The background of the entire image is a vibrant blue gradient. A large, dynamic splash of water, rendered in various shades of blue and white, flows from the right side towards the left, creating a sense of movement and freshness. The water droplets and bubbles are clearly visible, adding texture to the scene.

CRTPA

**Water Resource
and Technology
2015 AGM**

Whitehorse Yukon



PRESIDENT'S REPORT

First off let me say, Welcome everyone to the Annual CRTPA General Meeting held here in beautiful Whitehorse. This AGM was an accomplishment in itself to organize and I would like to recognize the Yukon representatives for hosting this event, and the City of Whitehorse as well.

This year we wanted to have an AGM in a pristine location to remind us of how the resources that sometimes we all take for granted are essential to our existence. I hope you all agree that this setting will in some way inspire each of us to do a better job in the communities we support.

I wish to extend a sincere welcome to the AANDC representatives from across the country that are in attendance, it is important to recognize the people we work with to bring the support services to the various parts of Canada.

With regards to Building Maintenance Training, the association was asked to facilitate discussion with various maintenance trainers from respective regions, in the development of a Building Maintenance Training Program to follow the model that has been used to train Municipal Water and Wastewater System operators. In the last quarter of 2014, a number of Building Maintenance Trainers met in Winnipeg to develop the framework that would be used to implement a training manual similar to the original Circuit Rider Training program for Water & Wastewater systems. From that exercise, the board has been tasked to complete the next phase of the Building Maintenance Training Manual. This will require the development of a number of sections of the BMT Manual, which will be reviewed by the working group for subsequent submission to AANDC.

The development of a National Building Maintenance Training program will allow for a similar training program for Building Maintenance Personnel. We are excited to be part of the Manual development and look forward to members at large participating where they are able.

Other initiatives that are being administered by the CRTPA include, Professional Designation, Assessment Guide and Checklist, and standardized Job Descriptions. We need the members of the association to volunteer your knowledge and experience, to get involved and be part of the development of these resources.

I hope everyone has an enjoyable time during the next two and a half days. This is a great time to share ideas and develop relationship with other trainers.

On behalf of the Board of Directors and the Executive, thank you to the regional reps for coordinating this AGM, and we hope everyone will provide encouraging discussion and comments.



Sincerely,

Winslow Davis, C.E.T.

AGM Schedule

	Time	ROOM A	ROOM B1
Tuesday August 18, 2015	7:30	Breakfast / Sign In	
	8:30	Opening Ceremonies	
	9:30	Regional Reports	Maintenance Trainer Meeting
	10:15	Break	
	10:30	Regional Reports	Maintenance Trainer Meeting
	11:30	Elections – AGM / Lunch	
	13:00	Math Manuals / Maintenance Trainer Manuals	
	14:00	Professional Designation	
	15:00	Break	
	15:15	Assessment Checklists	Yukon Projects – Dave Beaudoin

		ROOM A	ROOM B1	TOUR GROUPS
Wednesday August 19, 2015	8:00	Breakfast		
	8:45	Source Water Protection Planning & WSER programs in Alberta	Fire Safety – Stewart Meeches	Group #1 City of Whitehorse Water Treatment Plant / Booster Station – SCADA system
	9:45	Break		
	10:00	ACRS Reports and System Operations – Rick MacKay		
	11:00		Maintenance Management Plans – Gary Harris	
	12:00	Lunch		
	1:00	Source Water Protection Planning & WSER programs in Alberta	Building Maintenance Systems – Don Deggenhardt	Group #2 City of Whitehorse Water Treatment Plant / Booster Station – SCADA system
	14:00	Backup Strategies	TBA	
	14:45	Break		
	15:00	ACRES Reports and System Operations – Rick MacKay	Maintenance Trainer Manual Discussion	
	17:00	Dinner at the Wheelhouse Restaurant		
	20:00	Frantic Follies Show		

	Time	ROOM A	ROOM B1
Thursday August 20, 2015	8:00	Breakfast	
	8:30	Education Strategies in the North – Catherine Mallet	
	9:30	Health	
	10:30	Break	
	10:45	Ryan Martin - TetraTech	Maintenance Trainer Meeting
	12:00	Closing Ceremony	
	1:00	CRTPA AGM 2015 ENDED	



2014 AGM Minutes

Opened at 12:20 August 19, 2014 by Winslow Davis

President's welcoming message

Hopefully we will all get good information to take home to the communities. What we do affects us as Canadians in our respective territories and communities. I was raised with my grandma and great grandma. They wanted me to grow and be a useful member of society as well as learning the traditional ways.

Safety by Example – theme chosen by the BOD Important to both the CRTS and the MTs.

Good to see that AANDC is looking at the CRT model to deliver MT training to communities as well.

Your presence here means that you are dedicated to your communities. Your participation is key. As BOD members we are only a few minds, each region has a voice and you all have the opportunity to voice your opinions and bring them forward to the Executive. Please don't feel that you can't say anything. Share your opinions and network. There is a lot of knowledge and experience in the room.

Thank you to all the AANDC members for making the trip to the AGM. By you being here it shows that your regions support the program.

Ontario Election Results

Electronic and in person votes. 61% of voter response Phil Tangie will be the Ontario Representative on the Board of Directors.

Review the minutes from 2013 AGM (Attached) - Gary Harris

Motion Ken Mattes to adopt minutes as read. Seconded Guy Gauthier Approved by all and carried.

Financial Report - 2013/14 - Rynette Moore-Guillaume

Financial reports are sent to Forrest and Company for review. That was done as of March 31, 2014. In the bank as of March 2013 we had \$33,806.00. This will be used towards deliverables that are still being worked on right now.

2014 we spent \$131,060

Financial Report will be posted on website. If anyone wants to print them off they can do so.

Motion to approve financial report - Stanley Merasty. Second Eric Soui. Approved by all and carried

By-Law Amendments - Open the floor to the membership.

Gary Harris - Important that you consider what you are voting on. Presently we have President, 2 Vice

Presidents. Determined flow was that 1st Vice would be come Vice and then president. Gary voted against the proposed changes when it came up at the Board level.

Krista Derrickson – British Columbia Rep is elected by CRTs annually.

How does it work when someone is elected into an executive director position? You will then be serving both roles.

Ken – The Board was set up with all members having one-year terms but there is the potential for a lack of continuity. Ken ended up being president for 5 years. Bylaws are based on Western Canada Water. Concerned that it is a long time to be committed to the BOD. 7 years if someone is vice-president, president and then past president. WCW - three year term plus past president position.

Marc - If you decide to maintain one year. Is it a selfish vote - am I ready to move forward? There are not a lot of people who want to be on the executive. It's hard to get people committed to the BOD as is. Can't develop relationships with AANDC and the other board members to get work done.

Volunteer position - not a lot of people wanting to be on the BOD. It's a big time commitment and work to be done between sessions. We need working groups and committees.

Possibility to amend the terms to two years?

Discussed the option of having the executive members separate from the representation. Funding becomes an issue in that respect. Financial responsibility.

Ken Mattes - would it be better if the only 3-year term were the president's position?

- 1) To provide continuity the Executive Directors terms will be increased to three terms
- 2) The Executive Directors will serve three years continuous (President, Vice President, Secretary, Treasurer)

Marc LeMay motion to table the changes 1 and 2 until next year. Ray Osborne seconds.
Approved by all and carried.

3) Motion for the Past President to sit on the Board for a term of one year - Guy Guathier. Seconded: Joseph McKay. Approved by all and carried.

4) Remove the position of Second Vice-President
Motion to accept Jean Francois Guay Seconded Luc Bouchard.
Approved by all and carried.

5) Addition of a position for Maintenance Trainer Representative
Approved and carried at 2013 AGM

6) Addition of Conference Chair position.
Motion to accept Greg Mealing Seconded. Dan Lanteigne. Voted and approved.

Motion to close the AGM at 12:58 Darrell Jennex. Marc LeMay seconded. Approved.



ALBERTA

The CRTP:

In 2015 The Circuit Rider Training Program is involved in mentoring and teaching 84 active FN WTP Operators on 41 First Nation Communities. Our service is provided by an 8 member team that includes Level 3 Circuit Riders, trouble-shooters and provincially certified Instructors.

Summary of Duties for CRT's

- To deliver, "Hands-On-Training" of plant operators in the proper operations/maintenance of water/waste water treatment plants and facilities.
- To select and adapt technical material/training modules which would apply to **each individual** water/ waste water operators particular facility.
- To teach plant operators (in a hands-on context) on how to trouble shoot mechanical/electrical/safety equipment
- To provide training reports on site visits. This includes: observations, plant deficiencies, operator training, and recommendations.
- To complete DACUM charts. To monitor progress of various training modules at year's end.
- To provide on-site immediate repair and maintenance assistance to plant operators.
- To develop PROACTIVE/PREVENTATIVE operations/maintenance initiatives including MMP's.
- To assist operators/First Nation Public Works managers in the development of a budget (with presentation to chief and council if required) for water/waste water system.
- To assist operators to identify and rectify monitoring deficiencies as per INAC's Protocol for Safe Drinking Water in First Nations Communities.
- To participate in provision of 24/7 technical support to First Nations as required.
- To provide a summary of quarterly training reports, deficiency lists, etc to the manager of the CRTP.

This year the TSAG/CRTP made available to all FN Public Works Depts. A package of Safety courses that included: WH-MIS/TDG/Confined Space Pre Entry/Lock out / Tag out and Fall Alert. Thus far 5 FN have taken advantage of this seminar. The aforementioned safety courses are available to all FN water / wastewater operators.

This year the CRTP provided 3 sessions of Small Waste Water systems Instruction, 3 Sessions of Small Water Systems Instruction and 1 session of the Level 1 Water Operators course. All courses in Water and Waste water are followed with a Certification exam prep session. 24 operators participated in Small systems and 6 Operators in Level 1. As a result we have had several operators become certified during the most recent provincial's exam session.

The CRTP also provides Math for Operators Instruction and assistance with obtaining the GED Equivalency Diploma. We had 14 operators complete the math course and 2 complete GED.

The Alberta Circuit Rider Program is comprised of the following staff:

- Rod Badger (CRT)
- Keith Beilman (CRT)
- Blair Campbell (Trouble Shooter/CRT)
- Tim Gourlay (Trouble Shooter/CRT)
- Devin Meneen (CRT)
- John Nelson (Manager/Training Coordinator/CRT)
- Brad Tourangeau (Trouble Shooter/CRT)

Programs of Delivery

Drinking Water Advisory Action Plans We have continued this initiative in cooperation with AANDC and Health Canada. Representatives meet as a group once a week to develop and review action plans to remediate drinking water advisories initiated by Health Canada. The CRTP oversees the implementation of strategies for removing DWAs. We have achieved great success with this program. This year there has been on average 14 water advisories per month on FN communities addressed by the group.

Training Courses This fiscal year the CRTP provided safety courses to operators in: WHIMIS, TDG, Confined Space Pre-Entry, Lock Out/Tag Out and Fall Alert. The CRTP in cooperation with the Alberta Water and Waste Water Association provided courses in: Small Water Systems, Small Waste Water Systems, Level One Water Waste Water Operators Course, and Math for Waste Water Operators and Certification Exam Preparation. All these courses are part of the certification process for Water Operators in Alberta and the majority have certified educational units or CEUs associated with them. CEUs are required by Alberta Environment for Operators to maintain active certification status in our province. These courses add to the process of continued professional development and lifelong learning for our operators.

The TSAG CRTP will also provide assistance for operators in the communities who need to obtain GED High School Equivalency Diploma as it is a basic requirement for Certification. Our operators in need of a GED can obtain tutoring, study materials, exam prep assistance through the CRTP.

Trouble Shooting Service In the 2014/2015 fiscal year TSAG employed the services of a Trouble Shooter to assist the operators in addressing common issues at our water treatment plant. This includes performing diagnostics, small repairs and replacement of parts. Our Circuit Riders/Trouble Shooter assist the community operators to “find and fix” problems in machinery and technical equipment resulting in tremendous cost savings for the Nations they serve.



Trouble Shooter Blair Campbell assists with a hydrant repair on O’Chiese First Nation.



CRT Devin Meneen doing a training session on the use of Remote Water Monitoring Systems

First Nation Waste Management Strategy/WSER The CRTP continues to assist First Nation Waste Water System operators to be aware of and understand the new regulations regarding Waste Water. We also assist First Nations who wish to take the opportunity to register and comply with the WSER Initiative. We are currently involved with Phase 2 of our Waste Water Management Strategy. Phase 2 will see the development of an effluent monitoring plan and operator trainer program. We began implementing phase 2 in the final quarter of the current fiscal year. Phase 2 will include development of Maintenance Management Plans (MMP) and Emergency Response Plans (ERP). The Waste Water monitoring plan will include: lab samples, developing log book systems for recording site visits, notes etc. A training plan for operators including timelines/courses is being developed.

RWMS: Remote Water Monitoring Systems The CRTP has continued in the process of training community operators who are making use of "S:CAN" remote monitoring computer systems. The main advantage to this process is the connectivity factor. This fiscal year operators were provided with SCAN maintenance plans and training in how to do the maintenance. All community operators using the SCAN unit were provided with maintenance and cleaning kits. We are still encountering some reluctance on the part of the operators to make active use of the RWSMS/SCAN process and are working together with various community operators to overcome their reluctance.

To conclude TSAG continues to operate under the philosophy of providing value added service in all our programs. The CRTP is certainly a reflection of this. We continue to be a model for other provincial programs. Our CRTP is moving forward in assisting operators to become certified and effective. We are providing courses that allow for tremendous expansion of professional development at the community level. Our courses are hands on and we bring them to the operator. Our consultation on MMPs is insuring that the drinking water treatment and distribution systems are working effectively. Our strategies are successfully addressing the goals and objectives of AANDC Circuit Rider Training Initiative.

A TSAG / CRTP Success Story

Let me introduce Dennis Louis from Montana First Nation. Dennis began participating in the CRTP about 2 years previous. Dennis began by assisting in the Montana WTP. He participated in a TSAG GED workshop and got to know our team. Dennis then received Small Systems training and after 6 months on the program wrote his provincial exam and obtained his certification. Dennis moved on to participation in our Level 1 Operators course followed by various exam prep sessions and wrote his certification exam. Dennis is now a certified Level 1 Water Operator and working towards obtaining his level 2 certification. Dennis is a participant in a Pilot Project at Montana First Nation testing out a bio filtration system that based on good results will become a part of the new Montana WTP.



Currently Mr Louis is a contracted Water/ Wastewater Operator working and assisting with training operations at WTP on Samson Cree and Montana FN. Dennis has also recently received his 4th class Power Engineering certificate.

When asked to comment on TSAG/ CRTP, Dennis stated, "TSAG helps me move forward and stay positive, it's a very positive and upbeat training situation with these guys. There is some work to it but the guidance is awesome. I really like the prep courses too".

Did I mention that Dennis works under the guidance of long term Water operator at Montana and CRTP Participant, Leonard Standing on the Road?

Well Dennis we really like the goals and objectives you have obtained and the professional growth since you started is fabulous, good luck to you in the future.



Atlantic CRTP Regional Report 2015

Prepared by Darrell Jennex (Program Manager)



Service Provider

North Shore Micmac District Council Incorporated is the service provider for the Atlantic Canada Circuit Rider Training Program; for over 5 has administered and managed the program on behalf of and with Aboriginal Affairs and Northern Development Canada (AANDC). The Atlantic Canada CRT program having been in the region since 2002 is currently serving 23 of the 33 communities in the region. These 23 communities have centralized water and 18 centralized wastewater facilities. There are 11 communities served by municipal transfer agreements with local towns or have private wells and septic systems; these 11 communities can receive advice and technical assistance from CRTP staff upon requested from their Band Council. The 23 participating communities are served by approximately 44 operators (full and part-time) holding 58 provincial certificates and provide services to a total population of approximately 19,885 people (on reserve) in the Atlantic region.

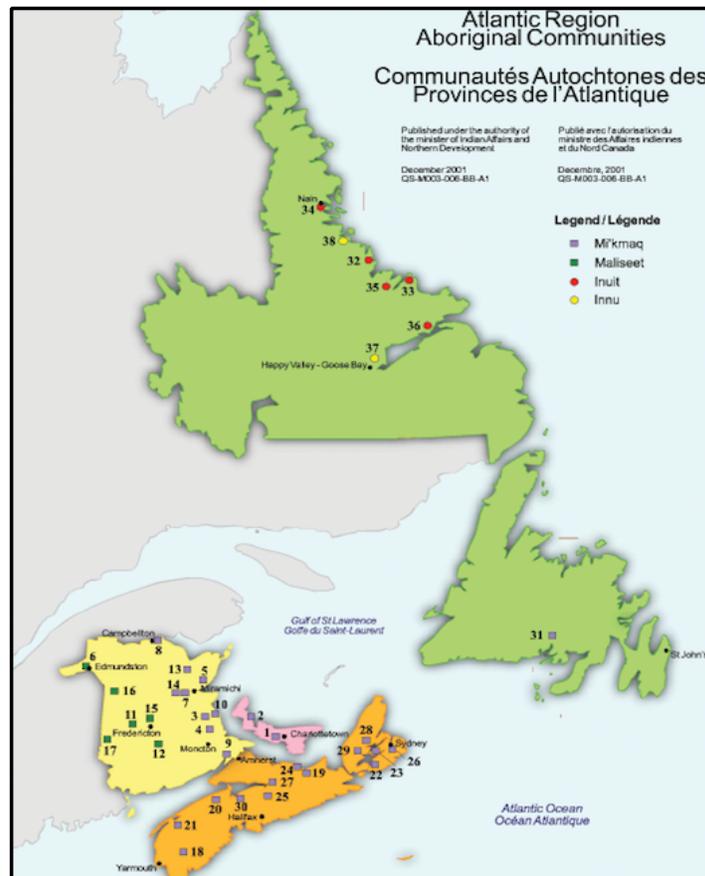


Figure 1 - Map illustrating the distribution of communities in the Atlantic Region

Resources

North Shore Micmac District Council-CRTP has a staff of six full time dedicated individuals providing CRTP services: a program manager, program co-ordinator, plus four experienced provincially certified trainers with one designated as senior trainer. The CRTP in the Atlantic region has made over 300 site visits over the past year and is expected to do the same this year in 2015-2016. The average number of site visits per year per community across the region is 16 with some communities receiving more visits than the average due to priority issues. All contacts with the communities are captured by reporting which includes site training visits, telephone contacts, emergency responses, participation in the regional AANDC annual inspections and capital project planning process. We continue to support drinking water and wastewater systems operation and training on site as part of our mandate in 2015-2016 balancing these efforts through a series of two day workshops held over the year (typical 3 workshops in a calendar year). Classroom training to operators in 2015 currently have received instruction and information on “Lift Station” (Operation/Maintenance), “Groundwater and Wells” (Operation Basics), plus “Turbidity” (Importance/Measurement) and this fall will receive instruction on “Disinfection Concepts and Practises” and “Water Storage” (Operation/Maintenance) while assisting operators in their preparation for certification.



Figure 2 – Groundwater and Wells and Turbidity workshop July 2015

Training

Workshops are in two day formats providing minimum of 6 hours of instruction time each day by our trainers (CRTs) and occasional guest speakers. Students are encouraged to use text books provided by the program as references and take notes during presentations. The CRT will often site sections in the text and direct the student’s attention to their books so that the material can be reference later after the workshop has ended. Quizzes are used to measure learning and sometimes a more formal test is done to simulate the provincial certification exam atmosphere for the benefit of the students. Each workshop is documented for individual attendance and test scores to assess student performance; these records are use to issue certificates of completion and qualify continuing education units (CEU) to meet provincial recertification requirements. See below portion the April 2015 workshop information and results.

Certificate Name:

“Lift Station Operations Workshop”

Learning Objectives (to state on certificate):

- < *Purpose of Lift Station*
- < *Lift station Requirements*
- < *Components of a Lift Station*
- < *Safety and Hazards*
- < *Supervisory Controls (floats, switches and transducers)*
- < *Newly Constructed Lifts Station Inspection and Startup*
- < *Operation of and Essential Tasks during Lift Station Visits*
- < *Lift Station Maintenance*

Figure 3 - April 2015 workshop topic list for issue of CEU certificate upon completion

SUMMARY

- 23 Students Participants Attended
- 20 Students in Full Attendance
- 3 Students Partial Attendance
- 15 Certificates to be issued with CEUs (Pass mark is 70%)
- 8 Attendance Certificate to be issued with indicated hours of attendance

Final	
Average	76.5%
Max	94.7%
Min	48.9%

Figure 4 – April 2015 workshop student performance indicators and reporting data



Figure 5 – Specialized tools provided and used in groundwater and wells April Workshop 2015

Systems and Technology

The water treatment systems found in the Atlantic region range from small water distribution systems (pop 100) with basic disinfection to larger systems (pop 2800) having diverse design and construction with technology in use such as ion exchange technology, activated carbon filtration, membrane and nano-filtration, greensand systems and other proprietary systems. The circuit rider trainers (CRTs) remain busy staying current in the multitude of systems and the technology found at each facility. There are new treatment systems coming online this year with innovations in each so our CRTs must keep pace to ensure training of the operators remains current and effective.



Figure 6 – Classroom with guest speaker (left), Tour City of Fredericton well operations with operators Bert Babineau and Dale Ward centre (right).

The Atlantic region, like many others will see new and upgraded water and wastewater facilities come online thru 2015-16. These new facilities with surface water sources for the production of drinking water have incorporated advanced features in their designs that ensure adequate contact time to enhance CT values, filtration systems for reduction of turbidity and better removal of Cryptosporidium and Giardia Lamblia (viruses and protozoa) all done to ensure more effective disinfection, and to meet Health Canada Guidelines for Canadian Drinking Water Quality such as AO (aesthetic objectives) for iron and manganese. While others systems especially ground water sources are designed to meet MAC requirements in reducing barium and other heavy metals but may also require additional treatment due to GUDI such as the addition of “Catalytic Ion” exchange and “Ultra-violet” disinfection plus continuing to “a must have” chlorine disinfection for maintenance of free residuals.

Communities are growing in population (pop. over 19,800 in the region), new water main extensions added to existing water distribution systems with collection and treatment systems being improved or expanded to satisfy growth; for these communities it means more effort must be made on the part of the operators to maintain the additional infrastructure while Band managers need to find funding to service this increased growth in population.

One wastewater system has been commissioned in one remote community in the year 2013. This wastewater operation is a three staged lagoon with UV disinfection, this system problems reduce the CRTP effectiveness to train the operator due to design and poor construction thus leaving the facility in bypass mode while issues are addressed. While in another remote community ancillary water system projects stretched out for years have gone unfinished with poorly managed staff is threatening treatment and supply to the community. These are some of the issues our CRT must contend with while continuing to provide training to operators on routine operations, effective maintenance and repair of water and wastewater facilities.

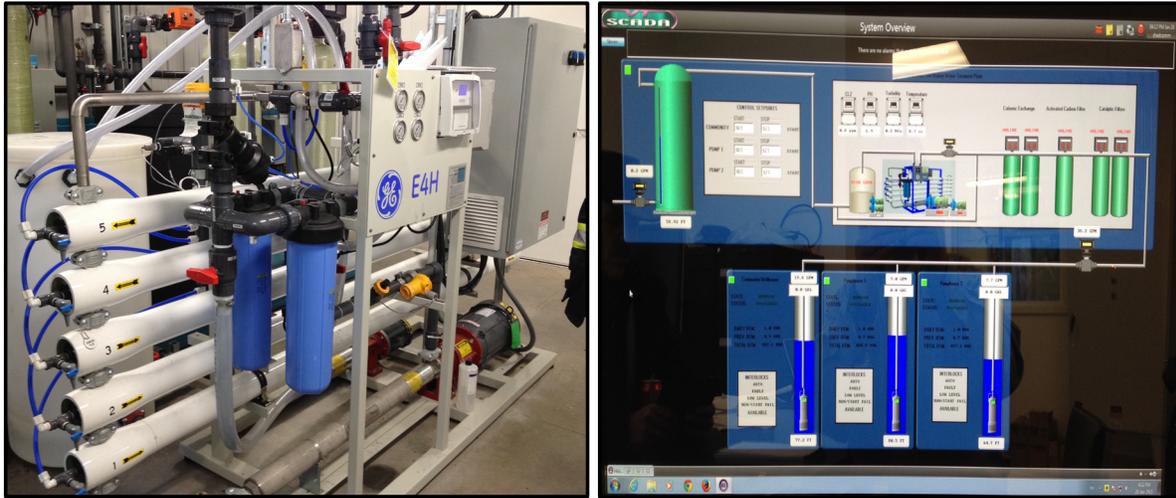


Figure 7 – Membrane filtration and SCADA systems where once simple pressure pumping operations existed!

Challenges

The biggest on-going challenges in the Atlantic region is education with adult students (reading and utilizing the text), self motivation, and encouraging more effective management by Band managers in the direction of their staff and facility operation. Plus, there is the need to have operators document and keep better records. NSMDC-CRTP, the Atlantic region service provider have noted a lack of reporting systems up thru the Band organizations from system operators to the managers thus we have begun to invite Band managers and Public Works personnel to operator workshops to help them understand what is needed to operate water and wastewater systems. To assisted management with their duties as managers we helped some in the hiring process to ensure competent and motivated candidates are chosen for their water and wastewater operations thus shorting the period to operational effectiveness by new operators. Also, there is evidence that many Band personnel in operation and management positions at the Band level lack office system skills and management training for effective management of their facilities and do not have a full understanding of their roles.

The recent implementation of the Wastewater Systems Effluent Regulations which the CRTP supports and is working with Environment Canada (EC) in Atlantic Canada continues to placed additional work load on the program taking time from training. Much time has been needed to assist and repeat follow-up with operators in maintaining access to information, explaining and demonstrating Effluent Regulatory Reporting Information System (ERRIS) to operators in meeting the new WSER regulations. Before long we will soon see the implementation of the drinking water regulation which was past in Ottawa June 2013. We have begun communicating with operators regarding the importance of records on site in order to be ready for the implementation of these regulations but it is felt this will be long process.

The administrative duties have increased as per the “CRTP Minimum Program Requirements” since its introduction and has placed addition work load on staff; such as standardized reporting systems for site visit reporting, individual operator lesson plans (44 individuals) each year, and possibly more reporting forms may come. This is in addition to annual review and development of Emergency Response Plans, Standard Operating Procedures and Maintenance Management Plans etc.

The Atlantic Canada CRTP has in the past where possible, purchased equipment and tools for community water and wastewater systems operators when the budget has allowed. It quite common to have operators without the needed equipment to perform their work. This year we have provided HACH 2100Q turbidity meters for monitoring that water quality parameter in treating surface and groundwater sources. This investment is consistent with our commitment to support and encourage better operations and control by owners and operators through good management practises, routine inspections, sampling, testing and better record keeping in the drinking water facilities.

Currently in our region we are assisting in the Annual Site Inspections with AANDC for water and wastewater systems which will take considerable time from the trainers. The Annual Site Inspections have begun and is expected to be completed by end of October 2015.

Summary

The North Shore Micmac District Council recognizes the need for a strong Circuit Rider Training Program in the Atlantic region and know that it's strength will come from staying informed about industry trends, science and technology in water resources and recover industry. We must not forget about the environmental concerns that affect us all, thus we teach with emphasis on protection of the environment which is becoming ever more important in keeping our planet green and healthy.

NSMDC management and CRTP staff have aligned ourselves with industry leaders such as Atlantic Canada Water and Wastewater Association (ACWWA) and the Maritime Provinces Water and Wastewater Association (MPWWA) to share resources to better communicate and serve First Nation operators in our region. We have done this through the formation and participation with the First Nation Technical Advisory Group with MPWWA to help in this effort. And, in addition, Mimiges Tomer (Program Co-ordinator) is a member of the Canada Water Network (CWN) which brings a different perspective and dynamic to our program offered by the North Shore Micmac District Council Circuit Rider Trainer Program in the Atlantic region. And, finally we are an active member in the Circuit Rider Trainers Professional Association providing support and volunteering time and human resources to the success of this valued and important organization.



Figure 8 - Mimiges Tomer is the Atlantic representative on CWN Young Professionals Committee

Meet the Atlantic Canada CRTP Team!



Figure 9 – From left to right, Darrell Jennex (Program Manager), Dan Lanteigne (Senior CRT), Tristan Brown (CRT), Norman Isaac (CRT) and Kyle Francis (CRT & ACRS) including Mimiges Tomer (Co-ordinator) above.



BRITISH COLUMBIA

BC Regional CRTP Report for the 2015 CRTPA AGM

CRTP services in BC are provided through Sumas First Nation through 7 contracted companies with a total of 14 Circuit Rider Trainers who service 163 First Nation communities. Last year we spend over 9,000 hours on site training which roughly equals over 1,125 site visits made in 2014/2015.

In the BC Region Operator training is separated into a couple of different programs. The CRTP which provides the hands on, on-site training and emergency resources to Operators and then the in class training is provided through the Operator Training Program (OTP) which allows for the flexibility to take courses either in class, on-line or through correspondence (distant learning). This allows the Operators to be able to pick the type of education that works best for them as individuals. There are a handful of options in service providers in BC but AANDC does have a contract with one of the organizations to provide specified training to the Operators in BC. This allows us to work together and create new courses that are currently unavailable to Operators anywhere else in the province. We are also able to tailor courses to First Nation Operators specifically.

Highlights of the past year:

- The addition of the 5 new communities into the CRTP program has now been implemented.
 - Operator certification to the level of the systems is up 5% from last year.
 - 7th Annual First Nation Operators conference was held in Vancouver with Operator's as well the CRT from the Yukon in attendance.
- New Operator network is being created by a very well organized group of First Nation Operators with support of AANDC and will be presented at this year's Operators conference in October. A small group of these individuals attended the Ontario First Nation Operators conference this past February and have extended an invitation for a few of them to attend the BC conference this year in support of the creation of the network. The new name (to still be decide) for the group might be: First Nation Operator Waters Network of BC & Yukon (FN OWN BC & YK)
- Reservoir Cleaning has been a top priority for the past couple of years.
- BC Region has 440 Operators who work in 27 Water Treatment facilities; 228 Water Distribution systems; 61 Wastewater Treatment facilities and 32 Wastewater Collection facilities.

First Nation System Information breakdown:

Water Treatment:

3 - WT-I facilities (29 Certified Operators)

14 - WT-II facilities (9 Certified Operators)

9 - WT-III facilities (5 certified Operators)

1 - WT-IV facility (1 operator who is ready to write the exam later this year)

Water Distribution:

185 - SWS facilities (154 Certified Operators plus 10 Operators In Training (OIT))

32 - WD-I facilities (70 Certified Operators)

10 - WD-II facilities (11 Certified Operators)

1 - WD-III facility (1 Certified Operator)

0 - WD-IV facilities (1 Certified Operator)

Wastewater Treatment:

29 – SWWS-L facilities (72 Certified Operators)

14 - SWWS-M facilities (20 Certified Operators)

11 WWT-I facilities (5 Certified Operators)

7 WWT-II facilities (3 Certified Operators)

2 – WWT-III facilities (0 Certified Operators)(1 Operator certified to MWWT-IV)

Wastewater Collection:

29 – WWC-I facilities (12 Certified Operators plus 3 WWC-OIT)

1 – WWC-II facility (3 Certified Operators)

There have been a few unexpected emergency situations this past summer in BC due to the drought conditions that the province has faced. Some of these situations have had easy fixes with leak detection and repair being all that was necessary to help recover the system all the way to the possibility of losing the entire water source. Throughout all of these situations the Circuit Rider Trainers have all stepped up and provided their expertise and troubleshooting abilities to help support each community through their struggles. In many cases their presence has been able to calm the situation in the communities as well as helping to empower the Operators in their knowledge and ability. BC Region will be using these differing situations to help each of the communities facing emergency drought conditions create a proper drought management section in their community emergency response plan.

A few of our BC Operators:



Certified Septic Installers Course



Operator installing a new diaphragm



Mud & silt at bottom of a reservoir before cleaning



One of the coastal communities





ONTARIO

Circuit Rider Training Program Annual Report for Ontario Region 2014/15



Prepared By:

Northern Waterworks Inc.

104 Howey Street
Red Lake, ON.
P0V 2M0

June 4th, 2015

Circuit Rider Training Program

CRT P Annual Report 2014/15

Project Background

Northern Waterworks Inc. (NWI) was awarded the contract for provision of Circuit Rider Training Program (CRTP) services, Ontario Region. NWI is the sole provider of CRTP services for the province, which includes one hundred and twenty one (121) eligible First Nation communities. Throughout Ontario region, there are one hundred and seventy eight (178) AANDC funded communal water and wastewater treatment facilities. The CRTP is a nationally funded program through Aboriginal Affairs and Northern Development Canada (AANDC). Under this program, Circuit Rider Trainers (CRT's) from Northern Waterworks visit First Nation communities to provide hands on support and site specific on-the-job training (OJT). The Circuit Rider Training Program is an integral component of the Government of Canada's commitment to assisting First Nations in the provision of safe, clean, drinking water and effective wastewater treatment and disposal. The program (or variation thereof) is administered by third-party service providers across the country and funded by the Government of Canada through the First Nation Water and Wastewater Action Plan (FNWWAP).

NWI has been working alongside municipalities and First Nations since our inception in 1997. NWI has successfully delivered on-site water and wastewater programs across Ontario for more than 18 years. NWI have delivered direct contract management and oversight services to ninety-three (93) water and wastewater facilities across Ontario. NWI's core business is as an Accredited Operating Authority (AOA), to Ontario municipalities. In Ontario, an accredited operating authority must be in charge of a municipal residential drinking water system at all times. To be accredited, you must establish and maintain a quality management system that meets the requirements of Ontario's Drinking Water Quality Management Standard (DWQMS). Accreditation is granted after a third party verifies that your quality management system meets the requirements of the DWQMS. This is a unique aspect that NWI bring to Ontario First Nation communities that participate in the CRTP program. To our knowledge, NWI is the only accredited company providing CRTP services in Canada.

The Circuit Rider Training Program is believed to have historically underserved Northern Ontario, due to low CRT availability and limited geographic accessibility. Northern Ontario presents unique challenges that the rest of Ontario does not. Thirty of Northern Ontario's First Nation communities are remote, which presents operational and logistical challenges. NWI has worked diligently to successfully overcome these challenges. NWI has fully staffed and strategically distributed hubs throughout Ontario. Placement of hubs is optimized to facilitate an efficient and economical distribution of staff and resources, through aggregation of projects located in similar geographic regions.

NWI has a comprehensive train-the-trainer program that has proven highly successful at supporting and developing First Nation capacity. NWI has trained uncertified First Nation staff up to water treatment level three, utilizing some as trainers to build capacity and continue the transfer of knowledge. To ensure the CRTP remained an economically viable and sustainable program, we leverage resources established through existing service agreements, utilizing our aggregated municipal operating hubs. This has been integral to ensuring that a stable and economically viable program is achieved for the long term.

Project Lead for Northern Waterworks is our Director of Operations, Mr. Robert Lariviere. With twenty-eight (28) years working at CRTP and water/wastewater treatment throughout Canada, Northern Waterworks' lead, Mr. Robert Lariviere, has extensive experience in all aspects of treatment, distribution and collection. This experience has been gained in many types of treatment systems and in many jurisdictions across Canada (Alberta, Northwest Territory, British Columbia, Yukon and Ontario). It also includes eleven (11) years direct experience piloting an original Circuit Rider Training Program in Northern Alberta, starting in 1997.

Mr. Mohammed Karim, P.Eng is our Project Engineer. Mr. Mohammed Karim has 14 years professional experience as a CRT P Trainer and Program Engineer. Mr. Karim holds Class 4 Certificates in all four (WT, WD, WWT, WWC) categories. Mr. Karim has provided project management functions, and also delivered training in plant operations and management (water and wastewater). In addition to this, Mr. Karim oversaw certification training and health and safety training programs through delivery of previous CRT P Programs.

Project Summary

Northern Waterworks has developed a comprehensive but achievable work plan that utilizes the unique depth-of-knowledge, skills, and experience of our highly qualified staff. Our trainers are responsible for, but are not limited to:

- Ensuring community outreach and scheduling of CRT on-site visits is coordinated
- Ensuring on-schedule performance, and composition of site-specific assessments, site-specific work plans, training plans, post site-visit reports and annual summary reports are provided to the Director of Operations
- Ensuring on-time composition and submission of annual regional work and training plans utilizing data gleaned from site-specific work and training plans
- Updating annual regional work and training plans as required
- Ensuring on-schedule submission of all plans and reports to the Director of Operations
- Ensuring copies of certificates, diplomas, and training registry are maintained and archived
- Recording and tracking operator training hours (CEU and On-The-Job)
- Recording, tracking and reporting on a quarterly basis operator success with certification exams and other related pass/fail programs
- Ensuring transparency, accountability and value for dollar of the CRT P program
- Ensuring operator training requirements are met
- Submitting all required documents related to certification to the Ontario Water and Wastewater Certification Office (OWWCO)
- Maintaining and updating required documents related to individual operator certification
- Overseeing the administration and delivery of CRTSP and CRT activities
- Assisting communities in development of an operating budget and assisting them in adhering to approved budgets
- Submitting NWI required reports as per NWI ICP in an approved NWI format to the Director of Operations and Vice President of Operations; in addition to CRTSP and CRT reporting requirements

NWI's CRT P program consists of the following steps:

1. Community Outreach

Once AANDC had made initial contact and established a list of eligible participants for the program, NWI established contact with communities and/or Tribal Councils as applicable, and coordinated a date for an on-site visit of the facilities. NWI identified community outreach as an integral factor to program successes. Involving stakeholders such as Tribal Councils, Community Leaders, O&M managers as well as local operational staff in each step of the program was essential to the program's success. It has been demonstrated that support from all levels of management and leadership greatly enhances the effectiveness of our programs.

2. Initial Site Visit Report

Risk Assessment, Needs Assessment, Training Assessment and Operational Evaluation

Once NWI had established a date with stakeholders for an initial site assessment, we proceeded with identification of immediate needs within the facility, as well as identified longer-term requirements. Our assessment (initial site visit report) was developed considering a wide variety of guidance documents. NWI assessed and considered items such as training requirements (basic water, health & safety, emergency response, etc.) and Continuing Education Unit (CEU) requirements. NWI further assessed certification needs, to assist operators in attaining and maintaining certification to the level of their systems. Based on the initial inspection/assessment reports, we determined what training resources, equipment and materials were required for program delivery. NWI's approach to these assessments involves all stakeholders and considers operator input as integral.



3. Site Specific Work Plans, Training Plans, & Annual Regional Work Plan

Site-specific work plans were developed based on **prioritized** needs identified through the initial site-visit report (initial assessment). Site-specific work plans itemized these prioritized needs for ratification. Data gleaned through site-specific work plans were utilized by NWI to formulate and develop training plans, for inclusion into the work plan framework.

4. On-The-Job Practical Training

Northern Waterworks initially created an "On-The-Job" practical training program to meet the ongoing certification requirements of our municipal operators. NWI has taken this innovative approach to "hands-on training", and customized it for use in our CRTP program delivery. NWI has received approval and acceptance from the Ontario Water Wastewater Certification Office (OWWCO) for this OJT curriculum. Our On-The-Job practical training program is a proprietary, comprehensive, four week hands-on training course which meets Environmental Guideline 4.3 "*On-The-Job Practical Training Criteria*", required for Ontario certification renewal. Below is a breakdown of Continuing Education (CEU) and On-the-Job (OJT) training hours required in Ontario for Certificate Renewal (every 3-years):

Mandatory Requirements for Certificate Renewal are:

System Class	Continuing Education	On-the-Job Practical	Total
Limited System – Ground	7 hours	13 hours	20 hours
Limited System – Surface	7 hours	13 hours	20 hours
Class I	7 hours	23 hours	30 hours
Class II	12 hours	23 hours	35 hours
Class III	14 hours	26 hours	40 hours

5. Evaluation

Northern Waterworks provides trainees with a standardized course evaluation form to be filled in upon completion of each site visit. The evaluation report is submitted directly to the Director of Operations, which ensure trainees can openly express their thoughts and opinions as well as offer suggestions. The intent of this process is to allow for internal program monitoring, providing NWI the ability to continually monitor, modify, and improve materials and program delivery.



2014/15 Program Statistics

Project approval was provided to NWI by AANDC in September of 2014. Once this approval was received, Initial Condition Assessments (ICA's) were scheduled with participant communities. ICA's were conducted from mid-September through till Mid November. These ICA's were utilized to formulate individual Site Specific Work & Training Plans, based on the prioritized needs of individual communities. By late November these site specific plans were complete, and subsequently utilized to populate an Annual Regional Work Plan, for submission to AANDC in early December, for work plan and budget line approval. In total, sixty-nine (69) First Nations had registered for the CRTP program, and had ICA's completed. The following summarizes program statistics for the 2014/15 CRTP Program, Ontario Region. Training began early in the fourth quarter, once Annual Regional Work Plan approval was received. In the fourth quarter NWI provided:

- ✓ Sixty-nine (69) communities registered for on-site CRTP training, up from fifty-four (54) the previous year.
- ✓ Sixty-two (62) Initial Condition Surveys were completed.
- ✓ Forty-six (46) communities received on-site, site specific, on-the-job training.
- ✓ Ninety (90) scheduled site visits were conducted
- ✓ One-hundred and forty-one (141) Operators received site specific on-the-job training
- ✓ A total of 2,328.5 hours of individual, site specific, on-the-job training hours were provide
- ✓ Utilizing eleven (11) CRT's

In the third quarter, NWI provided under separate contract:

- ✓ Annual Performance Inspections (API's) for all one hundred and fifteen (115) First Nations, totaling one hundred and seventy-eight (178) AANDC funded water and wastewater systems.

QUEBEC



We are proud to present our 2014-2015 annual report. The past year witnessed many structuring realizations for the best benefit of the served communities.

Website

At the start of 2014, several meetings took place to define the terms of reference for the creation of a website dedicated to the circuit rider training program. In operation since March 2015 the employees of the water treatment and school maintenance sectors, as well as the population in general, can access this website to learn more on communities and their infrastructures. Furthermore, the users have the opportunity to refer to some reports and documents relative to the operation and maintenance of their installations. They also have access to various equipment suppliers' reference and maintenance manuals, to various management plans (water source protection, preventive maintenance and emergency measures), to the address and phone number of several resources in the water treatment field, also to a list of trainings offered or recommended and to very useful links that will redirect the users towards more specific and specialized sites.

The website contains some levels of access, so that there will be general information for all, as well as more specific information with controlled access for the communities and their personal.

Revised approach

More or less at the same time, Aboriginal Affairs and Northern Development Canada and its service provider, Regroupement Mamit Innuat, adopted a new approach for the Circuit Rider Training Program with regard to the previous years. This approach was greatly influenced by the publication, in January 2013, of the «Circuit Rider Training Program: Minimum Program Requirements for Water and Wastewater Systems».

Consequently, the beginning of the year was mainly invested in producing working and training plans specific to every site in accordance with its needs. We then tried to engage at a higher level the communities' leaders in the process of improving the installations. To achieve that, the first annual visit consisted mainly in realizing three activities:

- meet the persons in charge to answer together the annual inspections' questionnaire;
- present and explain the working plans of work specific to the site;
- and finally, revise the previous circuit riders recommendations reports to assign responsibilities to each to implement, as fast as possible, certain correctives necessary for the smooth running of the installations.

This revised regional approach aims at refocusing the program on the training and at improving the transfer of knowledge to the community, with the vision that was expressed by the International Rural Water Association in July 2010: «The circuit riders transfer knowledge to the rural communities. Their role is to teach, not to do.»

Doing so, we believe that the communities will acquire a greater autonomy. The visits' frequency was then modulated according to the specific needs of each community and in some of them a different circuit rider was appointed in the perspective that they benefit from a different and more varied expertise. Nevertheless, additional visits were added when needed upon a written request to the service provider.

Maintenance management plan

Besides the training program for water and wastewater systems, Regroupement Mamit Innuat also maintains the same type of training in the field of inspection and maintenance of community buildings which is called the Maintenance Management Plan (MMP). The MMP trainer-inspector proceeds under a three step method. First, the building is duly inspected, taking the inventory of its components (architecture, HVAC and electricity) to develop the above mentioned MMP specific to the site. The MMP is then implemented and a follow up schedule is set up. These activities also allow the trainer-inspector to target staff training needs that are passed on to their managers. While this program is presently offered to the 26 communities connected with AANDC, it will be possible to extend it to other sectors such as other community buildings, health care buildings or even housing buildings, because the future is very promising in this field. Nowadays, communities are more aware of the long term benefits generated

by a MMP as far as increased installation lifespan and quality infrastructures are concerned.

Certification and training

Regroupement Mamit Innuat can also rely, inside his team, on a training coordinator who is responsible for the certification of the operators who work or will work in the field of water and wastewater. The coordinator's main mission is to recruit future candidates in association with the departments of human resources in several First Nation communities of the Quebec region and especially in those with lack of potential candidates. Then, the coordinator organizes and oversees the groups to be trained. This year, there were two groups of in class training, a French one in Wendake and an English one in Kahnawake. These trainings lasted 22 weeks in total, from which 19 weeks were spent in classroom to absorb the theoretical topics and three weeks of onsite training in workplace. These two groups ended their studies by the end of the fiscal year.

Serving the Cree Nation Government and its communities

In the course of the year, Regroupement Mamit Innuat was approached by the Cree Nation Government (CNG) and its nine member communities to offer approximately the same type of services which were already delivered to the southeastern First Nation communities of the province of Quebec. After agreement, a temporary six month contract was concluded between both parties guaranteeing to these nine communities at least two visits before the end of March 2015. The services offered by Regroupement Mamit Innuat were renewed for an additional year with a perspective of a multiannual agreement.

Telemetry

Finally, by the end the year, Regroupement Mamit Innuat carried on its investments in the project of telemetry, project which began in 2008. This project consists in first place in providing computers and an Internet link to the communities' water installations that are not already connected to the web. This will allow these communities' water operators to access the new website put in service recently by the Circuit Rider Training Program. These equipments will then allow the circuit riders and the operators to receive malfunctioning alarms, consult the water quality parameters and remotely access the water systems to eventually act on it or reset it, if necessary. This project will allow the circuit riders to have a better overview of the systems while assuring a better information exchange with the operators. Finally, this access to the data will facilitate

the production of the reports, especially those necessary to meet the new regulation requirements from all orders of government.

Conclusion

This constitutes a brief résumé of the actions undertaken by all the members of the Circuit Rider Training Program service provider, Regroupement Mamit Innuat, to improve the quality of services offered to its 37 First Nation communities throughout the Quebec region for the fiscal year 2014-2015.

Regroupement Mamit Innuat Inc. Quebec Region service provider

WATER AND WASTEWATER TECHNICIANS

Éric **SIOUI**, crt and program coordinator

Jean-François **GUAY**, crt and training coordinator

Marc **LEMAY**, crt in water and wastewater treatment

Guy **GAUTHIER**, crt in water and wastewater treatment

Luc **BOUCHARD**, crt in water and wastewater treatment

Angelo **CHAREST**, crt maintenance management plan (schools)

ADMINISTRATIVE PROFESSIONALS

Phi Dung **PHAN**, Jr. Eng., operational support agent

Serge **LOISELLE**, Eng., MBA, director



YUKON

Yukon Regional Report 2015

The Circuit Rider Training Program (CRTP) service is provided by Northern Utility Maintenance, Franklin Patterson, CRT apprentice, from Nacho-Nyak Dun First Nation and supervised by Ray Osborne, Senior CRT who currently works as an Operator with the City of Whitehorse.

The Yukon Region is made up of 17 First Nation communities, of which 3 are located in Northern BC. The Region is unique, in that there are 11 Self-Governing First Nations and 6 First Nation's without a land claim settlement (governed under the Indian Act), who have various levels of assistance from the CRTP and AANDC. Potable water for First Nations is provided from the individual First Nation communities, the Government of Yukon or various small municipalities.

Highlights of the year:

- Seven operators, 5 delegates, accompanied by a CRT, went to Vancouver to attend the AANDC 7th Annual BC First Nations Water and Wastewater Operational Excellence Conference. This was the third year a contingent from the Yukon Region has been invited to participate.
- The CRTs provided valuable support for facilities under construction, repair/ retrofit and/or being commissioned.
- There continues to be a funding arrangement for CRTP services in which AANDC directly funds Northern Utility Maintenance.
- At facilities that were under construction or recently commissioned CRTs have provided pre- and post-commissioning support. One project that had a lot of CRT involvement has been the retrofit of a First Nation's current Water Treatment Plant as well as the new Water Treatment Plant that will be in the construction stages soon.

- Training and assisting with tank cleaning with First Nation communities is a regular activity for CRT's
- Common challenges are: Operator turnover and backups, Operator hours and availability for training, mechanical and electrical issues in Water Treatment Plants after commissioning, well operational issues, unplanned maintenance activities, Standard Operating Procedures (SOPs), Emergency Response Plans (ERPs), Water Treatment Plant controls replacement, development and updating current maintenance management plans,

Statistics:

- Over 30 different aboriginal water systems, all classed as Small Water Systems, despite their complexities.
- Only 3 aboriginal wastewater facilities.
- Over 80% operators are certified and the CRT's have a continual training plan for each operator.
- In 2014/15, a decision was made regionally to inspect all First Nation owned and operated treatment systems in public access buildings (daycares, community halls, cultural centers, administration buildings, etc). While this decision has increased the number of high risk systems in the region, information from these inspections will allow for better management of high risk treatment system deficiencies in public access buildings by both AANDC regional staff and First Nation representatives.
- The CRTs traveled a total of 51514 km in 2014/15.
- AANDC supports training and professional development of the CRTs, currently through course work at Thompson River University, Kamloops, BC.



Professional Designation for CRTPA Membership

Prepared by Darrell Jennex (CTech)(EP)

Purpose

This (draft) proposal by the Circuit Rider Trainers Professional Association (C RTPA) reviews the options under consideration that will determine the direction and process for professional designation or unique recognition of the CRTPA membership; which would qualify Circuit Rider Trainers (CRTs) in Water and Wastewater and in Building Maintenance as distinct. CRT's would be recognized for either as professionals in the specialized fields of Water Resource/Recovery Technology or Building Systems Technology.

The report outlines options to move forward on a plan for professional designation or a unique recognition of the members in the CRTPA who are currently performing the work of CRTs for regional service providers (SP) funded by AANDC.

The CRTPA has investigated options for professional designations and alternatives that would more aptly describe the work and standards by which all CRTs follow in their day-to-day duties. CRTs are expected to draw on specific skills and knowledge from a variety of different trades and disciplines (including that of professional educator).

Background and Activities

CRTs for Water Resource and Recovery Technology

The Circuit Rider Training Program (CRTP) for Water Resource and Recovery Technology is designed to provide on-site, hands-on training, and mentoring services to First Nations drinking water and wastewater system operators. Under this program, mentoring services are delivered by CRTs who provide training to assist First Nations operators to obtain and maintain the level of certification and competency required for them to operate, maintain, and monitor their community's drinking water and wastewater systems.

CRTs are required to follow the Circuit Rider Training Program "Minimum Program Requirements for Water and Wastewater Systems". As a professional trainer the activities that CRTs may be required to undertake with water or wastewater system operators are as follows:

- Support operators to meet the quality requirements for water and/or wastewater stipulated in relevant guidelines, codes and regulations (including AANDC protocols, Health Canada Guidelines, and Environment Canada's Wastewater Systems Effluent regulations and other future required standards).
- Support operators in developing functional operations and maintenance work plans for each water and wastewater system.

- Develop learning plans tailored to the operator's individual educational and experiential needs as adult learners.
- Demonstrate how routine maintenance and repairs are conducted and may also need to assist in the procurement and management of outside expertise when it is required for repairs and maintenance.
- Aid system operators to familiarize themselves with the procedures required conducting sampling and testing.
- Train system operators in completing required record keeping and reporting.
- Provide comments on feasibility studies and design proposals.
- Attend the commissioning process of a new drinking water and wastewater system.
- Aid Chief and Council to develop and implement training plans to assist the system operator(s) to attain and maintain the level of certification required for their system(s).
- Identify occupational health and safety training needs of operators.
- Support the operators to develop procedures to follow in case of an emergency.

Background and Activities

CRTs for Building Systems Technology

The CRTP is designed to provide on-site, hands-on training and mentoring services to First Nations community buildings operations staff that are responsible for the day-to-day operation and maintenance of building systems and the technologies found within schools, health centres, band offices and other community buildings found in First Nation communities.

The building systems technology training done by the CRTs include but are not limited to:

- Structure
- Roofing
- Interior
- Exterior
- Atmospheric Monitoring
- HVAC
- Boiler heating
- Plumbing
- Electrical
- Fire Sprinkler Systems, and
- Instrumentation and control systems.

As a CRT the training activities that CRTs may be required to undertake in delivering building systems technology training to First Nations building operation and maintenance staff are as follows:

- Provide instruction to operation and maintenance workers for schools, health centres, band offices and other community buildings, regarding the proper operation, maintenance and best practices for the building systems and technology used in their facilities.

- Monitor preventive maintenance programs, update maintenance plans and review asset condition reports (ACRS) to help assure that building maintenance practices are up to date.
- Assist in developing and presenting training seminars, instruction manuals and other applicable training aids that reflect current industry requirements and standards.
- Keep on-going records of training and the progress for each community maintenance worker as adult learners.
- Provide oral presentations to various individuals, groups, and organizations as well as deliver tutoring to maintenance workers.
- Undertake and/or assist in the operation of facilities if required.
- Conduct field investigations and inspections to identify maintenance work requirements and report deficiencies.
- Provide emergency assistance to staff for equipment and system failures or problems.
- Provide input into system enhancements, upgrades or construction proposals to ensure effective and efficient operation during and after work is completed.
- Ensure applicable occupational health and safety guidelines and or provincial/territorial regulations are followed.
- Work and communicate in a cross-cultural setting sensitive to cultural beliefs and practices in the delivery of training.
- Maintain effective and good working relationship with Tribal Council, Chief, Councilors, and Staff with includes contractors and their employees.
- CRTs supports First Nations staff in development of emergency response procedures to follow in case of an emergency, this also includes backup systems are available and ready in the event of an emergency.

Designations Under Consideration

The possible options for professional designation or recognition of work currently under consideration by the CRTPA (that may more aptly describe the work and standards of all CRTs) are:

- Environmental Professional (EP) in “Education and Training” by ECO Canada,
- Professional Operator (PO) by Association of Boards of Certification (ABC), or
- Mentor for Adult Learners (Mentor Canada)

Details of each option is listed outlined below.

Option 1 – The **Environmental Careers Organization of Canada (ECO)**, which would provide for designation of “Environmental Profession” (EP) in Education & Training. The information needed and the process for certification is described below (as outlined on the [ECO Canada](#) website):

- a. EP certification is based on education, work experience, and environmental competencies.

- b. Candidates will be assessed based on environmental specializations that they identify from 14 diverse areas of expertise (Suggest “Education and Training” for CRTs).
- c. The candidate will receive a payment confirmation email with details on how to access your EP application.
- d. Before the candidate starts their application, they need an updated résumé and three references who can validate the candidate’s expertise.
- e. The candidate completes the application and agrees to the EP Code of Ethics.
- f. They perform a self-assessment to rate their competency in the EP specializations they’ve selected.
- g. The references provided will perform a confidential evaluation of your competency and experience.
- h. Receive final approval. The Canadian Environmental Certification Approvals Board (CECAB) will review candidate’s application and provide final approval. EP applications are reviewed on the second Tuesday of each month, so it can take up to one month to obtain final approval. CECAB will notify by email of the candidate’s results.

Fee Schedules for “Environmental Profession” (EP) below

	EPt For applicants with less than 5 years of experience	EP For applicants with at least 5 years of experience
APPLICATION	\$150 + GST/HST	\$250 + GST/HST
ANNUAL MEMBERSHIP	\$100 + GST/HST	\$200 + GST/HST
ADDING A SPECIALIZATION POST- APPLICATION	\$50 + GST/HST	\$100 + GST/HST
UPGRADING FROM EPt to EP	\$150 + GST/HST	

Option 2 - The **Certification Commission for Environmental Professionals (C2EP)** of the Association of Boards of Certification (ABC) implements certification programs for water environment industry professionals. C2EP awards certified operators the Professional Operator (PO) designation, the industry’s first professional designation for operators. The information needed and process of certification is described below as outlined on the [Professional Operator Organization](#) website.

- a. In order to earn a PO certification and designation, you must the meet education and experience requirements. You must also agree to uphold the [Professional Operator Code of Conduct](#) and pass the standardized exam.
- b. PO application must be accompanied with documentation of all of your qualifications. Such documentation might include your high school diploma,

certificates of completion of continuing education coursework, and letters from current and past supervisors.

- c. Begin [preparing for the examination](#), which you will need to complete. Once your eligibility is confirmed, you will have 180 days to successfully pass your PO examination.
- d. An individual may only advance through PO certification sequentially; in order to advance beyond class I, an individual must hold an active certification in addition to meeting the eligibility criteria for the next class level.
- e. Specific information about each eligibility criteria, including allowable substitutions for some post-secondary education and operating experience, is detailed below the summary. *See chart below.
- f. Applicants must document any claims of qualification or eligibility to be considered during the application review.
- g. Applicants must read and fully understand all eligibility criteria prior to submitting their applications and non-refundable fees. Application process fees are \$145.00 to \$195 payable to ABC/ C2EP at time of application submission and examination administration fee is \$64.00 payable at time of exam scheduling.
- h. Examinations are scheduled, completed on line and have a timed limit. Computer-based tests are completed through an LXR•Test Interface. Candidates record their response by typing a keystroke or clicking a mouse, and have the capability of paging through the test one item at a time. The screenshot below provides a summary of the functions of the LXR•Test software available to candidates during computer-based testing.

*See chart below for eligibility criteria sample of wastewater collection requirements.

SUMMARY OF PO WASTEWATER COLLECTION OPERATOR ELIGIBILITY CRITERIA							
	Core Requirements				Flexible Requirements (Substitutions Available)		
	General Education	Code of Conduct	Current Wastewater Collection Operator Certification	MINIMUM Post-secondary/ Continuing Education Contact Hours	MINIMUM Operating Experience	ADDITIONAL Post-secondary/ Continuing Education Contact Hours	ADDITIONAL Operating Experience
Class I	✓	✓	NA	90	6 months	NA	6 months
Class II	✓	✓	✓	180	18 months	NA	18 months
Class III	✓	✓	✓	450	24 months DRC	450	24 months
Class IV	✓	✓	✓	900	24 months DRC	900	24 months

Option 3 - “**Building Blocks of Quality Mentoring Programs**” may be formally adopted through CRTPA by-law and training. Members learn mentoring practices and standards used by the Big Brother Big Sister of Canada for adult learners in educational, career, and personal development in a workplace setting. CRTPA and members take on-line training, invite guest speakers to AGM and adopt the guiding principal outlined by “[Mentoring Canada](#)” with the goal to be recognized by the Big Brothers Big Sisters Canada organization. Information about mentoring is described below (as outlined on the Mentoring Canada website):

So what is mentoring, then? Mentoring is when a trusted and experienced individual freely acts as a friend, advisor, coach, guide, teacher or role model to someone less experienced and in need of such a relationship.

Categories and Types of Mentoring

The evolution of mentoring has escalated in recent decades, and today we see many types of mentoring. Those types marked by an asterisk are more aligned with that of the CRTPA and members. Mentoring can be categorized by:

- I **Degree of Formality:**
 - *Informal or Casual Mentoring
 - *Formal Mentoring
- II **Functions and Goals:**
 - *Educational or Academic Mentoring
 - *Career Mentoring
 - *Personal Development Mentoring
 - Cultural and Faith Based Mentoring
- III **Settings**
 - *Community Based Mentoring
 - *School Based Mentoring
 - *Workplace Mentoring
 - Internet Mentoring
- IV **Number of Mentees**
 - *One-to-one Mentoring
 - *Group Mentoring
 - Family Mentoring

The Building Blocks of Quality Mentoring Programs - *Are you starting a new mentoring program* and wanting to ensure it meets current practice standards? Or are you running an existing mentoring program* and aiming to offer the best quality services possible?*

*If so, welcome to **The Building Blocks of Quality Mentoring Programs!***

Grab your hard hat and steel toe boots, and get ready to learn how to build a high

*quality, responsible and effective mentoring program. In **The Building Blocks of Quality Mentoring Programs** course, you will find the tools to:*

- *Lay the foundation on which your mentoring program can be built*
- *Construct a solid, durable and stable program*
- *Create and evaluate positive outcomes for program participants*
- *Structure your program to ensure it withstands current challenges and complexities of mentoring.*

Take the course at your own pace at Mentoring Canada. If you wish, you can explore only those areas of greatest interest to you. But to get the most out of this course, we recommend that you check out all the topics and activities. It will take you about one and a half to two hours to cover all the subjects and exercises. The first step in our building process is to have a look at the Mentoring Groundwork.

Conclusion

The CRTPA has outlined the important work done by CRTs and will present three options for consideration by the CRTPA membership then determine a direction and process for member professional designation or similar recognition. These options can occur internally or external to that of the association, and would qualify CRTs within the CRTPA as a distinct group; recognizing the work they do as professional trainers and mentors to adult learners in the specialized fields of Water Resource, Water Recovery Technology and Building Systems Technology.

The feasibility of each profession designation option outlined above must be given due consideration and evaluated against the education, experience and competency of the membership at large in meeting the requirements found in each option. Therefore more information needs to be collected about the membership to determine the experiential and educational background of each member to develop an accurate profile of the association, which will help in determining what option of profession designation or recognition is achievable.

To that end we, the CRTPA have begun to survey the membership. Once an accurate profile of association members has been determined this will aid in making the most appropriate choice for a successful process toward “Professional Designation” for the CRTPA and its individual members.

To be presented to the members at the 2015 AGM in Whitehorse, Yukon Territories on August 18-20.

