



Bath Plant

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Lafarge's Bath Plant Leaps Forward

"We're doing our part to clear the air" says Michael Klenk, Bath Plant Manager as the plant continues to work towards a smaller environmental footprint. "All of us contribute to air emissions and all of us have a share in improving air quality", adds Klenk.

Bath Plant engineers have dramatically optimized the plant's emission controls. "Few people realize that inside the Bath plant's long rotary kiln, limestone is converted into lime as an intermediate step in the making of cement. It's like we have a built-in scrubber inside our kiln due to this lime" explains Rob Cumming, the Plant's Environmental Manager. Through kiln optimization efforts, sulphur dioxide emissions are down by over half from five years ago as confirmed by the plant's new continuous monitors (see Stack Emissions Now Monitored).

In addition, major refurbishment of the plant's electrostatic precipitator in this year's Winter Turnaround, along with replacement of control boards with newer technology, has reduced opacity levels by over one third. The electrostatic precipitator uses electricity to collect powder-like raw materials from flue gases.

Additional studies are underway to meet the challenges of Ontario's Clean Air Plan. "One of the most exciting technologies is the use of scrap tires as fuel partway down the kiln, a technology recognized around the world as an effective way to reduce smog causing compounds" notes Cumming. "It reduces fuel costs, reduces emissions, and puts scrap tires to good use" he adds.

Lafarge also has made a voluntary North American commitment to reduce carbon dioxide levels by 20% per tonne of product over 1990 levels as part of a partnership with World Wildlife Fund. "We are over halfway there" notes Klenk, adding "Replacing fossil fuels with renewable alternative fuels is key to our progress in addressing global warming".



Reducing Noise at the Bath Plant

Being situated in a rural area, the Bath Plant team recognizes the need to manage noise levels. “We’ve been hearing from our Community Liaison Committee and we’re taking action” says Peter Strajt, the Bath Plant’s Environmental Coordinator. The Plant has committed over \$1-million to reduce noise levels. “As members of the community, our goal is to be a good neighbour” adds Strajt.



Over the past two years, the Bath Plant has been working closely with acoustic engineers from RWDI Air Inc. to understand sources of noise at the plant. This independent assessment enabled the plant to determine its largest noise sources and to develop noise mitigation strategies. This work was done in accordance with Ministry of the Environment protocols.

Did you know? Our goal is to be less than 44 decibels, or as quiet as a refrigerator hum.

A noise reduction plan was formulated in 2006 and the first phase has already taken place. This first phase of the plan saw the installation of an acoustic silencer on Finish Mill B. This silencer was installed in April but, despite some informal observations of lower noise levels, analytical tests showed that it did not meet our engineer’s expectations.

“Due to the inner workings of a typical silencer it was a challenge coming up with a design that would work at a cement plant” explains Gaetan Laurier, Project Engineer. Further modifications by the manufacturer are slated to be operational by the end of October for additional testing. “We want to ensure that equipment installed has a sustained noise reducing effect. We’ve proceeded carefully because we are one of the first plants in Lafarge to address noise levels” noted Strajt. Once complete, the plant anticipates the installation of additional silencers.

Did you know? Noise levels are affected by atmospheric temperature, wind, humidity and topography.



Finish Mill B exhaust silencer

Stack Emissions Now Monitored Every 10 Seconds

“It’s like having a laboratory inside our stack” says Peter Strajt, the Bath Plant’s Environmental Coordinator, referring to the Plant’s recently completed \$3

Environment can assess compliance, and to facilitate emission trading. “These analyzers allow us to accurately track our progress in reducing these

compounds”, added Strajt. The Bath Plant is required to significantly reduce these emissions over the next 8 years – and the Plant is well underway (see Lafarge’s Bath Plant Leaps Forward).



The insides of Bath’s gas analyzer system

million project to install a modern Continuous Emissions Monitoring System (CEMS). The system obtained 3rd party certification in June after it met strict performance specifications laid out by Environment Canada. The system continuously measures and reports the levels of Nitrogen Oxides, Sulphur Dioxide, and Opacity.

In 2005, as part of the government’s Clean Air Plan, the Ontario government passed Ontario Regulation 194/05 – a regulation designed to lower smog causing gases emitted by Ontario industry. This Regulation mandates analyzers so the Ministry of the

The installation of these analyzers was a demanding task. “The standards mandated by the Ministry of the Environment require high accuracy and uptime” reports John Storrington, Project Manager. The analyzers must be calibrated daily and records kept for review by Ministry inspectors. “An outside firm is brought in with their own analyzers once per year to confirm that our analyzers are still as accurate” added Storrington.

This high level of accuracy is doubly important as emission credits can be bought and sold based on the annual totals reported by these systems.



Probes allow sample process gas leading to the stack to be pumped to the analyzers

The Bath Plant Welcomes New Employees

The Bath plant continues to be a dynamic place to work and we welcome a number of new employees.



Michael Klenk

Michael Klenk was appointed Plant Manager at the Bath Plant on June 9, 2006, replacing Glenn Widish. Klenk was Plant Manager at Lafarge's Whitehall Cement Plant in Pennsylvania, U.S. prior to taking the helm at the Bath plant.

Before the Whitehall plant, he held a variety of senior positions as Quality Control Manager, Production Manager and Operations Manager at Lafarge Calcium Aluminates in Chesapeake, Virginia. He has also worked for Lafarge in Demopolis, Alabama and Canada.

Klenk graduated from McGill University in Montreal with a Bachelor of Science degree in mechanical engineering. Fluent in both French and English, he is married with one son and resides in the Village of Bath.



Shawn Paterson

Shawn Paterson started work as Production Coordinator on June 16, 2006.

Shawn was educated at the University of Canterbury in Christchurch, New Zealand, where he received a Bachelor's degree in Chemical Engineering, and a Masters degree in Engineering Management

Before joining Lafarge, Shawn worked in both New Zealand and the United Kingdom in the dairy industry, manufacturing milk powder, butter and milk proteins. His roles included process engineer, project engineer and production supervisor.



Wayne Hoffman

Wayne Hoffman came to the Bath Plant on November 15, 2006 as the Maintenance Manager.

He started with Lafarge in 1981, at the Exshaw Plant in Alberta. In 2005, Wayne took an assignment with Lafarge, South Africa at the Lichtenburg Plant where he held the position of Regional Engineering Manager.

"I enjoy the job of Maintenance Manager and the Bath Plant is a new challenge. The quality of life in the area and the ability to engage in our hobbies is one of the things that attracted us to the area"



Shaw Healy

Shawn Healy joined Lafarge on January 2, 2007 as Assistant Shift Coordinator in Training in the Production department.

Shawn was in the Production department at the Invista plant in Millhaven before he came to the Bath Plant. He attended St Lawrence College, studying Electronics Engineering Technology.

"I like the fact that the company keeps

you moving, there is always a new challenge."



Peter Strajt

Peter Strajt began work as the Environmental Coordinator at the Bath Plant on January 8, 2007.

Before joining Lafarge, Peter was the Environmental Coordinator at AGS Automotive in Cambridge.

He attended Fanshaw College in London Ontario, and graduated with a diploma in Environmental Technology

Peter enjoys working for Lafarge in this capacity because it allows for dynamic involvement with various environmental issues. "It's nice working for a company that's committed to the environment, you feel like you're really making a difference."



Laird Crooks

On March 1, 2007, **Laird Crooks** took on the role of Training Coordinator for the Bath and Woodstock Plants. In this role, Laird will be responsible for

developing, administering and managing comprehensive plant-wide technical and non-technical training programs for both facilities.

Laird has spent the last few years at CTS in the training organization, and played a key role in the development of the Operator Certification Program.

Prior to going to CTS, Laird was the HR Manager at the Woodstock Plant.

"I appreciate the varied opportunities with Lafarge. I am especially looking forward to working with the employees of both plants."



Emma Buckley

Emma Buckley came to Lafarge on April 23, 2007. She is in the Cement Professional Development Program, working in the Environment department.

Emma graduated from the University of Guelph in January 2007 with a degree in Environmental Sciences.

"I'm glad to get the chance to be in the cement professional program. You get to work with people from all departments and really understand how the plant works."



Carol Chisholm

Carol Chisholm became Area Human Resources manager of the Lake Ontario District on May 22nd 2007, replacing Greg Krizan who transferred to Lafarge's Gypsum Division. Although she is based at the Plant, she is responsible for two cement plants, as well as slag and grinding plants, distribution terminals and the sales and marketing group.

Carol has been with Lafarge for 2 years as the Director of Organization Effectiveness for Corporate Purchasing

and was based out of the Mississauga Purchasing Hub.

Before Joining Lafarge, she worked for St. Mary's Cement at their Bowmanville plant, and was the Regional HR manager for Stream, a call centre, in Belleville.

Carol has a Bachelor of Arts degree in Sociology from Queens University in Kingston.



Kevin Magee

Kevin Magee joined Lafarge on July 15, 2007 as an Electrical Technician.

A Belleville native, he has previously worked as an Electrical Technologist at EMS-tech in Belleville, as well as attending Loyalist College.

Kevin enjoys working in the electrical department as it gives him a good overview of what's going on in the plant. "It's a good fit for me."



Ramesh Chary

Ramesh Chary joined the Lafarge team on August 1, 2007 as the new Operations Manager replacing Patrick Bourgeois who transferred to the Montreal Technical Office. Ramesh, his wife Sudha, and their two daughters Supriya and Shreya moved to the area from Southern India in July.

Ramesh has been working in the cement industry for the past 22 years. Most

recently, he was Plant manager in a cement plant in Southern India. He is a graduate in Chemical Engineering from Annamalai University in India, graduating in 1982.

"I am really happy to see that the people are very friendly and it has been a good welcome for me and my family. I am proud to be part of the Lafarge team at the Bath Plant, and confident that I will also be able to contribute to the team and to the plant. I am greatly enjoying this new assignment. Teamwork and commitment will be my guiding values" says Ramesh.

Lafarge congratulates employees who have taken on new assignments within the plant. John Ross McKay moved from Maintenance Manager to New Works Manager and Wayne Crewson moved to Electrical/Systems Coordinator from Systems Supervisor. Dawn Dawson was promoted from laboratory technician to the position of Utilities/Improvement supervisor, and Greg Moore was promoted from Team Leader to maintenance Supervisor. James Wynn was also promoted from Cement Professional, maintenance, to reliability engineer.

Fond Farewell

The Bath Plant bids a fond farewell to the 5 employees who retired this spring. Ron Kimmerly, Brad Cummings and Wayne Sager each retired after 30 years at the plant, while Wayne Lyons and Steve Deveau each retired after 32 years.

(More to come in the next issue.)

What's the latest on alternative fuels?

Did Lafarge receive approval to use alternative fuels?

Yes, late in December of 2006, the Ministry of the Environment completed its three-year review of our proposal to use alternative fuels and issued Certificates of Approval (or "permits") to begin using scrap tires, plastics, bone meal, solid shredded wastes, and fuel pellets. Over 200 conditions were applied in the approvals – in part to address comments received from the public over the three-year review period.



Bone Meal

However, under the Environmental Bill of Rights, members of the public have an opportunity to ask for leave to appeal; this is akin to asking for permission to appeal the approval of the project by the Ministry. This request is heard by the Environmental Review Tribunal and a member of this Tribunal decided to grant leave to appeal to some of the applicants in April of 2007.

As such, the permits are considered to be suspended, pending the outcome of the Tribunal proceedings. No alternative fuels are in use at the Lafarge Bath Plant yet, nor will they be until the status of the approvals is clarified.

What did Lafarge announce on September 7th?

Lafarge disagrees with the decision of the Tribunal granting leave to appeal.



Plastics

However, that decision was delivered at a time when the parties involved were attempting to achieve a negotiated settlement of the issues. That process continued throughout the summer and was, unfortunately, unsuccessful. Without a negotiated settlement, Lafarge has decided to challenge the decision of the Tribunal in court, by way of an Application for Judicial Review. An Application for Judicial Review asks the Court to review a decision made by an administrative tribunal, such as the Environmental Review Tribunal, to ensure that the Tribunal did not exceed its jurisdiction or make errors of law.

Lafarge Canada notified the Environmental Review Tribunal on September 7th that it intended to file an Application for Judicial Review of the Tribunal's April 4th decision to grant leave to a few groups to appeal the Ministry of the Environment's December decision. Due to this filing, Lafarge asked that the Tribunal adjourn or stay the hearing before the Tribunal pending the decision of the Court. On September 11th, the Tribunal indicated that after the Application for Judicial Review has been filed and motion materials presented to the Tribunal, it will then consider this request this fall at a hearing in Odessa yet to be scheduled.

Why is Lafarge opposed to the Tribunal hearing?

Lafarge would much prefer to come to an amicable agreement with those who are concerned with our proposal. Without discussing specifics, we have had extensive discussions with stakeholders and we participated in that process as long as we could before concluding that an agreement was not likely to happen before the preliminary hearing, and that a judicial review would be necessary.

We believe that an appeal hearing will be costly, not just for Lafarge but for environmental groups, members of the public, and the government. We don't expect that this quasi-judicial process will produce any new information. Alternative fuels have been in use around the world for over 30 years. While not widely used in Ontario, alternative fuel technology is well established and certainly not new.

The public has had significant participation throughout the three year process that led to the approvals by the Ministry of the Environment. Lafarge hosted a large-scale open house and 3 public meetings to inform our neighbours about our project. The Ministry posted the proposal on its public web site on at least two occasions and provided additional time for the public to comment. Lafarge listened to stakeholders and made changes to its proposal to reflect public comments.

Many groups and individuals, including some of the current appellants, provided their comments and questions to the Ministry – the Ministry responded in December, 2006 with its decision and

the issuance of Certificates of Approval with over 200 conditions. Importantly, the Ministry also published the reasons for their decision and explanations of how the Ministry addressed the concerns that were raised by the public. Given the level of public participation in the process prior to approvals being granted – and the strict nature of the conditions imposed by those approvals – Lafarge believes that the interests and concerns of the public were heard, taken seriously, and protected by the Ministry of the Environment. You can read these Certificates for yourself by going to our website (www.bathcementplant.com) and looking under What's New (see also our story on the website in this issue).

What's next in the process?

We have recently filed our application to the court requesting judicial review of the decision of the Tribunal granting leave to appeal. Other stakeholders will be provided with the opportunity to respond to our application and a suitable time will be set for the court to hear our application. After that, the court will consider the arguments from both sides and make its ruling. Given all of this, we do not anticipate a decision by the court until next year.

As we await the court's decision, we will continue to answer your questions and provide you with information on our project. Lafarge remains hopeful that, as the process unfolds, discussions can continue with concerned groups towards a negotiated outcome.

What are alternative fuels?

In order to make cement, limestone

from our quarry needs to be heated to a very high temperature and this, of course, requires fuel. Traditionally, cement plants in North America use various combinations of petroleum coke (a refinery byproduct), coal, natural gas, and various grades of fuel oil. Over the past 30 years, governments and cement makers have learned from first-hand experience that alternative fuels are better fuel choices. Lafarge's Bath plant is proposing to use up to



Fuel Pellets

100 tonnes per day of scrap tires, plastics, bone meal, and/or solid shredded materials with a biomass characteristic including up to 1.25 tonnes per day of fuel pellets.

Did you know? The Bath plant receives three large boatloads of coal and pet coke every year.

How did the Ministry of the Environment ensure community concerns were addressed?

In the approvals that the Ministry issued in December of 2006, following three years of public consultation, the Ministry put in place over 200 conditions on our use of alternative fuels at the Bath plant. To our knowledge, this is the strictest permit in the world for this type of project. You can read these Certificates for yourself by going to our website (www.bathcementplant.com)

and looking under What's New (see also our story on the website in this issue).

The Ministry's approval is built on three pillars. First, that Lafarge is only allowed continued use of alternative fuels only after it carries out a series of successful emission tests at gradually increasing rates of alternative fuel usage. This is a very cautious approach – one that we think is unique.

The second pillar is that the Ministry has applied very strict emission standards. These standards, which cover a wide range of compounds, are in many cases the strictest in the world. They are so strict that the plant must maintain its current performance or better in order to comply.

The third pillar is public transparency. Lafarge is obligated to provide funds for a third party engineer to review the emission tests and to explain the results to the public. Lafarge must make the results available to the community, the health unit, and the local municipalities. Finally, a community liaison committee will be expanded to include additional members. Many of the same groups opposed to the use of alternative fuels have been invited to participate.



Mid Kiln Injection of Waste Tires

Introducing Our Plant's Website.

Lafarge's Bath plant is committed to direct, transparent communication with surrounding communities. To this end, the Plant maintains a website at www.bathcementplant.com. This website contains information regarding the Alternative Fuels Project as well as news about what's happening in the plant. To read about environmental programs and initiatives, look in the sustainable development section. New items are posted regularly, so be sure to log in often! To help you familiarize yourself with the features of this website, here is a brief overview of some of the things it has to offer.



What's New:
This section of the website is where you will find information about what's happening at the plant. Events, milestones and press releases will be posted here. Check regularly for updates!

Alternative Fuels:
Get the facts about the Alternative Fuels project. This section includes the scope of the project, information from plants already using Alternative Fuels as well as answers to some common questions.

FAQ's:
With sections on Emissions, Kiln operation and Legal Issues, the Frequently Asked Questions address common concerns. This is a good place to gain a detailed understanding of the Alternative Fuels project.

Newsletters:
If you've ever wondered what happens during the winter turnaround, or how Lafarge supports the local community, visit our newsletter archive. With issues dating back to 2005, this is an excellent way to learn about the plant.



Comments or questions? contact The Plant at (613) 352-7711 x 143, lafargebathinfo@lafarge-na.com, or write:
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