

### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

### Facility ID No. A0367

### **PERMIT NO.** AP3274-1329

### CLASS I AIR QUALITY OPERATING PERMIT

Issued to: GRAYMONT WESTERN US INC.

Mailing Address: 3950 South 700 East, Suite 301; Salt Lake City, Utah 84107

Physical Address: 12.5 MILES NORTHWEST OF WENDOVER, NEVADA; ALONG INTERSTATE 80 (PILOT PEAK PLANT)

General Facility Location: SAME

Section 14; T34N, R68E MDB&M (HA 191) (Zone 11)

### **EMISSION UNIT LIST:**

### LIMESTONE QUARRY

### A. System 01 - Limestone Quarry Drilling/Blasting

F 0.001 Quarry Drilling

F 0.002 Quarry Blasting

F 0.003 Loading of Limestone (Truck Loading)

### B. System 02 – Limestone Truck Dump (Revised: November 9, 2004)

PF 1.001 Limestone Truck Dump transfer to Primary Crusher Hopper

### C. System 03 – Primary Crushing and Screening Circuit (D-1) (Revised: November 9, 2004)

S 2.001 Primary Crusher R-1

S 2.002 Primary Crusher R-1 transfer to Conveyor C-1

S 2.003 Conveyor C-2 transfer to Primary Crusher R-1

S 2.004 Primary Screen S-1

S 2.005 Primary Screen S-1 transfer to Conveyor C-2

S 2.006 Conveyor C-1 transfer to Primary Screen S-1

S 2.007 Conveyor C-306 transfer to Conveyor C-3

S 2.008 Primary Screen S-1 transfer to Conveyor C-7

S 2.009 Primary Screen S-1 transfer to Conveyor C-3

S 2.010 Primary Screen S-1 transfer to Conveyor C-305

S 2.010.1 Conveyor C-7 transfer to Conveyor C-4

S 2.010.2 Hopper/Feeder F-1 transfer to Conveyor C-1

### D. System 04 – Secondary Screening Circuit (D-311) (Revised: November 9, 2004)

S 2.011 Conveyor C-305 transfer to Screen S-2

S 2.012 Secondary Screen S-2

S 2.013 Secondary Screen S-2 transfer to Conveyor C-306

S 2.014 Secondary Screen S-2 transfer to Conveyor C-5

S 2.015 Secondary Screen S-2 transfer to Conveyor C-307



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee LIMESTONE QUARRY (CONTINUED)

### Da. System 04a – Secondary Limestone Crushing System (D-2) (Added on Date: November 9, 2004)

- S 2.210 Screen S-1 transfer to Conveyor C-8
- S 2.211 Screen S-1 transfer to Conveyor C-210
- S 2.212 Conveyor C-210 transfer to Conveyor C-211
- S 2.213 Conveyor C-211 transfer to Conveyor C-5
- S 2.214 Conveyor C-8 transfer to Crusher R-2
- S 2.215 Crusher R-2
- S 2.216 Crusher R-2 transfer to Conveyor C-9
- S 2.217 Conveyor C-9 transfer to Conveyor C-305
- S 2.218 Conveyor C-7 transfer to Conveyor C-309
- S 2.219 Conveyor C-309 transfer to Conveyor C-307
- S 2.220 Conveyor C-220 transfer to Bin Vent N-220
- S 2.221 Bin Vent N-220
- S 2.222 Conveyor C-320 transfer to Bin Vent N-320
- S 2.223 Bin Vent N-320

#### E. System 05 – Limestone Quarry Conveyance Transfers (Revised: November 9, 2004)

- PF 1.002 Conveyor C-3 transfer to Stockpile
- PF 1.003 Conveyor C-4 transfer to Stockpile
- PF 1.004 Conveyor C-5 transfer to Conveyor C-6
- PF 1.005 Conveyor C-6 transfer to Stockpile
- PF 1.006 Conveyor C-307 transfer to Conveyor C-308
- PF 1.007 Conveyor C-308 transfer to Stockpile



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee <u>LIMESTONE QUARRY</u> (CONTINUED)

### F. System 06 - Limestone Quarry Conveyance Wind Erosion; Consisting of:

- F 0.004 Conveyor C-1
- F 0.005 Conveyor C-2
- F 0.006 Conveyor C-3
- F 0.007 Conveyor C-4
- F 0.008 Conveyor C-5
- F 0.009 Conveyor C-6
- F 0.010 Conveyor C-7
- 0.011 Conveyor C-305
- F 0.012 Conveyor C-306
- F 0.013 Conveyor C-307
- F 0.014 Conveyor C-308
- F 0.015 Conveyor C-311
- F 0.016 Reclaim Stockpile
- F 0.017 Fines Stockpile
- F 0.018 Small Kiln Feed Stockpile
- F 0.019 Large Kiln Feed Stockpile

#### **LIME PLANT**

#### G. System 07 – Lime Plant Conveyance Transfers (Revised: November 9, 2004)

- PF 1.008 Stockpile transfer to Conveyor C-10 (F214)
- PF 1.009 Stockpile transfer to Conveyor C-10 (F213)
- PF 1.010 Stockpile transfer to Conveyor C-10 (F12)
- PF 1.011 Stockpile transfer to Conveyor C-10 (F11)
- PF 1.012 Stockpile transfer to Conveyor C-10 (F10)
- PF 1.013 Stockpile transfer to Conveyor C-10 (F215)
- PF 1.014 Stockpile transfer to Conveyor C-10 (F216)
- PF 1.015 Stockpile transfer to Conveyor C-10 (F217)
- PF 1.016 Stockpile transfer to Conveyor C-10 (F218)
- PF 1.017 Stockpile transfer to Conveyor C-311 (F310)
- PF 1.018 Stockpile transfer to Conveyor C-311 (F311)
- PF 1.019 Stockpile transfer to Conveyor C-312 (F312)
- PF 1.020 Stockpile transfer to Conveyor C-312 (F313)
- PF 1.021 Stockpile transfer to Conveyor C-312 (F314)
- PF 1.022 Stockpile transfer to Conveyor C-312 (F315)
- PF 1.023 Stockpile transfer to Conveyor C-312 (F316) PF 1.024 Conveyor C-313 transfer to Fines Stockpile
- PF 1.025 Conveyor C-11 transfer to Fines Stockpile
- PF 1.026 Conveyor C-311 transfer to Conveyor C-312



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee *LIME PLANT* (CONTINUED)

### H. System 08 - Lime Plant Stone Dressing Screen (Kilns 1 and 2) (D-10) (Revised: November 9, 2004)

- S 2.016 Conveyor C-10 transfer to Stone Dressing Screen S-10
- S 2.017 Stone Dressing Screen S-10
- S 2.018 Stone Dressing Screen S-10 transfer to Conveyor C-11
- S 2.019 Stone Dressing Screen S-10 transfer to Conveyor C-12

### I. System 09 - Lime Plant Stone Dressing Screen (Kiln 3) (D-317) (Revised: November 9, 2004)

- S 2.020 Conveyor C-312 transfer to Stone Dressing Screen S-312
- S 2.021 Stone Dressing Screen S-312
- S 2.022 Stone Dressing Screen S-312 transfer to Conveyor C-313
- S 2.023 Stone Dressing Screen S-312 transfer to Conveyor C-314

### J. System 10 - Lime Plant Wind Erosion; Consisting of:

- F 0.020 Conveyor C-10
- F 0.021 Conveyor C-11
- F 0.022 Conveyor C-12
- F 0.023 Conveyor C-19
- F 0.024 Conveyor C-219
- F 0.025 Conveyor C-312
- F 0.026 Conveyor C-313
- F 0.027 Conveyor C-314
- F 0.028 Stockpile (From Screen S-10)
- F 0.029 Stockpile (From Screen S-312)

### K. System 11 – Lime Plant Stone Surge Bin N-19 (Kiln 1); N-219 (Kiln 2) (D-19) (Revised: November 9, 2004)

- S 2.024 Conveyor C-12 transfer to Stone Surge Bin N-19 and Stone Surge Bin N-219
- S 2.025 Stone Surge Bin N-19
- S 2.026 Stone Surge Bin N-19 transfer to Conveyor C-19
- S 2.027 Conveyor C-19 transfer to Kiln # 1 Pre-heater PH-20
- S 2.028 Stone Surge Bin N-219
- S 2.029 Stone Surge Bin N-219 transfer to Conveyor C-219
- S 2.030 Conveyor C-219 transfer to Kiln # 2 Pre-heater PH-220

### L. System 12 - Kiln # 1 Circuit (D-85) (Revised: August 3, 2004 and January 27, 2006)

- S 2.031 Kiln # 1 Pre-heater PH-20
- S 2.032 Kiln # 1
- S 2.033 Kiln # 1 Lime Cooler N-21



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee LIME PLANT (CONTINUED)

### M. System 13 - Kiln # 1 Coal Handling Circuit

PF '	1.027	Truck Dump t	to Coal Hop	per N-90
------	-------	--------------	-------------	----------

PF 1.028 Coal Hopper N-90 transfer to Conveyor C-90

PF 1.029 Coal Silo T-90 Discharge to Conveyor C-92

PF 1.030 Conveyor C-92 transfer to Coal Mill R-92

#### N. System 14 - Kiln # 1 Coal Silo T-90 (D-91)

S 2.034 Coal Silo T-90 Loading Vent

S 2.035 Conveyor C-90 transfer to Coal Silo T-90

### O. System 15 - Kiln # 1 Coal Handling Wind Erosion; Consisting of:

F 0.030 Conveyor C-90

F 0.031 Conveyor C-92

### P. System 16 - Kiln # 2 Circuit (D-285) (Revised: August 3, 2004 and January 27, 2006)

S 2.036 Kiln # 2 Pre-heater PH-220

S 2.037 Kiln # 2 K-220

S 2.038 Kiln # 2 Lime Cooler N-221

### Q. System 17 - Kiln # 2 Coal Handling Circuit

PF 1.031 Conveyor C-90 transfer to Conveyor C-290

PF 1.032 Coal Silo T-290 Discharge to Conveyor C-292

PF 1.033 Conveyor C-292 transfer to Coal Mill R-292

### R. System 18 - Kiln # 2 Coal Handling Wind Erosion; Consisting of:

F 0.032 Conveyor C-290

F 0.033 Conveyor C-292

#### S. System 19 – Kiln # 2 Coal Silo T-290 (D-291)

S 2.039 Conveyor C-290 transfer to Coal Silo T-290

S 2.040 Coal Silo T-290

### T. System 20 – Lime Plant Stone Feed to Kiln # 3 (D-382)

S 2.041 Conveyor C-314 transfer to Pre-heater PH-321

### U. System 21 - Kiln # 3 Circuit (D-385) (Revised: August 3, 2004 and January 27, 2006)

S 2.042 Kiln # 3 Pre-heater PH-321

S 2.043 Kiln # 3 K-321

S 2.044 Kiln # 3 Lime Cooler N-332



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee *LIME PLANT* (CONTINUED)

### V. System 22 - Kiln # 3 Coal Handling Circuit

PF 1.034 Co	onveyor C-90 transfer	to Conveyor C-391
-------------	-----------------------	-------------------

- PF 1.035 Coal Silo T-391 Discharge to Conveyor C-392
- PF 1.036 Conveyor C-392 transfer to Coal Mill R-392

### W. System 23 – Kiln # 3 Coal Handling Wind Erosion; Consisting of:

- F 0.034 Conveyor C-391
- F 0.035 Conveyor C-392

### X. System 24 - Kiln # 3 Coal Silo T-391 (D-391)

- S 2.045 Conveyor C-391 transfer to Coal Silo T-391
- S 2.046 Coal Silo T-391

### Y. System 25 – Product Lime Loadout from Kiln # 1 (D-82) (Revised: November 9, 2004)

- S 2.047 Kiln # 1 Lime Cooler N-21 transfer to Conveyor C-30
- S 2.048 Conveyor C-30 transfer to Bucket Elevator E-30
- S 2.049 Bucket Elevator E-30 transfer to Screen S-31 via Gate G-35 and Gate G-36
- S 2.050 Gate G-36 transfer to Screen S-30
- S 2.051 Gate G-36 transfer to Kiln Run Silo T-40
- S 2.052 Kiln Run Silo T-40 discharge to Feeder F-50
- S 2.053 Feeder F-50 transfer to Conveyor C-50
- S 2.054 Conveyor C-50 transfer to Crusher R-50
- S 2.055 Crusher R-50 transfer to Gate G-55
- S 2.056 Gate G-55 transfer to Bucket Elevator E-30
- S 2.057 Gate G-36 transfer to Core Bin N-30
- S 2.058 Core Bin N-30 discharge
- S 2.059 Screen S-30 transfer to Conveyor C-43 via Gate G-41 and Gate G-42
- S 2.060 Conveyor C-43 transfer to Silo T-43
- S 2.061 Loadout Silo T-43 discharge
- S 2.062 Screen S-30 transfer to Conveyor C-42
- S 2.063 Conveyor C-42 transfer to Silo T-40; -OR-
  - Conveyor C-42 transfer to Conveyor C-44
- S 2.064 Screen S-31 transfer to Gate G-44
- S 2.065 Gate G-44 transfer to Silo T-44 via Conveyor C-42 and Conveyor C-44
- S 2.066 Gate G-44 transfer to Loadout Silo T-42 via Conveyor C-42
- S 2.067 Loadout Silo T-42 discharge



### BUREAU OF AIR POLLUTION CONTROL

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

### **PERMIT NO. AP3274-1329** CLASS I AIR QUALITY OPERATING PERMIT

### Issued to: Graymont Western US Inc., hereinafter called the permittee **LIME PLANT (CONTINUED)**

#### Z. System 26 – Product Lime Loadout from Kiln # 2 (DC-230)

- S 2.068 Kiln # 2 Lime Cooler N-221 transfer to Conveyor C-230
- S 2.069 Conveyor C-230 transfer to Bucket Elevator E-230
- Screen S-230 transfer to Bucket Elevator E-230 via Mill R-250 or Gate G-236 2.070
- S 2.071 Screen S-230 transfer to Conveyor C-231 via Gate G-236
- 2.072 Conveyor C-231 transfer to Bucket Elevator E-32
- S 2.073 Gate G-38 transfer to Conveyor C-42
- 2.074 Conveyor C-42 transfer to Loadout Silo T-42; -OR-Conveyor C-42 transfer to Loadout Silo T-44
- Conveyor C-44 transfer to Loadout Silo T-44 S 2.075
- S 2.076 Conveyor C-41 transfer to Kiln Run Silo T-41
- S 2.077 Screen S-31 transfer to Kiln Run Silo T-40 or Kiln Run Silo T-41 via Gate G-43; -OR-Screen S-31 transfer to Conveyor C-43 via Gate G-44

#### AA. System 27 – Product Lime Loadout from Kiln # 2 – DC-30 (Revised: November 9, 2004)

- S 2.078 Bucket Elevator E-230 transfer to Gate G-235
- S 2.079 Gate G-235 transfer to Screw Conveyor C-231
- S 2.080 Gate G-235 transfer to Screen S-230
- S 2.081 Bucket Elevator E-32 transfer to Gate G-38
- S 2.082 Gate G-38 transfer to Conveyor Screen S-31
- S 2.083 Gate G-38 transfer to Gate G-39
- 2.084 Gate G-38 transfer to Conveyor C-42
- S 2.085 Gate G-35 transfer to Gate G-36; -OR-
  - Gate G-35 transfer to Screen S-31
- Bucket Elevator E-30 transfer to Gate G-35 S 2.086
- 2.087 Gate G-39 transfer to Kiln Run Silo T-41 S
- S 2.088 Gate G-39 transfer to Kiln Run Silo T-40
- S 2.089 Gate G-39 transfer to Core Bin N-30
- Bucket Elevator E-31 transfer to Gate G-37 S 2.090
- S 2.091 Gate G-37 transfer to Screen S-31
- 2.092 Gate G-37 transfer to Core Bin N-30
- S 2.093 Gate G-37 transfer to Screen S-30
- 2.094 Screen S-31 transfer to Screw Conveyor C-42 S
- Screw Conveyor C-42 transfer to Kiln Run Silo T-40 S 2.095
- Screen S-31 transfer to Gate G-44 S 2.096
- S 2.097 Gate G-44 transfer to Screw Conveyor C-42
- S 2.198 Gate G-44 transfer to Conveyor C-43
- S 2.199 Gate G-44 transfer to Kiln Run Silo T-40
- S 2.100 Screen S-31 transfer to Gate G-43



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee *LIME PLANT* (CONTINUED)

### AA. System 27 – Product Lime Loadout from Kiln # 2 – DC-30 (Revised: November 9, 2004) (Continued)

- S 2.101 Gate G-43 transfer to Silo T-40; **-OR-** Gate G-43 transfer to Conveyor C-41
- S 2.102 Kiln Run Silo T-41 transfer to Conveyor C-51
- S 2.103 Conveyor C-51 transfer to Conveyor C-50
- S 2.104 Gate G-55 transfer to Bucket Elevator E-31
- S 2.105 Kiln Run Silo T-41 transfer to Conveyor C-52
- S 2.106 Conveyor C-52 discharge to Loadout
- S 2.107 Loadout Silo T-43 transfer to Conveyor C-60
- S 2.108 Conveyor C-60 discharge to Loadout
- S 2.109 Loadout Silo T-44 transfer to Conveyor C-61
- S 2.110 Conveyor C-61 discharge to Loadout
- S 2.111 Loadout Silo T-44 discharge
- S 2.112 Dust Collector D-30 transfer to Gate G-47

### AB. System 28 - Kiln # 1 and Kiln # 2 Cyclone/Baghouse Fines Silo Discharge

- PF 1.037 Fine Dust Silo T-89 discharge
- PF 1.038 Fine Dust Silo T-89 transfer to Pugmill

### AC. System 29 - Kiln # 1 and Kiln # 2 Cyclone/Baghouse Collection Product Loadout (D-89)

- S 2.113 Process Baghouse transfer to Fine Dust Silo T-89 via Conveyor C-285 and Conveyor C-85
- S 2.114 Fine Dust Silo T-89 Loadout

### ACa. System 29a - Kiln # 1 and Kiln # 2 Baghouse Fines Silo Discharge System (D-11)

(Added on Date: November 9, 2004)

S 2.224 Fines Silo T-89 Discharge to Truck via Retractable Spout

### AD. System 30 – Kiln # 3 Baghouse Collection Product Loadout (D-388)

S 2.115 Process Baghouse transfer to Fine Dust Silo T-388 via Conveyor C-385

#### AE. System 31 – Kiln # 3 Baghouse Fines Discharge System (D-389)

S 2.116 Unloading of Baghouse Dust to Truck (Vaculoader System)

### AEa. System 31a – Kiln # 3 Baghouse Fines Discharge System (Added on Date: November 9, 2004)

PF 1.042 Fines Dust Silo T-388 transfer to Truck via Pugmill



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

# Issued to: Graymont Western US Inc., hereinafter called the permittee LIME PLANT (CONTINUED)

### AF. System 32 – Hydrate Plant Surge Bin (D-1101)

- S 2.117 Product Lime Silo T-44 transfer to Surge Bin N-1101 via Conveyor C-1105 and Gate G-1105
- S 2.118 Surge Bin N-1101 transfer to Conveyor C-1102
- S 2.119 Conveyor C-1102 transfer to Hydrator Package via Conveyor C-1104

### AG. System 33 – Hydrate Plant Hydrator (W-1101)

- S 2.120 Hydrator
- S 2.121 Conveyor C-1122 transfer to Gate G-1122

### AH. System 34 – Hydrate Plant Lime Transfer DC-1132 (Revised: November 9, 2004)

- S 2.122 Gate G-1122 transfer to Conveyor C-1123
- S 2.123 Gate G-1122 transfer to Air Separator S-1130
- S 2.124 Air Separator S-1130 transfer to Conveyor C-1130
- S 2.125 Conveyor C-1130 transfer to Mill R-1130
- S 2.126 Conveyor C-1131 transfer to Bucket Elevator E-1130
- S 2.127 Bucket Elevator E-1130 transfer to Separator S-1130 or Separator S-1131
- S 2.128 Separator S-1130 and Separator S-1131 transfer to Conveyor C-1130, C-1132 or C-1134
- S 2.129 Mill R-1130 transfer to Conveyor C-1131
- S 2.130 Bucket Elevator E-1130 transfer to Air Separator S-1130
- S 2.131 Conveyor C-1134 transfer to Bin N-1130

#### Al. System 35 - Hydrate Plant Lime Transfer to Silo T-1140 (DC-1140) (Revised: May 9, 2006)

- S 2.132 Bin N-1130 transfer to Gate G-1131
- S 2.135 Pnuematic Conveyor A-1130 transfer to Loadout Silo T-1140 via Gate G-1133

#### Ala. System 35a – Hydrate Plant Lime Transfer to Silo T-1141 (Added on Date: May 9, 2006)

- S 2.132 Bin N-1130 transfer to Gate G-1131
- S 2.137 Pnuematic Conveyor A-1130 transfer to Loadout Silo T-1141

### Alb. System 35b – Hydrate Silos Loadout (Added on Date: May 9, 2006)

- S 2.136 Loadout Silo T-1140 discharge via Conveyor C-1140
- S 2.138 Loadout Silo G-1141 Screw Conveyor C-1141 Discharge



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329

## CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee LIME PLANT (CONTINUED)

### AJ. System 36 – Product Lime Kiln # 3 – Control Device #1 DC-331

- S 2.139 Kiln # 3 Lime Cooler N-322 transfer to Gate G-326
- S 2.140 Gate G-326 transfer to Conveyor C-331
- S 2.141 Gate G-326 transfer to Conveyor C-332
- S 2.142 Conveyor C-331 transfer to Bucket Elevator E-331
- S 2.143 Conveyor C-332 transfer to Bucket Elevator E-332
- S 2.144 Bucket Elevator E-331 transfer to Gate G-331.1
- S 2.145 Gate G-331.1 transfer to Gate G-331 or Silo T-40
- S 2.146 Gate G-331 transfer to Core Bin N-332
- S 2.147 Conveyor C-333 transfer to Kiln # 3 Run Silo T-331
- S 2.148 Core Bin N-332 discharge to Truck
- S 2.149 Bucket Elevator E-332 transfer to Conveyor C-334 or Bin N-332 via Gate-332.1
- S 2.150 Conveyor C-334 transfer to # 3 Kiln Run Silo T-331
- S 2.151 Gate G-353 transfer to Conveyor C-332
- S 2.152 Gate G-354 transfer to Conveyor C-332
- S 2.153 Dust Collector D-331 discharge to # 3 Kiln Run Silo T-331

#### AK. System 37 - Product Lime Kiln #3 - Control Device #2 DC-333

- S 2.154 Kiln # 3 Run Silo T-331 transfer (via F-336) to Conveyor C-336
- S 2.155 Kiln # 3 Run Silo T-331 transfer (via F-337) to Conveyor C-337
- S 2.156 Conveyor C-336 transfer to Bucket Elevator E-336
- S 2.157 Conveyor C-337 transfer to Bucket Elevator E-337
- S 2.158 Bucket Elevator E-336 transfer to Gate G-336
- S 2.159 Gate G-336 transfer to Screen S-336
- S 2.160 Gate G-336 transfer to Conveyor C-341
- S 2.161 Screen S-336 transfer to Crusher R-351
- S 2.162 Screen S-336 transfer to Gate G-351
- S 2.163 Gate G-351 transfer to Crusher R-351
- S 2.164 Gate G-351 transfer to Conveyor C-342
- S 2.165 Screen S-336 transfer to Gate G-353
- S 2.166 Gate G-353 transfer to Conveyor C-341
- S 2.167 Crusher R-351 transfer to Screw Conveyor C-351
- S 2.168 Conveyor C-351 transfer to Bucket Elevator E-336
- S 2.169 Bucket Elevator E-337 transfer to Gate G-337
- S 2.170 Gate G-337 transfer to Screen S-337
- S 2.171 Gate G-337 transfer to Conveyor C-341
- S 2.172 Screen S-337 transfer to Crusher R-352
- S 2.173 Crusher R-352 transfer to Screw Conveyor C-352
- S 2.174 Conveyor C-352 transfer to Bucket Elevator E-337



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

## Issued to: Graymont Western US Inc., hereinafter called the permittee <u>LIME PLANT</u> (CONTINUED)

### AK. System 37 – Product Lime Kiln #3 – Control Device #2 DC-333 (Continued)

S	2.175	Screen	S-337	transfer t	to Gate	G-352

- S 2.176 Gate G-352 transfer to Crusher R-352
- S 2.177 Gate G-352 transfer to Conveyor C-342
- S 2.178 Screen S-337 transfer to Gate G-354
- S 2.179 Gate G-354 transfer to Conveyor C-341
- S 2.180 Dust Collector D-333 discharge to Conveyor C-341

### AL. System 38 - Product Lime Kiln #3 - Control Device #3 DC-343

- S 2.181 Dust Collector D-361 transfer to Bucket Elevator E-341
- S 2.182 Conveyor C-341 transfer to Bucket Elevator E-341
- S 2.183 Conveyor C-342 transfer to Bucket Elevator E-342
- S 2.184 Bucket Elevator E-341 transfer to Lime Silo T-343
- S 2.185 Bucket Elevator E-342 transfer to Lime Silo T-342
- S 2.186 Dust Collector D-343 discharge to Lime Silo T-342

#### AM. System 39 – Product Lime Kiln # 3 – Control Device #4 DC-361

- S 2.187 Lime Silo T-343 loadout to Truck (via spout U-362 and Spout U-364 via Conveyor C-364)
- S 2.188 Lime Silo T-342 loadout to Truck (via spout U-363 and Spout U-364 via Conveyor C-365)

### **COAL STORAGE**

#### AN. System 40 - Coal Storage System (Added on Date: November 9, 2004)

- PF 1.040 Truck Unloading to Coal Storage Stockpile
- PF 1.041 Coal transfer from Coal Storage Stockpile to Truck via Front-End Loader



CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions**

B. Emission Unit # PF1.001 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

B. System 02 – Limestone Truck Dump (Revised: November 9, 2004)

PF 1.001 Limestone Truck Dump transfer to Primary Crusher Hopper

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Limestone Truck Dump (PF1.001)**, shall be controlled by operating a wet suppression system located at **PF1.001**.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Emission Limits**

- a. On and after the date of startup of **PF1.001** the permittee will not discharge or cause the discharge into the atmosphere from **PF1.001** the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.001** will not exceed **0.49** pound per hour. This limit is less than the **78.8** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited in B.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from **PF1.001** will not exceed **1.02** pounds per hour. This limit is less than the **78.8** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited in B.3.a. of this section
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.001** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 State Only Requirement The opacity from **PF1.001** will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.001** will not exceed **1,100.0** tons of **as fed aggregate** per any one-hour period.
- b. The maximum allowable annual throughput rate for **PF1.001** will not exceed **3,069,000** tons of **as fed aggregate** per year, based on a 12-month rolling period.
- c. Hours
  - **PF1.001** may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- B. Emission Unit # PF1.001 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for **PF1.001** on a daily basis.
- ii. Monitor and record the hours of operation for **PF1.001** on a daily basis.
- iii. Conduct an observation of the wet suppression system once every two-calendar weeks and verify that the wet suppression system is operating normally; record the time of the observation and indicate if the wet suppression system is operating normally. Record any sprays that were repaired, replaced or modified.
- iv. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- v. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vi. The required monitoring established in (i.) through (v.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.001** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the observations and the implementation and proper use of the wet suppression system, and any corrective actions taken in order to maintain implementation and proper use of the wet suppression system used for control of emissions.
  - (f) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

No Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

C. Emission Units #'s S2.001 – S2.010.2 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

C.	System	03 – Primary Crushing and Screening Circuit (D-1) (Revised: November 9, 2004)
S	2.001	Primary Crusher R-1
S	2.002	Primary Crusher R-1 transfer to Conveyor C-1
S	2.003	Conveyor C-2 transfer to Primary Crusher R-1
S	2.004	Primary Screen S-1
S	2.005	Primary Screen S-1 transfer to Conveyor C-2
S	2.006	Conveyor C-1 transfer to Primary Screen S-1
S	2.007	Conveyor C-306 transfer to Conveyor C-3
S	2.008	Primary Screen S-1 transfer to Conveyor C-7
S	2.009	Primary Screen S-1 transfer to Conveyor C-3
S	2.010	Primary Screen S-1 transfer to Conveyor C-305
S	2.010.1	Conveyor C-7 transfer to Conveyor C-4
S	2.010.2	Hopper/Feeder F-1 transfer to Conveyor C-1

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Equipment

Emissions from the **Primary Crushing and Screening Circuit (S2.001 – S2.010.2)** each, shall be ducted to a control system consisting of a **Baghouse (D-1)** with 100% capture and a maximum volume flow rate of **24,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of **S2.001 S2.010.2** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-1)**, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-1)**, will not exceed **3.29** pounds per hour. This limit is less than the **394.2** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by C.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-1)</u>, will not exceed <u>4.11</u> pounds per hour. This limit is less than the <u>394.2</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by C.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-1)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse (D-1)** will not equal or exceed 20%.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- C. Emission Units #'s S2.001 S2.010.2 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits (Continued)
    - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 03** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-1)**, the following pollutants in excess of the following specified limits:

- Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
- ii. Emissions from the exhaust stack of **Baghouse (D-1)** that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
- iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.001 S2.010.2** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.001 S2.010.2** each, will not exceed **1,100.0** tons of **as fed aggregate** per any one-hour period.
- b. Hours

**S2.001 – S2.010.2** each, may operate a total of **8760** hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

- C. Emission Units #'s S2.001 S2.010.2 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for **S2.001 S2.010.2** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.001 S2.010.2** each, on a daily basis.
- iii. **Baghouse (D-1)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-1**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse (D-1)** and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-1), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.001 S2.010.2** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-1).
  - (g) Records and results of the annual inspection of **Baghouse** (D-1).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- C. Emission Units #'s S2.001 S2.010.2 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse (D-1)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under C.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in C.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-1)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - i. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

**D. Emission Units #'s S2.011 – S2.015** location North 4522.85 km, East 734.42 km, UTM (Zone 11)

D.	D. System 04 – Secondary Screening Circuit (D-311) (Revised: November 9, 2004)		
S	2.011	Conveyor C-305 transfer to Screen S-2	
S	2.012	Secondary Screen S-2	
S	2.013	Secondary Screen S-2 transfer to Conveyor C-306	
S	2.014	Secondary Screen S-2 transfer to Conveyor C-5	
S	2.015	Secondary Screen S-2 transfer to Conveyor C-307	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Equipment

Emissions from the **Secondary Screening Circuit** (**S2.011** – **S2.015**) each, shall be ducted to a control system consisting of a **Baghouse** (**D-311**) with 100 % capture and a maximum volume flow rate of **12,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.011 S2.015** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-311**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of Baghouse (D-311), will not exceed 1.65 pounds per hour. This limit is less than the 157.7 pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by D.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-311)</u>, will not exceed <u>2.06</u> pounds per hour. This limit is less than the <u>157.7</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by D.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-311**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-311**) will not equal or exceed 20%.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- D. Emission Units #'s S2.011 S2.015 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits (Continued)
    - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 04** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-311)**, the following pollutants in excess of the following specified limits:

- i. Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
- ii. Emissions from the exhaust stack of **Baghouse** (D-311) that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
- iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.011 S2.015** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.011 S2.015** each, will not exceed **1,100.0** tons of **as fed aggregate** per any one-hour period.
- b. Hours

S2.011 – S2.015 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- D. Emission Units #'s S2.011 S2.015 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for S2.011 S2.015 each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.011 S2.015** each, on a daily basis.
- iii. **Baghouse** (**D-311**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-311**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-311**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-311), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.011 S2.015**, **S2.222** and **S2.223** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-311).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-311**).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

- D. Emission Units #'s S2.011 S2.015 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-311) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under D.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in D.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-311)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - i. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

**Da. Emission Units #'s S2.210 – S2.223** location North 4522.85 km, East 731.42 km, UTM (Zone 11)

Da.	Systen	n 04a – Secondary Limestone Crushing System (D-2) (Added on Date: November 9, 2004)
S	2.210	Screen S-1 transfer to Conveyor C-8
S	2.211	Screen S-1 transfer to Conveyor C-210
S	2.212	Conveyor C-210 transfer to Conveyor C-211
S	2.213	Conveyor C-211 transfer to Conveyor C-5
S	2.214	Conveyor C-8 transfer to Crusher R-2
S	2.215	Crusher R-2
S	2.216	Crusher R-2 transfer to Conveyor C-9
S	2.217	Conveyor C-9 transfer to Conveyor C-305
S	2.218	Conveyor C-7 transfer to Conveyor C-309
S	2.219	Conveyor C-309 transfer to Conveyor C-307
S	2.220	Conveyor C-220 transfer to Bin Vent N-220
S	2.221	Bin Vent N-220
S	2.222	Conveyor C-320 transfer to Bin Vent N-320 (Vented to Baghouse D-311)
S	2.223	Bin Vent N-320 (Vented to Baghouse D-311)

### 1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Equipment

Emissions from the **Secondary Limestone Crushing System** (S2.210 – S2.221) each, shall be ducted to a control system consisting of a **Baghouse** (D-2) with 100 % capture and a maximum volume flow rate of 10,000 dry standard cubic feet per minute (DSCFM). Emissions from S2.222 and S2.223 each, shall be ducted to a control system consisting of a **Baghouse** (D-311) with 100 % capture and a maximum volume flow rate of 12,000 dry standard cubic feet per minute (DSCFM). Emission limits established for **Baghouse** D-311 will remain as currently permitted in System 04.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

### Da. Emission Units #'s S2.210 - S2.223 (continued)

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.210 S2.221** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-2**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-2)**, will not exceed **1.37** pounds per hour. This limit is less than the **551.6** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by Da.3.a. of this section
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-2)</u>, will not exceed <u>1.71</u> pounds per hour. This limit is less than the <u>551.6</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by Da.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-2)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse (D-2)** will not equal or exceed 20%.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)
    - On and after the sixtieth day after achieving the maximum production rate at which **System 04a** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-2)**, the following pollutants in excess of the following specified limits:
    - i. Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
    - ii. Emissions from the exhaust stack of **Baghouse** (D-2) that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
    - iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
    - iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.210 S2.223** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.210 S2.223** each, will not exceed **1,100.0** tons of **as fed aggregate** per any one-hour period.
- b. Hours
  - S2.210 S2.223 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

### Da. Emission Units #'s S2.210 - S2.223 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for S2.210 S2.223 each, on a daily basis.
- ii. Monitor and record the hours of operation for S2.210 S2.223 each, on a daily basis.
- iii. **Baghouse (D-2)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-2**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse (D-2)** and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-2), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.210 S2.223** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-2).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-2**).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Da. Emission Units #'s S2.210 - S2.223 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. <u>Performance/Compliance Testing</u>

Within 60 days after achieving the maximum production rate at which **System 04a** will be operated, but no later than 180 days after the initial startup of **System 04a**, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-2**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under Da.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in Da.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-2)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - i. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

No Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

E. Emission Units #'s PF1.002 - PF1.007 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

	The color of the work of the color of the co				
E.	E. System 05 – Limestone Quarry Conveyance Transfers (Revised: November 9, 2004)				
PF	1.002	Conveyor C-3 transfer to Stockpile			
PF	1.003	Conveyor C-4 transfer to Stockpile			
PF	1.004	Conveyor C-5 transfer to Conveyor C-6			
PF	1.005	Conveyor C-6 transfer to Stockpile			
PF	1.006	Conveyor C-307 transfer to Conveyor C-308			
PF	1.007	Conveyor C-308 transfer to Stockpile			

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Limestone Quarry Conveyance Transfers** (**PF1.002 – PF1.007**) each, shall be controlled by operating fogging water sprays with chemical surfactant located at **PF1.002 – PF1.007** each.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  - **Emission Limits**
  - a. On and after the date of startup of **PF1.002 PF1.007** each, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.002 PF1.007**, the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.002 PF1.007** combined, will not exceed **0.54** pound per hour. This limit is less than the **472.8** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by E.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from **PF1.002 PF1.007** combined, will not exceed **1.13** pounds per hour. This limit is less than the 472.8 pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by E.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.002 PF1.007** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.002 PF1.007** each, will not equal or exceed 20%.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 05** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- i. Fugitive emissions from **PF1.004** and **PF1.006** each, will not exceed 10 percent opacity (40 CFR Part 60.672(b)).
- ii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iii. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.004** and **PF1.006** each, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

- E. Emission Units #'s PF1.002 PF1.007 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.002 PF1.007** each, will not exceed **1,100.0** tons of **as fed aggregate** per any one-hour period.
    - b. Hours
       PF1.002 PF1.007 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- E. Emission Units #'s PF1.002 PF1.007 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for **PF1.002 PF1.007** each, on a daily basis.
- ii. Monitor and record the hours of operation for PF1.002 PF1.007 each, on a daily basis.
- iii. Conduct an observation of the fogging water sprays system once every two-calendar weeks and verify that the fogging water sprays system is operating normally; record the time of the observation and indicate if the fogging water sprays system is operating normally. Record any sprays that were repaired, replaced or modified.
- iv. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- v. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vi. The required monitoring established in (i.) through (v.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.002 PF1.007** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the observations and the implementation and proper use of the fogging water sprays system, and any corrective actions taken in order to maintain implementation and proper use of the fogging water sprays system used for control of emissions.
  - (f) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements



901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

**G. Emission Units #'s PF1.008 – PF1.026** location North 4522.85 km, East 734.42 km, UTM (Zone 11)

G.	System	07 – Lime Plant Conveyance Transfers (Revised: November 9, 2004)
PF	1.008	Stockpile transfer to Conveyor C-10 (F214)
PF	1.009	Stockpile transfer to Conveyor C-10 (F213)
PF	1.010	Stockpile transfer to Conveyor C-10 (F12)
PF	1.011	Stockpile transfer to Conveyor C-10 (F11)
PF	1.012	Stockpile transfer to Conveyor C-10 (F10)
PF	1.013	Stockpile transfer to Conveyor C-10 (F215)
PF	1.014	Stockpile transfer to Conveyor C-10 (F216)
PF	1.015	Stockpile transfer to Conveyor C-10 (F217)
PF	1.016	Stockpile transfer to Conveyor C-10 (F218)
PF	1.017	Stockpile transfer to Conveyor C-311 (F310)
PF	1.018	Stockpile transfer to Conveyor C-311 (F311)
PF	1.019	Stockpile transfer to Conveyor C-312 (F312)
PF	1.020	Stockpile transfer to Conveyor C-312 (F313)
PF	1.021	Stockpile transfer to Conveyor C-312 (F314)
PF	1.022	Stockpile transfer to Conveyor C-312 (F315)
PF	1.023	Stockpile transfer to Conveyor C-312 (F316)
PF	1.024	Conveyor C-313 transfer to Fines Stockpile
PF	1.025	Conveyor C-11 transfer to Fines Stockpile
PF	1.026	Conveyor C-311 transfer to Conveyor C-312

### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.008 – PF1.023 and PF1.026 each, shall be controlled by operating PF1.008 – PF1.023 and PF1.026 each, as underground transfers.

Emissions from **PF1.024** and **PF1.025** each, shall be controlled by best operational practices.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- G. Emission Units #'s PF1.008 PF1.026 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
    - a. On and after the date of startup of **PF1.008 PF1.026** each, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.008 PF1.026**, the following pollutants in excess of the following specified limits:
      - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.008 PF1.026** combined, will not exceed **1.36** pounds per hour. This limit is less than the **310.2** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by G.3.a. of this section.
      - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from **PF1.008 PF1.026** combined, will not exceed **3.89** pounds per hour. This limit is less than the **310.2** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by G.3.a. of this section.
      - iii. SIP 445.721 *Federally Enforceable SIP Requirement* The opacity from **PF1.008 PF1.026** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
      - NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.008 PF1.026** each, will not equal or exceed 20%.
    - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)
      - On and after the sixtieth day after achieving the maximum production rate at which **System 07** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
      - i. Fugitive emissions from **PF1.008 PF1.023**, and **PF1.026** each, will not exceed 10 percent opacity (40 CFR Part 60.672(b)).
      - ii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
      - iii. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.008 PF1.023**, and **PF1.026** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- G. Emission Units #'s PF1.008 PF1.026 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.008 PF1.023**, and **PF1.026** each, will not exceed **250.0** tons of **as fed aggregate** per any one-hour period.
    - b. The maximum allowable throughput rate for **PF1.024** will not exceed **25.0** tons of **as fed aggregate** per any one-hour period.
    - c. The maximum allowable throughput rate for **PF1.025** will not exceed **30.0** tons of **as fed aggregate** per any one-hour period.
    - d. Hours
      - PF1.008 PF1.026 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- G. Emission Units #'s PF1.008 PF1.026 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for **PF1.008 PF1.026** each, on a daily basis.
- ii. Monitor and record the hours of operation for **PF1.008 PF1.026** each, on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.008 PF1.026** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

No Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

H. Emission Units #'s S2.016 - S2.019 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

		· · · · · · · · · · · · · · · · · · ·
H.	System	08 – Lime Plant Stone Dressing Screen (Kilns #1 and #2) (D-10) (Revised: November 9, 2004)
S	2.016	Conveyor C-10 transfer to Stone Dressing Screen S-10
S	2.017	Stone Dressing Screen S-10
S	2.018	Stone Dressing Screen S-10 transfer to Conveyor C-11
S	2.019	Stone Dressing Screen S-10 transfer to Conveyor C-12

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

### **Air Pollution Equipment**

Emissions from the **Lime Plant Stone Dressing Screen Kilns #1 and #2 Circuit (S2.016 – S2.019)** each, shall be ducted to a control system consisting of a **Baghouse (D-10)** with 100 % capture and a maximum volume flow rate of **5,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of **S2.016 S2.019** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-10**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-10)**, will not exceed **0.69** pound per hour. This limit is less than the **60.9** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by H.3.a. of this section
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-10)</u>, will not exceed <u>0.86</u> pound per hour. This limit is less than the <u>60.9</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by H.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of <u>Baghouse</u> (D-10) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of <u>Baghouse</u> (**D-10**) will not equal or exceed 20%.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 08** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-10)**, the following pollutants in excess of the following specified limits:

- i. Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
- ii. Emissions from the exhaust stack of **Baghouse** (**D-10**) that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
- iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.016 S2.019** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- H. Emission Units #'s S2.016 S2.019 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput rate for **S2.016 S2.019** each, will not exceed **250.0** tons of **as fed aggregate** per any one-hour period.
- b. Hours

S2.016 – S2.019 each, may operate a total of 8760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. <u>Monitoring, Record keeping and Compliance</u>

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for S2.016 S2.019 each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.016 S2.019** each, on a daily basis.
- iii. **Baghouse (D-10)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-10**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-10**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse (D-10)**, including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.016 S2.019** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-10**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-10**).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- H. Emission Units #'s S2.016 S2.019 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-10) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under H.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in H.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-10)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - i. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

I. Emission Units #'s S2.020 - S2.023 location North 4522.99 km, East 734.42 km, UTM (Zone 11)

I. S	. System 09 – Lime Plant Stone Dressing Screen (Kiln 3) (D-317) (Revised: November 9, 2004)			
S	2.020	Conveyor C-312 transfer to Stone Dressing Screen S-312		
S	2.021	Stone Dressing Screen S-312		
S	2.022	Stone Dressing Screen S-312 transfer to Conveyor C-313		
S	2.023	Stone Dressing Screen S-312 transfer to Conveyor C-314		

### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### Air Pollution Equipment

Emissions from the **Lime Plant Stone Dressing Screen Kiln #3 Circuit (S2.020 – S2.023)** each, shall be ducted to a control system consisting of a **Baghouse (D-317)** with 100% capture and a maximum volume flow rate of **8,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.020 S2.023** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-317**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-317)**, will not exceed **1.17** pounds per hour. This limit is less than the 60.9 pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by I.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse</u> (D-317), will not exceed <u>1.46</u> pounds per hour. This limit is less than the <u>60.9</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by I.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-317**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-317**) will not equal or exceed 20%.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 09** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-317)**, the following pollutants in excess of the following specified limits:

- i. Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
- ii. Emissions from the exhaust stack of **Baghouse (D-317)** that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
- iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.020 S2.023** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- I. Emission Units #'s S2.020 S2.023 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable throughput rate for **S2.020 S2.023** each, will not exceed **250.0** tons of **as fed aggregate** per any one-hour period.
- b. Hours

S2.020 – S2.023 each, may operate a total of 8760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for S2.020 S2.023 each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.020 S2.023** each, on a daily basis.
- iii. **Baghouse** (**D-317**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-317**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-317**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse (D-317)**, including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.020 S2.023** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-317**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-317**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- I. Emission Units #'s S2.020 S2.023 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-317**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under I.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in I.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse** (**D-317**) concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - i. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

K. Emission Units #'s S2.024 – S2.030 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

K.	System 11 – Lime Plant Stone Surge Bin N-19 (Kiln 1); N-219 (Kiln 2) (D-19) (Revised: November 9, 2004	
S	2.024	Conveyor C-12 transfer to Stone Surge Bin N-19 and Stone Surge Bin N-219
S	2.025	Stone Surge Bin N-19
S	2.026	Stone Surge Bin N-19 transfer to Conveyor C-19
S	2.027	Conveyor C-19 transfer to Kiln # 1 Pre-heater PH-20
S	2.028	Stone Surge Bin N-219
S	2.029	Stone Surge Bin N-219 transfer to Conveyor C-219
S	2.030	Conveyor C-219 transfer to Kiln # 2 Pre-heater PH-220

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Air Pollution Equipment

Emissions from the Lime Plant Stone Surge Bin N-19 (Kiln 1); N-219 (Kiln 2) Circuit (S2.024 – S2.030) each, shall be ducted to a control system consisting of a Baghouse (D-19) with 100 % capture and a maximum volume flow rate of 4,500 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate as referenced in 40 CFR Part 60, Appendix A.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of the **S2.024 S2.030** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-19**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-19)**, will not exceed **0.62** pound per hour. This limit is less than the **243.8** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by K.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-19)</u>, will not exceed <u>0.77</u> pound per hour. This limit is less than the <u>243.8</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by K.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of <u>Baghouse</u> (D-19) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-19**) will not equal or exceed 20%.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- K. Emission Units #'s S2.024 S2.030 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits (Continued)
    - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 11** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-19)**, the following pollutants in excess of the following specified limits:

- i. Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
- ii. Emissions from the exhaust stack of **Baghouse** (**D-19**) that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
- iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.024 S2.030** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.024 S2.030** each, will not exceed **250.0** tons of **as fed aggregate** per any one-hour period.
- b. Hours

S2.024 – S2.030 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- K. Emission Units #'s S2.024 S2.030 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for S2.024 S2.030 each, on a daily basis.
- ii. Monitor and record the hours of operation for S2.024 S2.030 each, on a daily basis.
- iii. **Baghouse (D-19)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-19**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-19**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-19), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.024 S2.030** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-19).
  - (g) Records and results of the annual inspection of **Baghouse** (D-19).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- K. Emission Units #'s S2.024 S2.030 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-19) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under K.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in K.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-19)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - i. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

L. Emission Units #'s S2.031 – S2.033 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

L.	System 12 – Kiln # 1 Circuit (D-85) (Revised: August 3, 2004 and January 27, 2006)		
S	2.031	Kiln # 1 Pre-heater PH-20	
S	2.032	Kiln # 1 K-20	
S	2.033	Kiln # 1 Lime Cooler N-21	

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### Air Pollution Equipment

Emissions from the **Kiln # 1 Circuit** (**S2.031 – S2.033**) each, shall be ducted to a control system consisting of a mechanical collection and **Baghouse** (**D-85**) control system, with 100 % capture and a maximum volume flow rate of **60,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.031 S2.033** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-85**), the following pollutants in excess of the following specified limits:
  - i. SIP 445.731 <u>Federally Enforceable SIP Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (D-85) will not exceed 0.34 pound per million Btu.
  - ii. SIP 445.732 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **106.3** pounds per hour.
  - iii. NAC 445B.2203 <u>State Only Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **0.34** pound per million Btu.
  - iv. NAC 445B.22033 <u>State Only Requirement</u> The maximum allowable discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **106.3** pounds per hour.
  - v. SIP Article 8.2.1.1 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of Sulfur to the atmosphere from the exhaust stack of **Baghouse** (D-85) will not exceed 71.7 pounds per hour.
  - vi. NAC 445B.22047 <u>State Only Requirement</u> The maximum allowable discharge of Sulfur to the atmosphere from the exhaust stack of **Baghouse (D-85)** will not exceed **71.7** pounds per hour.
  - vii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse</u> (D-85) will not exceed <u>10.29</u> pounds per hour.
  - viii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **8.23** pounds per hour.
  - ix. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **14.00** pounds per hour, <u>based on a 3-hour</u> rolling period.
  - x. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere from the exhaust stack of **Baghouse (D-85)** will not exceed **120.00** pounds per hour.
  - xi. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of CO (carbon monoxide) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **307.50** pounds per hour.
  - xii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of VOC (volatile organic compounds) to the atmosphere from the exhaust stack of **Baghouse** (**D-85**) will not exceed **4.35** pounds per hour.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- L. Emission Units #'s S2.031 S2.033 (Continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits (Continued)
    - a. On and after the date of startup of **S2.031 S2.033** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-85**), the following pollutants in excess of the following specified limits:
      - xiii. SIP 445.721 *Federally Enforceable SIP Requirement* The opacity from the exhaust stack of **Baghouse (D-85)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
      - xiv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of <u>Baghouse</u> (D-85) will not equal or exceed 20%.
    - b. New Source Performance Standards (NSPS) Subpart HH Standards of Performance for Lime Manufacturing Plants (40 CFR, Part 60.340)
      - On and after the sixtieth day after achieving the maximum production rate at which **System 12** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-85)**, the following pollutants in excess of the following specified limits:
      - i. Emissions of particulate matter in excess of 0.30 kilogram per megagram of stone feed (40 CFR Part 60.342(a)(1)).
      - ii. Emissions from the exhaust stack of **Baghouse** (D-85) that exhibit greater than 15 percent opacity (40 CFR Part 60.342(a)(2)).
      - iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
      - iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.031 S2.033** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable lime production rate for the **Kiln # 1 Circuit** will not exceed **25.0** tons of **lime production** per any one-hour period.
- b. The maximum allowable coal feed rate for the **Kiln # 1 Circuit** will not exceed **5.00** tons of **coal** per any one-hour period.
- c. The **Kiln #1 Circuit** may combust, as the primary fuel source, coal only, with a maximum coal sulfur content of 3.0%. The use of diesel fuel or propane is designated for startups and flame stabilization purposes during the startup and/or shut down of the Kiln #1 Circuit.
- d. Hours
  - S2.031 S2.033 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

- L. Emission Units #'s S2.031 S2.033 (Continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the lime production for the **Kiln #1 Circuit** on a daily basis.
- ii. Monitor and record the feed rate of coal for the **Kiln #1 Circuit** on a daily basis.
- iii. Record the coal sulfur content as demonstrated and submitted by the coal supplier data on a daily basis.
- iv. Monitor and record the hours of operation for the **Kiln # 1 Circuit** on a daily basis.
- v. The Kiln # 1 Circuit may combust coal, diesel fuel, and/or propane only, during start-up of the Kiln # 1 Circuit.
- vi. **Baghouse (D-85)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-85**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-85**) and any corrective actions taken in order to maintain proper operating pressure.
- vii. Once each calendar year, the permittee shall conduct an inspection of all bags contained in **Baghouse (D-85)**, or perform dye testing on **Baghouse (D-85)**.
  - (a) In the event that **Kiln #1 K-20** (**S2.032**) operates without prolonged shutdown for an entire calendar year, and COMS data for **Kiln #1 K-20** (**S2.032**) indicates that **Baghouse** (**D-85**) is operating properly, the internal baghouse inspection or dye test may be conducted during the next prolonged shutdown that will allow safe access inside **Baghouse** (**D-85**).
- viii. The Permittee shall install, calibrate, operate and maintain a Continuous Opacity Monitoring System (COMS) to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from the exhaust stack of **Kiln # 1 K-20** (**S2.032**). The COMS will be installed at an appropriate location in the exhaust stack of **Kiln # 1 K-20** (**S2.032**) to accurately and continuously measure the opacity from the exhaust stack of **Kiln # 1 K-20** (**S2.032**) in accordance with the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 60.11 and NAC 445B.256 to NAC 445B.267.
- ix. The Permittee shall install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in L.4.a.(vii.) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specification 1 and NAC 445B.256 to NAC 445B.267.
- x. The Permittee shall install, calibrate, operate and maintain a SO<sub>2</sub> continuous emissions monitoring system (CEMS) (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) to continuously measure the concentration of SO<sub>2</sub> (in ppm), volumetric gas flow (in SCFH), and SO<sub>2</sub> mass emissions (in lb/hr) from the exhaust stack of **Kiln # 1 K-20 (S2.032)**. The CEMS will be installed at an appropriate location in the exhaust stack of **Kiln # 1 K-20 (S2.032)** to accurately and continuously measure the SO<sub>2</sub> concentration from the exhaust stack of **Kiln # 1 K-20 (S2.032)** in accordance with the requirements prescribed in 40 CFR Part 60, Appendix F, 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 and NAC 445B.256 to NAC 445B.267.
- xi. The Permittee shall install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO<sub>2</sub> concentration (in ppm), volumetric gas flow (in SCFH), and a 3-hour rolling period SO<sub>2</sub> mass emissions (in lb/hr), as measured by the CEMS required in L.4.a.(ix.) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 and NAC 445B.256 to NAC 445B.267.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

- L. Emission Units #'s S2.031 S2.033 (Continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance (Continued)
      - xii. The required monitoring established in (i.) through (xi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.031 S2.033** each, are operating:
        - (a) The calendar date of any required monitoring.
        - (b) The total daily feed rate of coal, in tons, for the corresponding date.
        - (c) The results and verification of the coal sulfur content, as provided by the coal supplier, for the corresponding date.
        - (d) The total daily lime production, in tons, for the corresponding date.
        - (e) The total daily hours of operation for the corresponding date.
        - (f) The corresponding average hourly feed rate of coal, in tons per hour. The average hourly coal feed rate will be determined from the daily coal feed rate and the total daily hours of operation recorded in (b) and (e) above.
        - (g) The corresponding average hourly rate of lime production, in tons per hour. The average hourly lime production rate will be determined from the daily lime production and the total daily hours of operation recorded in (d) and (e) above.
        - (h) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-85**).
        - (i) Records and results of the annual inspection of **Baghouse** (D-85).
        - (i) For the Kiln # 1 Circuit startup:
          - (1) The time startup began.
          - (2) The time coal firing began.
          - (3) The time off-gases were routed through Baghouse (D-85).
          - (4) Baghouse (D-85) inlet temperature when the kiln off-gases were routed through Baghouse (D-85).
          - (5) Records documenting why any deviation from the best management practices plan for the Kiln # 1 Circuit startup was necessary.
          - (6) Kiln #1 K-20 (S2.032) stack opacity as measured by the COMS.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- L. Emission Units #'s S2.031 S2.033 (Continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance (Continued)
      - xii. The required monitoring established in (i.) through (xi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.031 S2.033** each, are operating: (Continued)
        - (k) The measured opacity (in percent opacity) from the COMS required in L.4.a.(viii.) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:
          - (1) Each 6-minute average as required in NAC 445B.22017.1(b), and as set forth in 40 CFR Part 60.13(h).
        - (l) The emission rates of SO<sub>2</sub> in pounds per hour (lbs/hr) and parts per million (ppm) measured by the CEMS required in L.4.a.(x.) of this section, for each averaging period described below:
          - (1) The SO<sub>2</sub> emissions in pounds per hour (lbs/hr) for each 3-hour rolling period.
          - (2) The following equation articulates the defining formula by which the pertinent data is calculated:

$$E_h = K * C_{hp} * Q_{hs} * \left( \frac{100 - \% H_2 O}{100} \right)$$

where:

 $E_h$  = Hourly  $SO_2$  mass emission rate during unit operation, lb/hr.

 $K = 1.660 \times 10^{-7}$  for SO<sub>2</sub>, (lb/scf)/ppm.

 $C_{hp}$  = Hourly average  $SO_2$  concentration during unit operation, ppm (dry).

Q<sub>hs</sub> = Hourly average volumetric flow rate during unit operation, scfh as measured (wet).

 $%H_2O$  = Hourly average stack moisture content during unit operation or constant moisture value, percent by volume.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- L. Emission Units #'s S2.031 S2.033 (Continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Once per calendar year, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse (D-85)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. The Method 201 or Method 201A tests required in L.4.b.i. of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 test with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in L.2. of this section.
- iii. Conduct and record a Method 6, 7, 10 and 18 for SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC's (or equivalent methods as approved by the Director) on the exhaust stack of **Baghouse (D-85)** while the **Kiln # 1 Circuit (S2.031 S2.033** each) is operating, consisting of three valid runs. The Method 6, 7, 10 and 18 emissions tests must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests will be conducted at the maximum production rate of the emission unit(s) and all performance tests must be conducted under conditions that are representative of maximum emissions potential for each stack.
- iv. Performance tests required under L.4.b.i. through iii. of this section that are conducted below the maximum allowable throughput, as established in L.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- v. Tests of performance must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The emissions results of the Method 5 performance test for PM and the Method 201 or Method 201A performance test for PM<sub>10</sub> must be reported in lb/hour and lb/MMBTU.
- vii. The permittee shall give notice to the director 30 days before the tests of performance to allow the director to have an observer present. A written testing procedure for the tests of performance must be submitted to the director at least 30 days before the tests of performance to allow the director to review the proposed testing procedures (NAC.445B.252.4).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- L. Emission Units #'s S2.031 S2.033 (Continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - b. <u>Performance/Compliance Testing</u> (Continued)
      - viii. Within 60 days after completing the performance tests contained in L.4.b. of this Section, the permittee shall furnish the director a written report of the results of the performance tests required in L.4.b. of this Section (40 CFR Part 60.8(a)). All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.395 (NAC 445B.252.8).
      - ix. As a result of the most recent performance tests performed in L.4.b.i. through iii. of this section, the permittee shall derive emission factors for each of the following:
        - (a) Pounds of PM per ton of lime production (lbs-PM/ton-lime production)
        - (b) Pounds of PM<sub>10</sub> per ton of lime production (lbs-PM<sub>10</sub>/ton-lime production)
        - (c) Pounds of NO<sub>x</sub> per ton of lime production (lbs-NO<sub>x</sub>/ton-lime production)
        - (d) Pounds of CO per ton of lime production (lbs-CO/ton-lime production)
        - (e) Pounds of VOC's per ton of lime production (lbs-VOC's/ton-lime production)

The annual emissions of PM,  $PM_{10}$ ,  $NO_x$ , CO and VOC's from the **Kiln #1 Circuit**, will be calculated based on the testing contained in L.4.b. of this Section, and then converted to tons of emissions per year.

The annual emissions of  $SO_2$  from the **Kiln # 1 Circuit**, will be calculated based on the data recorded by the CDCS in L.4.a.ix. of this section, and then converted to tons of emissions per year.

5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

M. Emission Units #'s PF1.027 – PF1.030 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

Μ.	System	13 – Kiln # 1 Coal Handling Circuit
PF	1.027	Truck Dump to Coal Hopper N-90
PF	1.028	Coal Hopper N-90 transfer to Conveyor C-90
PF	1.029	Coal Silo T-90 Discharge to Conveyor C-92
PF	1.030	Conveyor C-92 transfer to Coal Mill R-92

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Air Pollution Control Equipment

Emissions from the **Kiln # 1 Coal Handling Circuit (PF1.027 and PF1.028)** each, shall be controlled by best operational practices.

Emissions from the Kiln # 1 Coal Handling Circuit (PF1.029 and PF1.030) each, shall be controlled by operating PF1.029 and PF1.030 each in an enclosed building.

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

- Emission Limits
- a. On and after the date of startup of **PF1.027 PF1.030** each, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.027 PF1.030**, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.027 PF1.030** combined, will not exceed **0.07** pound per hour. This limit is less than the **82.6** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by M.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from **PF1.027 PF1.030** combined, will not exceed **0.21** pound per hour. This limit is less than the **82.6** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by M.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.027 PF1.030** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.027 PF1.030** each, will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.027** and **PF1.028** each, will not exceed **200.0** tons of **coal** per any one-hour period.
- b. The maximum allowable throughput rate for **PF1.029** and **PF1.030** each, will not exceed **5.0** tons of **coal** per any one-hour period.
- c. Hours
  - PF1.027 PF1.030 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- M. Emission Units #'s PF1.027 PF1.030 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **PF1.027 PF1.030** each, on a daily basis.
- ii. Monitor and record the hours of operation for PF1.027 PF1.030 each, on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.027 PF1.030** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

N. Emission Units #'s S2.034 - S2.035 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

		14 – Kiln # 1 Coal Silo T-90
S	2.034	Coal Silo T-90 Loading Vent
S	2.035	Conveyor C-90 transfer to Coal Silo T-90

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Equipment

Emissions from the **Kiln # 1 Coal Silo T-90** (**S2.034 and S2.035**) each, shall be ducted to a control system consisting of a mechanical collection system and **Baghouse** (**D-91**) with 100 % capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.034 and S2.035** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-91**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-91)**, will not exceed **0.14** pound per hour. This limit is less than the **58.5** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by N.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-91)</u>, will not exceed <u>0.17</u> pound per hour. This limit is less than the <u>58.5</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by N.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-91)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of <u>Baghouse</u> (**D-91**) will not equal or exceed 20%.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.034** and **S2.035** each, will not exceed **200.0** tons of **coal** per any one-hour period.
- b. Hours

**S2.034** and **S2.035** each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- N. Emission Units #'s S2.034 S2.035 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **S2.034** and **S2.035** each, on a daily basis.
- ii. Monitor and record the hours of operation for S2.034 and S2.035 each, on a daily basis.
- iii. **Baghouse (D-91)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-91**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-91**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-91), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours

of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.034** and **S2.035** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse (D-91)**.
  - (g) Records and results of the annual inspection of **Baghouse** (**D-91**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

P. Emission Units #'s S2.036 – S2.038 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

Ρ.	System 16 – Kiln # 2 Circuit (D-285) (Revised: August 3, 2004 and January 27, 2006)	
S	2.036	Kiln # 2 Pre-heater PH-220
S	2.037	Kiln # 2 K-220
S	2.038	Kiln # 2 Lime Cooler N-221

 NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Equipment

Emissions from the **Kiln # 2 Circuit** (**S2.036** – **S2.038**) each, shall be ducted to a control system consisting of a **Baghouse** (**D-285**) with 100% capture and a maximum volume flow rate of **70,000** dry standard cubic feet per minute (DSCFM). Emissions from the **Kiln # 2 Circuit Cylcone Catch Bin** shall be ducted to a control system consisting a **Baghouse** (**D-282**) with 100% capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
    - a. On and after the date of startup of **S2.036 S2.038** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-285**) the following pollutants in excess of the following specified limits:
      - i. SIP 445.731 <u>Federally Enforceable SIP Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **0.31** pound per million Btu.
      - ii. SIP 445.732 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **122.6** pounds per hour.
      - iii. NAC 445B.2203 <u>State Only Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **0.31** pound per million Btu
      - iv. NAC 445B.22033 <u>State Only Requirement</u> The maximum allowable discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **122.6** pounds per hour.
      - v. SIP Article 8.2.1.1 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of Sulfur to the atmosphere from the exhaust stack of **Baghouse** (D-285) will not exceed 107.5 pounds per hour.
      - vi. NAC 445B.22047 <u>State Only Requirement</u> The maximum allowable discharge of Sulfur to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **107.5** pounds per hour.
      - vii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **12.00** pounds per hour.
      - viii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **9.60** pounds per hour.
      - ix. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **21.00** pounds per hour, based on a <u>3-hour</u> rolling period.
      - x. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of  $NO_x$  (nitrogen oxides) to the atmosphere from the exhaust stack of **Baghouse** (D-285) will not exceed 160.00 pounds per hour.
      - xi. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of CO (carbon monoxide) to the atmosphere from the exhaust stack of **Baghouse** (D-285) will not exceed 410.0 pounds per hour.
      - xii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of VOC (volatile organic compounds) to the atmosphere from the exhaust stack of **Baghouse** (**D-285**) will not exceed **6.53** pounds per hour.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits (Continued)
    - a. On and after the date of startup of S2.036 S2.038 each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (D-282), the following pollutants in excess of the following specified limits:
      - xiii. SIP 445.732 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (**D-282**) will not exceed **58.5** pounds per hour.
      - xiv. NAC 445B.22033 <u>State Only Requirement</u> The maximum allowable discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-282**) will not exceed **58.5** pounds per hour.
      - xv. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the combined exhaust stacks of **Baghouse** (D-282) will not exceed 0.17 pound per hour.
      - xvi. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the combined exhaust stacks of **Baghouse** (**D-282**) will not exceed **0.14** pound per hour.
      - xvii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the combined exhaust stacks of **Baghouse** (**D-285**) and **Baghouse** (**D-282**) each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
      - xviii. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the combined exhaust stacks of **Baghouse** (**D-285**) and **Baghouse** (**D-282**) each, will not equal or exceed 20%.
    - b. New Source Performance Standards (NSPS) Subpart HH Standards of Performance for Lime Manufacturing Plants (40 CFR, Part 60.340)
      - On and after the sixtieth day after achieving the maximum production rate at which **System 16** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-285)** the following pollutants in excess of the following specified limits:
      - i. Emissions of particulate matter in excess of 0.30 kilogram per megagram of stone feed (40 CFR Part 60.342(a)(1)).
      - ii. Emissions from the exhaust stack of **Baghouse** (**D-285**) that exhibit greater than 15 percent opacity (40 CFR Part 60.342(a)(2)).
      - iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
      - iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.036 S2.038** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable lime production rate for the **Kiln # 2 Circuit** will not exceed **33.30** tons of **lime production** per any one-hour period.
    - b. The maximum allowable coal feed rate for the **Kiln # 2 Circuit** will not exceed **7.50** tons of **coal** per any one-hour period.
    - c. The maximum allowable cyclone dust loadout rate from the **Kiln # 2 Circuit Cylcone Catch Bin** will not exceed **200.00** tons of **cyclone dust** per any one-hour period.
    - d. The Kiln # 2 Circuit may combust, as the primary fuel source coal only, with a maximum coal sulfur content of 3.0%. The use of diesel fuel or propane is designated for startups and flame stabilization purposes during the startup and/or shut down of the Kiln # 2 Circuit.
    - e. Hours
       S2.036 S2.038 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the lime production rate for the **Kiln # 2 Circuit** on a daily basis.
- ii. Monitor and record the coal feed rate of coal for the **Kiln # 2 Circuit** on a daily basis.
- iii. Record the coal sulfur content as demonstrated and submitted by the coal supplier data on a daily basis.
- iv. Monitor and record the loadout rate of cyclone dust for the **Kiln # 2 Circuit Cylcone Catch Bin** on a daily basis.
- v. Monitor and record the hours of operation for the Kiln # 2 Circuit (S2.036 S2.038) each, on a daily basis.
- vi. The Kiln # 2 circuit may combust coal, diesel fuel, and/or propane only, during start-up of the Kiln # 2 circuit.
- vii. **Baghouse (D-285) and Baghouse (D-282) each,** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse (D-285) and Baghouse (D-282) each** and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse (D-285) and Baghouse (D-282) each**, and any corrective actions taken in order to maintain proper operating pressure.
- viii. Once each calendar year, the permittee shall conduct an inspection of all bags contained in **Baghouse (D-285) and Baghouse (D-282) each**, or perform dye testing on **Baghouse (D-285) and Baghouse (D-282) each**.
  - (a) In the event that **Kiln # 2 K-220** (**S2.037**) operates without prolonged shutdown for an entire calendar year, and COMS data for **Kiln # 2 K-220** (**S2.037**) indicates that **Baghouse** (**D-285**) is operating properly, the internal baghouse inspection or dye test may be conducted during the next prolonged shutdown that will allow safe access inside **Baghouse** (**D-285**).
- ix. The Permittee shall install, calibrate, operate and maintain a Continuous Opacity Monitoring System (COMS) to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from the exhaust stack of **Kiln # 2 K-220 (S2.037)**. The COMS will be installed at an appropriate location in the exhaust stack of **Kiln # 2 K-220 (S2.037)** to accurately and continuously measure the opacity from the exhaust stack of **Kiln # 2 K-220 (S2.037)** in accordance with the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 60.11 and NAC 445B.256 to NAC 445B.267.
- x. The Permittee shall install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in P.4.a.(viii.) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specification 1 and NAC 445B.256 to NAC 445B.267.
- xi. The Permittee shall install, calibrate, operate and maintain a SO<sub>2</sub> continuous emissions monitoring system (CEMS) (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) to continuously measure the concentration of SO<sub>2</sub> (in ppm), volumetric gas flow (in SCFH), and SO<sub>2</sub> mass emissions (in lb/hr) from the exhaust stack of Kiln # 2 K-220 (S2.037). The CEMS will be installed at an appropriate location in the exhaust stack of Kiln # 2 K-220 (S2.037) to accurately and continuously measure the SO<sub>2</sub> concentration from the exhaust stack of Kiln # 2 K-220 (S2.037) in accordance with the requirements prescribed in 40 CFR Part 60, Appendix F, 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 and NAC 445B.256 to NAC 445B.267.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance (Continued)
      - xii. The Permittee shall install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO<sub>2</sub> concentration (in ppm), volumetric gas flow (in SCFH), and a 3-hour rolling period SO<sub>2</sub> mass emissions (in lb/hr), as measured by the CEMS required in P.4.a.(x.) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 and NAC 445B.256 to NAC 445B.267.
      - xiii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
      - xiv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

- A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.
- xv. The required monitoring established in (i.) through (xiv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.036 S2.038** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily feed rate of coal, in tons, for the corresponding date.
  - (c) The results and verification of the coal sulfur content, as provided by the coal supplier, for the corresponding date.
  - (d) The total daily lime production, in tons, for the corresponding date.
  - (e) The total daily loadout rate of cyclone dust, in tons, for the corresponding date.
  - (f) The total daily hours of operation for the corresponding date.
  - (g) The corresponding average hourly feed rate of coal, in tons per hour. The average hourly coal feed rate will be determined from the daily coal feed rate and the total daily hours of operation recorded in (b) and (f) above.
  - (h) The corresponding average hourly rate of lime production, in tons per hour. The average hourly lime production rate will be determined from the daily lime production and the total daily hours of operation recorded in (d) and (f) above.
  - (i) The corresponding average hourly loadout rate of cyclone dust, in tons per hour. The average hourly cyclone dust loadout rate will be determined from the daily cyclone dust loadout and the total daily hours of operation recorded in (e) and (f) above.
  - (j) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (k) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-285**) and **Baghouse** (**D-282**) each.
  - (1) Records and results of the annual inspection of **Baghouse (D-285) and Baghouse (D-282)** each.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - Monitoring, Record keeping and Compliance (Continued)
      - xv. The required monitoring established in (i.) through (xiv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.036 S2.038** each, are operating: (Continued)
        - (m) For the Kiln # 2 Circuit startup:
          - (1) The time startup began.
          - (2) The time coal firing began.
          - (3) The time off-gases were routed through Baghouse (D-285).
          - (4) Baghouse (D-285) inlet temperature when the kiln off-gases were routed through Baghouse (D-285).
          - (5) Records documenting why any deviation from the best management practices plan for the Kiln # 2 Circuit startup was necessary.
          - (6) Kiln # 2 K-220 (S2.037) stack opacity as measured by the COMS.
        - (n) The measured opacity (in percent opacity) from the COMS required in P.4.a.(ix.)of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:
          - (1) Each 6-minute average as required in NAC 445B.22017.1(b), and as set forth in 40 CFR Part 60.13(h).
        - (o) The emission rates of SO<sub>2</sub> in pounds per hour (lbs/hr) and parts per million (ppm) measured by the CEMS required in P.4.a.(xi.) of this section, for each averaging period described below:
          - (1) The SO<sub>2</sub> emissions in pounds per hour (lbs/hr) for each 3-hour rolling period.
          - (2) The following equation articulates the defining formula by which the pertinent data is calculated:

$$E_h = K * C_{hp} * Q_{hs} * \left(\frac{100 - \% H_2 O}{100}\right)$$

where:

 $E_h$  = Hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hr.

 $K = 1.660 \times 10^{-7}$  for  $SO_2$ , (lb/scf)/ppm.

 $C_{hp}$  = Hourly average  $SO_2$  concentration during unit operation, ppm (dry).

Q<sub>hs</sub> = Hourly average volumetric flow rate during unit operation, scfh as measured (wet).

 $%H_2O$  = Hourly average stack moisture content during unit operation or constant moisture value, percent by volume.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program (Continued)
    - b. <u>Performance/Compliance Testing</u>

Once per calendar year, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-285**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. The Method 201 or Method 201A tests required in P.4.b.i. of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 test with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in P.2. of this section.
- iii. Conduct and record a Method 6, 7, 10 and 18 for SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC's (or equivalent methods as approved by the Director) on the exhaust stack of **Baghouse (D-285)** while **Kiln # 2 Circuit (S2.036 S2.038** each) is operating, consisting of three valid runs. The Method 6, 7, 10 and 18 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests will be conducted at the maximum production rate of the emission unit(s) and all performance tests must be conducted under conditions that are representative of maximum emissions potential for each stack.
- iv. Performance tests required under P.4.b.i. through iii. of this section that are conducted below the maximum allowable throughput, as established in P.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- v. Tests of performance must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The emissions results of the Method 5 performance test for PM and the Method 201 or Method 201A performance test for PM<sub>10</sub> must be reported in lb/hour and lb/MMBTU.
- vii. The permittee shall give notice to the director 30 days before the tests of performance to allow the director to have an observer present. A written testing procedure for the tests of performance must be submitted to the director at least 30 days before the tests of performance to allow the director to review the proposed testing procedures (NAC.445B.252.4).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- P. Emission Units #'s S2.036 S2.038 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - b. <u>Performance/Compliance Testing</u> (Continued)
      - viii. Within 60 days after completing the performance tests contained in P.4.b.of this Section, the permittee shall furnish the director a written report of the results of the performance tests required in P.4.b.of this Section (40 CFR Part 60.8(a)). All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.395 (NAC 445B.252.8).
      - ix. As a result of the most recent performance tests performed in P.4.b.i. through iii. of this section, the permittee shall derive emission factors for each of the following:
        - (a) Pounds of PM per ton of lime production (lbs-PM/ton-lime production)
        - (b) Pounds of PM<sub>10</sub> per ton of lime production (lbs-PM<sub>10</sub>/ton-lime production)
        - (c) Pounds of NO<sub>x</sub> per ton of lime production (lbs-NO<sub>x</sub>/ton-lime production)
        - (d) Pounds of CO per ton of lime production (lbs-CO/ton-lime production)
        - (e) Pounds of VOC's per ton of lime production (lbs-VOC's/ton-lime production)

The annual emissions of PM,  $PM_{10}$ ,  $NO_x$ , CO and VOC's from the **Kiln # 2 Circuit**, will be calculated based on the testing contained in P.4.b. of this Section, and then converted to tons of emissions per year.

The annual emissions of SO<sub>2</sub> from the **Kiln # 2 Circuit**, will be calculated based on the data recorded by the CDCS in P.4.a.x. of this section, and then converted to tons of emissions per year.

5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Q. Emission Units #'s PF1.031 - PF1.033 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

Q.	Q. System 17 – Kiln # 2 Coal Handling Circuit		
PF	1.031	Conveyor C-90 transfer to Conveyor C-290	
PF	1.032	Coal Silo T-290 Discharge to Conveyor C-292	
PF	1.033	Conveyor C-292 transfer to Coal Mill R-292	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the Kiln # 2 Coal Handling Circuit (PF1.031) shall be controlled by best operational practices. Emissions from the Kiln # 2 Coal Handling Circuit (PF1.032 and PF1.033) each, shall be controlled by operating PF1.032 - PF1.033 each in an enclosed building.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of **PF1.031 PF1.033** each, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.031 PF1.033**, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.031 PF1.033** combined, will not exceed **0.04** pound per hour. This limit is less than the **90.1** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by Q.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from **PF1.031 PF1.033** combined, will not exceed **0.11** pound per hour. This limit is less than the **90.1** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by Q.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.031 PF1.033** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.031 PF1.033** each, will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.031** will not exceed 200.0 tons of coal per any one-hour period.
- b. The maximum allowable discharge rate for PF1.032 and PF1.033 each, will not exceed 7.50 tons of coal per any one-hour period.
- c. Hours

PF1.031 – PF1.033 each, may operate a total of 8760 hours per year.



4.

#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- Q. Emission Units #'s PF1.031 PF1.033 (continued)
  - NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **PF1.031 PF1.033** each, on a daily basis.
- ii. Monitor and record the hours of operation for PF1.031 PF1.033 each, on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.031 PF1.033** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

S. Emission Units #'s S2.039 - S2.040 location North 4514.99 km, East 567.68 km, UTM (Zone 11)

S.	S. System 19 – Kiln # 2 Coal Silo T-290		
S	2.039	Conveyor C-290 transfer to Coal Silo T-290	
S	2.040	Coal Silo T-290	

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Equipment

Emissions from the **Kiln # 2 Coal Silo T-290** (**S2.039 and S2.040**) each, shall be ducted to a control system consisting of a mechanical collection and **Baghouse** (**D-291**) with 100 % capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.039** and **S2.040** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-291**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-291**), will not exceed **0.14** pound per hour. This limit is less than the **58.5** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by S.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-291)</u>, will not exceed <u>0.17</u> pound per hour. This limit is less than the <u>58.5</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by S.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-291)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse (D-291)** will not equal or exceed 20%.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.039** and **S2.040** each, will not exceed **200.0** tons of **coal** per any one-hour period.
- b. Hours
  - **S2.039 and S2.040** each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- S. Emission Units #'s S2.039 S2.040 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **S2.039** and **S2.040** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.039** and **S2.040** each, on a daily basis.
- iii. **Baghouse** (**D-291**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-291**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse (D-291)** and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-291), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.039 and S2.040** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-291**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-291**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

T. Emission Unit # S2.041 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

T. System 20 – Lime Plant Stone Feed to Kiln # 3
S | 2.041 | Conveyor C-314 transfer to Pre-heater PH-321

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Equipment

Emissions from the **Lime Plant Stone Feed to Kiln # 3** (S2.041) shall be ducted to a control system consisting of **Baghouse** (D-382) with 100% capture and a maximum volume flow rate of 1,500 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.041**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-382**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-382)**, will not exceed **0.21** pound per hour. This limit is less than the **60.9** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by T.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-382)</u>, will not exceed <u>0.26</u> pound per hour. This limit is less than the <u>60.9</u> pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by T.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-382**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-382**) will not equal or exceed 20%.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR, Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 20** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-382)**, the following pollutants in excess of the following specified limits:

- i. Emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter (40 CFR Part 60.672(a)(1)).
- ii. Emissions from the exhaust stack of **Baghouse** (D-382) that exhibit greater than 7 percent opacity (40 CFR Part 60.672(a)(2)).
- iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.041** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- T. Emission Unit # S2.041 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput rate for **S2.041** will not exceed **250.0** tons of **as fed aggregate** per any one-hour period.
- b. <u>Hours</u>

**S2.041** may operate a total of **8760** hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of as fed aggregate for **S2.041** on a daily basis.
- ii. Monitor and record the hours of operation for **S2.041** on a daily basis.
- iii. **Baghouse** (**D-382**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-382**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-382**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse (D-382)**, including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.041** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-382**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-382**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

U. Emission Units #'s S2.042 – S2.044 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

U.	. System 21 – Kiln # 3 Circuit (D-385) (Revised: August 3, 2004 and January 27, 2006)	
S	2.042	Kiln # 3 Pre-heater PH-321
S	2.043	Kiln # 3 K-321
S	2.044	Kiln # 3 Lime Cooler N-332

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Equipment

Emissions from the **Kiln # 3 Circuit** (**S2.042** – **S2.044**) each, shall be ducted to a control system consisting of **Baghouse** (**D-385**) with 100% capture and a maximum volume flow rate of **100,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.042 S2.044** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-385**), the following pollutants in excess of the following specified limits:
    - i. SIP 445.731 <u>Federally Enforceable SIP Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (D-385), will not exceed 0.28 pound per million Btu.
    - ii. SIP 445.732 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **133.7** pounds per hour.
    - iii. NAC 445B.2203 <u>State Only Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **0.28** pound per million Btu.
    - iv. NAC 445B.22033 <u>State Only Requirement</u> The maximum allowable discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **133.7** pounds per hour.
    - v. SIP Article 8.2.1.1 <u>Federally Enforceable SIP Requirement</u> The maximum allowable discharge of Sulfur to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **171.9** pounds per hour.
    - vi. NAC 445B.22047 <u>State Only Requirement</u> The maximum allowable discharge of Sulfur to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **171.9** pounds per hour.
    - vii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (D-385), will not exceed 17.14 pounds per hour.
    - viii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **13.71** pounds per hour.
    - ix. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **33.60** pounds per hour, based on a <u>3-hour</u> rolling period.
    - x. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere from the exhaust stack of **Baghouse (D-385)**, will not exceed **200.00** pounds per hour.
    - xi. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of CO (carbon monoxide) to the atmosphere from the exhaust stack of **Baghouse** (D-385), will not exceed 512.50 pounds per hour.
    - xii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of VOC (volatile organic compounds) to the atmosphere from the exhaust stack of **Baghouse** (**D-385**), will not exceed **10.44** pounds per hour.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

- U. Emission Units #'s S2.042 S2.044 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits (Continued)
    - a. On and after the date of startup of **S2.042 S2.044** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-385**), the following pollutants in excess of the following specified limits:
      - xiii. SIP 445.721 *Federally Enforceable SIP Requirement* The opacity from the exhaust stack of **Baghouse (D-385)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
      - xiv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-385**) will not equal or exceed 20%.
    - b. New Source Performance Standards (NSPS) Subpart HH Standards of Performance for Lime Manufacturing Plants (40 CFR, Part 60.340)
      - On and after the sixtieth day after achieving the maximum production rate at which **System 21** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-385)**, the following pollutants in excess of the following specified limits:
      - i. Emissions of particulate matter in excess of 0.30 kilogram per megagram of stone feed (40 CFR Part 60.342(a)(1)).
      - ii. Emissions from the exhaust stack of **Baghouse** (D-385) that exhibit greater than 15 percent opacity (40 CFR Part 60.342(a)(2)).
      - iii. The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
      - iv. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **S2.042 S2.044** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable lime production rate for the **Kiln # 3 Circuit** will not exceed **50.0** tons of **lime production** per any one-hour period.
- b. The maximum allowable coal feed rate for the **Kiln # 3 Circuit** will not exceed **12.0** tons of **coal** per any one-hour period.
- c. The Kiln # 3 Circuit may combust, as the primary fuel source coal only, with a maximum coal sulfur content of 3.0%. The use of diesel fuel or propane is designated for startups and flame stabilization purposes during the startup and/or shut down of the Kiln # 3 Circuit.
- d. Hours
  - S2.042 S2.044 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

- U. Emission Units #'s S2.042 S2.044 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the lime production for the **Kiln # 3 Circuit** on a daily basis.
- ii. Monitor and record the coal feed rate of coal for the Kiln #3 Circuit on a daily basis.
- iii. Record the coal sulfur content as demonstrated and submitted by the coal supplier data on a daily basis.
- iv. Monitor and record the hours of operation for the Kiln #3 Circuit (\$2.042 \$2.044) each, on a daily basis.
- v. The Kiln #3 circuit may combust coal, diesel fuel, and/or propane only, during start-up of the The Kiln #3 circuit.
- vi. **Baghouse (D-385)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-385**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-385**) and any corrective actions taken in order to maintain proper operating pressure.
- vii. Once each calendar year, the permittee shall conduct an inspection of all bags contained in **Baghouse (D-385)**, or perform dye testing on **Baghouse (D-385)**.
  - (a) In the event that **Kiln # 3 K-321** (**S2.043**) operates without prolonged shutdown for an entire calendar year, and COMS data for **Kiln # 3 K-321** (**S2.043**) indicates that **Baghouse** (**D-385**) is operating properly, the internal baghouse inspection or dye test may be conducted during the next prolonged shutdown that will allow safe access inside **Baghouse** (**D-385**).
- viii. The Permittee shall install, calibrate, operate and maintain a Continuous Opacity Monitoring System (COMS) to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from the exhaust stack of **Kiln # 3 K-321 (S2.043)**. The COMS will be installed at an appropriate location in the exhaust stack of **Kiln # 3 K-321 (S2.043)** to accurately and continuously measure the opacity from the exhaust stack of **Kiln # 3 K-321 (S2.043)** in accordance with the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 60.11 and NAC 445B.256 to NAC 445B.267.
- ix. The Permittee shall install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in U.4.a.(vii.) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specification 1 and NAC 445B.256 to NAC 445B.267.
- x. The Permittee shall install, calibrate, operate and maintain a SO<sub>2</sub> continuous emissions monitoring system (CEMS) (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) to continuously measure the concentration of SO<sub>2</sub> (in ppm), volumetric gas flow (in SCFH), and SO<sub>2</sub> mass emissions (in lb/hr) from the exhaust stack of Kiln # 3 K-321 (S2.043). The CEMS will be installed at an appropriate location in the exhaust stack of Kiln # 3 K-321 (S2.043) to accurately and continuously measure the SO<sub>2</sub> concentration from the exhaust stack of Kiln # 3 K-321 (S2.043) in accordance with the requirements prescribed in 40 CFR Part 60, Appendix F, 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 and NAC 445B.256 to NAC 445B.267.
- xi. The Permittee shall install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO<sub>2</sub> concentration (in ppm), volumetric gas flow (in SCFH), and a 3-hour rolling period SO<sub>2</sub> mass emissions (in lb/hr), as measured by the CEMS required in U.4.a.(ix.) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 and NAC 445B.256 to NAC 445B.267.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

- U. Emission Units #'s S2.042 S2.044 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance (Continued)
      - xii. The required monitoring established in (i.) through (xi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.042 S2.044** each, are operating:
        - (a) The calendar date of any required monitoring.
        - (b) The total daily feed rate of coal, in tons, for the corresponding date.
        - (c) The results and verification of the coal sulfur content, as provided by the coal supplier, for the corresponding date
        - (d) The total daily lime production, in tons, for the corresponding date.
        - (e) The total daily hours of operation for the corresponding date.
        - (f) The corresponding average hourly feed rate of coal, in tons per hour. The average hourly coal feed rate will be determined from the daily coal feed rate and the total daily hours of operation recorded in (b) and (e) above.
        - (g) The corresponding average hourly rate of lime production rate, in tons per hour. The average hourly lime production rate will be determined from the daily lime production and the total daily hours of operation recorded in (d) and (e) above.
        - (h) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-385**).
        - (i) Records and results of the annual inspection of **Baghouse** (**D-385**).
        - (i) For the Kiln # 3 Circuit startup:
          - (1) The time startup began.
          - (2) The time coal firing began.
          - (3) The time off-gases were routed through Baghouse (D-385).
          - (4) Baghouse (D-385) inlet temperature when the kiln off-gases were routed through Baghouse (D-385).
          - (5) Records documenting why any deviation from the best management practices plan for the Kiln # 3 Circuit startup was necessary.
          - (6) Kiln # 3 K-321 (S2.043) stack opacity as measured by the COMS.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- U. Emission Units #'s S2.042 S2.044 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance (Continued)
      - xii. The required monitoring established in (i.) through (xi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.042 S2.044** each, are operating: (Continued)
        - (k) The measured opacity (in percent opacity) from the COMS required in U.4.a.(viii.) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:
          - (1) Each 6-minute average as required in NAC 445B.22017.1(b), and as set forth in 40 CFR Part 60.13(h).
        - (1) The emission rates of SO<sub>2</sub> in pounds per hour (lbs/hr) and parts per million (ppm) measured by the CEMS required in U.4.a.(x.) of this section, for each averaging period described below:
          - (1) The SO<sub>2</sub> emissions in pounds per hour (lbs/hr) for each 3-hour rolling period.
          - (2) The following equation articulates the defining formula by which the pertinent data is calculated:

$$E_h = K * C_{hp} * Q_{hs} * \left(\frac{100 - \% H_2 O}{100}\right)$$

where:

 $E_h$  = Hourly  $SO_2$  mass emission rate during unit operation, lb/hr.

 $K = 1.660 \times 10^{-7}$  for  $SO_2$ , (lb/scf)/ppm.

 $C_{hp}$  = Hourly average  $SO_2$  concentration during unit operation, ppm (dry).

Q<sub>hs</sub> = Hourly average volumetric flow rate during unit operation, scfh as measured (wet).

 $%H_2O$  = Hourly average stack moisture content during unit operation or constant moisture value, percent by volume.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- U. Emission Units #'s S2.042 S2.044 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program (Continued)
    - b. Performance/Compliance Testing

Once per calendar year, the permittee will:

- Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-385) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. The Method 201 or Method 201A tests required in U.4.b.i. of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 test with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in U.2. of this section.
- iii. Conduct and record a Method 6, 7, 10 and 18 for SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC's (or equivalent methods as approved by the Director) on the exhaust stack of **Baghouse** (**D-385**) while the **Kiln # 3 Circuit** (**S2.042 S2.044** each) is operating, consisting of three valid runs. The Method 6, 7, 10 and 18 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests will be conducted at the maximum production rate of the emission unit(s) and all performance tests must be conducted under conditions that are representative of maximum emissions potential for each stack.
- iv. Performance tests required under U.4.b.i. through iii. of this section that are conducted below the maximum allowable throughput, as established in U.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- v. Tests of performance must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The emissions results of the Method 5 performance test for PM and the Method 201 or Method 201A performance test for PM<sub>10</sub> must be reported in lb/hour and lb/MMBTU.
- vii. The permittee shall give notice to the director 30 days before the tests of performance to allow the director to have an observer present. A written testing procedure for the tests of performance must be submitted to the director at least 30 days before the tests of performance to allow the director to review the proposed testing procedures (NAC.445B.252.4).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- U. Emission Units #'s S2.042 S2.044 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - b. <u>Performance/Compliance Testing</u> (Continued)
      - viii. Within 60 days after completing the performance tests contained in U.4.b.of this Section, the permittee shall furnish the director a written report of the results of the performance tests required in U.4.b.of this Section (40 CFR Part 60.8(a)). All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.395 (NAC 445B.252.8).
      - ix. As a result of the most recent performance tests performed in U.4.b.i. through iii. of this section, the permittee shall derive emission factors for each of the following:
        - (a) Pounds of PM per ton of lime production (lbs-PM/ton-lime production)
        - (b) Pounds of PM<sub>10</sub> per ton of lime production (lbs-PM<sub>10</sub>/ton-lime production)
        - (c) Pounds of NO<sub>x</sub> per ton of lime production (lbs-NO<sub>x</sub>/ton-lime production)
        - (d) Pounds of CO per ton of lime production (lbs-CO/ton-lime production)
        - (e) Pounds of VOC's per ton of lime production (lbs-VOC's/ton-lime production)

The annual emissions of PM,  $PM_{10}$ ,  $NO_x$ , CO and VOC's from the **Kiln # 3 Circuit**, will be calculated based on the testing contained in U.4.b. of this Section, and then converted to tons of emissions per year.

The annual emissions of SO<sub>2</sub> from the **Kiln # 3 Circuit**, will be calculated based on the data recorded by the CDCS in U.4.a.ix. of this section, and then converted to tons of emissions per year.

5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

V. Emission Units #'s PF1.034 - PF1.036 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

٧.	V. System 22 – Kiln # 3 Coal Handling Circuit			
PF	1.034	Conveyor C-90 transfer to Conveyor C-391		
PF	1.035	Coal Silo T-391 Discharge to Conveyor C-392		
PF	1.036	Conveyor C-392 transfer to Coal Mill R-392		

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from the Kiln # 3 Coal Handling Circuit (PF1.034) shall be controlled by best operational practices. Emissions from the Kiln # 3 Coal Handling Circuit (PF1.035 and PF1.036) each, shall be controlled by operating PF1.035 and PF1.036 each in an enclosed building.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.034 PF1.036** each, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.034 PF1.036**, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.034 PF1.036** combined, will not exceed **0.04** pound per hour. This limit is less than the **101.8** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by V.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from **PF1.034 PF1.036** combined, will not exceed **0.11** pound per hour. This limit is less than the **101.8** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by V.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.034 PF1.036** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.034 PF1.036** each, will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.034** will not exceed 200.0 tons of coal per any one-hour period.
- b. The maximum allowable discharge rate for PF1.035 and PF1.036 each, will not exceed 12.0 tons of coal per any one-hour period.
- c. Hours

PF1.034 – PF1.036 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- V. Emission Units #'s PF1.034 PF1.036 (Continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **PF1.034 PF1.036** each, on a daily basis.
- ii. Monitor and record the hours of operation for PF1.034 PF1.036 each, on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.034 PF1.036** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

X. Emission Units #'s S2.045 – S2.046 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

X.	K. System 24 – Kiln # 3 Coal Silo T-391		
S	2.045	Conveyor C-391 transfer to Coal Silo T-391	
S	2.046	Coal Silo T-391	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Air Pollution Equipment**

Emissions from the **Kiln # 3 Coal Silo T-391** (**S2.045 and S2.046**) each, shall be ducted to a control system consisting of a mechanical collection and **Baghouse** (**D-391**) with 100 % capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of S2.045 and S2.046 each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (D-391), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-391**), will not exceed **0.14** pound per hour. This limit is less than the **58.5** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by X.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-391)</u>, will not exceed <u>0.17</u> pound per hour. This limit is less than the <u>58.5</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by X.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-391)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-391**) will not equal or exceed 20%.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.045** and **S2.046** each, will not exceed **200.0** tons of **coal** per any one-hour period.
- b. Hours

S2.045 and S2.046 each, may operate a total of 8760 hours per year.



## **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329

CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- X. Emission Units #'s S2.045 S2.046 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **S2.045** and **S2.046** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.045** and **S2.046** each, on a daily basis.
- iii. **Baghouse** (**D-391**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-391**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-391**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-391), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.045** and **S2.046** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-391**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-391**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



## **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

Y. Emission Units #'s S2.047 - S2.067 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

Y.	System	25 – Product Lime Loadout from Kiln # 1 (D-82) (Revised: November 9, 2004)
S	2.047	Kiln # 1 Lime Cooler N-21 transfer to Conveyor C-30
S	2.048	Conveyor C-30 transfer to Bucket Elevator E-30
S	2.049	Bucket Elevator E-30 transfer to Screen S-31 via Gate G-35 and Gate G-36
S	2.050	Gate G-36 transfer to Screen S-30
S	2.051	Gate G-36 transfer to Kiln Run Silo T-40
S	2.052	Kiln Run Silo T-40 discharge to Feeder F-50
S	2.053	Feeder F-50 transfer to Conveyor C-50
S	2.054	Conveyor C-50 transfer to Crusher R-50
S	2.055	Crusher R-50 transfer to Gate G-55
S	2.056	Gate G-55 transfer to Bucket Elevator E-30
S	2.057	Gate G-36 transfer to Core Bin N-30
S	2.058	Core Bin N-30 discharge
S	2.059	Screen S-30 transfer to Conveyor C-43 via Gate G-41 and Gate G-42
S	2.060	Conveyor C-43 transfer to Silo T-43
S	2.061	Loadout Silo T-43 discharge
S	2.062	Screen S-30 transfer to Conveyor C-42
S	2.063	Conveyor C-42 transfer to Gate T-40; <b>-OR-</b> Conveyor C-42 transfer to Conveyor C-44
S	2.064	Screen S-31 transfer to Gate G-44
S	2.065	Gate G-44 transfer to Silot T-44 via Conveyor C-42 and Conveyor C-44
S	2.066	Gate G-44 transfer to Loadout Silo T-42 via Conveyor C-42
S	2.067	Loadout Silo T-42 discharge

#### 1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Equipment

Emissions from the **Product Lime Loadout from Kiln #1** (S2.047 – S2.067) each, shall be ducted to a control system consisting of **Baghouse** (D-82) with 100% capture and a maximum volume flow rate of 15,000 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- Y. Emission Units #'s S2.047 S2.067 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
    - a. On and after the date of startup of **S2.047 S2.067** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-82**), the following pollutants in excess of the following specified limits:
      - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-82**), will not exceed **1.29** pounds per hour, nor more than **5.63** tons per year. This limit is less than the **877.6** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by Y.3.a. of this section.
      - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-82)</u>, will not exceed <u>1.29</u> pounds per hour, nor more than <u>5.63</u> tons per year. This limit is less than the <u>877.6</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by Y.3.a. of this section.
      - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-82**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
      - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-82**) will not equal or exceed 20%.
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.047 S2.067** each, will not exceed **200.0** tons of **lime** per any one-hour period.
- b. Hours
  - S2.047 S2.067 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- Y. Emission Units #'s S2.047 S2.067 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for S2.047 S2.067 each, on a daily basis.
- ii. Monitor and record the hours of operation for S2.047 S2.067 each, on a daily basis.
- iii. **Baghouse** (**D-82**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-82**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-82**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-82), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.047 S2.067** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-82).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-82**).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- Y. Emission Units #'s S2.047 S2.067 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse (D-82)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under Y.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in Y.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iv. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-82)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- v. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## **PERMIT NO.** AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

Emission Units #'s S2.068 - S2.077 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

Z.	System	26 – Product Lime Loadout from Kiln # 2 – (DC-230)
S	2.068	Kiln # 2 Lime Cooler N-221 transfer to Conveyor C-230
S	2.069	Conveyor C-230 transfer to Bucket Elevator E-230
S	2.070	Screen S-230 transfer to Bucket Elevator E-230 via Mill R-250 or Gate G-236
S	2.071	Screen S-230 transfer to Conveyor C-231 via Gate G-236
S	2.072	Conveyor C-231 transfer to Bucket Elevator E-32
S	2.073	Gate G-38 transfer to Conveyor C-42
S	2.074	Conveyor C-42 transfer to Loadout Silo T-42; <b>-OR-</b> Conveyor C-42 transfer to Loadout Silo T-44
S	2.075	Conveyor C-44 transfer to Loadout Silo T-44
S	2.076	Conveyor C-41 transfer to Kiln Run Silo T-41
S	2.077	Screen S-31 transfer to Kiln Run Silo T-40 or Kiln Run Silo T-41 via Gate G-43; <b>-OR-</b> Screen S-31 transfer to Conveyor C-43 via Gate G-44

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Air Pollution Equipment**

Emissions from the Product Lime Loadout from Kiln #2 – (DC-230) (S2.068 – S2.077) each, shall be ducted to a control system consisting of Baghouse (D-230) with 100% capture and a maximum volume flow rate of 8,000 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate as referenced in 40 CFR Part 60, Appendix A.

#### NAC 445B.3405 (NAC 445B.316) Part 70 Program **Emission Limits**

- On and after the date of startup of S2.068 S2.077 each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (D-230), the following pollutants in excess of the following specified limits:
  - NAC 445B.305 Federally Enforceable PSD Permit Requirement The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of Baghouse (D-230), will not exceed 0.69 pound per hour. This limit is less than the 378.4 pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by Z.3.a. of this
  - ii. NAC 445B.305 Federally Enforceable PSD Permit Requirement The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (D-230), will not exceed 0.69 pound per hour. This limit is less than the 378.4 pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by Z.3.a. of this section.
  - iii. SIP 445.721 Federally Enforceable SIP Requirement The opacity from the exhaust stack of Baghouse (D-230) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 State Only Requirement The opacity from the exhaust stack of Baghouse (D-230) will not equal or exceed 20%.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- Z. Emission Units #'s S2.068 S2.077 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable throughput rate for **S2.068 S2.077** each, will not exceed **66.70** tons of **lime** per any one-hour period.
- b. <u>Hours</u>

S2.068 – S2.077 each, may operate a total of 8760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for \$2.068 \$2.077 each, on a daily basis.
- ii. Monitor and record the hours of operation for \$2.068 \$2.077 each, on a daily basis.
- iii. **Baghouse** (**D-230**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (1) Monitor the bag cleaning air pressure at **Baghouse** (**D-230**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (2) Monitor and record the pressure drop across **Baghouse** (**D-230**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse** (**D-230**), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.068 S2.077** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-230**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-230**).



## **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

- Z. Emission Units #'s S2.068 S2.077 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-230) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under Z.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in Z.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-230)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section I. Specific Operating Conditions** (continued)

**AA. Emission Units #'s S2.078 – S2.112** location North 4522.85 km, East 734.42 km, UTM (Zone 11)

	AA O 1 07 B 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
-	AA. System 27 – Product Lime Loadout from Kiln # 2 – DC-30 (Revised: November 9, 2004)			
	2.078	Bucket Elevator E-230 transfer to Gate G-235		
S	2.079	Gate G-235 transfer to Screw Conveyor C-231		
S	2.080	Gate G-235 transfer to Screen S-230		
S	2.081	Bucket Elevator E-32 transfer to Gate G-38		
S	2.082	Gate G-38 transfer to Conveyor Screen S-31		
S	2.083	Gate G-38 transfer to Gate G-39		
S	2.084	Gate G-38 transfer to Conveyor C-42		
S	2.085	Gate G-35 transfer to Gate G-36; -OR- Gate G-35 transfer to Screen S-31		
S	2.086	Bucket Elevator E-30 transfer to Gate G-35		
S	2.087	Gate G-39 transfer to Kiln Run Silo T-41		
S	2.088	Gate G-39 transfer to Kiln Run Silo T-40		
S	2.089	Gate G-39 transfer to Core Bin N-30		
S	2.090	Bucket Elevator E-31 transfer to Gate G-37		
S	2.091	Gate G-37 transfer to Screen S-31		
S	2.092	Gate G-37 transfer to Core Bin N-30		
S	2.093	Gate G-37 transfer to Screen S-30		
S	2.094	Screen S-31 transfer to Screw Conveyor C-42		
S	2.095	Screw Conveyor C-42 transfer to Kiln Run Silo T-40		
S	2.096	Screen S-31 transfer to Gate G-44		
S	2.097	Gate G-44 transfer to Screw Conveyor C-42		
S	2.198	Gate G-44 transfer to Conveyor C-43		
S	2.199	Gate G-44 transfer to Kiln Run Silo T-40		
S	2.100	Screen S-31 transfer to Gate G-43		
S	2.101	Gate G-43 transfer to Silo T-40; -OR- Gate G-43 transfer to Conveyor C-41		
S	2.102	Kiln Run Silo T-41 transfer to Conveyor C-51		
S	2.103	Conveyor C-51 transfer to Conveyor C-50		
S	2.104	Gate G-55 transfer to Bucket Elevator E-31		
S	2.105	Kiln Run Silo T-41 transfer to Conveyor C-52		
S	2.106	Conveyor C-52 discharge to Loadout		
S	2.107	Loadout Silo T-43 transfer to Conveyor C-60		
S	2.108	Conveyor C-60 discharge to Loadout		
S	2.109	Loadout Silo T-44 transfer to Conveyor C-61		
S	2.110	Conveyor C-61 discharge to Loadout		
S	2.111	Loadout Silo T-44 discharge		
S	2.112	Dust Collector D-30 transfer to Gate G-47		
		·		



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### AA. Emission Units #'s S2.078 – S2.112 (continued)

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

Air Pollution Equipment

Emissions from the **Product Lime Loadout from Kiln # 2 (DC-30) (S2.078 – S2.112)** each, shall be ducted to a control system consisting of **Baghouse (D-30)** with 100% capture and a maximum volume flow rate of **9,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of S2.078 S2.112 each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (D-30), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-30**), will not exceed **0.77** pound per hour. This limit is less than the **1,111.7** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AA.3.a. of this section
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse (D-30)**, will not exceed **0.77** pound per hour. This limit is less than the **1,111.7** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AA.3.a. of this section.
    - iii. SIP 445.721 *Federally Enforceable SIP Requirement* The opacity from the exhaust stack of **Baghouse** (**D-30**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-30**) will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.078 S2.112** each, will not exceed **200.0** tons of **lime** per any one-hour period.
- b. Hours
  - S2.078 S2.112 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions** (continued)

#### AA. Emission Units #'s S2.078 – S2.112 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for S2.078 S2.112 each, on a daily basis.
- ii. Monitor and record the hours of operation for \$2.078 \$2.112 each, on a daily basis.
- iii. **Baghouse** (**D-30**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-30**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-30**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-30), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.078 S2.112** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-30).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-30**).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### AA. Emission Units #'s S2.078 - S2.112 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-30) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AA.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AA.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-30)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AB. Emission Unit # PF1.037 - PF1.038 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

AB.	AB. System 28 – Kiln # 1 and Kiln # 2 Cyclone/Baghouse Fines Silo Discharge		
PF	1.037	Fine Dust Silo T-89 discharge	
PF	1.038	Fine Dust Silo T-89 transfer to Pugmill	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Equipment

Emissions from the Kiln # 1 and Kiln # 2 Cyclone/Baghouse Fines Silo Discharge (PF1.037 and PF1.038) shall be controlled by a shroud/chute located at PF1.037, and by the lime being saturated with water at PF1.038.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.037** and **PF1.038**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.037** and **PF1.038** combined, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.01** pound per hour. This limit is less than the **46.1** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AB.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.03** pound per hour. This limit is less than the **46.1** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by AB.3.a. of this section.
  - iii. SIP 445.721 *Federally Enforceable SIP Requirement* The opacity from **PF1.037 and PF1.038** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.037 and PF1.038** each, will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput/discharge rate for **PF1.037** and **PF1.038** each, will not exceed **58.30** tons of **lime** per any one-hour period.
- b. <u>Hours</u>

**PF1.037** and **PF1.038** each, may operate a total of 8760 hours per year.



## **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### AB. Emission Unit # PF1.037 - PF1.038 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput/discharge rate of lime for **PF1.037** and **PF1.038** each, on a daily basis.
- ii. Monitor and record the hours of operation for PF1.037 and PF1.038 each, on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.
  - If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

    A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.
- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.037 and PF1.038** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput/discharge rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput/discharge rate of lime, in tons per hour. The average hourly throughput/discharge rate will be determined from the daily throughput/discharge rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AC. Emission Units #'s S2.113 – S2.114 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

AC. System 29 – Kiln # 1 and Kiln # 2 Cyclone/Baghouse Collection Product Loadout (D-89)		
S	2.113	Process Baghouse transfer to Fine Dust Silo T-89 via Conveyor C-285 and Conveyor C-85
S	2.114	Fine Dust Silo T-89 Loadout

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Kiln # 1 and Kiln # 2 Cyclone/Baghouse Collection Product Loadout (S2.113 and S2.114)** each, shall be ducted to a control system consisting of **Baghouse (D-89)** with 100% capture and a maximum volume flow rate of **2,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.113 and S2.114** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-89**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-89)**, will not exceed **0.34** pound per hour. This limit is less than the **46.1** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AC.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-89)</u>, will not exceed <u>0.43</u> pound per hour. This limit is less than the <u>46.1</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AC.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-89**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of <u>Baghouse</u> (D-89) will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput/discharge rate for **S2.113** and **S2.114** each, will not exceed **58.30** tons of **lime** per any one-hour period.
- b. Hours

**S2.113 and S2.114** each, may operate a total of 8760 hours per year.



## **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

### AC. Emission Units #'s S2.113 - S2.114 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput/discharge rate of lime for **S2.113** and **S2.114** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.113 and S2.114** each, on a daily basis.
- iii. **Baghouse (D-89)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-89**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-89**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-89), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.113 and S2.114** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput/discharge rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput/discharge rate of lime, in tons per hour. The average hourly throughput/discharge rate will be determined from the daily throughput/discharge rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-89).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-89**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

ACa. Emission Unit # S2.224 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

ACa. System 29a – Kiln # 1 and Kiln # 2 Baghouse Fines Silo Discharge System (D-11)

(Added on Date: November 9, 2004)

S 2.224 Fines Silo T-89 Discharge to Truck via Retractable Spout

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from the **Kiln #1 and Kiln #2 Baghouse Fines Silo Discharge System** (**S2.224**) shall be ducted to a control system consisting of **Baghouse** (**D-11**) with 100% capture and a maximum volume flow rate of **1,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - on and after the date of startup of **S2.224** the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-11)**, the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-11)**, will not exceed **0.21** pound per hour. This limit is less than the **46.1** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by ACa.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-11)</u>, will not exceed <u>0.26</u> pound per hour. This limit is less than the <u>46.1</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by ACa.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-11)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-11**) will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable discharge rate for \$2.224 will not exceed 58.30 tons of lime per any one-hour period.
- b. Hours
  S2.224 may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### ACa. Emission Unit # S2.224 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput/discharge rate of lime for **S2.224** on a daily basis.
- ii. Monitor and record the hours of operation for \$2.224 on a daily basis.
- iii. **Baghouse (D-11)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-11**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-11**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse (D-11)**, including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.224** are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput/discharge rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput/discharge rate of lime, in tons per hour. The average hourly throughput/discharge rate will be determined from the daily throughput/discharge rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse (D-11)**.
  - (g) Records and results of the annual inspection of **Baghouse** (**D-11**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

**AD. Emission Unit # S2.115** location North 4522.85 km, East 734.42 km, UTM (Zone 11)

AD. System 30 - Kiln # 3 Baghouse Collection Product Loadout (D-388)

S | 2.115 | Process Baghouse transfer to Fine Dust Silo T-388 via Conveyor C-385

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

Air Pollution Equipment

Emissions from the **Kiln # 3 Baghouse Collection Product Loadout** (**S2.115**) shall be ducted to a control system consisting of **Baghouse** (**D-388**) with 100% capture and a maximum volume flow rate of **1,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.115**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (D-388)**, the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-388)**, will not exceed **0.21** pound per hour. This limit is less than the **44.6** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AD.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-388)</u>, will not exceed <u>0.26</u> pound per hour. This limit is less than the <u>44.6</u> pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AD.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-388**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse (D-388)** will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.115** will not exceed **50.0** tons of **lime** per any one-hour period.
- b. Hours

**S2.115** may operate a total of **8760** hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## **PERMIT NO. AP3274-1329** CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## Section VI. Specific Operating Conditions (continued)

#### AD. Emission Unit # S2.115 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- Monitor and record the throughput rate of lime for **S2.115** on a daily basis.
- Monitor and record the hours of operation for **S2.115** on a daily basis.
- iii. Baghouse (D-388) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - Monitor the bag cleaning air pressure at **Baghouse** (**D-388**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - Monitor and record the pressure drop across Baghouse (D-388) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse** (**D-388**), including bags.
- The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure: A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.115** is operating:
  - The calendar date of any required monitoring.
  - The total daily throughput rate of lime, in tons, for the corresponding date.
  - The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-388).
  - Records and results of the annual inspection of **Baghouse** (**D-388**).
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program **Shielded Requirements**



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

**AE. Emission Unit # S2.116** location North 4522.85 km, East 734.42 km, UTM (Zone 11)

AE. System 31 - Kiln # 3 Baghouse Fines Discharge System (D-389)

S | 2.116 | Unloading of Baghouse Dust to Truck (Vaculoader System)

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Equipment

Emissions from the **Kiln # 3 Baghouse Fines Discharge** (S2.116) shall be ducted to a control system consisting of **Baghouse** (D-389) with 100% capture and a maximum volume flow rate of 900.0 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.116**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-389**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-389)**, will not exceed **0.12** pound per hour. This limit is less than the **44.6** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AE.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-389)</u>, will not exceed <u>0.15</u> pound per hour. This limit is less than the <u>44.6</u> pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by AE.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-389)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-389**) will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable discharge rate for **S2.116** will not exceed **50.0** tons of **lime** per any one-hour period.
- b. Hours

**S2.116** may operate a total of **8760** hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### AE. Emission Unit # S2.116 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the discharge rate of lime for **S2.116** on a daily basis.
- ii. Monitor and record the hours of operation for **S2.116** on a daily basis.
- iii. **Baghouse** (**D-389**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-389**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-389**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-389), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.116** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily discharge rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (b) and (c) above
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-389**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-389**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AEa. Emission Unit # PF1.042 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

AEa. System 31a – Kiln # 3 Baghouse Fines Discharge System

(Added on Date: November 9, 2004)

PF 1.042 | Fines Dust Silo T-388 transfer to Truck via Pugmill

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Equipment

Emissions from the **Kiln # 3 Baghouse Fines Discharge (PF1.042**) shall be controlled by mixing the baghouse fines discharged from Fines Dust Silo T-388 with water.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of **PF1.042**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.042**, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.09 pound per hour. This limit is less than the 44.6 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AEa.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.19** pound per hour. This limit is less than the **44.6** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by AEa.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.042** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 State Only Requirement The opacity from PF1.042 will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### **Operating Parameters**

- a. The maximum allowable discharge rate for **PF1.042** will not exceed **50.0** tons of **lime** per any one-hour period.
- b. Hours

**PF1.042** may operate a total of 8760 hours per year



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### AEa.Emission Unit # PF1.042 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput/discharge rate of lime for **PF1.042** on a daily basis.
- ii. Monitor and record the hours of operation for **PF1.042** on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.
  - If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

    A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.
- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.042** are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput/discharge rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput/discharge rate of lime, in tons per hour. The average hourly throughput/discharge rate will be determined from the daily throughput/discharge rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AF. Emission Units #'s S2.117 - S2.119 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

AF.	AF. System 32 – Hydrate Plant Surge Bin		
S	2.117	Product Lime Silo T-44 transfer to Surge Bin N-1101 via Conveyor C-1105 and Gate G-1105	
S	2.118	Surge Bin N-1101 transfer to Conveyor C-1102	
S	2.119	Conveyor C-1102 transfer to Hydrator Package via Conveyor C-1104	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Hydrate Plant Surge Bin** (S2.117 – S2.119) each, shall be ducted to a control system consisting of **Baghouse** (D-1101) with 100% capture and a maximum volume flow rate of 1,000.0 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.117 S2.119** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-1101**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-1101**), will not exceed **0.17** pound per hour. This limit is less than the **61.0** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AF.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-1101)</u>, will not exceed <u>0.17</u> pound per hour. This limit is less than the <u>61.0</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AF.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-1101)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-1101**) will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.117 S2.119** each, will not exceed **20.0** tons of **lime** per any one-hour period.
- b. <u>Hours</u>
  - S2.117 S2.119 each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

### AF. Emission Units #'s S2.117 - S2.119 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for **S2.117 S2.119** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.117 S2.119** each, on a daily basis.
- iii. **Baghouse (D-1101)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-1101**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-1101**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-1101), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.117 S2.119** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse (D-1101)**.
  - (g) Records and results of the annual inspection of **Baghouse** (**D-1101**).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AG. Emission Units #'s S2.120 - S2.121 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

A	AG. System 33 – Hydrate Plant Hydrator			
S	2.120	Hydrator		
S	2.121	Conveyor C-1122 transfer to Gate G-1122		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Hydrate Plant Hydrator** (**S2.120** and **S2.121**) each shall be ducted to a control system consisting of a **Wet Scrubber** (**W-1110**) with 100% capture.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.120 and S2.121** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Wet Scrubber (W-1110)**, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Wet Scrubber (W-1110)**, will not exceed **1.98** pounds per hour. This limit is less than the **60.6** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AG.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Wet Scrubber (W-1110)**, will not exceed **1.98** pounds per hour. This limit is less than the **60.6** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AG.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Wet Scrubber** (W-1110) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Wet Scrubber (W-1110)** will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable throughput rate for **S2.120** and **S2.121** each, will not exceed **19.8** tons of **lime** per any one-hour period.
- b. Hours
  - **S2.120** and **S2.121** each, may operate a total of 8760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

#### AG. Emission Units #'s S2.120 – S2.121 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for **S2.120** and **S2.121** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.120** and **S2.121** each, on a daily basis.
- iii. Within 30 days of issuance of this operating permit, the Permittee shall install and operate a device for measurement of the water supply pressure for **Wet Scrubber (W-1110)**. The Permittee shall conduct and record a reading of the **Wet Scrubber (W-1110)** water supply pressure once every two-calendar weeks, and record any corrective actions taken in order to maintain proper operating pressure.
- iv. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- v. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.

- vi. The required monitoring established in (i.) through (v.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.120** and **S2.121** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the readings of the water supply pressure for Wet Scrubber (W-1110).



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AG. Emission Units #'s S2.120 - S2.121 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth year calendar thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Wet Scrubber (W-1110)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AG.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AG.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of Wet Scrubber (W-1110) concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- vi. The need for additional performance testing for **Wet Scrubber (W-1110)** will be considered by the Director upon review of the initial performance tests conducted for **Wet Scrubber (W-1110)**.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

# CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions (continued)**

AH. Emission Units #'s S2.122 - S2.131 North 4522.85 km, East 734.42 km, UTM (Zone 11)

AH.	AH. System 34 – Hydrate Plant Lime Transfer DC-1132 (Revised: November 9, 2004)			
S	2.122	Gate G-1122 transfer to Conveyor C-1123		
S	2.123	Gate G-1122 transfer to Air Separator S-1130		
S	2.124	Air Separator S-1130 transfer to Conveyor C-1130		
S	2.125	Conveyor C-1130 transfer to Mill R-1130		
S	2.126	Conveyor C-1131 transfer to Bucket Elevator E-1130		
S	2.127	Bucket Elevator E-1130 transfer to Separator S-1130 or Separator S-1131		
S	2.128	Separator S-1130 and Separator S-1131 transfer to Conveyor C-1130, C-1132 or C-1134		
S	2.129	Mill R-1130 transfer to Conveyor C-1131		
S	2.130	Bucket Elevator E-1130 transfer to Air Separator S-1130		
S	2.131	Conveyor C-1134 transfer to Bin N-1130		

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Equipment

Emissions from the **Hydrate Plant Lime Transfer DC-1132** (S2.122 – S2.131) each, shall be ducted to a control system consisting of **Baghouse** (**D-1132**) with 100% capture and a maximum volume flow rate of **4,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.122 S2.131** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-1132**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-1132)**, will not exceed **0.58** pound per hour. This limit is less than the **279.6** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AH.3.a. of this section
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse (D-1132)**, will not exceed **0.58** pound per hour. This limit is less than the **279.6** pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AH.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-1132**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-1132**) will not equal or exceed 20%.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AH. Emission Units #'s S2.122 - S2.131 (continued)

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput rate for **S2.122 S2.131** each, will not exceed **30.0** tons of **hydrated lime** per any one-hour period.
- b. Hours

S2.122 – S2.131 each, may operate a total of 8760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of hydrated lime for S2.122 S2.131 each, on a daily basis.
- ii. Monitor and record the hours of operation for \$2.122 \$2.131 each, on a daily basis.
- iii. **Baghouse** (**D-1132**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-1132**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-1132**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse (D-1132)**, including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.122 S2.131** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of hydrated lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of hydrated lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (D-1132).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-1132**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • <u>www.ndep.nv.gov/bapc</u> • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AH. Emission Units #'s S2.122 - S2.131 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-1132**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AH.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AH.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-1132)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AI. Emission Units #'s S2.132 & S2.135 location North 4514.57 km, East 568.30 km, UTM (Zone 11)

AI.	Al. System 35 – Hydrate Plant Lime Transfer to Silo T-1140 (DC-1140) (Revised: May 9, 2006)				
S	2.132	Bin N-1130 transfer to Gate G-1131			
S	2.135	Pnuematic Conveyor A-1130 transfer to Loadout Silo T-1140 via Gate G-1133			

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Hydrate Plant Lime Transfer to Silo T-1140** (**DC-1140**) (**S2.132** and **S2.135**) each, shall be ducted to a control system consisting of **Baghouse** (**D-1140**) with 100% capture and a maximum volume flow rate of **1,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.132 and S2.135** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-1140**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-1140)**, will not exceed **0.26** pound per hour. This limit is less than the **46.3** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AI.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-1140)</u>, will not exceed <u>0.26</u> pound per hour. This limit is less than the <u>46.3</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AI.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from exhaust stack of **Baghouse** (**D-1140**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from exhaust stack of **Baghouse (D-1140)** will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput rate for **S2.132** and **S2.135** each, will not exceed **60.0** tons of **hydrated lime** per any one-hour period.
- b. Hours

S2.132 and S2.135 each, may operate a total of 8760 hours per year.

Revised: May 9, 2006



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### Al. Emission Units #'s S2.132 & S2.135 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of hydrated lime for **S2.132 and S2.135** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.132** and **S2.135** each, on a daily basis.
- iii. **Baghouse** (**D-1140**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-1140**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-1140**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-1140), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.132 and S2.135** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of hydrated lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of hydrated lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse (D-1140)**.
  - (g) Records and results of the annual inspection of **Baghouse** (**D-1140**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### Al. Emission Units #'s S2.132 & S2.135 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - b. Performance/Compliance Testing

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of **Baghouse** (**D-1140**):

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse (D-1140)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).
- ii. The Method 201A test required in this section may be replaced by a Method 5 test that includes the back-half catch. All particulate captured in the Method 5 tests with back-half catch performed under this provision shall be considered  $PM_{10}$  emissions for determination of compliance with the emission limitations established in AI.2 for **S2.132 and S2.135**.
- iii. Performance tests required under AI.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in AI.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iv. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-1140)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- v. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Ala. Emission Units #'s S2.132 & S2.137 location North 4514.57 km, East 568.30 km, UTM (Zone 11)

Ala	Ala. System 35a – Hydrate Plant Lime Transfer to Silo T-1141 (DC-1141) (Added on Date: May 9, 2006)					
S	2.132	Bin N-1130 transfer to Gate G-1131				
S	2.137	Pnuematic Conveyor A-1130 transfer to Loadout Silo T-1141				

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from the **Hydrate Plant Lime Transfer to Silo T-1141 (DC-1141)** (**S2.132 and S2.137**) each, shall be ducted to a control system consisting of **Baghouse (D-1141)** with 100% capture and a maximum volume flow rate of **1,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.132 and S2.137** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-1141**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-1141)**, will not exceed **0.26** pound per hour. This limit is less than the **46.3** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AIa.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-1141)</u>, will not exceed <u>0.26</u> pound per hour. This limit is less than the <u>46.3</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AIa.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from exhaust stack of **Baghouse** (**D-1141**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from exhaust stack of **Baghouse (D-1141)** will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

**Operating Parameters** 

- a. The maximum allowable throughput rate for **S2.132** and **S2.137** each, will not exceed **60.0** tons of **hydrated lime** per any one-hour period.
- b. Hours

**S2.132 and S2.137** each, may operate a total of **8760** hours per year.

Added: May 9, 2006



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### Ala. Emission Units #'s S2.132 & S2.137 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of hydrated lime for **S2.132 and S2.137** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.132** and **S2.137** each, on a daily basis.
- iii. **Baghouse (D-1141)** shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-1141**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-1141**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-1141), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.132 and S2.137** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of hydrated lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of hydrated lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse (D-1141)**.
  - (g) Records and results of the annual inspection of **Baghouse** (**D-1141**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Ala. Emission Units #'s S2.132 & S2.137 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - b. Performance/Compliance Testing

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of **Baghouse** (**D-1141**):

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse (D-1141)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).
- ii. The Method 201A test required in this section may be replaced by a Method 5 test that includes the back-half catch. All particulate captured in the Method 5 tests with back-half catch performed under this provision shall be considered  $PM_{10}$  emissions for determination of compliance with the emission limitations established in AIa.2 for **S2.132 and S2.137**.
- iii. Performance tests required under AIa.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in AIa.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iv. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-1141)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- v. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### BUREAU OF AIR POLLUTION CONTROL

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## **PERMIT NO. AP3274-1329** CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Alb. Emission Units #'s S2.136 & S2.138 location North 4514.57 km, East 568.30 km, UTM (Zone 11)

Alb	Alb. System 35b – Hydrate Silos Loadout DC-1142 (Added on Date: May 9, 2006)				
S	2.136	Loadout Silo T-1140 discharge via Conveyor C-1140			
S	2.138	Loadout Silo T-1141 discharge via Conveyor C-1141			

NAC 445B.3405 (NAC 445B.316) Part 70 Program 1.

Air Pollution Control Equipment

Emissions from the Hydrate Silos Loadout (DC-1142) (S2.136 and S2.138) each, shall be ducted to a control system consisting of Baghouse (D-1142) with 100% capture and a maximum volume flow rate of 1,000 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate as referenced in 40 CFR Part 60, Appendix A.

- NAC 445B.3405 (NAC 445B.316) Part 70 Program 2. **Emission Limits** 
  - On and after the date of startup of S2.136 and S2.138 each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (D-1142), the following pollutants in excess of the following specified limits:
    - NAC 445B.305 Federally Enforceable PSD Permit Requirement The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of Baghouse (D-1142), will not exceed 0.17 pound per hour. This limit is less than the 46.3 pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AIb.3.a. of this section
    - NAC 445B.305 Federally Enforceable PSD Permit Requirement The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of **Baghouse** (D-1142), will not exceed 0.17 pound per hour. This limit is less than the 46.3 pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AIb.3.a. of this section.
    - iii. SIP 445.721 Federally Enforceable SIP Requirement The opacity from exhaust stack of Baghouse (D-1142) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 State Only Requirement The opacity from exhaust stack of **Baghouse (D-1142)** will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- The maximum allowable throughput rate for S2.136 and S2.138 each, will not exceed 60.0 tons of hydrated lime per any one-hour period.
- b. Hours

**S2.136** and **S2.138** each, may operate a total of 8760 hours per year.

Added: May 9, 2006



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Alb. Emission Units #'s S2.136 & S2.138 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of hydrated lime for **S2.136 and S2.138** each, on a daily basis.
- ii. Monitor and record the hours of operation for S2.136 and S2.138 each, on a daily basis.
- iii. **Baghouse** (**D-1142**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-1142**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-1142**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-1142), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.136** and **S2.138** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of hydrated lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of hydrated lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse (D-1142)**.
  - (g) Records and results of the annual inspection of **Baghouse** (**D-1142**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

Alb. Emission Units #'s S2.136 & S2.138 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - b. Performance/Compliance Testing

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of **Baghouse** (**D-1142**):

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse (D-1142)** consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).
- ii. The Method 201A test required in this section may be replaced by a Method 5 test that includes the back-half catch. All particulate captured in the Method 5 tests with back-half catch performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in Alb.2 for **S2.136 and S2.138**.
- iii. Performance tests required under AIb.4.b.i. of this section that are conducted below the maximum allowable throughput rate, as established in AIb.3.a. of this section, shall be subject to the director's review to determine if the throughput rate during the performance tests was sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iv. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-1142)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. The visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- v. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- vi. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions** (continued)

AJ. Emission Units #'s S2.139 - S2.153 North 4522.85 km, East 734.42 km, UTM (Zone 11)

AJ.	AJ. System 36 – Product Lime Kiln # 3 – Control Device #1 DC-331				
S	2.139	Kiln # 3 Lime Cooler N-322 transfer to Gate G-326			
S	2.140	Gate G-326 transfer to Conveyor C-331			
S	2.141	Gate G-326 transfer to Conveyor C-332			
S	2.142	Conveyor C-331 transfer to Bucket Elevator E-331			
S	2.143	Conveyor C-332 transfer to Bucket Elevator E-332			
S	2.144	Bucket Elevator E-331 transfer to Gate G-331.1			
S	2.145	Gate G-331.1 transfer to Gate G-331 or Silo T-40			
S	2.146	Gate G-331 transfer to Core Bin N-332			
S	2.147	Conveyor C-333 transfer to Kiln # 3 Run Silo T-331			
S	2.148	Core Bin N-332 discharge to Truck			
S	2.149	Bucket Elevator E-332 transfer to Conveyor C-334 or Bin N-332 via Gate-332.1			
S	2.150	Conveyor C-334 transfer to # 3 Kiln Run Silo T-331			
S	2.151	Gate G-353 transfer to Conveyor C-332			
S	2.152	Gate G-354 transfer to Conveyor C-332			
S	2.153	Dust Collector D-331 discharge to # 3 Kiln Run Silo T-331			

## 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* Air Pollution Equipment

Emissions from the **Product Lime Kiln #3 – Control Device #1 DC-331** (**S2.139 – S2.153**) each, shall be ducted to a control system consisting of **Baghouse (D-331)** with 100% capture and a maximum volume flow rate of **6,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AJ. Emission Units #'s S2.139 – S2.153 (continued)

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of the **S2.139 S2.153** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-331**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-331)**, will not exceed **0.82** pound per hour. This limit is less than the **564.1** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AJ.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse</u> (D-331), will not exceed 1.03 pounds per hour. This limit is less than the 564.1 pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AJ.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse (D-331)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-331**) will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.139 S2.153** each, will not exceed **100.0** tons of **lime** per any one-hour period.
- b. Hours
  - S2.139 S2.153 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AJ. Emission Units #'s S2.139 – S2.153 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for S2.139 S2.153 each, on a daily basis.
- ii. Monitor and record the hours of operation for S2.139 S2.153 each, on a daily basis.
- iii. **Baghouse** (**D-331**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-331**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-331**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse** (**D-331**), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.139 S2.153** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-331**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-331**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AJ. Emission Units #'s S2.139 - S2.153 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-331**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AJ.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AJ.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-331)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runss. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VI. Specific Operating Conditions** (continued)

**AK. Emission Units #'s S2.154 – S2.180** location North 4522.85 km, East 734.42 km, UTM (Zone 11)

	AK. System 37 – Product Lime Kiln # 3 – Control Device #2 DC-333			
	2.154	Kiln # 3 Run Silo T-331 transfer (via F-336) to Conveyor C-336		
	2.155	Kiln # 3 Run Silo T-331 transfer (via F-337) to Conveyor C-337		
S	2.156	Conveyor C-336 transfer to Bucket Elevator E-336		
S	2.157	Conveyor C-337 transfer to Bucket Elevator E-337		
S	2.158	Bucket Elevator E-336 transfer to Gate G-336		
S	2.159	Gate G-336 transfer to Screen S-336		
S	2.160	Gate G-336 transfer to Conveyor C-341		
S	2.161	Screen S-336 transfer to Crusher R-351		
S	2.162	Screen S-336 transfer to Gate G-351		
S	2.163	Gate G-351 transfer to Crusher R-351		
S	2.164	Gate G-351 transfer to Conveyor C-342		
S	2.165	Screen S-336 transfer to Gate G-353		
S	2.166	Gate G-353 transfer to Conveyor C-341		
S	2.167	Crusher R-351 transfer to Screw Conveyor C-351		
S	2.168	Conveyor C-351 transfer to Bucket Elevator E-336		
S	2.169	Bucket Elevator E-337 transfer to Gate G-337		
S	2.170	Gate G-337 transfer to Screen S-337		
S	2.171	Gate G-337 transfer to Conveyor C-341		
S	2.172	Screen S-337 transfer to Crusher R-352		
S	2.173	Crusher R-352 transfer to Screw Conveyor C-352		
S	2.174	Conveyor C-352 transfer to Bucket Elevator E-337		
S	2.175	Screen S-337 transfer to Gate G-352		
S	2.176	Gate G-352 transfer to Crusher R-352		
S	2.177	Gate G-352 transfer to Conveyor C-342		
S	2.178	Screen S-337 transfer to Gate G-354		
S	2.179	Gate G-354 transfer to Conveyor C-341		
S	2.180	Dust Collector D-333 discharge to Conveyor C-341		

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### Air Pollution Equipment

Emissions from the **Product Lime Kiln # 3 – Control Device #2 DC-333** (**S2.154 – S2.180**) each, shall be ducted to a control system consisting of **Baghouse** (**D-333**) with 100% capture and a maximum volume flow rate of **32,500** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AK. Emission Units #'s S2.154 – S2.180 (continued)

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of the **S2.154 S2.180** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-333**), the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse** (**D-333**), will not exceed **4.46** pounds per hour. This limit is less than the **954.05** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AK.3.a. of this section.
    - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse (D-333)</u>, will not exceed <u>5.57</u> pounds per hour. This limit is less than the <u>954.05</u> pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AK.3.a. of this section.
    - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-333**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
    - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-333**) will not equal or exceed 20% in accordance with NAC 445B.354.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **S2.154 S2.180** each, will not exceed **160.0** tons of **lime** per any one-hour period.
- b. Hours
  - S2.154 S2.180 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AK. Emission Units #'s S2.154 – S2.180 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for S2.154 S2.180 each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.154 S2.180** each, on a daily basis.
- iii. **Baghouse** (**D-333**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-333**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-333**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-333), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.154 S2.180** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-333**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-333**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AK. Emission Units #'s S2.154 - S2.180 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-333**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AK.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AK.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-333)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AL. Emission Units #'s S2.181 - S2.186 location North 4522.85 km, East 734.42 km, UTM (Zone 11)

	Emission State # S SELICI SELICITIVO IOSALISH NOTE I ISELES KIN, E ASK 75 1. 12 KIN, S TW (2010 1 1)			
AL.	AL. System 38 – Product Lime Kiln # 3 – Control Device #3 DC-343			
S	2.181	Dust Collector D-361 transfer to Bucket Elevator E-341		
S	2.182	Conveyor C-341 transfer to Bucket Elevator E-341		
S	2.183	Conveyor C-342 transfer to Bucket Elevator E-342		
S	2.184	Bucket Elevator E-341 transfer to Lime Silo T-343		
S	2.185	Bucket Elevator E-342 transfer to Lime Silo T-342		
S	2.186	Dust Collector D-343 discharge to Lime Silo T-342		

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### Air Pollution Equipment

Emissions from the **Product Lime Kiln # 3 – Control Device #3 DC-343** (**S2.181 – S2.186**) each, shall be ducted to a control system consisting of **Baghouse** (**D-343**) with 100% capture and a maximum volume flow rate of **8,000** dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

#### NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.181 S2.186** each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**D-343**), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of **Baghouse (D-343)**, will not exceed **1.10** pounds per hour. This limit is less than the **336.7** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AL.3.a. of this section
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of <u>Baghouse</u> (D-343), will not exceed 1.37 pounds per hour. This limit is less than the 336.7 pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AL.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-343**) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from the exhaust stack of **Baghouse** (**D-343**) will not equal or exceed 20%.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AL. Emission Units #'s S2.181 – S2.186 (continued)

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput rate for **S2.181 S2.186** each, will not exceed **160.0** tons of **lime** per any one-hour period.
- b. <u>Hours</u>

S2.181 – S2.186 each, may operate a total of 8760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for S2.181 S2.186 each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.181 S2.186** each, on a daily basis.
- iii. **Baghouse** (**D-343**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-343**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-343**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of **Baghouse** (**D-343**), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.181 S2.186** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-343**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-343**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AL. Emission Units #'s S2.181 - S2.186 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of Baghouse (D-343) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AL.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AL.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-343)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements



#### BUREAU OF AIR POLLUTION CONTROL

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## **PERMIT NO. AP3274-1329** CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AM. Emission Units #'s S2.187 - S2.188 North 4522.85 km, East 734.42 km, UTM (Zone 11)

AM. System 39 – Product Lime Kiln # 3 – Control Device #4 DC-361				
S	2.187	Lime Silo T-343 loadout to Truck (via spout U-362 and Spout U-364 via Conveyor C-364)		
S	2.188	Lime Silo T-342 loadout to Truck (via spout U-363 and Spout U-364 via Conveyor C-365)		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Equipment

Emissions from the Product Lime Kiln #3 - Control Device #4 DC-361 (S2.187 and S2.188) each, shall be ducted to a control system consisting of Baghouse (D-361) with 100% capture and a maximum volume flow rate of 3,000 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate as referenced in 40 CFR Part 60, Appendix A.

#### NAC 445B.3405 (NAC 445B.316) Part 70 Program 2. **Emission Limits**

- On and after the date of startup of the S2.187 and S2.188 each, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (D-361), the following pollutants in excess of the following specified limits:
  - NAC 445B.305 Federally Enforceable PSD Permit Requirement The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere from the exhaust stack of Baghouse (D-361), will not exceed 0.41 pound per hour. This limit is less than the 117.1 pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited by AM.3.a. of this section
  - NAC 445B.305 Federally Enforceable PSD Permit Requirement The discharge of PM (particulate matter) to the atmosphere from the exhaust stack of Baghouse (D-361), will not exceed 0.51 pound per hour. This limit is less than the 117.1 pounds per hour combined maximum allowable emission limit as determined from SIP 445.732 and the combined maximum allowable throughput as limited by AM.3.a. of this section.
  - iii. SIP 445.721 Federally Enforceable SIP Requirement The opacity from the exhaust stack of Baghouse (D-361) will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 State Only Requirement The opacity from the exhaust stack of **Baghouse (D-361)** will not equal or exceed 20%.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- The maximum allowable throughput rate for **S2.187** and **S2.188** each, will not exceed **200.0** tons of **lime** per any onehour period.
- b. Hours
  - **S2.187 and S2.188** each, may operate a total of **8760** hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AM. Emission Units #'s S2.187 - S2.188 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of lime for **S2.187** and **S2.188** each, on a daily basis.
- ii. Monitor and record the hours of operation for **S2.187** and **S2.188** each, on a daily basis.
- iii. **Baghouse** (**D-361**) shall be supplied with plant air for bag cleaning purposes. The plant air system shall be equipped with a low-pressure alarm system. Every two-calendar weeks, the permittee shall conduct the following:
  - (a) Monitor the bag cleaning air pressure at **Baghouse** (**D-361**) and record whether it is above 30 psi. If the bag cleaning air pressure falls below 30 psi, the permittee shall record any corrective actions taken in order to maintain an operation bag cleaning air pressure that is above 30 psi.
  - (b) Monitor and record the pressure drop across **Baghouse** (**D-361**) and any corrective actions taken in order to maintain proper operating pressure.
- iv. Once each calendar year, the permittee shall conduct an internal inspection of Baghouse (D-361), including bags.
- v. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- vi. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.

- vii. The required monitoring established in (i.) through (vi.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.187 and S2.188** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of lime, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of lime, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
  - (f) Records and results of the operating air pressure and pressure drop of **Baghouse** (**D-361**).
  - (g) Records and results of the annual inspection of **Baghouse** (**D-361**).



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AM. Emission Units #'s S2.187 - S2.188 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (Continued)
  - b. Performance/Compliance Testing

Within 180 days from the date of issuance of this permit, and once every fifth calendar year thereafter, the permittee will:

- i. Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM<sub>10</sub> on the exhaust stack of **Baghouse** (**D-361**) consisting of three valid runs. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.
- ii. Performance tests required under AM.4.b.i. of this section that are conducted below the maximum allowable throughput, as established in AM.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then, the director may order additional performance testing for the purpose of a compliance demonstration.
- iii. Conduct and record a Method 9 visible emissions reading on the exhaust stack of **Baghouse (D-361)** concurrent with one of the three required Method 5 and Method 201 or Method 201A performance test runs. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with both a 6-minute average, and a 3-minute average is determined.
- iv. Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- v. The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367

## PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

AN. Emission Unit #'s PF1.040 - PF1.041 location North 4522.85 km, East 731.42 km, UTM (Zone 11)

AN. System 40 – Coal Storage System (Added on Date: November 9, 2004)			
PF	1.040	Truck Unloading to Coal Storage Stockpile	
PF	1.041	Coal transfer from Coal Storage Stockpile to Truck via Front-End Loader	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Equipment

Emissions from PF1.040 and PF1.041 each shall be controlled by best operational practices.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.040** and **PF1.041**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.040** and **PF1.041** combined, the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.21** pound per hour. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AN.3.a. of this section.
  - ii. NAC 445B.305 <u>Federally Enforceable PSD Permit Requirement</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.44** pound per hour. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by AN.3.a. of this section.
  - iii. SIP 445.721 <u>Federally Enforceable SIP Requirement</u> The opacity from **PF1.040** and **PF1.041** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.
  - iv. NAC 445B.22017 <u>State Only Requirement</u> The opacity from **PF1.040** and **PF1.041** each, will not equal or exceed 20%.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput/discharge rate for **PF1.040** and **PF1.041** each, will not exceed **200.0** tons of **coal** per any one-hour period.
- b. Hours

PF1.040 and PF1.041 each, may operate a total of 8760 hours per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VI. Specific Operating Conditions (continued)**

#### AN. Emission Unit # PF1.040 - PF1.041 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of coal for **PF1.040** and **PF1.041** each, on a daily basis.
- ii. Monitor and record the hours of operation for PF1.040 and PF1.041 each, on a daily basis.
- iii. The Permittee shall maintain a visual observation plan that has been approved by the Director.
- iv. A certified Method 9 observer shall conduct and record a visible emission survey of visible emissions from the emission sources, in accordance with the submitted observation plan, once every two-calendar weeks, under normal representative operating conditions; record the time of the survey and indicate whether any visible emissions were observed.
  - If the visible emission survey detects any visible emissions, the Permittee will conduct the following procedure:

    A Method 9 visible emissions reading will be conducted by a certified visible emissions reader within 4 hours of the initial visible observation survey, including all documents required under 40 CFR Part 60, Appendix A.
- v. The required monitoring established in (i.) through (iv.) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.040 and PF1.041** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of coal, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of coal, in tons per hour. The average hourly throughput/discharge rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission readings that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

No Shielded Requirements

\*\*\*\*\*\*\*\*End of Specific Operating Conditions\*\*\*\*\*\*



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section VII. Emission Caps**

- A. Cap for Systems 1 through 40; Pilot Peak Plant Facility-Wide Emission Units
  - 1. Emission Limits

On and after the date of startup of **Systems 1 through 40**; **Pilot Peak Plant Facility-Wide Emission Units**, and during periods specified by Permittee as operating under the provisions of Part A of this Section, the permittee will not discharge or cause the discharge into the atmosphere from **Systems 1 through 40**; **Pilot Peak Plant Facility-Wide Emission Units**, the following pollutants in excess of the following specified limits:

- a. The annual potential to emit from any individual Hazardous Air Pollutant will be less than **10.0** tons per year, based on a 12-month rolling period.
- b. The annual potential to emit from any combination of Hazardous Air Pollutants will be less than **25.0** tons per year, based on a 12-month rolling period.
- 2. <u>Monitoring, Recordkeeping, Reporting and Compliance</u>
  - a. Permittee shall demonstrate compliance with the annual hazardous air pollutants emissions cap in **Sections VII.A.1. a.** and **VII.A.1.b.** of this operating permit by submitting an annual hazardous air pollutants emissions inventory spreadsheet, depicting Hazardous Air Pollutants emissions rates in units of tons per year.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

## **Section VIII. Surface Area Disturbance Conditions**

Surface area disturbance in excess of 20 acres.

#### NAC 445B.22037

#### A. Fugitive Dust

- 1. No person may cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.
- 2. Except as otherwise provided in subsection 4, no person may cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation.

#### B. State Implementation Plan (SIP) 445.734

In accordance with 445.734, a plan for the control of particulate matter will be submitted within 60 days days of issuance date of this permit. Acceptance of the plan for the control of particulate matter by the Administrator does not limit the permittee's need to control particulate matter, nor from putting into effect the ongoing program using the best practical methods as required in A.1 and A.2, of this section.



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

# Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section IX. Schedules of Compliance**

A. Chemical Accident Prevention Provisions

If the Permittee is not in compliance with the Chemical Accident Prevention Provisions, the permittee shall:

- 1. Submit a compliance schedule for meeting the requirements of 40 CFR Part 68.215 by the date provided in 40 CFR Part 68.10(a) or;
- 2. Submit as part of the compliance certification submitted under 40 CFR Part 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68.215, including the registration and submission of the risk management plan.

\*\*\*\*\*\*\*\*End of Schedules of Compliance



#### **BUREAU OF AIR POLLUTION CONTROL**

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

## Facility ID No. A0367 PERMIT NO. AP3274-1329 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: Graymont Western US Inc., hereinafter called the permittee

### **Section X. Amendments**

February 20, 2004 - Section IX., Table IX.1 - Corrected Emission Unit Identification Numbers S2.013 & S2.014 to S2.014 & S2.015.

August 3, 2004 – Reopened Permit pursuant to NAC 445B.325: removed the following language from Systems 12, 16 & 21 (Kilns 1, 2 & 3) – "baghouse bypassing, during startup of Kilns 1, 2 & 3, will not exceed a 7-hour duration period after coal firing has commenced." The language was removed as it provides for a variance of the excess emissions provisions contained in the NAC, for which authority for providing a variance does not exist.

November 9, 2004 - Minor Revision Application submitted by Graymont and received by the BAPC on July 20, 2004.

Added Systems 04a, 29a, 31a and 40.

Increased short-term throughput rates for Systems 02, 04, 05, 07, 08, 09, 11, 25, 27, 34 and 35.

Removed Table IX.1 from Section IX.

January 27, 2006 - Major Modification Application submitted by Graymont and received by the BAPC on May 23, 2005.

Removed Maximum Sulfur Content of as-fed coal (0.7% by weight) for each Lime Kiln (Systems 12, 16 & 21).

Replaced 0.7% maximum coal sulfur content with 3.0% maximum coal sulfur content.

Revised the hourly SO<sub>2</sub> emission limit averaging time for each Lime Kiln (Systems 12, 16 & 21).

Graymont to install, calibrate, operate and maintain a CEMS to continuously monitor and record the SO<sub>2</sub> emission rates for each Lime Kiln (Systems 12, 16 & 21)

No changes in existing emission rates, per this modification application, for Systems 12, 16 & 21.

May 9, 2006 - Minor Revision Application submitted on February 23, 2006.

Revised System 35, added Systems 35a and 35b

#### This permit:

- 1. Is non-transferable. (NAC 445B.287) Part 70 Program
- 2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318) (State Only Requirement)
- 3. Will expire and be subject to renewal five (5) years after the issuance date of <u>January 22, 2004</u> NAC 445B.315) *Part 70 Program*
- 4. A completed application for the renewal of a Class I operating permit must be submitted to the director on the form provided by the Director with the appropriate fee at least 240 days, but no earlier than 18 months, before the expiration date of the current Class I operating permit for stationary sources. (NAC 445B.3443.2) *Part 70 Program*
- 5. Any party aggrieved by the Department's decision to issue this permit may appeal to:
  - a) The State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)
  - b) The United States Environmental Protection Agency's Environmental Appeals Board (EAB). The provisions in 40 CFR 124.19 shall apply to appeals made to the EAB for this PSD Operating Permit to Construct.
- 6. The effective date of the permit is 30 days after service of notice to the applicant and commenters of the final decision to issue, modify, or revoke and reissue the permit, unless review is requested on the permit under 40 CFR 124.19 within the 30 day period.
- 7. If an appeal is made to the EAB, the effective date of the permit is suspended until such time as the appeal is resolved.

THIS PERMIT EXPIRES ON:	January 22, 2009			
	Signature			
	Issued by:	Matthew A. DeBurle Supervisor, Permitting Bureau of Air Pollution	_	
	Phone:	(775) 687-9349	Date:	May 9, 2006
rm				

## Class I Non-Permit Equipment List

Graymont Pilot Peak Operations Area Facility-Wide Title V Operating Permit AP3274-1329

Emission Unit #	Emission Unit Description
IA1.001	Kiln #1 diesel fired auxiliary drive motor (<250 Hp)
IA1.002	Kiln #2 gasoline fired auxiliary drive motor (<250 Hp)
IA1.003	Kiln #3 diesel fired auxiliary drive motor (<250 Hp)
IA1.004	Kiln #1 gasoline fired hydraulic pump (<250 Hp)
IA1.005	Diesel fired fire pump – Emergency Use Only
IA1.006	Smart Ash 100 Disposal Unit
IA1.007	Fuel Storage Tanks (< 40,000 gallon capacity)
IA1.008	Parts Cleaners
IA1.009	Various Space Heaters (< 4 MMBTU/HR rated heat input, each)