

Neighbours

A part of the community since 1965

Summer 2007

Durham Region Health Department study concludes nuclear communities no impact to health

Findings from a recent study by the Durham Region Health Department conclude a healthy relationship between Ontario Power Generation's Durham nuclear plants and the host communities they operate in.

The Health Department has recently issued an update to their 1996 report on radiation and health in Durham Region.

'Radiation and Health in Durham Region 2007' is a descriptive study that examined rates of various cancers and congenital anomalies and stillbirths in areas surrounding the Pickering and Darlington Nuclear stations. This study concluded that *"disease rates in Ajax-Pickering and Clarington did not indicate a pattern to suggest that the Pickering NGS and the Darlington NGS were causing health effects in the population. Many of the same patterns were shown in Simcoe County in particular and some in Halton Region. Given the extremely low levels of radiation exposure from the stations, it would be unlikely that any effects would occur."* The report noted there are communities, including Toronto, where background radiation levels are actually higher than those found in Pickering and Clarington due to other sources of radiation in those communities.

A copy of this report is available from the Durham Region Health department website: www.region.durham.on.ca.

Questions about the study or requests for presentations on 'Radiation and Health in Durham Region' can be made through health@region.durham.on.ca.

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On the wildside

Grade 4 to 6 students at Pickering's Maple Ridge Public School were fascinated by "Falon" the peregrine falcon – one of the world's fastest creatures, shown here with handler, Emma Stainton. *For full story, see page 3.*

Boaters take note: New algae net at Pickering Nuclear

Pickering Nuclear has installed a mesh net at the south end of the station's cooling water intake channel as a measure to reduce the amount of algae (*Cladophora*) drawn into the intake channel.

Algae in Lake Ontario can block the station's intake screens, which are designed to keep unwanted materials in the water from entering the station. The new barrier is in response to increasing levels of algae in Lake Ontario over the past decade, which, if left unchecked, could impact on the station's ability to produce electricity.

The barrier is located at the end of the intake channel's east groyne at a 45-degree angle, strung between a series of piles driven into the lake bed. The piles are two metres below the water surface but the net will extend to the surface of the water.

There are floats and lighted buoys to alert boaters to the new installation and signs will be posted both at Frenchman's Bay Marina. Boaters are advised to follow marine protocol when travelling near this area.

Mesh barriers have been used in the Great Lakes for more than 20 years to reduce problems from fish getting into power station cooling water intakes. The design of the net reduces chances of fish being caught or injured from it.

The Pickering installation has been approved by the federal Department of Fisheries and Oceans and by Transport Canada.

Boaters who have questions on the new algae net program can contact OPG at 905-837-7272.

Pickering Nuclear Performance Highlights

Pickering Nuclear posts a performance update on our website, www.opg.com, on a quarterly basis reviewing plant performance in a number of key indicators including safety and environmental performance. Here are some highlights from Quarter 1, 2007.

Safety

OPG's ongoing goal is to build a strong safety culture at each of our nuclear stations to ensure there are no public or employee safety concerns as a result of our operations.

In the four decades nuclear energy has served Canada's electricity needs, no member of the public has ever been harmed as a result of radiation emissions from a nuclear power plant or a spent fuel or nuclear waste storage facility. Emissions from our station are well below one one-thousandth of the radiation an average Canadian receives every year from sources such as the sun, ground, food sources and other naturally-occurring radiation in the environment. The 2.8 microsieverts emitted from Pickering Nuclear in 2006 is well below

In addition to public safety, OPG measures itself against other companies in worker safety performance. In first

quarter, 2007, both Pickering A and B were in the top quartile of performers in keeping the employee all-injury rate low. During the first quarter, Pickering B employees worked more than 1.4 million hours without a lost time injury.

With a .99 all-injury rate (Pickering A) and 1.31 all-injury rate (Pickering B) compared to best practice top quartile performance of an average 1.48. The Pickering B employee accident severity rate was also better than industry top quartile but Pickering A did drop in performance with a higher accident severity rate due to an employee who slipped on ice resulting in a fractured arm.

Environment and radiation health

Pickering Nuclear did not record any major or moderate spills to the environment during Quarter 1.

The radiation dose to public for the year 2006 (most recent data available) shows Pickering Nuclear continues to have an excellent record of emissions well below regulatory limits and contributing only minutely to the amount of radiation the typical Canadian receives from background sources such as the sun, ground, food and man-made sources such as x-rays and plane travel.



A message from Mark Elliott

Hello, my name is Mark Elliott and in my new role as Senior Vice President at the Pickering A Nuclear Station, let me welcome you to this edition of Pickering Nuclear Neighbours.

As SVP for Pickering A my primary goal is to oversee operations of this plant in a manner responsible to our employees and to you, the members of Pickering Nuclear's host community, while ensuring our plants best performance to meet the electricity needs of the people of Ontario.

At OPG, our core values begin with safety. We incorporate conservative decision making into everything we do at our nuclear stations. We would not operate our plants if we did not believe it was safe to do so. In this issue of Neighbours, you will read about the extensive report produced earlier this year by the Durham Health Department. The 2007 report reconfirms the findings of a similar 1996 study indicating a positive health relationship between the Durham nuclear plants and the communities where we operate. The full report can be found on the Durham Region website at www.region.durham.on.ca.

Our performance goals at OPG Nuclear are for the long term as well as the immediate future. One way we intend to meet them is to plan for the future generation of engineers, operators, technologists and other highly-skilled employees who will operate our plants as our current generation of employees retire. We were proud to be on hand at the University of Ontario Institute of Technology as the OPG Engineering Building was officially opened in March by community and university dignitaries, including Ontario's Minister of Energy Dwight Duncan. The building offers state-of-the-art engineering laboratories and facilities to enhance learning for jobs like those at our nuclear stations.

I look forward to meeting some of you over the coming months and invite you to participate in activities we host here at Pickering Nuclear, like our Tuesdays on the Trail program and within the community with our many community partners including the City of Pickering, which will be hosting Canada Day celebrations on OPG lands at Kinsmen Park, provided to the City for use by the public.

Mark Elliott
Senior Vice-President
Pickering A

OPG's Doug Bredewold Strikes it Big at this Year's Bowl for Kid's Sake Charity Event

Community is more than just a word – it is a place with a face.

One face that is no stranger to the Durham community is Pickering Nuclear's own Doug Bredewold.

Doug, a Work Coordinator in Maintenance Assessing, is an active member in his community supporting numerous fundraising and charity events. On March 30, for the ninth year running, Doug took part in the annual Big Brothers and Sisters Bowl for Kid's Sake event and raised just under \$5600 in support of the Ajax-Pickering chapter.

"[The Big Brothers Big Sisters organization] is dedicated to providing troubled youth with tools to overcome personal adversity and hardship," said Doug. "This ensures that the most fundamental investment in our communities, our children, is in place."

Beyond raising money to support vital programs, events such as the Bowl for Kid's Sake, create an opportunity to connect with members of the local community in a cooperative and fun atmosphere. "By volunteering some time, you help the community meet its most basic needs," said Doug. "You also meet a lot of good people."



Doug Bredewold was not only the top earner for the Ajax-Pickering Bowl for Kid's Sake fundraiser, he was a great scorekeeper too as pictured above at the event this spring.

Doug, who is modest about his fundraising efforts credits his generous OPG co-workers who pledge to his fundraising sheet each year.

At the recent Ajax-Pickering Big Brothers and Sisters Recognition Night, Executive Director Bonnie Harkness commented, "Doug is one person we hope never retires."

OPG has been a long standing contributor to this event and received a recognition plaque both for the company's commitment to the organization through its Corporate Citizenship Program and, in large part thanks to Doug's efforts, as the highest earning business in the Bowl For Kids' Sake event. For more than 12 years, members from the OPG organization, like Doug, have made sure it is the kids who win.

Ontario Power Generation Celebrates National Wildlife Week And Earth Day With The Community

continued from cover

During National Wildlife Week (April 8 to 15), OPG's Corporate Citizenship Program sponsored visits to five area public schools by the Canadian Peregrine Foundation. The purpose was to raise awareness about endangered Canadian birds of prey by exhibiting a magnificent peregrine falcon. The Grades 4 to 6 core curriculum includes learning about endangered species. These falcons, which suffered a disastrous population decline due to the insecticide DDT, are staging a remarkable recovery through the work of groups such as the Foundation.

OPG also sponsored and/or took part in several environmental events as part of Wildlife Week and Earth Day (April 22) celebrations. On April 20, OPG staff pitched in for the City of Pickering's "20 Minute Makeover" by cleaning up litter on the Waterfront Trail north of the Pickering Nuclear Plant. On April 26, students from Dunbarton High School in Pickering planted trees in OPG's Brock Woodlot. On April 28, OPG partnered with the City of Pickering and the Frenchman's Bay Watershed Rehabilitation Project in a community tree planting at Alex Robertson Park. As well, OPG joined the Town of Ajax and the Town of Whitby in their Earth Day celebrations. OPG thanks the Dunbarton students, our municipal partners and the many members of the public and the Boy Scout groups who took part in these events.

Safe and Secure at OPG's Nuclear Facilities

Security Enhancements at Pickering Nuclear

As part of the ongoing enhancements to security, OPG has begun work on a new barrier system around the protected area of Pickering Nuclear. While unlikely to be visible by community members, the enhanced fencing is aimed at deterring and thwarting any plans of unwarranted intrusion, which is one of our regulator's requirements in its Nuclear Security Regulations.

The first phase in 2007 will involve the installation of razor mesh wire and razor wire pyramid bundles, which will follow the existing taut wire fence around the protected area. Enhanced lighting, detection equipment, and additional cameras are scheduled for installation in 2008. These changes will complement the existing on-site armed response team who are also dedicated to the safety and security of the plant.

"The razor wire portion of the fence will be physically isolated and inaccessible to staff and the public, thus eliminating any risk to personal safety," says Stan Harvey, OPG Vice President of Nuclear Security.

Work on this enhanced physical barrier system has also started at Darlington Nuclear. New signage has recently been added around both the Darlington and Pickering sites which ensures that everyone understands the presence of a 24/7 armed response force on both sites to ensure the safety of the plants. Increased security measures are for the protection of our staff, the community and the integrity of the station.



Programs for school-aged kids...

AT PICKERING NUCLEAR

Looking for something fun to do with your school-aged children this summer? For eight Tuesdays in July and August join us for free fun and educational activities on the Pickering Nuclear portion of the Waterfront Trail.

Activities, designed for children aged 6-13, start at the Sandy Beach Road entrance to Alex Robertson Park. Join us at 10 a.m. or 1 p.m. Activities are approximately two hours in duration. Children must be accompanied by an adult. Due to the nature of program activities, day care groups and camps cannot be accommodated.

Tuesdays on the trail



Tuesday, July 3: Cartoon College and Beading Boot Camp

Learn basic cartooning principles including how to make your own cartoon character with Amber Bond of PineRidge Arts Council. Then use beading techniques to make a cobra stitch bracelet.

Tuesday, July 10: Creating with Power

Discover symbols and images hidden within the Kijimba Kind trail sculptures then carve your own wearable keepsake using power grinders with Dorsey James of the PineRidge Arts Council. Power tools for ages 8 and up only.

Tuesday, July 17: Microscopia

Learn to identify pond insects on an aquatic bug hunt with experts from the Frenchman's Bay Rehabilitation Project. Make a bug craft.

Tuesday, July 24: Dramarama - Act I

Allow imagination and creativity to star on the Trail as Act One School of Drama theatre experts lead a fun-filled session of theatre games and activities.

Tuesday, July 31: Dramarama - Act II

An encore performance will feature fun with Act One School of Drama theatre experts providing a mix of first session favorites and new game surprises.

Tuesday, August 7: 'TREE'-mendous Trees

'Scientists in the School' lead an adventure tracking down tree suspects in our forest, experimenting with leaves and making leaf fossil casts to take home.

Tuesday, August 14: Creating with Power

Discover symbols and images hidden within the Kijimba Kind trail sculptures then carve your own wearable keepsake using power grinders with Dorsey James of the PineRidge Arts Council. Power tools for ages 8 and up only.

Tuesday, August 21: Animal Adventure

Observe animals in their natural habitat on a guided hike through our woodlot with experts from the Frenchman's Bay Rehabilitation Project. Examine deer, coyote and other animal bones. Make a craft.

Pickering Nuclear Community Information Line: 905-837-7272

OPG Engineering Building opens at UOIT



With as much as half of our workforce retiring in the next five to ten years, OPG is committed to ensuring there is a new generation of highly-skilled and trained young workers ready to step in. Part of that commitment includes a \$10-million investment in the University of Ontario Institute. On March 30, the UOIT OPG Engineering Building was officially opened by community, government and university dignitaries. The building offers state-of-the-art engineering laboratories and facilities to enhance learning. Pictured above at the ceremony are: OPG's Pierre Charlebois, Chief Operating Officer, and Tom Mitchell, Chief Nuclear Officer; Ontario Minister of Energy Dwight Duncan, and Richard Marceau, UOIT Provost.

Ontario Power Generation nuclear plants make safe neighbours

At Ontario Power Generation, safety is always our first priority.

OPG meets all regulatory requirements of Canada's nuclear regulator, the Canadian Nuclear Safety Commission, and in fact, has set voluntary targets for its operations that are much lower than even those set by the regulator.

For example, OPG has stringent controls on our release of radiation to the environment. Using the ALARA (As low as reasonably achievable) approach, OPG has maintained radiation release levels that are a small fraction of the regulatory limit – less than one percent. This includes the amount of tritium released from our plants.

Although the Ontario regulatory limit for tritium drinking water levels is 7,000 Becquerels per litre, OPG has set its own internal target at just 100 Bq/l. In 2006,

water tested at the closest municipal water treatment plants to our stations measured between five to seven Bq/l, a trace amount. In fact, OPG routinely samples (daily) at local municipal water treatment plants and the results are consistently below our internal target of 100 Bq/l.

As part of our on-going community radiation monitoring, OPG regularly tests drinking water in the vicinity of our nuclear facilities and our results are reviewed by a number of agencies, including the Durham Health Department.

For more information on OPG's commitment to the environment, visit our website at www.opg.com. To request a presentation on this topic for your community group, call Pickering Nuclear at 905-839-1151, ext. 3182.

Neighbours



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