

Community Advisory Panel (CAP) September 16, 2014 Briefing Notes

Responsible Care – Safety, Security, & Environmental:

➤ Safety:

- We had one recordable injury to an employee during the month of August. The worker was clearing a strainer on the drain from an air header in our warehouse and in doing so was blowing it clear through a hose out the wall of the building. He was holding the hose with one hand and controlling the valve with the other when the discharge end of the hose came back through the building wall and kicked back against his head, knocking out his earplug and resulting in a minor, short term injury to his eardrum. The practice of discharging air through an uncontrolled hose was the cause and the bleed has not been hard piped to prevent recurrence.
- o No injuries to any contractors have occurred since the last CAP meeting in April.
- O During the week of October 20th Canexus North Vancouver & Nanaimo will be audited by an independent 3rd party under the Certificate of Recognition (also known as COR) program of WorkSafe BC. This program measures company's safety programs against a defined set of benchmarks for which a successful audit completion can lead to COR certification. Our main goal is to use this program to provide a clear assessment of our program and to assist with continuous improvement within our two facilities.
- During the week of November 17th the Chemistry Industry Association of Canada (CIAC) will be conducting the 7th Responsible Care Verification audit of Canexus. As the audit will include the North Vancouver facility this time around, a local CAP representative was engaged and the e-mails sent in August and replies endorsed Ms. Lisa Richardson as being a suitable candidate for the audit team. Further CAP discussion is recommended regarding the selection process.

> Environment:

- The plant experienced two Freon leaks incidents during the months of April & June. In both incidents, Freon was lost from the condenser units within the chlorine liquefaction process. The events were caused by leaks in the heat exchange units where seawater is used to cool the hot Freon gas after compression. In the April incident an estimated 658 kg of R134A refrigerant leaked from the unit to the seawater stream. This coolant is highly volatile and therefore quickly forms a gas and enters the atmosphere and not the inlet water environment. In the second incident, an estimated total of 170 kg leaked from the unit.
 - The Freon in both events is non-ozone depleting R134A which was converted to as part of TCP, however it is still a coolant for which applicable standards for coolant loss apply.
 - The heat exchange units have both been repaired, pressure tested and the one unit is still being prepared for return to service.
 - In both instances, accelerated corrosion of the tubes by the seawater stream resulted in the leaks and an improvement plan to eliminate future incidents is underway.
- o There was one minor environmental reportable incident in August during an excavation procedure as part of our Caustic Modernization project. During carefully planned excavation, a long since covered up and forgotten sump on our analytical testing lab drain was uncovered. The original design had the sump filled with limestone to neutralize acidic waste streams from the lab testing regime. A plan to by-pass the sump was made which required fully excavating it, but the side of the sump failed and approximately 500 liters of water at low pH entered the excavation. The leak

was immediately neutralized, the piping repaired with proper materials of construction, the soil removed and remediated, and the sump completely removed.

> Security:

o There have been no security incidents since the last CAP meeting.

Transportation:

o There have been no transportation incidents since the last CAP meeting

Plant Operations:

- > The plant has a planned maintenance shutdown scheduled to begin late next week on September 25th and to run for a 10 12 day period during which routine inspections, maintenance, and process improvements will be undertaken.
- As discussed at many previous CAP meetings, we are in the process of replacing an old administration building on the site. The building walls have been poured and are now standing in place while the roof and interior get built. We anticipate completion of construction and occupancy in early 2015.
- As has also been discussed at many previous CAP meetings we are also moving ahead with our Caustic Process Modernization project. This project was approved by the Canexus Board of Directors in March, 2014. The project will improve plant efficiency by reducing steam demand and corresponding energy consumption. Some key highlights of the project are as follows:
 - O Replacement of the current, less efficient evaporation process with a state of the art evaporation process which will reduce overall steam consumption by ~33%.
 - Once operational, the steam demand will drop to levels well below what was projected for TCP with corresponding lower GHG emissions from a reduction in natural gas requirements.
 - O The new system will have a vastly reduced footprint, be located in the center of the plant at a location previously used for diaphragm cell maintenance, and will result in the decommissioning and removal of the old evaporation process.
 - O In addition to steam savings in the evaporation equipment, the project will further optimize cooling water usage and heat recovery into the membrane cell process, reduce electricity consumption through use of much smaller pumping equipment, and reduce maintenance costs over the life of the operation.
 - O The project will have no impact on the long term plant manpower requirements, but will result in a large capital investment and moderate construction workforce over the next 18 month timeframe. At peak construction, a contract workforce of 25 50 workers is anticipated which is below levels of the recent Acid Projects completed in 2013 and negligible in terms of impact upon the community via traffic or noise.
 - O There will be no change to the plant capacity or shipment volumes from site, this is strictly an optimization project to reduce energy requirements and maintenance costs with a modern and efficient evaporation process.
 - O We have received approval from Port Metro Vancouver for the initial demolition phase of the project in which we are removing an old maintenance shop building this was where the old diaphragm cells were maintained prior to TCP completion. This location is where the new caustic evaporation process is to be constructed.

- o Detailed Engineering of the project is well underway and expected to finish at the end of this year.
- o In July, we submitted a Permit Application to Port Metro Vancouver for the project which is being evaluated for likely the next several months. Pending approval by the Port, we anticipate construction to begin on the new process unit in early 2015 and to continue through to the Fall of 2015 with completion in the 4th quarter of the year.

> 2014 Community Outreach Activities:

- the following list highlights a number of initiatives undertaken so far in 2014 with outreach activities in our surrounding community.
 - o A Transportation Accident / HazMAT Tabletop Exercise was held on February 11th by NSEMO with Canexus as an active participant.
 - o March 11th Presentation to the Blueridge Community Association on the Plant Operation, TCP Upgrades and Transportation Risk information.
 - TransCAER (Transportation Community Awareness & Emergency Response) outreach activities have included training sessions across Western Canada this summer and fall in Saskatoon, Edmonton, Kamloops, and Surrey.
 - O Canexus ER Leaders regularly serve as instructors, including on several occasions so far in 2014, at the Justice Institute facility in Maple Ridge where Emergency Responders from across BC are provided classroom and hands on training.
 - O Canexus is an active leader in the North Shore Waterfront Industrial Association (NSWIA) Working Waterfront program. This program aims to increase awareness and knowledge for Grade 4/5/6 students of the North Shore of the importance and value of the waterfront industries. The program consists of a combination of classroom presentations by company representatives and a harbor tour field trip. Since 2001 the program has delivered presentations to over 11,000 your students in our community.
 - O As part of the CAP challenges presented last year, Canexus has been working closely with the NSEMO to increase emergency preparedness in our community. Canexus leaders have now been trained in the Rapid Damage Assessment program and are working closely with NSEMO on potentially providing a secure location for emergency supplies. Progress has been slowed by the illness of a key contributor, but this important partnership will continue to move forward valuable improvement in ER needs for our local community.
 - O Canexus has also performed site specific outreach activities with Arc'Teryx and Univar so far in 2014.



ERCO Worldwide Update to CAP - September 16, 2014

Production

- As discussed at last meeting, our Line 7 transformer (3-years old) failed on April 2nd. Our older mothballed unit was put back in service a week later but it only has 75% capacity. The failed unit has been returned to manufacturer for re-engineering and rebuild anticipated return is mid-March.
- Initial planning underway for another major shutdown next April (14 days) for replacement of 2 transformers (Lines 7 & 8) and other major maintenance.

Safety/Environmental

- Employees have now worked 782 days since the last Recordable injury on July 26, 2012.
- Summer Safety Fest sports activities (pitch & put, lawn bowling) and BBQ held on front lawn on July 24th to celebrate 150,000 hours / 2 years without a Recordable injury.
- Planning underway with DNVFD Hazmat for an emergency drill on site.

Responsible Care

- On Oct. 8-9th, ERCO corporate management will be on site for annual Responsible Care meetings, where plant operation is reviewed.

General

- Paul Timmons, ERCO President, has announced his retirement at year end, after 34 years of service.
 - Ed Bechberger, Senior VP, Sales & Operations, will be promoted to President, ERCO Worldwide, and effective January 1, 2015.

Tom Miller





September 16, 2014

CAP Meeting Update

Safety & Environmental

- Days with no lost time (4,351 days)
- 1 minor 3rd party Incident occurred during the annual turnaround. .

Operations

- Annual plant turnaround occurred August 11 26th. General maintenance and Capital project tie in.
- Facility running at full capacity into the end of the year.
- The review of the business is well underway. Newalta, along with its third-party financial advisors, is in the process of sharing information with interested parties and evaluating all strategic options for the Industrial Division, including sale, spin off and IPO.

Projects

- Rail Improvements will be conducted this year upgrading the infrastructure.
- Reactor Project Completed and operational