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We encourage your questions and comments. (802) 770-7644 or OmyalnVermont.net - click "Contact"



P.O. Box 10

Whipple Hollow Road Florence, VT 05744

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ago these same continents began separating and ultimately drifting apart again. From that time to the present, erosional forces have exposed some of this white marble bedrock to the surface.

European settlers took note of these white marble outcrops along the Taconic Mountains and Champlain Valley. In the late 1700s they began quarrying, by hand, the relatively sound crystalline rock for monuments and building stone. The marble industry grew and became more mechanized over time, reaching peak production between the late 19th and early 20th centuries - and white marble from Vermont was used to construct many prominent buildings and monuments nationwide.

As marble's use as a building stone waned during the late 20th century, new uses developed. Even as early as the mid 1900s fractured white marble deposits deemed unsuitable for building stone began to be used as feed stone for producing finely ground fillers for industrial applications. Two such processing plants were located on the site of today's Omya Verpol facility, with one - the East Plant - still in operation. In the 1970s Omya recognized the value of Vermont's white marble resources to produce white filler products for the paper, plastics and paint industries and constructed a new, ultra-modern processing facility - the Verpol facility's West Plant - to meet growing demand. Today, quarries in Middlebury, Florence and South Wallingford provide white marble ore to the Verpol facility. Careful quarry development ensures that processing requirements, in terms of quality and quantity, can be met long-term. At times the removal of soil and rock overburden is necessary to gain access to the underlying deposits. The exposed white marble ore is extracted, crushed and sized at the quarry sites into suitable feed stone and trucked to Verpol. Careful guarry development also means that the varying grades of marble must be carefully selected and blended to optimize use of the deposit while still maintaining consistent quality.

#### EARN AND LEARN

Omya believes in the talent of young college students and encourages their development by offering paid internships within the company. Proctor native and current full-time Omya employee Mallory McDonnell was one of those students.

During Mallory's college years, she interned for two summer and winter breaks at Verpol along side of the



Environmental and Safety Managers. In 2008, Mallory earned a degree in Civil Engineering with a concentration in Environmental Engineering from Villanova University. Upon her graduation, Omya was excited to offer Mallory a full-time Engineering position at Verpol - a job that would allow her to apply her engineering

skills in a state she loves, Vermont.

Mineral processing offers a wealth of opportunity to enrich and expand a technical background. Science and math caught Mallory's interest as a young girl, and what she enjoys today about being an Engineer is taking the theory and putting it to practical use. As a member of the Society of Women Engineers, Mallory works with young people and Girl Scouts in developing "fun" projects to get them involved applying math and science, without their even realizing it. In Mallory's words, "That's what being an Engineer is, applying what you know and seeing a great outcome."

Mallory brings that same enthusiasm to her work in the Pre-Grind Department here at Omya. She has participated in the construction, commissioning and continuous improvements of the \$10 million Tailings Dewatering Facility (TDF). "It has been exciting to be a part of the TDF project," said Mallory, "and to work with the different teams involved along the way." Mallory also enjoys sharing information with the public on Omya's processes through community events and open houses. She looks forward to her future with Omya and to continuous learning from her work and from the people on her team.

Throughout their working life, quarry sites are progressively reclaimed, often resulting in the creation of productive farm land, forest land and/or natural habitat. Omya is committed to the responsible and environmentally-sustainable utilization of Vermont's marble resources through the careful development, operation and reclamation of its quarries.

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#### Calcium Carbonate in Papermaking

Calcium carbonate has physical and chemical properties that allow its use in many diverse applications. For the last 30 to 40 years, ground calcium carbonate (GCC) has been used to manufacture paper. Omya was an innovative leader in this technology first in Europe, then later in the U.S. and elsewhere around the globe. Over years of research and development, Omya has been successful in helping to produce what is known as "alkaline" or "acid-free" paper.

Compared to traditional acid-based paper making, the manufacturing of alkaline paper significantly reduces both environmental impacts and production costs. Furthermore, alkaline paper has greater permanence and higher



brightness and whiteness than acidbased papers.

GCC is used as both a filler and a coating pigment in paper production. Printing and writing paper can consist of 10 - 20% calcium carbonate. Using GCC as filler in paper sheets means that less wood pulp fiber (and thus fewer trees) is required. Additionally, GCC's use makes for easier drying of the paper during the manufacturing process, requiring less energy. These benefits allow the paper maker to operate more efficiently. The use of less corrosive chemicals to produce alkaline paper also extends the life of paper-making machinery.

Some paper is coated to provide a better surface for printing. Utilizing GCC as a coating pigment allows for higher coating solids during application to the paper. The benefits include improved smoothness and brightness at the paper surface and reduced drying energy. GCC also requires less binder than other minerals to "glue" the coating pigments to the paper surface, allowing for further cost savings. Lastly, the superior flow properties of GCC slurry lead to greater production efficiency.

The use of GCC in papermaking provides for similar or better paper properties (especially brightness) than with other pigments. Less energy and fewer trees are required when making paper and productivity can be increased. These benefits are available to the paper maker without incurring additional expense and, in fact, overall production costs typically are reduced. As such, the environment, the customer and, ultimately, the consumer all come out ahead.

# **Understanding Marble**

Although Omya's Vermont production of ground calcium carbonate products started in 1978, the history of Vermont's marble resources is much older.

#### **Continuous Improvements**

Since our last newsletter, time has flown by so quickly. As you will see in this newsletter, we have been working hard at Omya Verpol to continuously improve all aspects of our operations.



A main focus for us over the summer was the construction of a new lined facility where we will manage our mineral

by-product called "tailings" (tailings result from the purification of marble ore). A lot of work was necessary in preparing the area before placing the liner. (See related article on page 3)

While noise generated by the Verpol facility is well below state permitted limits, we continue to seek further reductions at their sources. We do this with the assistance of our neighbors. Their input combined with our efforts has helped us to identify key sources and continually reduce impacts.

This past summer we were very pleased to employ 17 local students who assisted us in our operations. They did a fantastic job. It bodes well for the future of Omya and the community to have so many talented young people in our local area.

To maintain and increase our business here in Vermont, we focus upon ways to optimize our operations and make our products more competitive. We compete with other companies that are located closer to key markets and who have access to low cost energy, including natural gas. Our ability to compete is linked directly to our process efficiency, the cost of energy and our capacity to develop good alternative energy sources and balance our additional transportation costs.

Thank you for the support that you continue to give to Omya. We are pleased to be an active member of our community and strive to be an asset both on the local and State level.

I welcome your observations and input concerning Omya and the Verpol facility. Please feel free to contact me directly at 770-7617 to share your thoughts.

Vermont's white marble deposits are the result of a long and complex geological history which began 500 million years ago. During that time, sediments from marine organisms began accumulating in a warm, shallow sea environment along what was then the eastern continental coast. Over millions of years those accumulated sediments consolidated into limestone.

Between 450 and 250 million years ago the North American and African continents drifted together, eventually colliding and forming the Appalachian Mountains. The elevated subsurface temperatures and pressures transformed some of the limestone into white crystalline marble. About 250 million years



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Best regards, Pierre Masuy

#### **Omya Community Survey**

Omya contracted with The University of Vermont's Center for Rural Studies to conduct a survey to better understand how familiar our neighbors and general public are with our operations and their impacts on the local community. This confidential survey was mailed in mid-November to randomly-selected Vermont households in the vicinity of our calcium carbonate operations. Results of the study will be posted on our OmyalnVermont.net website and in the next issue of this newsletter.

# recent event

October 16 Omya Middlebury Quarry Open House\*

October 25-29 **Biannual Water Monitoring Event** 

November Pittsford Food Drive Fundraiser\*

December 9 Community Issue Team Meeting

December 21 Red Cross Gift of Life Marathon\*

\* Omya is a sponsor of this event

# **Omya Gives Back**

At Omya we feel it's our civic responsibility to support local efforts that benefit our community and neighbors. In the past six months we have made donations to the following organizations and community groups:

- Addison County Humane Society
- American Cancer Society
- Bowen-Walker Fund
- Boys & Girls Club of Brandon
- Breakfast for Veterans
- Castleton Summer Concerts on the Green
- Chittenden First Response
- Christ the King School
- Climb for Lyme Disease
- **Eckerd Youth Alternatives**
- Epilepsy Foundation Evelyn's Fund
- •
- Fair Haven Booster Club
- Foxcroft Farm
- Goshen Volunteer Fire Department
- Jay Wilson Scholarship Fund
- **Kiwanis Club**
- Lakes Region Youth Orchestra
- Long Trail School
- Loretto Home Bus Trip
- Lothrop Elementary School
- Lothrop Enrichment After-School Program
- Lothrop School PTO
- Loyalty Day Parade Veterans of Foreign Wars •
- Maclure Library
- Marble Valley Players
- **Memorial Sports Center**
- Mill River Union High School Hydrate Haiti
- Mount Saint Joesph Academy
- Neshobe Sportsman Club
- Orwell Summer Baseball
- **Orwell Village School**
- Otter Valley Boys/Girls Soccer Club
- Otter Valley Football Club

- Otter Valley Project Graduation Otter Valley Raft Race Our Lady of Guadalupe Foundation
- Pack 110 Boy Scouts of Pittsford
- Parent Child Center of Addison County
- Pittsford Historical Society
- Pittsford Lions Club
- Pittsford Recreation Youth League
- Pittsford Santa's Fund
- Proctor-Pittsford Country Club
- Proctor Fall Festival
- **Proctor High School**
- **Proctor Youth League**
- **RAVE Car Show** Rotary Club of Rutland

Omya's Middlebury Quarry **Open House** 

Omya hosted its 10th Annual Middlebury Quarry Open House on October 16. The timing of the Open House coincided with the nationwide Earth Science Week sponsored by the American Geological Institute as a way for people of all ages to explore the earth's natural environment. Awards were presented to students in grades K-12 who participated in a poster contest with the theme "Minerals and Their Uses." While it did rain periodically throughout the day, the weather did not dampen the Middle L to R: Ethan Beebe, Marissa Holcomb enthusiasm of the 600 guests that stopped by for a tour or the spirits of the Omya employees staffing the event.

Bus tours transported people down into the quarry for a close-up look at geological formations. There they learned details about drilling, blasting and the overall quarrying process. Rock collectors scouted the area to find their favorite pieces of marble for souvenirs. Pink colored marble seems to be a favorite every year!



Liam Johnson



Cub Scout Pack 44. Granville, NY Back L to R: Conner Lennox, Tyler Waite, Gregory Desiato, Jestyn Baker, Jacob Vladyka, Ian Boston, R.J Holcomb

Front: Matthew Vladyka

The primary purpose of the Open House is to provide fun-filled education by which children can learn about mineral deposits, use a microscope, paint on a mural, play in a sand pile made of ground calcium carbonate, or have a hand at chiseling rock with a hammer. But from the feedback it's clear adults enjoy the event just as much! Safety is Omya's first priority and hard hats and safety glasses were provided.

Information was provided on how the marble is processed at Omya's Verpol facility in Florence, Vermont for its use in a multitude of everyday consumer products. A marble sculpting exhibit hosted by the Vermont Marble Museum also demonstrated special artisan techniques for marble blocks.



L to R: Omya employees: Dan Firliet, Darren Foster, Ken Bates, Ben Burton

### Tracking Vermont's Marble Industry and the Rail

Trains and the Vermont marble industry have a relationship that dates back over 125 years. This relationship began when the Honorable Redfield Proctor, President of Vermont Marble Company, incorporated the Clarendon and Pittsford Railroad on September 10, 1885. While the rail line provided vital local transportation in the Florence, Proctor, and Rutland areas, it was used mainly by the Vermont Marble Company to move its building material to thriving markets elsewhere.

- **RSVP** Bone Builders
- **Rutland City Mission**
- Rutland County Foster Parent Association
- **Rutland County Humane Society**
- Rutland Cutting Edge Fundraiser
- Rutland High School Project Graduation
- **Rutland Long Trail Festival**
- Rutland Natural Resources Conservation District •
- **Rutland Recreation Department**
- Rutland Region Chamber of Commerce Art in the Park
- Rutland Town Booster Club
- **Rutland Town PTO**
- Salisbury Historical Society
- Salvation Army
- Sarah Leary Scholarship Fund
- SOAR -Neshobe After-School Program •
- Special Olympics of Vermont
- Sunshine Fund

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- TAM Middlebury
- The Baby Center
- VT Adaptive Ski & Sports
- Vermont State Fair Bike Giveaway
- Vermont Symphony Orchestra
- West Rutland Cheerleaders
- West Rutland Class of 2011 •

In 1972 the Clarendon and Pittsford Railroad was sold to the operators of the Vermont Railway, and in 1976 Omya/Pluess-Staufer purchased the Vermont Marble Company, setting the stage for today's relationship between Omya and Vermont Rail System (VRS). Today's VRS connects Omya's Verpol facility in Florence with many North American markets, providing a competitive means by which to move large volumes of product to customers around the continent. VRS works closely with Omya in providing a variety of services including route and rate negotiations, shipment implementation and tracking, and organizing and planning.

Rail transport in Vermont - for both freight and passenger purposes - has played a significant role in the state. As the largest user of Vermont's rail system, Omya is pleased to be a sponsor of the Rutland Region Chamber of Commerce's railcar preservation fundraising effort. Funds will be used toward the preservation of the original 1913 Rutland Passenger Railcar which will be on permanent display at the Jeffords Amtrak Passenger Station in downtown Rutland. The railcar is being donated by Vermont Railway, Inc.

Today VRS still provides safe and energy-efficient transportation at a reasonable cost. Mr. Proctor's vision - the need for efficient heavy transportation - lives on today with Omya and the Vermont Rail System.

### Vermont Travel Information Council Approves Installation of New Road Signs

For many years navigating trucks to and from our Florence facility has been a challenge. Truck drivers come from all directions, and some drivers have never before been to Vermont - let alone our facility. They arrive any time, day or night, in any weather. As a result, some trucks lose their way on secondary roads enroute to Florence - typically from Proctor or West Rutland.

Our ongoing efforts to improve truck traffic to our facility include installing new road signs in Florence, providing verbal and written instructions in English and other languages, distributing directions and maps, coordinating law enforcement patrols, communicating with GPS service providers, improving road lighting and markings and conducting trucker surveys.

In November, three members of the Omya-sponsored Community Issue Team met with the Vermont Travel Information Council (TIC) in support of Omya's application to install two additional "official business directional signs" (OBDS) in West Rutland and Center Rutland. The members presented the TIC with a detailed history of the matter at hand, resolution efforts to date and our latest proposal to install additional signage. The TIC approved these additional signs.

The new signs will be placed in West Rutland and Center Rutland on Business Route 4. The objective is to direct Omya-bound trucks entering Vermont on Route 4 from New York onto Business Route 4 East toward Center Rutland, then to Route 3 toward Proctor and finally to Route 7 in Pittsford. The signs are intended to prevent trucks from traveling into the town centers of West Rutland and Proctor, thereby ending up on Whipple Hollow Road or Florence Road to access the Verpol facility.

Omya will continue to seek and implement the most effective means to resolve this issue.

# **Tailings Management Update**

On October 15, 2010, Omya's "Full", five-year Certification (originally issued May 2010) to construct a lined tailings management facility (TMF) on the Florence site was amended by the Vermont Agency of Natural Resources, Solid Waste Program (SWP).

Under the original Certification, the new lined TMF to be constructed over the former Loveland tailings management area was expected to be completed in October 2010. Initial site work to close out portions of the former Loveland tailings management area and prepare the remaining area for eventual TMF construction revealed that the underlying existing tailings were insufficiently strong to support necessary construction equipment.

As a result of those unforeseen site conditions, Omya met with the SWP and independent consulting engineers to conduct a series of evaluations and geotechnical tests to verify the characteristics of the underlying tailings. The result of the assessment determined that several minor changes to the design, construction, and operation of the TMF should be considered in order to assure the stability and reliability of the facility. In September, Omya submitted to the SWP a certification amendment application including those proposed changes.

The SWP approved the proposed modifications and issued an amended Certification that requires the TMF on the Florence site to be operational by December 31, 2010. The new lined TMF allows us to continue managing our tailings by-product on-site while we seek marketing outlets for the tailings.

In addition to the closure work performed on the Loveland area, in late October the on-site Kane and Drake tailings management area was closed. The last of the former tailings management areas on the Florence site were closed at the end of 2010 in accordance with our certification.

# **Omya Vermont Workforce**



Do you have a comment or suggestion? We want to know. 802-770-7644

The Omya Community Feedback Line is available 24 hours a day, 7 days a week. You can also reach us through our website at www.OmyaInVermont.net. Simply click on "Contact" and select any one of the contacts listed or fill out the on-line comment form at the bottom of the page.

All calls and website inquiries will be returned by 5:00 p.m. on the next regular business day.

# Mixing It Up

Omya hosted a Rutland Region Chamber of Commerce Member Mixer



in June at the Vermont Marble Museum in Proctor. During the event we unveiled our new "World of Omya" exhibit, which was designed by Green Screen Graphics of Rutland. The new exhibit explains Omya's role as a global mineral processing company producing the highest quality calcium carbonate used in diverse consumer products in the Paint, Paper, Plastics, Food, Pharmaceutical, Agriculture and Construction industries. Brandon's Café Provence provided delicious hors d'oeuvres and desserts while the Proctor High School Jazz Band delighted the 200+ guests. A good time was had by all!



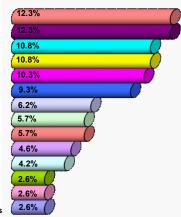
For more information about Omya's North American and

At Omya we feel our most valuable resource is the employees who work here. Omya Vermont currently employs 194 people at the Florence Verpol production facility and the Proctor campus, which includes our Technical Center, Geology Department, Aviation Department and Power Division. A diverse group of talented and dedicated professionals has made Omya the success it is. The following are the types of highly-skilled positions at Omya held by your neighbors.

#### **Omya Vermont Workforce**



Automation, Process Control Engineers, IT & Specialists



International Operations visit www.omya-na.com and www.omya.com.

