo – truck

### **HAZARDOUS PRODUCTS LIST:**

Diesel fuel	- 50,000 liters maximum	By Shunter Shed
Furnace fuel	- 9,000 liters maximum	By Repair Shop
Gasoline	- 9,000 liters maximum	By Old Shop
Used Oils	- 10,000 liters maximum	By Shop – Grease Shed
Motor Oils	- 5,000 liters maximum	Shop – Grease Shed
Hydraulic Oils	- 3,000 liters maximum	Shop – Grease Shed
Propane	- 5 X 12 kg. Containers	Behind Shop
Oxygen	- 35 X 244 cu. Ft.	Front of Welding Shop
Acetylene	- 12 X 300 cu. Ft.	Front of Welding Shop
AN	- 25,000 kg. Maximum	By Tracks in front of Office

**FIRST AID ATTENDANTS:**

Ralph Wardrope	Reg Croft	Rick Smith	Thys Molenaar
Leonard Wright	Steven Schofield	Kevin MacLellan	Kim Gilby
Ross MacDonald			

**POST TRAUMA SUPPORT:**

At National Gypsum a critical incident is any event that is outside the normal range of human emotion and has the potential to pierce our emotional armor. The Company is aware of mental trauma associated with major critical incidents could dramatically affect how supervisors and employees function at work or at home.

**Employee and Family Assistance Program**

Employee and Family Assistance program is a self-referral counseling service available to employees and supervisors. All information is confidential. The company is not informed of the identity of those using the program. This benefit covers the cost of short-term counseling, assessment and referral. The service is provided by a private and confidential counseling service who can be contacted through our HR division or by dialing 1-800-891-4317 (hearing impaired 1-800-456-4006) 24hrs a day/7 days a week.

**EMERGENCY PHONE NUMBERS:**

FIRE ..... 911  
 POLICE ..... 911  
 AMBULANCE ..... 911  
 HOSPITAL ..... COLCHESTER ..... 893-5507      QE II ..... 473-2043  
    DARTMOUTH GENERAL ..... 456-8333  
 POISON CONTROL ..... 911

CANUTEC ..... 613-996-6666

PLANT MANAGER ..... JEFF NEWTON ..... 639-1932  
 MAINTENANCE ..... THYS MOLENAAR ..... 758 2881  
 OPERATIONS ..... LEE GOODICK ..... 832-0336  
 DOCKSITE ..... BARRY MacLEAN ..... 758-1139  
 OFFICE MANAGER ..... KIM GILBY ..... 865-4634  
 H.R. & SAFETY ..... RALPH WARDROPE..... 236-2092

ENVIRONMENTAL EMERGENCY'S ..... 1-800-565-1633  
 DEPARTMENT OF LABOUR AND ADVANCED EDUCATION 424-4125  
 EMERGENCY MEASURES ORGANIZATION ..... 424-5620  
 FIRE MARSHALL'S OFFICE ..... 424-5721  
 DEPARTMENT OF ENVIORNMENT ..... 424-7773

FUEL SUPPLIER ..... PETRO CANADA SPILLS ..... 1-514-252-5800  
 CN TRAIN ..... CHIEF DISPATCHER ..... 1-800-617-6617

CHIEF INSPECTOR OF EXPLOSIVES ..... 613-995-8251  
    FAX ..... 613-995-0480  
    email - [cwatson@nrcan.gc.ca](mailto:cwatson@nrcan.gc.ca)

Ralph Wardrope  
 Human Resource & Safety Manager

## Revised:

- |                      |                     |
|----------------------|---------------------|
| ➤ March 27, 2002     | ➤ June 11, 2010     |
| ➤ April 21, 2003     | ➤ August 26, 2010   |
| ➤ August 7, 2003     | ➤ January 19, 2011  |
| ➤ November 4, 2004   | ➤ February 29, 2012 |
| ➤ May 19, 2005       | ➤ October 31, 2012  |
| ➤ September 6, 2006  | ➤ April 25, 2013    |
| ➤ September 13, 2007 | ➤                   |
| ➤ August 21, 2008    | ➤                   |

“Attachment C”

National Gypsum (Canada) Ltd.  
1707 Highway # 2,  
Milford Station, NS  
B0N 1Y0

**Contingency Plan & Procedures**

**For**

**Releases of Dangerous Goods and Hazardous Wastes**

## Table of Contents

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Disposal	4
Public Relations & Reporting	4
Training	4
Equipment List	5
Hazardous Products List	5
Emergency Telephone Numbers	6
Emergency Procedures	Attachment "A"
Fire Plan	Attachment "B"

### Record of Amendments

Plan developed June 24, 1992  
 Revised June 4, 1993  
 Revised September 13, 1993  
 Revised August 31, 2001  
 Revised September 10, 2003  
 Revised September 7, 2004  
 Revised September 7, 2006  
 Revised August 21, 2008  
 Revised January 19, 2011  
 Revised February 29, 2012  
 Revised September 10, 2013

## **National Gypsum (Canada) Ltd.**

### **Emergency Procedures for Hazardous Material Spill**

#### **Introduction:**

This procedure will define what Hazardous Materials are stored or used on site at the Milford Quarry, how to deal with an accidental spill or release and how to restore the environment back to its natural state.

The Hazardous Materials stored / used on site are, petroleum based products, i.e. fuel oils, gasoline, lubricating oils, and greases, and ammonia nitrate. The Emergency Plan and Fire Plan are two other documents that are closely related to this plan. There are no PCB containing material in use or storage at this site.

#### **Scope:**

This plan is intended to direct the actions to be taken in order to mitigate and / or correct any damage caused by a hazardous material spill or accidental release at the Milford Quarry site. This plan will set guidelines and procedures for National Gypsum employees to follow in the event of a hazardous material spill. The notification requirements of the Nova Scotia Department of Labour Environment Division, National Gypsum Company in Charlotte NC, and our different suppliers of hazardous products.

#### **Notification Procedures:**

A spill or release of any hazardous material on the property of National Gypsum (Canada) Ltd. regardless of the amount must be reported immediately. All employees will be charged with the responsibility to report any spills or releases they cause or find to the Supervisor on site immediately. At the same time take whatever measures necessary to stop and contain the spill or release. The Supervisor will be responsible for ensuring that the proper agencies are notified as per the requirements, controls are in place to prevent further spill or release of hazardous product, and clean-up measures are started. He shall ensure the site is restored to its original state.

#### **Containment and Clean-up Procedures:**

All responses at National Gypsum (Canada) Ltd. will be of the non-transport-related type.

Spills or accidental releases of any type, size, or quantity are to be contained, cleaned-up and reported immediately. All bulk storage areas containing hazardous materials will have a supply of clean-up materials on site for rapid response to minor spills or releases.

The most likely spill will be at the 50,000-liter diesel fuel storage tank located at the Shunter Shed. (See site plan for actual locations of stored Hazardous Materials) If a large spill occurs at this site all efforts must be made to contain the fuel oil and to prevent it from entering the manhole by the west-end of the Shunter Shed. This drain leads to the Shubenacadie River and all efforts must be used to prevent fuel oil from entering the river. Blocking the ditch by whatever means will be the first and primary concern.

Any equipment required to move earth or to dig sump holes at a spill site is available on site. (See Equipment List)



### **Restoration of Spill Site:**

It is the policy of National Gypsum (Canada) Ltd. that all contaminated material or soil will be removed and treated by an approved treatment facility. The Department of Labour Environmental Division will be consulted in all cases of site restoration.

### **Disposal:**

For large spills requiring large quantities of contaminated soil to be removed, outside contractors will be called in to remove and dispose of all material as per the direction of DOL Environment personal. Small spills will be cleaned-up by National Gypsum (Canada) Ltd. employees and materials will be stored in empty 205 liter drums until full. The disposal of these drums will be handled by Industrial Environmental Services along with the normal hazardous material waste produced under normal operation of our plant.

### **Public Relations & Reporting:**

It will be the responsibility of the Human Resource & Safety Manager to handle all reporting required to the Department of Labour Environment as well as any requirements for public relations. (See emergency phone list for contact numbers)

### **Training:**

All employees will be informed of this plan and will be reviewed at least annually with them. Any employee who would have the occasion to handle or dispense petroleum products will be trained in the technical procedures via paper exercise as well as simulation of an actual spill. This will be done annually and any time changes have been made. All training will be evaluated; each time it is reviewed, looking for areas to improve or to simplify the plans. All emergency equipment will be inspected monthly to insure it is available for use when needed.

The Human Resource & Safety Manager will be responsible to insure that all information in these procedures are kept current and when changes are made all parties are informed. A record of amendments will be attached.

### **Equipment List:**

The following is a list of the different types of equipment available on site, at all times for use in an emergency.

- 2 – 12 yard front – end loaders
- 1 - 7 yard front-end loader
- 6 - 70 ton off highway dump trucks
- 3 - track type bulldozers
- 2 - excavators
- 1 - road grader
- 1 - water truck (9000 liter)
- 1 - fuels - lube truck
- 1 - anfo – truck

**HAZARDOUS PRODUCTS LIST:**

This is a list of the maximum quantities that would be on site at any given time.

		Spill Reporting Requirements
Diesel fuel	- 50,000 liters maximum	100 liters
Furnace fuel	- 9,000 liters maximum	100 liters
Gasoline	- 9,000 liters maximum	100 liters
Used Oils	- 10,000 liters maximum	100 liters
Motor Oils	- 5,000 liters maximum	100 liters
Hydraulic Oils	- 3,000 liters maximum	100 liters
Propane	- 5 X 12 kg. containers	100 liters
Oxygen	- 35 X 244 cu. Ft.	100 liters
Acetylene	- 12 X 300 cu. Ft.	100 liters
Ammonia Nitrate	- 80,000 kg. Maximum	50 liters or 50 kg

All spills shall be reported to a supervisor who then will report the spill to the Department of Environment and Labour or Natural Resources Canada depending on the material involved in the spill.

**Emergency Phone Numbers:**

September 10, 2013

These numbers are accessible 24 hours per day 7 days per week.

FIRE .....	911
POLICE .....	911
AMBULANCE .....	911
HOSPITAL .....	QE II .....
	473-2043
	COLCHESTER .....
	893-5507
	DARTMOUTH GENERAL ...
	456-8333
POISON CONTROL .....	911
CANUTEC .....	613-996-666

PLANT MANAGER .....	JEFF NEWTON.....	639-1932
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QUARRY MANAGER .....	LEE GOODICK .....	832-0336
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MAINTENANCE MANAGER .....	BARRY MacLEAN .....	758-1139
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DOCK MANAGER .....	THYS MOLENAAR.....	758-2881
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OFFICE MANAGER .....	KIM GILBY .....	865-4634
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H.R. & SAFETY MANAGER .....	RALPH WARDROPE .....	236-2092
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CN .....	CHIEF DISPATCHER .....	1-800-617-6617
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HEAD OFFICE .....	SPEED DIAL .....	01
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ELECTRICITY .....	NS POWER .....	428-6230
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DEPARTMENT OF LABOUR and ADVANCED EDUCATION.....	424-4125
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ENVIRONMENTAL EMERGENCY'S .....	1-800-565-1633
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EMERGENCY MEASURES ORGANIZATION .....	424-5620
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FIRE MARSHALL .....	424-5721
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FUEL SUPPLIER .....	PETRO CANADA SPILLS .....	514-252-5800
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CHIEF INSPECTOR OF EXPLOSIVES .....	613-995-8251
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FAX ...	613-995-0408
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Email –	<a href="mailto:cwatson@nrcan.gc.ca">cwatson@nrcan.gc.ca</a>
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Ralph Wardrope

Human Resource &amp; Safety Manager

**National Gypsum (Canada) Ltd.  
Quarry Operations**

**STANDARD OPERATING PROCEDURE**

**ID#**                      **QO #07 -001**

**Task:**                      **Normal Blasting Operations in the Quarry**

**Classifications:**      **Blaster**

**Revised:**                **July 23,2014**

**Scope:** This procedure will assist those employees who are designated to perform blasting operations and have access to explosives. The procedure will be reviewed annually to ensure that it is current and consistent with the way the job is being done. All blasters are to know and follow;

- a) Blasting Safety Regulations made under Section 82 of the OHSA.
- b) Current ANFO (Mechanical) Manufacturing Certificate
- c) Blasting Explosives and Initiation Systems Storage, Possession, Transportation  
Destruction and Sale

Lead blasters must also be familiar with and use the remote nonel blasting machines according to the manufactures instructions.

**Equipment Operating Angle Devices:** Angle devices are designed to measure the current operating angles of the machine. The angle device installed on the side of the machine measures the downhill / uphill slope. The angle device installed on the front of the machine measures the side slope. The angle device indicates the current operating angle by lining up the black ball with the corresponding numbers at the base of the angle device.

**Operating Standards:** The Tradestar ANFO truck and the De-watering Truck is not to be operated on any side slope greater than 15 degrees and downhill / uphill slope greater than 30 degrees. The maximum slope constraints are for stable ground conditions under full traction. These maximum constraints must be reduced considerably for both loose ground and slippery conditions as the Operator will have to apply his/her knowledge to complete the task safely. Operators trained in STOP are expected to utilize the STOP safety cycle (Decide-Stop-Observe-Think-Act), if there is any doubt before acting STOP and get clarification. If you have any doubt or concerns about specific tasks contact your supervisor.

**Ground Control / Face Inspections:** Operators must be very familiar with established procedures.

**Fall Protection:** Blasters must be familiar with established fall protection requirements. If you have not been subjected to fall protection training you should see your supervisor before proceeding to work.

## Procedure

### 1. Pre- Start Inspection / Fall Protection Inspection and Hook Up

#### Pre- Start Inspection Dewatering Truck

1. Conduct walk around inspection check tires, wheel nuts and inspect engine compartment ( belts, hoses, oil leaks etc)
2. Check engine oil
3. Clean off headlights, tail lights and indicator lights.
4. Check fire extinguisher.
5. Start engine, check all gauges, indicators, warning lights for normal readings.
6. Check brakes and steering.
7. Ensure warning lights are operational.
8. Indicate if repairs are required on the operators report.

#### Pre- Start Inspection ANFO Truck

1. Conduct a walk around inspection check tires, wheel nuts, ladders, steps.
2. Inspect mixer chains and linkages, auger arms, and mast condition.
3. Inspect engine compartment check belts, hoses, oil leaks etc.
4. Check engine oil.
5. Clean off headlights, tail lights and indicator lights.
6. Check fire extinguisher.
7. Ensure nozzles to fire suppression system are not plugged with mud. If the nozzles or a nozzle is plugged with mud it must be washed clean prior to loading the truck.
8. Start engine, check all gauges, indicators, warning lights for normal readings.
9. Checks brakes and steering.
10. Ensure warning lights are operational.

#### Fall Protection Inspection and Tie Off

A fall hazard from elevation is defined as a fall exposure of 6 ft (2 metres) or greater. If you are working with 3ft of a fall hazard then **fall protection equipment** must be used.

1. Inspect lifeline block housing for distortion, cracks, damage and legible supplier specification labels. Check the block for loose screws, bent or damaged parts. Ensure the anchorage loop swivel is free and connecting hook is corrosion free and not damaged.
2. Examine anchorage point check for damage or distortion.
3. Check to see if Lifeline will extend and retract fully. Make certain device locks up when lifeline is jerked sharply. Lock-up should be positive with no slipping.
4. Inspect the entire lifeline unit for signs of corrosion, cuts, kinks, burns, broken wires, chemical contact areas or severely abraded areas.
5. Inspect reverse lifeline payout. If a fall has been arrested it is possible that the reverse line has been deployed. To inspect for this pull the life line out until it stops. If the lifeline red band is visible, the reverse lifeline has been spent and the unit must be serviced by an authorized service center before reuse. If the

- reverse lifeline has not been deployed that portion is acceptable and the inspection can continue.
6. Inspect remaining components of subsystem; full body harness, anchorage connector for defects.
  7. Hook the Ultralock Retractable Lifeline to a designed anchor, put on safety harness, lock hook to the harness.

## **2. Loading Trucks with Explosives**

### Loading De-watering Truck

1. Determine the requirements from both the cap and powder magazine.
2. Insert your designated key fob into the slot and wait approx. 10 seconds before opening the door to ensure the fob registers.
3. Load the truck at each location. Ensure each magazine door is locked when leaving, your key fob is removed and both the cap box and powder box are locked on the truck.
4. Flip placards to 1.1 D, ensure red flashing light is on and proceed to the blasting area.

### Loading ANFO Truck

1. Fuel ANFO truck at the fueling station.
2. Position the truck under the AN silo for loading ensure both hatches are aligned.
3. Climb up onto the truck, put the handrail up, unlock AN silo and the loading hatches.
4. Open the hatches and proceed to load the truck with the desired amount of AN.
5. Close and lock both the silo hatch and the loading hatch on the truck.
6. Put the hand railing down and climb down off the truck.

### Established Loading Trucks with Explosives Practices

1. Ensure the magazines doors are locked when leaving each site.
2. When explosives are present, the cap and powder box on the de-watering truck must be locked at all times other than when the truck is on the blasting bench.
3. When detonators are present in the cap box a sign must be displayed to read detonators.
4. Explosives outside the magazine must be attended at all times.
5. Once trucks are loaded with explosives they cannot be parked around the office or main shop.
6. If a fire should break out while the ANFO truck is at the fuel station activate the trucks fire suppression system if it is safe to do so, declare an emergency and ensure the evacuation of all personnel within 3,000ft of the truck. Do not attempt to fight the fire.
7. The AN storage silo and AN Hopper on the truck are considered a confined space and requires a written permit from your supervisor.
8. If AN does not flow freely from the storage silo, electric hammers can be used to increase the flow.
9. If any AN is spilled when the truck is being loaded the spilled AN is to be cleaned up immediately and disposed off in the top portion of a hole directly below the stemming.

### 3. Loading Production Shots

#### Examine Work Area

1. Stop a safe distance away from the work area, review the face inspection sheet.
2. Proceed to work area, check the top working surface looking for possible walking hazards. Have the hazards removed prior to loading the shot.
3. Closely inspect the location of the drilled holes relative to the free face.
4. Inspect the shot for possible problems. If a hazard exists, notify your supervisor and if necessary re-drill holes prior to loading.

#### Preparing to Load Production Shots

1. Set out blast warning signs on entrances to the shot loading area.
2. Set out high visibility markers on either end of the blast area to indicate the area to be blasted below.
3. Measure and record the depths of all the holes to be loaded.
4. Position the trucks prior to loading at the first hole.
5. Determine how the hole is to be loaded; dry, lined or water filled.

#### Loading Production Shots

1. Determine the borehole condition and the required blasting agent:
  - a) If the hole is making at least 2 gallons per minute and the blast is not scheduled to be fired immediately then load with a large diameter water gel.
  - b) If the hole is making less than 2 gallons of water per minute then line the hole and proceed to load with a combination of large diameter water gel and ANFO.
  - c) If the hole is not making water pump as required and load as a dry hole with ANFO.
2. Based on the borehole condition, prepare the appropriate hardware, explosive and materials needed.
3. Load the hole to the desired height and stem the rest of the way to the surface.
4. Record and report all conditions along with all materials consumed on the shot form.

#### Loading Shot using the ANFO Truck

1. The desired position of the ANFO truck is such that 2 holes can be loaded from one set-up.
2. Remove the boom from the carrying saddle and swing it over the first hole using the remote control or manual controls.
3. Fill augers with ANFO by starting the auguring system, as the augers are being filled and during the loading of the first hole watch the fuel percentage read out. The target is a six-percent fuel mixture for maximum explosive energy. If the fuel mixer requires adjusting the fuel divider is located in the cab below the computer (note refer to ANFO operators manual).
4. If the boom is out and the truck must be moved use low gear and move slowly so as not to damage the boom and swing gear assembly.
5. When loading the last hole of the shot, stop the loading short of the desired collar height to ensure all the AN can be placed in the last hole while maintaining the desired collar height.

6. Unlock the control valve cover and empty the remaining ANFO that's in the auger system into the last hole bringing the collar up to the desired height by using the manual controls located at the back of the truck.
7. Re-lock the control valve cover.
8. Swing the boom back into its carrying saddle and put the hose in its travel position.

#### Established Practices when Loading Production Shots

1. If you are working closer than 1 meter from a 2 meter drop then **fall protection** is required. Always be aware of your position to the highwall.
2. No unauthorized personnel or piece of equipment can come inside the posted blast warning signs without authorization from the blasters.
3. An employer, a blaster with direction and control of the blasting operation and any supervisor directing work in a blasting area must ensure that all tasks in the blasting area are coordinated so that they may be performed safely.
4. Prior to entering the blasting bench, stop and visually survey the bench for all possible hazards.
5. If a wet hole is loaded prior to the arrival of the ANFO truck notify the blaster operating the ANFO truck.
6. If a portion of a shot appears light and one is uncertain then the face must be profiled to prevent fly rock and or a significant air blast.
7. Prior to loading the shot the "Blasting Area", signs will be placed on either end of the blast approximately 100 feet behind the shot.
8. When excavating equipment is working in the area one six – foot high, high visibility marker will be placed on either end of the blast. This will indicate to the operators below the blast area.
9. Loading of holes will not occur when excavating equipment is working within one times the bench height.
10. Pursuant to the AN permit only 2 operators and 2 visitors are allowed at the blast site while ANFO is being directly discharged down the bore hole.
11. If a hole needs to be re-drilled it will be done in accordance with section 50 General Blasting Safety Regulations OHS. (never drill a hole within ½ the holes depth or 20 ft. which ever is greater).
12. The ANFO truck is not to be within 15 meters of an operating drill pursuant to form 6R of the AN permit.
13. No smoking or open flame is permitted in a blasting area.
14. During cold weather conditions set the hydraulic warmer on the ANFO truck for 15 minutes before starting to load holes.

## **4. Connection / Clearing and Guarding / Blast Firing and Post Blast Inspection**

### Connecting Blast Holes

1. Connect the blast holes based on the desired firing sequence.
2. Ensure all holes are properly connected by checking the connections.
3. If it is a multi row shot ensure the rows are properly connected by following the nonel connections in either direction. Return to the hole that connects the front row to the back row and follow the lead nonel back with your hands. Continue to follow the



connections along the back row in either direction. Repeat this procedure for each row.

#### Blast Clearing and Guarding

1. Depending on the location of the blast, several persons may be required to clear and guard all roads and approaches to prevent a person from entering the blast danger zone prior to firing the blast
2. All equipment and personnel must be outside of the blast danger zone before the two-minute warning is sounded. The blast danger zone is defined as a minimum of 750ft radius behind the line of the shot and a 2000ft radius to the front and sides of the direction of the shot. Only persons clearing the shot can enter this zone once the two-minute warning has sounded.
3. In circumstances where public lands are within a 3000ft radius to the front and sides of the shot, the Lead Blaster will have the shots profiled and surveyed before loading and firing the shot.
4. The Lead Blaster, Blaster and Supervisor shall ensure that sections 66, 67 and 68 of the blasting safety regulations are complied with before the blasting process begins. The person clearing the front of the shot shall double-check the area before they call for the two-minute warning. The Lead Blaster firing the shot can request for additional guard(s) if they cannot adequately guard the area behind the shot. Prior to firing the shot, the blaster must be outside the blast danger zone (750ft to the rear or 2000ft radius to the front and sides of the direction of the shot) or as far as necessary to clear the expected blast area and be at least 100ft away from any high wall.
5. All persons clearing and guarding the blast danger area will keep this area guarded until the "blast all clear" has been communicated and sounded.
6. In certain circumstances, equipment that cannot be moved may be left within the blast danger zone. The lead blaster should notify the supervisor of the condition and have a decision. Under no circumstances should personnel be allowed to be within the blast danger zone during a blast unless they are under approved shelter.

#### Blast Firing and Post Blast Inspection

1. All blasts should be fired as soon as practicable possible.
2. Blasts are mainly detonated using a remote nonel blasting machine where the blaster must be outside the blast danger zone (750ft to the rear or 2000ft radius to the front and sides of the direction of the shot) or as far as necessary to clear the expected blast area and be at least 100ft away from any high wall.
3. The use of this machine along with the required steps are covered in manufactures instructions manual.
4. If the remote Nonel Blasting Machines are not working or not available for what ever reason then;
  - a) A blasting shed will be used. If a blasting shed is required then the required steps are covered in SOP "Firing Shots with Blasting Sheds".
  - b) Nonel lead line can be extended to fire the blast where the blaster must be outside the blast danger zone (750ft to the rear or 2000ft radius to the front and sides of the direction of the shot) or as far as necessary to

clear the expected blast area and be at least 100ft away from any high wall.

5. After the shot has been fired, before going into the shot area, the Blasters will allow the smoke and fumes to clear from the shot area.
6. The blaster should approach the top of the shot cautiously and check the shot for misfired holes. If the shot has fired completely, the blaster will call the persons guarding the shot and let them know the shot is all clear. The person guarding the shot will radio the primary crusher operator and tell him that the shot is all clear and to sound the all clear. This warning will be two soundings of the siren. They will also declare over the radio that 'The blast is cleared, everyone can use their radios again'.
7. On the post blast inspection it may be determine that a liner has failed. If this is identified then check to see if the nonel tubing has burn marks from joining hookup and see if the lower portion of the hole has moved. If the burn marks are not evident and rock movement is not as expected then consider the hole as a misfire.
8. If a misfire or other shot failure has occurred, an all clear may be sounded only if the misfire does not present an immediate hazard. The area is then to be blocked off to limit access until the misfire has been dealt with in accordance to the Blasting Safety Regulations.
9. Record any post blast results on the face inspection report i.e. overhangs, cracks, any unusual hazards. The face inspection report is to be given to the operators requiring it or placed in designated box in the clock room.

#### Established Practices for Connection / Clearing and Guarding / Blast Firing and Post Blast Inspection

1. Blaster must know and follow the Blasting Safety Regulations made pursuant to the Occupational Health and Safety Act.
2. An employer and a blaster must ensure that sufficient security measures are used to prevent any unauthorized person from entering an area where loaded holes are present.
3. Blaster must be familiar with the use of the remote nonel blasting machine per the manufactures instructions.

## **5. Misfired Hole**

### Clearing the Misfire

1. After it has been determined that a misfire has occurred an employer and a blaster must ensure that a misfired hole is treated to ensure the removal of all hazards from the misfired hole in a manner that complies with the Blasting Safety Regulations made under the Occupational Health and Safety
2. The misfire cannot be dealt with until an employer and a blaster ensure the hole is treated at a safe and suitable time and in accordance with any instructions provided by the manufacture of the detonator.

3. Before treating the misfire hole, a blaster must inform all supervisors of all employees in the blasting area of the means that will be used to treat the misfired hole.

#### Reporting Misfire Hole

1. A misfire hole must be reported with 24 hrs in accordance to section 12 (2) of the Blasting Safety Regulations.
2. A blasting incident report must be filled out in accordance to section 12 (3) of the Blasting Safety Regulations.
3. Ensure under section 12 (2) that MOHSC is copied on the incident and consulted on the corrective action taken.

### **6. End of Shift Requirements.**

#### Emptying Dewatering Truck

1. All unused explosives or caps shall be returned to there appropriate magazine.
2. Ensure the magazines are locked back up.
3. Park the dewatering truck at the designated area.

#### Emptying ANFO Truck.

1. Position ANFO truck at AN silo as the boom reaches the hopper, set parking brake.
2. Turn fuel valve control located on the left side fender to the off position.
3. Remove cover off the hopper, swing boom over the hopper and start up the bucket elevator system.
4. Begin auguring AN back into the silo
5. Unlock loading hatch and observe until all AN is emptied as practical (heel 50-kg).
6. When finished unloading AN shut off truck auger and bucket elevator system, re-lock loading hatches on ANFO truck.
7. Swing boom back in it's saddle and set cover back on the hopper to the bucket elevator system.
8. Park the ANFO truck at the approved parking area, ensure loading hatches are locked, control valves are locked and the master switch is turned off.
9. Lock the gate on the parking area.

## General Work Place Rules

1. All operators are to be in care and control of the equipment they are operating at all times.
2. All incidents of damage to the equipment you are operating must be reported to your supervisor on shift immediately
3. Each blaster must know and comply with;
  - a) Blasting Safety Regulations made under Section 82 of the Occupational Health and Safety Act,
  - b) Current ANFO (Mechanical) Manufacturing Certificate
  - c) Blasting Explosives and Initiation Systems Storage, Possession, Transportation Destruction and Sale.
4. Neither the Dewatering Truck nor the ANFO Truck are to be parked near the main office or the rear of the shop dry area while carrying explosives.
5. The Dewatering truck must always be attended while carrying explosives. Attended is defined by the courts as alert, awake, consistently watch full.
6. While operating the ANFO truck on the bench be watchful of all loaded holes and get a spotter when maneuvering, backing towards open ends, loaded holes or all hazardous conditions on the bench on the bench.
7. While operating the Dewatering or ANFO truck provided seat belts must be worn at all times.
8. Hearing protection is required when the drill is operating on the bench and blast hole loading is occurring.
9. Tightly fitting safety goggles are required when handling both ammonium nitrate prills and packaged explosives.
10. When traveling to the blast site all access roads must be at least 50ft from the open edge or bermed. If access does not meet the standard then entrance to the site is prohibited.
11. Headlights or day time running lights must be on at all times.
12. Ensure red flashing lights are on and operational when explosive are being transported.
13. When mounting or dismounting the ANFO Truck or climbing to up to or down from the loading hatches always use three point contact.
14. If you are working or need to come closer than 1 meter from a 2 meter drop then **fall protection** is required. Always be aware of your position to the high wall.
15. House keeping standards apply; cabs are to be cleaned each shift and all articles within the cab are to be secured.
16. Lock the equipment at the end of each shift
17. Failure to follow this procedure could result in disciplinary action.

	Quarry Superintendent	Quarry Manager	Safety Manager	Plant Manager
	Date	Date	Date	Date

## **National Gypsum (Canada) Ltd.**

### **Training Requirements for use of Anfo Truck**

All blasting operations will be pursuant to the “Blasting Safety Regulations” made under Section 82 of the Occupational Health and Safety Act in Nova Scotia.

Note – Blaster certificates 1<sup>st</sup> class to 3<sup>rd</sup> class are covered under the Provincial “Blaster Trade Regulations”.

Training will consist of the following:

#### **Monthly PC Safety**

January	Elements of Back Care
February	Hearing Conservation for Employees
March	WHMIS the Learning System Ladders:
April	A Practical Approach to Ladder Safety
May	Electrical Safety: What everyone should know Electrical Safety: NFPA 70E Arc Flash Training
June	Confined Space Employee Training: Permit Require
July	Bloodborne Pathogens: Always Protect Yourself
August	Step Back for Safety Series – Hand Safety
September	Lockout/Tagout: Authorized Employees
October	Fire Extinguishers: Ready to Respond
November	PPE: From Head to Toe Respiratory Protection Employee Training

#### **Monthly Safety Meetings**

January	Slips, Trips and Falls
February	Mental Health
March	WHMIS
April	PPE
May	Confined Space
June	Arc Flash
July	Conveyor Safety
August	Arch Flash Safety
September	Lockout
October	Fire Prevention
November	2016 Safety Program
December	Electrical Safety

#### **Annual review with sign off on:**

- Operating and Maintenance Instructions AN/FO Delivery Unit Model# 5TOHRC/DS
- Emergency Procedures Plan Revised September 4, 2014
- Fire and Pre Fire Plan Revised September 4, 2014

- Containment and Disposal Procedures Revised February 20,2014
- QO -007-001 Normal Blasting Operations in the Quarry Revised July 23,2014

### **Fall Protection Training**

- training is required every three years, last completed December 14,2012
- Training required due on or before December 2015.

### **Spill Reporting and Clean Up**

- training is required every three years, last completed September 8, 2014
- Training required due on or before September 2017.

<b>Revised:</b> August 31, 2001	September 7, 2004
September 13, 2005	September 14, 2006
September 4,2007	September 2,2008
August 25,2009	August 26,2010
September 1,2011	September 7, 2012
September 10,2013	September 10,2014