



March 31, 2016

Ministry of Energy & Mines
PO Box 9320
Stn Prov Govt
Victoria, BC V8W 9N3

Attention: Diane Howe, Deputy Chief Inspector

Subject: 2015 Annual Reclamation Report - Falkland Quarry

Please find the 2015 Annual Reclamation Report for the Falkland Quarry.

Company:	LAFARGE CANADA INC.	
Mine Name:	FALKLAND QUARRY	
Mines Act Permit #:	Q-4-001	
	Previous Report (e.g., 2014)	Current Report (e.g., 2015)
Total Disturbance Area (ha)	36.4 ha	34.8 ha
Total Reclaimed Area (ha)	0 ha	0 ha
Total Exempt Area (ha) (i.e., pit walls)	0 ha	0 ha
Total Liability Estimate		\$140,000.00
Date for next Five Year Mine Plan and Reclamation Plan update (if req)	July 30, 2020	

Please give me a call if you have any questions or concerns.

Sincerely,

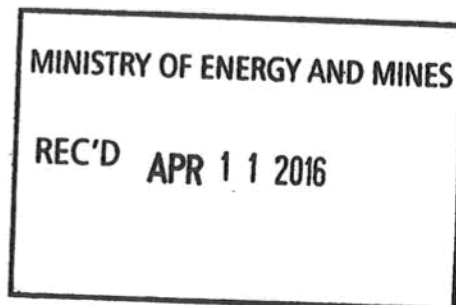
Jennifer Weslowski
Land Manager, Cement

LAFARGE CANADA INC.

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**2015 Annual Reclamation Report
Mines Act Permit Number Q-4-001
Falkland Quarry**



Lafarge Canada Inc.

**Mark Wilson, Mine Manager
(250) 682-1912**

**March 31, 2016
Prepared by: Jennifer Weslowski**

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1.0 EXECUTIVE SUMMARY

In 2015, nearly 8,500 tonnes of gypsum was extracted from the Falkland Quarry. No additional area was disturbed and no reclamation completed as mining activities are still taking place in the disturbed areas. Total disturbed area consists of 34.8 ha with 1.2 ha of that planned for future reclamation.

2.0 INTRODUCTION

The Falkland Quarry is located directly north of the Town of Falkland and can be accessed via Lynes Road. Lafarge has been extracting gypsum from the Falkland Quarry since 1977 which is used in the cement manufacturing process. Gypsum is blasted from the quarry, loaded onto trucks and then hauled to the Kamloops Cement Plant for further processing. Any off spec material is deposited in the waste dump area located directly east of the active mining area.

The Falkland Quarry is located on private lands owned by Lafarge. The main quarry activities are located within the N 1/2 of SW 11 and a portion of DL 5210 (Benavis) with access roads weaving through 4 other parcels. Lafarge submitted a Mine Plan in July 1992 with a supplemental revision in December 1992. The scope of development and reclamation detailed in this plan has not changed and continues to be the guiding documents for development of the quarry. An updated Notice of Work was filed with the Ministry of Energy and Mines on March 27, 2015 and an amended Mines Act Permit was received on July 31, 2015.

3.0 MINING PROGRAM

3.1 *Surface Development to Date*

Estimated minable reserves' remaining is approximately 115,000 tonnes. To date, the total disturbed area is 34.8 ha and consists of the following:

- waste dump area - 2.1 ha
- access roads - 2.5 ha
- quarry areas - 8.1 ha
- other areas - 22.1

3.2 *Surface Development in 2015*

No additional area was disturbed in 2015 and no reclamation completed as mining activities are still taking place in the disturbed areas. The Summary of Disturbed and Reclaimed Areas (Table 1) and the Quantities of Waste Rock, Tailings, Low Grade Ore, Coarse Reject and other Mine Waste (Table 2) can be found at the end of this report.

4.0 ENVIRONMENTAL PROTECTION PROGRAM

4.1 *Ground Water Protection*

Depth of groundwater is unknown at this time. To date groundwater has not been encountered. The discovery of any significant subsurface flows will be reported to the Mines Inspector as soon as possible and work will cease until the Inspector advises otherwise. Any silt-laden water resulting from extraction activities will be suitably contained on site and not allowed free access to any watercourse.

4.2 *Soil Salvage & Stockpiling*

Topsoil and subsoil will be removed from operational areas prior to any disturbance of the land and stockpiled separately for use in reclamation. Existing stockpiles have been seeded to provide erosion control and prevent the emergence of noxious weeds. Stockpiles are to be inspected twice during the growing season, in the spring and late summer by a qualified individual for the presence of prohibited noxious weed and any weeds identified will be controlled immediately through the use of herbicide or manual removal.

4.3 *Mitigation Measures*

In an attempt to prevent inadvertent access of unauthorized persons, the quarry has been fenced and signage posted around the perimeter warning of the hazards associated with entering the lands. All operations within the quarry will be conducted in accordance with all municipal and provincial regulations governing noise levels. All equipments will be properly maintained to minimize the impact of noise generating activities. Mitigation measures to control dust will include watering and or the application of dust control agents on internal haul roads as required.

5.0 FUTURE RECLAMATION PROGRAMS

The main objective of the reclamation program is to restore the quarry back to a natural setting to sustain an ecosystem consistent with the surroundings. The approved end land use is wildlife habitat and the land will be re-vegetated to a self sustaining state using appropriate plant species. An area consisting of 1.2 ha has been identified for future reclamation.

6.0 RECLAMATION LIABILITY COST ESTIMATES

A letter of credit in the amount of \$50,000.00 is being held by the Ministry as security to ensure proper performance of the approved reclamation program. The 1.2 ha area that has been identified future reclamation is estimated to cost \$140,000.00. Funds are accrued on an annual basis to ensure sufficient reclamation funds are available at the end of the life of the quarry.

TABLE 1

SUMMARY OF AREAS DISTURBED AND RECLAIMED TO DECEMBER 31, 2015

COMPANY: LAFARGE CANADA INC. PERMIT NO: Q-4-001

DISTURBANCE	MINING		RECLAMATION								LAND USE OBJECTIVE**
	AREA DISTURBED (ha)		AREA RECONTOURED (ha)		AREA SEEDED/PLANTED (ha)		AREA FERTILIZED (ha)		AREA REVEGETATED* (ha)		
	2015	TOTAL* **	2015	TOTAL* **	2015	TOTAL* *	2015	TOTAL* **	2015	TOTAL* **	
WASTE DUMPS	0	2.1	0	0	0	0	0	0	0	0	Wildlife Habitat
TAILINGS PONDS	0	0	0	0	0	0	0	0	0	0	
PLANT SITE	0	0	0	0	0	0	0	0	0	0	
ROADS	0	2.5	0	0	0	0	0	0	0	0	Wildlife Habitat
ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	
PIT	0	8.1	0	0	0	0	0	0	0	0	Wildlife Habitat
STOCKPILES	0	0	0	0	0	0	0	0	0	0	
LINEAR	0	0	0	0	0	0	0	0	0	0	
OTHER	0	22.1	0	0	0	0	0	0	0	0	
TOTAL	0	34.8	0	0	0	0	0	0	0	0	Wildlife Habitat
EXEMPT e.g., pit high walls											ha

* In order for an area to be recorded as "re-vegetated", it must have supported vegetation that will lead to the designated land use objective for at least one year. Please provide monitoring data in the Annual Reclamation Report to support the areas reported here.

** Specify land use. Options include: forestry, grazing, wildlife habitat, recreation, agricultural, industrial, residential, and other.

*** Total up to December 31, 2015.

TABLE 2

**QUANTITIES OF WASTE ROCK, TAILINGS, LOW GRADE ORE, COARSE REJECT
AND OTHER MINE WASTE AS OF DECEMBER 31, 2015**

COMPANY: LAFARGE CANADA INC. PERMIT NO.: Q-4-001

Use the space below to enter information for each waste dump, tailings pond or low grade ore pile. All quantities should be given in tonnes.

Name of Waste Pile or Pond	Acid Generating Waste		Potentially Acid Generating Waste		Non-Acid Generating Waste	
	2015	Total	2015	Total	2015	Total
Waste Dumps						
1	N/A	N/A	N/A	N/A	N/A	N/A
2						
3						
4						
5						
Total						
Tailings Ponds						
1	N/A	N/A	N/A	N/A	N/A	N/A
2						
3						
4						
5						
Total						
Low Grade Ore/Coarse Reject/Other Mine Waste						
1	N/A	N/A	N/A	N/A	N/A	N/A
2						
3						
4						
5						
Total						



March 31, 2016

Ministry of Energy & Mines
PO Box 9320
Stn Prov Govt
Victoria, BC V8W 9N3

Attention: Diane Howe, Deputy Chief Inspector

Subject: Harper Ranch Quarry Annual Reclamation Report - 2015

Please find the 2015 Annual Reclamation Report for the Harper Ranch Quarry.

Company:	LAFARGE CANADA INC.	
Mine Name:	HARPER RANCH QUARRY	
Mines Act Permit #:	Q-4-070	
	Previous Report (e.g., 2014)	Current Report (e.g., 2015)
Total Disturbance Area (ha)	68.28 ha	73.0 ha
Total Reclaimed Area (ha)	0 ha	0 ha
Total Exempt Area (ha) (i.e., pit walls)	0 ha	0 ha
Total Liability Estimate		
Date for next Five Year Mine Plan and Reclamation Plan update (if req)	July 5, 2020	

Please give me a call if you have any questions or concerns.

Sincerely,

Jennifer Weslowski
Land Manager, Cement

LAFARGE CANADA INC.

Suite 300, 115 Quarry Park Road SE, Calgary AB T2C 5G9

Phone: (403) 225-5400 Fax: (403) 278-2738

E-mail: jennifer.weslowski@lafarge.com

**2015 Annual Reclamation Report
Mines Act Permit Number Q-4-070
Harper Ranch Quarry**



Lafarge Canada Inc.

**Mark Wilson, Mine Manager
(250) 682-1912**

**March 31, 2016
Prepared by: Jennifer Weslowski**

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1.0 EXECUTIVE SUMMARY

In 2015, approximately 243,000 tonnes of limestone was extracted from the Harper Ranch Quarry. No additional area was disturbed and no reclamation completed as mining activities are still taking place in the disturbed areas. Total disturbed area consists of 73.0 ha with 1.2 ha of that planned for future reclamation.

2.0 INTRODUCTION

The Harper Ranch Quarry is located directly north of Lafarge's Kamloops Cement Plant. Lafarge has been extracting limestone from the Harper Ranch Quarry since 1970 which is the main raw material used in the cement manufacturing process. The limestone is blasted and crushed in the quarry and then conveyed to the Kamloops Cement Plant for further processing. The mining operations produce some overburden and waste rock which is currently disposed of in the waste dump adjacent to the open pit. On March 2, 2015 Lafarge obtained Licence of Occupation No. 347526 which allows for the production of aggregates materials from the waste rock. An updated Notice of Work was filed with the Ministry of Energy and Mines on January 14, 2015 and an amended Mines Act Permit was received on July 6, 2015.

3.0 MINING PROGRAM

3.1 *Surface Development to Date*

Estimated minable reserves' remaining is approximately 11.3M tonnes. To date, the total disturbed area is 73.0 ha and consists of the following:

- waste dump area - 4.1 ha
- access roads - 4.9 ha
- quarry area - 41.6 ha
- stockpiles - 1.1 ha
- other areas - 21.3 ha

3.2 *Surface Development in 2015*

No additional area was disturbed in 2015 and no reclamation completed as mining activities are still taking place in the disturbed areas. The Summary of Disturbed and Reclaimed Areas (Table 1) and the

Quantities of Waste Rock, Tailings, Low Grade Ore, Coarse Reject and other Mine Waste (Table 2) can be found at the end of this report.

4.0 ENVIRONMENTAL PROTECTION PROGRAM

4.1 *Ground Water Protection*

Depth of groundwater is unknown at this time. To date groundwater has not been encountered only perched aquifers. If any significant amounts of water are encountered LCI will provide weekly updates of the water encountered and the amount of water pumped to the infiltration area. A minimum of 2 water samples will be taken by a qualified person and sent to a qualified laboratory for a complete mineral analysis with results sent to the Mines Inspector for review. Any silt-laden water resulting from extraction activities will be suitably contained on site and not allowed free access to any watercourse.

4.2 *Soil Salvage & Stockpiling*

Topsoil and subsoil will be removed from operational areas prior to any disturbance of the land and stockpiled separately for use in reclamation. Currently there are no topsoil or subsoil stockpiles on the site. Any future stockpiles will be seeded to provide erosion control and prevent the emergence of noxious weeds. Stockpiles and operational areas are to be inspected twice during the growing season, in the spring and late summer by a qualified individual for the presence of prohibited noxious weed and any weeds identified will be controlled immediately through the use of herbicide or manual removal.

4.3 *Mitigation Measures*

In an attempt to prevent inadvertent access of unauthorized persons, a fence with gates has been installed on the east boundary of the quarry. Signage has been posted around the quarry perimeter warning hikers of the hazards associated with entering the lands. All operations within the quarry will be conducted in accordance with all municipal and provincial regulations governing noise levels. All equipments will be properly maintained to minimize the impact of noise generating activities. Mitigation measures to control dust will include watering and or the application of dust control agents on internal haul roads as required.

5.0 FUTURE RECLAMATION PROGRAMS

The main objective of the reclamation program is to restore the quarry back to a natural setting to sustain an ecosystem consistent with the surroundings. The approved end land use is **wildlife habitat** and the land will be re-vegetated to a self sustaining state using appropriate plant species. At this time, limited opportunities exist for progressive reclamation as disturbed areas are actively being used for resource extraction.

6.0 RECLAMATION LIABILITY COST ESTIMATES

A letter of credit in the amount of \$100,000.00 is being held by the Ministry as security to ensure proper performance of the approved reclamation program. The 1.2 ha area that has been identified future reclamation is estimated to cost \$140,000.00. Funds are accrued on an annual basis to ensure sufficient reclamation funds are available at the end of the life of the quarry.

TABLE 1

SUMMARY OF AREAS DISTURBED AND RECLAIMED TO DECEMBER 31, 2015

COMPANY: LAFARGE CANADA INC. PERMIT NO: Q-4-070

DISTURBANCE	MINING		RECLAMATION										LAND USE OBJECTIVE**
	AREA DISTURBED (ha)		AREA RECONTOURED (ha)		AREA SEEDED/PLANTED (ha)		AREA FERTILIZED (ha)		AREA REVEGETATED* (ha)				
	2015	TOTAL* **	2015	TOTAL* **	2015	TOTAL** *	2015	TOTAL* **	2015	TOTAL* **			
WASTE DUMPS	0	4.1	0	0	0	0	0	0	0	0	0	Wildlife Habitat	
TAILINGS PONDS	0	0	0	0	0	0	0	0	0	0	0		
PLANT SITE	0	0	0	0	0	0	0	0	0	0	0		
ROADS	0	4.9	0	0	0	0	0	0	0	0	0	Wildlife Habitat	
ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	0		
PIT	0	41.6	0	0	0	0	0	0	0	0	0	Wildlife Habitat	
STOCKPILES	0	1.1	0	0	0	0	0	0	0	0	0		
LINEAR	0	0	0	0	0	0	0	0	0	0	0		
OTHER	0	21.3	0	0	0	0	0	0	0	0	0		
TOTAL	0	73.0	0	0	0	0	0	0	0	0	0	Wildlife Habitat	

EXEMPT	ha
e.g., pit high walls	

* In order for an area to be recorded as "re-vegetated", it must have supported vegetation that will lead to the designated land use objective for at least one year. Please provide monitoring data in the Annual Reclamation Report to support the areas reported here.

** Specify land use. Options include: forestry, grazing, wildlife habitat, recreation, agricultural, industrial, residential, and other.

*** Total up to December 31, 2015.

TABLE 2

**QUANTITIES OF WASTE ROCK, TAILINGS, LOW GRADE ORE, COARSE REJECT
AND OTHER MINE WASTE AS OF DECEMBER 31, 2015**

COMPANY: LAFARGE CANADA INC. PERMIT NO.: Q-4-070

Use the space below to enter information for each waste dump, tailings pond or low grade ore pile. All quantities should be given in tonnes.

Name of Waste Pile or Pond	Acid Generating Waste		Potentially Acid Generating Waste		Non-Acid Generating Waste	
	2015	Total	2015	Total	2015	Total
Waste Dumps						
1	N/A	N/A	N/A	N/A	N/A	N/A
2						
3						
4						
5						
Total						
Tailings Ponds						
1	N/A	N/A	N/A	N/A	N/A	N/A
2						
3						
4						
5						
Total						
Low Grade Ore/Coarse Reject/Other Mine Waste						
1	N/A	N/A	N/A	N/A	N/A	N/A
2						
3						
4						
5						
Total						