



Insider

Volume XI, Winter 2009

CEMA Joint Review Committee Workshop

The Joint Review Committee held a unique daylong workshop in Fort McMurray, on November 5 and 6, to move forward reinvigoration of the organization. This initiative is being led by a joint task group made up of CEMA Directors as well as Provincial and Federal government regulators. This workshop was a key milestone to the development of stakeholder-based concrete recommendations for CEMA's improvement and revitalization.

Proposals pertaining to CEMA's vision, mission, goals and organizational structure were developed. Participants, including current CEMA Members and non-CEMA Members from the leading Aboriginal and Environmental Communities in the oilsands region, had the opportunity to discuss and debate draft proposals through facilitation.

The review of the CEMA's current governance structure and operations to clarify the future relationship of the organization with Regulators was started earlier in June of this year. This review will determine the future direction of the Association; provide clarity about CEMA's relationship with the government's regulators and address CEMA's relationship with its member organizations. It will create an environment where government, industry, aboriginal groups and not for profit environmental organizations can work together on equal footing to address the cumulative environmental issues surrounding the development of Alberta's oilsands.



Bob, Rick and Brian hard at work!

President's Message

Dear Friends,

With the holiday season upon us, it's time for reflection and review of the past year. We can be thankful for all the successes that CEMA has achieved in continuing to build a strong and relevant association in the oil sands region.

We saw the completion of two important Management Frameworks on Air Containments and Nitrogen Recommendations. CEMA held Workshop's on Biodiversity and Closure Coordination, an Aboriginal Youth and Elders Camp, and a TEK Elders and Coaching Workshops. The

past year saw the CEMA family growing as new Aboriginal Members and an Educational Institution joined.

We continued regional community outreach with Environment Week activities as well as within the local community. CEMA Members continued their dedicated support of Working Groups, by providing advice, expertise and participation in the ongoing creation of recommendations.



Most importantly, CEMA has embarked in a reinvigoration process through the work of the Joint Review Committee.

I would like to thank Glen and all the CEMA staff for their hard work in 2009. Since March, I've had the opportunity to work with an extremely good group of people on the Management Committee; each of their devotion to CEMA is without question. Also, a special thanks to the members of the Joint Review Committee, as we continue the challenging work in the months ahead, we are proud of the achievements thus far.

So, rest up and enjoy the break, because CEMA's work plan, challenges and expectations for 2010 are very high. We will have a new Phase 2 Framework for the Athabasca River, Recommendations for our future structure and the details of the Lower Athabasca Regional Plan.

I want to wish everyone a safe and happy holiday season!

Rick

Thank You Judy

After 12 years with CEMA and 4 years as Vice-President, Judy Smith is resigning as Vice-President and Member of CEMA. Judy is changing her position at Shell and will no longer be working on the Athabasca Oil Sands Project.

Judy was quoted "I have enjoyed my time with CEMA particularly chairing the SEWG and NSMWG for several years each. I truly hope the CEMA Governance changes, and the earlier Revitalization Strategy, where I put a lot of my energies, will help CEMA."

Judy's last CEMA General Membership Meeting will be Dec 9 and 10, 2009.

Judy has worked very hard over the years within CEMA. She will be missed!

All CEMA Members want to thank Judy for all her hard work and offer best wishes in her new position at Shell.



We welcome your submissions!

The Insider is published by the Cumulative Environmental Management Association. For more information, please contact:

If you have any ideas for our publication or an article to submit for consideration, please send it in and we would be glad to include it.

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NSMWG

The NSMWG was formed over 10 years ago and has undertaken approximately \$5M dollars worth of work and research directed at understanding and managing the potential impacts of NOx and SO2 emissions on regional ecosystems. In 2008, the NSMWG decided that an independent overarching technical review of NSMWG work and products would now be appropriate. The purpose of the review would be to summarize and comment upon the scientific and technical work done to date by the WG, identify possible program and/or study gaps and provide advice on the further development and/or implementation of the Recommendations for the Acid Deposition Management Framework or the Oil Sands Region of North-eastern Alberta (ADMF), 2004, the Ozone Management Framework for the Regional Municipality of Wood Buffalo Area (OMF), 2005, and the Interim Nitrogen (Eutrophication) Management Recommendations and Work Plan for the Regional Municipality of the Wood Buffalo Area (EMF), 2008. This review will provide the NSMWG, CEMA members and the general public with information to assess and evaluate the work and products of the NSMWG. A layperson's summary of the NSMWG program and frameworks is part of the review project, which commenced in October 2009 and is scheduled to be completed in early 2010.

A number of projects related to understanding regional ecosystem responses to acid deposition and developing a model to predict the impact of existing and possible future acid emissions are complete or approaching completion. These projects were part of developing the implementation tools for the ADMF. The ADMF research projects completed to date are: time-to-effects modeling, isotope tracing of water yield and chemical loadings, palaeolimnological surveys of regional lakes and sensitive soils' work. Some general conclusions from the work are:

- Regional lakes have limited potential for acidification i.e. they are well buffered.
- Forest (mineral) soils in the region are acid sensitive with the potential for base cation to aluminum ratio changes that could have adverse ecological effects.
- Groundwater accounts for approximately ten percent or less of annual inflow to RAMP lakes.
- There is no clear indication of N deposition in lake sediment but C:N ratios indicate recent disturbances to nutrient cycles.
- AOSERP soils' map requires updating to the Saskatchewan border to incorporate recent soil mapping and sampling data.

Base case modeling runs for the Stage 2 implementation of the ADMF will be completed in early 2010. The results will reflect a 2006 actual emissions case and an existing and approved projects (to Q3 2009) emissions inventory. Stage 3 implementation of the ADMF involves two phases.

Phase 1: Assembling existing data for the MAGIC (time-to-effects) model run, identify critical data gaps and recommending approaches fill these data gaps and undertaking the work necessary to address critical information/data gaps. Information to date indicates that approximately 25% of the lakes cannot be modeled and that the AOSERP soils map of the RMWB has some gaps. Phase2: Undertake a full regional MAGIC model run in 2011 as per the ADMF.

CMAQ modeling of regional ozone levels is being undertaken as per the Ozone Management Framework (OMF). The modeling will estimate existing, regional ambient ozone and PM levels and ozone exposure levels to vegetation using an emissions database for 2006 (the same database being used in the Stage 2 ADMF modeling). Results will be available in Q1 2010.

One of the key issues in the modeling for the ADMF and the OMF has been to try and ensure consistency for some of the key inputs to the CALPUFF/CALMET and CMAQ models, so that results can be compared. This has largely been successful due to the efforts of the Ozone and the Phase 2 ADMF Task Groups.

The NSMWG has and is undertaking a broad base of research/study related to the Interim Nitrogen (Eutrophication) Management Recommendations and Work Plan (EMF). These include: an assessment and recommendations on regional monitoring related to N deposition and impacts on biodiversity; recommendations on monitoring N deposition in the region; N deposition and cycling within boreal bogs; N and S cycling and soil acidification in forest ecosystems; regional leaf area index determination, which is relevant to acid and nitrogen deposition determination and a joint NSMWG/WBEA project to measure actual deposition velocities of nitric acid and ammonia over certain vegetation cover types.

Results received to date reflect:

- Roots in moss and vascular plants retain approximately 80% of the nitrogen.
- Interactions between N/S result in changes to understory foliage chemistry and growth
- Current leaf area values used for the Region forest cover types are high.
- Using MODIS leaf area values reduces deposition estimates.
- Measured deposition velocities are within expected ranges.

The NSMWG is now working towards a phased approach undertaking a N critical load research program, with results that can be transferrable throughout the region. The path forward is to be determined based on the LARP results and communications with the Research team from Universities of Alberta, Southern Illinois, Trent and Villanova Universities, Alberta Research Council and Stantec.

TMAC

The Trace Metals and Air Contaminants Working Group are putting finishing touches to all TMAC products, and preparing to amalgamate within an Air Theme Working Group in 2010. The completion and approval by CEMA in September 2009, of the Final Recommendations of Air Contaminant Emissions in the Regional Municipality of Wood Buffalo (ACMF), confirms the TMAC Working Group has completed its terms of reference. The Trace Metals Management Framework, approved by CEMA, 2002, is now incorporated within the ACMF. The RSDS Air issues encompassed within the two Frameworks are: traditional resource use, air pollutant interactions, heavy metals deposition, inhalable particulate matter, to include PM10 and PM2.5, long range transport, odours, tailings pond emissions and VOCs. Issues not incorporated into the ACMF are noise and air visibility.

Outstanding concerns for the TMAC Working Group members are a forum with CEMA to deal with health related issues, air quality in communities adjacent to the oil sands facilities, who will be responsible for TMAC completed products and a creative and practical strategy to communicate the TMAC products to First Nations and Métis communities. Communication of the TMAC products can assist the local communities in identifying their concerns, so to voice their issues within the broader audience on air emissions and health effects. Without appropriate communication, communities can misinterpret or not understand the information released in the TMAC products.

An Air Theme Workshop was held on November 19, to discuss the amalgamation of the NSM and TMAC Working Groups. All participating members were in full agreement with the amalgamation and a draft working group structure was developed. Ecological Environmental Effects would be encompassed by the NSMWG, Odours would be NSMWG, TMAC and interested members and a Health Group of TMAC members. Discussion noted the Health Group could also be designated under the Traditional Environmental Knowledge Standing Committee, to be utilized by all working group members.

A formal letter from the TMACWG has been forwarded to the CEMA MC with a summary of its nine-year history, products completed, identified issues and recommendations for the path forward. The TMACWG's expectations are the expertise and skills within the working group will continue to be utilized by CEMA.

Updates TEK Advisory Committee Coaching Workshop

The Traditional Environmental Knowledge Advisory Committee (TEK AC) enjoyed the success of the 2009 Coaching Workshop "Perspectives into Practice" held in October in Fort McMurray. This annual workshop focused on the interaction of Traditional Environmental Knowledge with western science, through speakers coming from the University of Alberta, Red Crow College, Northwest Territories, Winnipeg and Local 2020 to address the topic. The workshop members enjoyed the keynote address from CEMA's newest member Keyano College, Associate Vice-President Leo Jacobs. The results from this workshop will be used to inform future planning as the TEK AC continues assisting in the integration of TEK into CEMA work plans.

The advisory committee will look forward to the results from the Community Orientation Project anticipated in Q4 2010. The project will provide insight into the history of Aboriginal People of Canada in the Regional Municipality of Wood Buffalo (RMWB). The outcome will assist in providing a regional Aboriginal orientation programs for new residents and employees to RMWB.



SWWG & Sub Groups Updates

The Surface Water Working Group (SWWG) is continuing with its work to meet the fast approaching deadline for the Phase 2 Water Management Framework recommendation. The draft recommendation is nearing completion, and the Phase 2 Framework Committee (P2FC) and the task groups are beginning to wind down. Meetings and discussions will continue until the end of the year, with the draft recommendation being delivered to both CEMA and regulators upon its completion.

The Socio-Economic Task Group (ETG) has completed its final contract for traditional use mapping, with the reports currently under review by the SWWG. Westland Resource Group, the consultant contracted to undertake the traditional use work, is heading back into the participating communities this month in order to present the results of the project. The traditional use work completed by the ETG has been used to help develop the Phase 2 recommendation, and to identify data gaps where further work is required to assess traditional use impacts of water level changes in the lower Athabasca River.

The In-Stream Flow Needs Technical Task Group (IFNTTG) has completed the majority of its work-plan, with the draft report from their final contract on aquatic mammal habitat due this

month. The IFNTTG will continue to provide information to the P2FC on potential impacts to the aquatic ecosystem in the lower Athabasca River, but in the coming months their attention will shift to the development of a monitoring program for the Phase 2 Water Management Framework. Candidates for the monitoring program include knowledge gaps uncovered through their work, as well as questions raised by the P2FC during their assessment of water management alternatives.

The Water Requirements and Engineering Mitigation Task Group (WREM) has completed its report on water storage mitigation options. Information in the report will help inform the P2FC regarding the implications of different water storage methods, such as footprint on the landscape and the volume of water that can be stored using each method.

The P2FC is recommending that once the Phase 2 Water Management Framework is implemented, work continue through a monitoring program to better understand impacts to the aquatic ecosystem, traditional uses, and industry. Monitoring is an aspect of adaptive management, which also includes review of the framework and results of the monitoring plan at set intervals to ensure environmental, traditional, and economic objectives are being met.

CEMA

Meeting Dates

General Meeting Dates: Fort McMurray

**Program Manager/Co-Chair/
Management Committee
Meetings: Fort McMurray**

**Management Committee Meetings:
Fort McMurray**

March 24th
March 25th (AGM)
June 08th
June 09th
September 22nd
September 23rd
December 08th
December 09th

January 20th
April 21st
September 8th
October 20th

January 21st
March 17th
May 12th
July 22nd
October 21st
February 18th
April 22nd
June 24th
September 9th
November 15th
December 16th

* Dates and locations are subject to change.

A complete list of Working Group meeting dates is available at

(780) 799-3947 | www.cemaonline.ca

Aboriginal Round Table (ART)

Tansi !

We, the Aboriginal Round Table (ART) have taken the time to reflect on the work that we have done in the past year with CEMA. Our first meeting was in November of last year and since then our greatest accomplishment is that we are well on our way within the cycle of change. The cycle of change involves Awareness, Acceptance and Change. Change happens over a long period of time. So why is this different for us? Actually, it is not different at all, in fact this is an example of why this is true. Let us tell you our story.

It is common knowledge amongst the Aboriginal people of our plight in getting our voices heard and understood. So it stands to reason that the Aboriginal people have waited a long time and made many attempts to achieve this goal. Many stories have been told by our Elders, many of our grassroots have offered their expertise and many of our leaders have spoken many wise words in their attempt to get this point across. All without any significant change. So in essence, it has been since the first contact with our white brothers that we, the aboriginal people have worked on his concept of being heard and understood. Over time, the Aboriginal people have waited for the chance through with they felt that they were being given the opportunity to work on this concept in a meaningful manner.

We, the ART came about from the concept of developing a meaningful engagement process between the Aboriginal people and CEMA. So you can see and follow the long outstanding concept of being heard and understood as again another attempt by the ART. CEMA in its desire to work with the Aboriginal people accepted the challenge to begin the work with ART. Hence a working partnership was struck between CEMA and ART. This concept of change in relation to CEMA organization depends on their cycle of change and we cannot speak on their behalf. We can only commend CEMA for their wisdom in accepting this challenge. Within any organization, there is a 'Champion' for change and in CEMA's case it is Glen Semenchuk.

This work between CEMA and the ART has not been and will not be easy, because it involves bridging gaps between two cultures. So it has taken a year with us to become aware of our history, put it into perspective and to look forward. Within this context of our work with CEMA, it is about environmental issues. But we say that environmental issues and socio-economic issues are one, they cannot be separated. If there is damage being done to our land, then you are doing damage to us as people of the land.

In becoming aware of our past, we see how it leads to the present scenario. We have seen the first time industry came to this land and it is common knowledge that the Aboriginal people have always had a genuine interest to participate in all areas that relate to decision making as to how we can create a sustainable process to guide the industrial development. We have become aware of the complicated process that regulates industrial development and how we have not been involved in a "meaningful way". This has made all the Aboriginal people angry, which ensued in some legal battles.

However, we the grassroots people/people of the land have chosen another path forward and to work within the concept of change. We ask ourselves and our partners, "How can we change things and work towards developing a framework for future generations?"

In becoming aware of the past, we have come to accept the present. We see that the damage to the air, the water, the earth and to our way of life is a reality. Industry is not going away and we certainly are not going anywhere. "Where would we go"? This is our home! So we have agreed that we will not let the anger and the pain that we feel in our hearts control us any longer. We choose to look forward and to continue to work on the concept of being heard and understood, despite the many failed attempts.

So yes, it has taken us a year to come to this point, where we are ready to work on the necessary change that will reflect the true partnership that has been struck by CEMA and the ART. We are ready for change, is CEMA ready? In our hearts we hope that by the virtue of giving us the chance to work, CEMA is also ready to go to the next step within their organization.

In 2010, the ART is committed to focus on a communication strategy within CEMA. This strategy will involve a way to communicate with the Aboriginal communities about the work within CEMA, thus leading to a greater awareness within the communities.

Information is knowledge and power if used with critical thinking, which then enables us to make informed decisions. This will also help in our work with the cycle of change within the communities. Awareness is the first step in taking the communities along with us in our journey for CHANGE.



Alice Martin presenting

Tansi Nitotemik

Peyak askiy aspin oma Aboriginal Round Table
ka ki maci atoskatamahk

Nistam Ka mamowapiyahk, Ekopiw pisimohk, 2008.
Nikaskitanan tanisi kawi Miyo atoskiyahk
Mistahi Kikway oma Cycle of Change

Miyo Machihowin oma Kaki mikosiyak
Kwayashk tanisitotamahk mina takamimoyahk
Kwayashk ta pimatisiyahk

Ota poko nokan eka enatotakowiyahk micitwaw
ota piskwatamaki Kiwahahk Picki otahk
Onikaniwak Kitiyahk Miyo pimatisiwin
Atotamahk mako mayo Natotawawahk
Aspin oci akamaskiwinowak Kitaskinahk
KatakosiKwaw Kiscaskiyinowahk Ki atastamahk
Oma miyo pimatisiwin Kayas oci oma atociKatiK

Niyanan Aboriginal Round table Nikaskitanan
Tansi isi kawi Miyo piKisKwatamahK esiciKiwin
CEMA asci AkamimoyahK oma Miyo Macihowin
Ta pasiKonamahk ekwa ta natotatoyahk

CEMA eKwa Niyanan Nitipaimonan ta atosKatamahk
EwicasiK eta kwayashk tanitotaKowiyahk

Nanaskkomawak CEMA ekwa Glen Sememchuk, CEO

Mistahi KiKway oma Miyo Macihowin
Ka ki MiKosiyahk PoKo tanistotaWaw
Aboriginal asiwinowak Ka Ki Miyo pimatisiyahk

Anoth KisiKaw noKan tansi Kitaskinow
Kinipiminow eKwa Kihiyonow emisonachiciKateK
Mako poKo ta aKamimoyahk oma Miyo
Machiowin ta pasiKonamahk PoKo oma
KaKimiKosiyahk emiwasik pimatisiwin
otiniKah KaKiyo Aboriginal Aysinowak Kwayashk
to Miyo Macichotaww

Miyo Machihowin Our Right to a Healthy Life
..... It was given to us
..... Indigenous Knowledge
..... Our Values, ethics & protocol

*C is pronounced as ch maci (Machi)

CEMA News

Fort McKay Open House

The second day of the CEMA September General Meeting was held in Fort McKay. Elders were invited for a luncheon to learn more about CEMA. The afternoon session featuring breakout sessions and open group discussion was an opportunity to listen to Elders concerns with respect to the environment.

CEMA would like to thank Chief Jim Boucher and the Fort McKay IRC under the direction of CEMA MC member, Lisa Schaldmose.



Ruth, Helene, Lisa, Chief Jim Boucher, Jumba, Judy and Simon

Ottawa Trip

In October, Glen Semenchuk traveled to Ottawa for a following up session with CEMA Members of the Federal Government. Updates were provided to the Assistant Deputy Ministers of Natural Resources, Environment Canada and Fisheries and Ocean Canada and the Vice-President of Canadian Environment Assessment Agency. Another important meeting was held with the Assistant Deputy Minister and senior management at Indian Affairs and Northern Development to explore a possible relationship between INAC and CEMA.

Congrats Mr. President

CEMA President Rick Brown of Alberta Environment has a new title, acting Assistant Deputy Minister, Environmental Management. He began his new job last month. Congratulations Rick! We know you will do a great job.

New CEMA Members



CEMA Members would like to welcome Keyano College into the CEMA family. An educational institution such as Keyano College is a wonderful new addition to the CEMA family.

More Federal News

In November 2009, the Report of the Commissioner of the Environment and Sustainable Development was released and included a reference to CEMA. Applying the Canadian Environmental Assessment Act – Section 1.35: 'For some large projects that occur in extensively developed areas, responsible authorities have begun to develop or participate in multi-stakeholder partnerships to identify and manage cumulative effects at a regional level. For example, given the scale and pace of development, the cumulative effects of oil sands development on the environment—air emissions, threats to water quantity and water quality, and impacts on ecosystems—are a serious concern. As noted by a review panel, "these key issues must be addressed with urgency if oil sands development is to continue at the current pace." In 2000, the Cumulative Environmental Management Association (CEMA) was formed in partnership with industry, non-government organizations, First Nations, and all levels of government. CEMA's mandate is to develop recommendations on managing the environmental impacts resulting from multiple industrial developments and resource use within the oil sands region of northern Alberta. Oil sands developments are predicted to continue for decades. Committees such as this can contribute to monitoring the evolution of environmental effects at the regional level.'

Gillian Donald Continues with CEMA

The RWG is also pleased to announce that it is extending the contract of its Terrestrial Technical Program Manager, Gillian Donald, for two more years. Since starting with RWG at the beginning of 2009 she has impressed everybody with her knowledge of the subject matter, diligence, and ability to carry the heavy work load of overseeing the technical aspects of the work being undertaken by TSG and its task groups.

Updates On Working Groups and Sub-Groups

RECLAMATION WORKING GROUP (RWG) UPDATE

The RWG has had a busy 2009 with the re-organization of its governance structure, the ongoing work of the Aquatics Terrestrial Sub-Groups as well as the work of its task groups. The RWG has an active schedule for 2010 which most importantly involves the development of a path forward to address returning biodiversity in reclaimed areas as a follow-up to the Alberta Research Council report and the RWG Biodiversity Workshop held in September and developing a work plan to address the integration and coordination of reclamation among oil sand company leases to meet the expectation of a continuous functional closure landscape, as follow up to the RWG closure coordination workshop held in November.

Closure Coordination Task Group (CCTG)

On November 19th, led by Members of the CCTG, the RWG hosted a Closure Coordination Workshop titled: "Meeting the Expectation of a Continuous Functional Closure Landscape in the Oil Sands Region". The unique daylong Workshop included 50 key stakeholders representing the provincial regulators, mine planners, closure planners and reclamation specialists. The goal of the Workshop was to ensure that the planning, operation, and reclamation of oil sands mine sites support the development of a functional and interconnected post-closure regional landscape.

Specific objectives of the workshop included:

- Communication of government's expectations with respect to planning, operation, and reclamation of oil sand mine sites through to closure;
- Knowledge of process linkages surrounding planning, operation, and reclamation;
- Increased dialogue and sharing between stakeholders involved in the processes of planning the mine life-cycle especially with respect to expectations, successes, opportunities, and challenges associated with integrated coordination; and
- Stakeholder feedback to support the identification and prioritization of potential tasks, knowledge or tools required.

The CCTG is now compiling the information gathered from the workshop into a synthesis document and the CCTG will be developing a renewed mandate and work plan going forward in 2010.

Biodiversity and Wildlife Task Group

With the success of the Biodiversity and Wildlife Workshop held earlier in the fall, the Biodiversity and Wildlife Task Group anticipate the results to inform their future work plans. The outcome, in combination with the forthcoming report by ARC expected in Q4 2009 will assist in clearly defining the path forward for future work. In addition the task group looks forward to overseeing work initiated on an Early Successional Wildlife Monitoring Program Design.

CCTG Workshop - Co-Chair Brett Purdy speaking



Terrestrial Sub Group



Back row (left to right): Scott Johnson, Clayton Dubyk (TSG Co-Chair), Tyler Colberg, Justin Straker, Grant Klappstein, Francis Salifu, Front row (left to right): Gillian Donald, Lelaynia Cox, Tanya Richens, and Carmalee FarnBaker. Missing from photo: Rob Vassov (TSG Co-Chair), David Bergstrom, Chi Chen, Brett Purdy, Isaac Amponsah, Chris Hale, Will Hughesman, Xiao Tan, Marty Yarmuch, Heather Bartlett

Terrestrial Sub Group (TSG) Aquatics Sub Group (ASG)

Terrestrial Sub Group (TSG) Update

The Terrestrial Sub Group is pleased to announce the completion and approval from RWG of the 2nd Edition of the Guidelines for Reclamation to Forest Vegetation in the Athabasca Oils Sands Region (The Revegetation Manual). In addition to receiving a great amount of input from member organizations of RWG and TSG, the Subgroup received a positive review from the Technical Peer Reviewer assigned to provide a scientific assessment of The Revegetation Manual. The TSG anticipates the submission of the document to the GoA pending CEMA approval at the December GM.

In addition to updating The Revegetation Manual, the TSG is charged with the production and continuing update of the Land Capability and Classification System for Forest Ecosystems in the Oil Sands manual (LCCS). As part of this process, the TSG will begin work in Q1 2010 to verify the assumptions used in this system and consider how to address the link between the LCCS and site index on reclaimed lands and incorporate the information the LCCS provides which is valuable to the process of reclaiming upland sites.

Best Management Practices Task Group (BMPTG)

The BMPTG is in the review phase of the first draft of the document describing Best Management Practices (BMPs) Guideline for Soil Salvage and Placement for Oil Sands Mines in the Regional Municipality of Wood Buffalo. Since January 2009, the BMPTG members have held meetings to discuss and provide extensive input to evaluate the BMPs to incorporate into the guideline. A finalized recommendation is expected in Q2 2010.

Hydrocarbon Task Group (HCTG)

The HCTG has successfully completed its mandate by finalizing the details of a research study to investigate petroleum hydrocarbons (PHCs) in mineral soil (Cg) located beneath peat deposits in the Athabasca Oil Sands Region to evaluate their effects on plants and soil fauna. This project is a follow-up to earlier studies funded by the HCTG on lean oil sands and tar ball toxicity and degradation. This study will provide data to support development of salvage and placement guidelines for soils containing indigenous PHCs. The Task Group will reconvene when the results from this study are submitted Q1 2011. The HCTG also provided recommendations on salvage of surface soil containing shallow hydrocarbons in a briefing note to TSG at the November meeting. The recommendations were developed based on the results of the lean oil sands and tar ball toxicity and degradation studies. These recommendations will be incorporated into the BMPs being prepared by the BMPTG.

Plot Network Task Group (PNTG)

The Plot Network Task Group is finalizing the review of the objectives of the long term monitoring plot network and evaluation of the methods and protocols utilized on the network. With the successful completion of 2009 field work, the rationale defining the objectives and evaluating the current protocols of the plot network is in preparation.

Forest Productivity Task Group (FPTG)

The FPTG will meet in Q1 2010 to begin work on developing a Growth and Yield Strategic Plan. The task group anticipates the plan for developing a G & Y program for reclaimed landscapes will assist in the development of members Forest Resource Plan (FRP) in 2011.

Alternative Regeneration Task Group (ARTG)

The TSG has approved the formation of a new task group to develop a recommendation on forest regeneration standards to be used by oil sands mining operations. The ARTG will meet in December 2009 to begin work on the development of Alternative Regeneration Standards for oil sands mines in light of the fact that the current base regeneration standards will cease to exist on May 1, 2010.

The ASG has recently initiated a review of the 2007 Guideline for Wetland Establishment on Reclaimed Oil Sands Leases ("the Wetlands Manual"). ASG has selected CH2MHill to lead this review after a competitive bidding process. CH2MHill will manage the review of the Wetlands Manual by experts in various disciplines relating to wetlands. The reviewers, who have been selected by ASG, will cover the following disciplines: hydrology & watershed design, aquatic ecology, biogeochemistry, toxicology, and wetland design/construction.

CH2MHill has prepared a participant's package that outlines project objectives, timelines and instructions. Reviewers are currently being instructed to provide their comments on the overall structure and approach of the report in relation to its intended audience, concepts, uncertainties and disagreements surrounding the information presented, points of clarification, missing/unclear information, gaps in the manual, and recommendations for future work. This review is not meant to provide editorial comments, rather, it is meant to indicate critical gaps and suggestions to consider for the next edition;

After the initial review, the ASG will have the opportunity to review the comments and respond to reviewers. The reviewers will then consider the ASG response and provide final comments. ASG will have the opportunity to provide input on the structure of the report prior to it being drafted and the final report will include a synthesis of all comments and recommendations. Comments will be clearly linked to the Wetlands Manual. It is expected that this report will form the basis for the development of the next edition of the Wetlands Manual.

Technology Transfer Task Group (TTTG)

The TTTG recently held its first series of meetings for the technology transfer process which is being led by TTTG Co-Chairs Jon Hornung from Suncor and Carla Wytrykush of Syncrude with the assistance of Gerry Haekel from ASRD, Theo Charette, the RWG Technical Program Manager, and Marsha Trites, the technology Transfer Technical Lead. The first series of meetings were two 2 day workshops with ecologists and toxicologists. The workshops went better than expected. The researchers were very excited and keen about the project and gave the TTTG thirty key messages that summarize key findings from research over the past five years, as well as directions for future research.

The next workshop is scheduled for January 27th and 28th with further workshops planned in 2010 and 2011 (four to six), which will lead to the production of other key messages and the production of the final draft by the end of 2011. The TTTG has adopted the following approach with the researchers being engaged:

- Detailed introduction of project objectives, outcomes, and participants, including a thorough introduction of the TTTG team;
- One on one consultation with researchers to encourage thinking about how their research applies to reclamation;
- Small technical sessions with a maximum of 10 participants for small group discussions which allow even the most timid of participants to share their thoughts;
- Larger workshops restricted to researchers and their peers to confirm key messages from technical sessions. Researchers must be comfortable enough to confirm these messages;
- "cells" of researchers sharing ideas and criticisms securely, in person and online.

All in all, the TTTG is very enthusiastic about progress so far and many good things are expected to come from this process.

End Pit Lakes Modelling Task Group (EPLMTG)

The EPLMTG recently confirmed Andrews Takyi of Total as its chair and has initiated its Oil Sand End Pit Lake Physical/Biochemical Model Development with Golder Associates after a competitive bidding process. The EPLMTG drafted a conceptual model (included with the RFP) that includes a list of the main processes that eventually must be included in the models. The EPLMTG intends to tackle each process in a staged approach. The EPLMTG identified three inter-related critical processes that are to be addressed at this time:

1. Gas (methane, sulphide, ammonia, etc.) production and release from tailings may impact lake mixing and oxygen demand (see item 3 below).
2. Mature fine tails (MFT) consolidation rate. Lake deepening due to MFT consolidation is potentially a very important process. Impacts lake depth (and thus lake mixing, etc.) and tailings pore water release into the overlying water column; and
3. Inclusion of a lake-bottom oxygen consumption module, which is a function of chemical and biological oxygen demand at the sediment/water interface and in the overlying water column. Oxygen is important in determining the naphthenic acid degradation and concentration in surface waters. Naphthenic acids are the most toxic component of oil sands mine process-affected water.

Golder will be expected to preserve the functionality of CEMAs existing Phase II model, as well as add the three functions identified above. Tasks included in this process are as follows:

1. Agreement on physical-biochemical model platform to describe spatial and temporal data in pit lake systems. Agreement on modelling approach, construction, inputs, etc.;
2. Model construction. Import existing Phase II model functionality and build new functions.
3. Rigorous model testing by proponent.
4. Peer-review of outcomes. Peers to test model as well. Consultant to recommend 3 peers.
5. Recommendation on work plan for future work and to compare model results with detailed field observations.

End Pit Lakes Guidelines Task Group (EPLGTG)

With the completion of the review of the previous edition of the End Pit Lakes (EPL) Technical Guidance Document the EPLGTG has been working towards agreement on a proposed Table of Contents and structure that will be put in place for the development of the next edition of the Technical Guidance Document. It is expected that the structure adopted for the development of the EPLTGD will guide the development of the next edition of the Wetlands Manual as well.

The EPLGTG has developed a proposal for the roles and responsibilities for a managing editor to assist in the development of this document. This individual will assist in identifying the target audience of the EPLTGD; assist in the finalization of the draft table of contents; and assist the EPLGTG with the selection of authors for individual chapters of the guidance document. It should be noted that CONRAD is currently engaged in an EPL Technology Transfer process, the results of which will be critical in the development of the next edition of the EPL Technical Guidance Document. The EPLGTG will be working very closely with the CONRAD committee leading this process and is planning a meeting with this group in Q1 2010 to further scope out the process going forward.