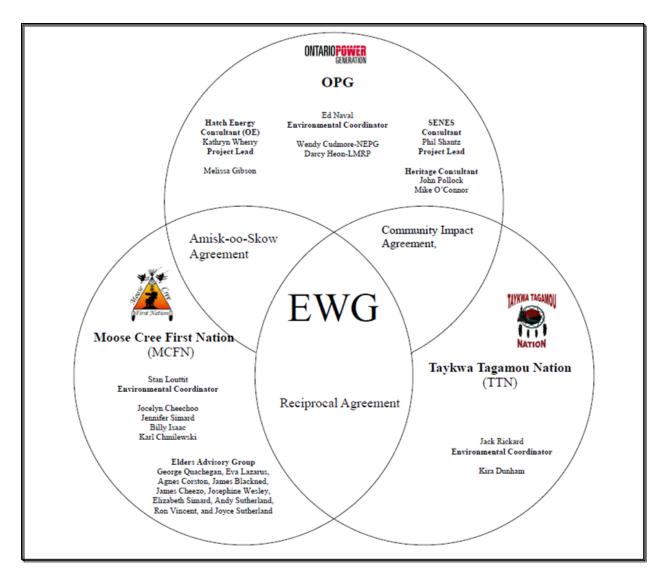


Environmental Working Group

Monthly Report

December 2011

ENVIRONMENTAL WORKING GROUP Relationship Organizational Chart



- Weekly Environmental Working Group (EWG) and EWG/Kiewit Alarie, a Partnership (KAP) meetings.
 - The EWG review its Action Items that include priority permit reviews, and deliverables to the Mattagami Extensions Coordinating Committee (MECC).
 - > KAP gives EWG a construction up date every week and discusses any upcoming issues and/or urgent permit reviews.
 - Specific items that were discussed are below.
- OPG and Hatch members of the EWG submitted information for the drafting of the Environmental Effects Monitoring Workshop Report.
- Ongoing review and compilation of Traditional Ecological Knowledge (TEK) for the Lower Mattagami River Project.
- Review and revision of Cost Benefit Analysis of Reducing Spill in Adam Creek based on further EWG comments. Currently working on revision No. 4. Ongoing discussions regarding Term and Condition 4 c.
- Face to face EWG meeting on December 14, 2011.
- Operation Overview Report was revised to incorporate EWG comments.

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|--|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|
| Environmental Effects Monitoring Workshop | | | | | | | | | | | | |
| Environmental Assessment (EA) Variances – EWG Review and | | | | | | | | | | | | |
| Submission to MECC | | | | | | | | | | | | |
| EA Terms and Conditions Environmental Compliance Plan – EWG | | | | | | | | | | | | |
| Review and Submission to MECC. | | | | | | | | | | | | |
| EWG Terms of Reference (ToR) – Submission to MECC | | | | | | | | | | | | |
| EWG Work Plan – Submission to MECC | | | | | | | | | | | | |
| EWG Environnemental Due Diligence Audit #1 | | | | | | | | | | | | |
| Environmental Audit – Accreditation Training | | | | | | | | | | | | |
| EWG presentation to the MECC the LMRP "Operations Report" | | | | | | | | | | | | |
| (Condition 4(a) of EA T&Cs). | | | | | | | | | | | | |
| The MECC were presented the draft "Fish Habitat Assessment | | | | | | | | | | | | |
| Report", and "Baseline Fish Methyl Mercury Report" (Condition 4b. of | | | | | | | | | | | | |
| EA T&Cs) by Hatch. | | | | | | | | | | | | |
| The MECC were presented the draft "Cost Benefit Analysis of | | | | | | | | | | | | ĺ |
| Mitigating and Reducing Adam Creek Spill" (Condition 4(c) and (e) | | | | | | | | | | | | |

ACTIONS COMPLETED in 2011

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|--|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|--------|
| of EA T&Cs) by Hatch. | | | | | | | | | | | | |
| EWG present to the MECC the methods and means of ensuring that | | | | | | | | | | | | TBD* |
| restrictions on hunting and fishing (Condition 5(a) and (c) of EA | | | | | | | | | | | | |
| T&Cs). | | | | | | | | | | | | |
| EWG present to the MECC "Terrestrial Habitat Restoration | | | | | | | | | | | | TBD* |
| Downstream of Kipling GS" (Condition 5b. of EA T&Cs). | | | | | | | | | | | | |
| EWG present to the MECC a Public Information Program to | | | | | | | | | | | | TBD* |
| communicate the results of fish methyl mercury baseline reports | | | | | | | | | | | | |
| (Condition 7(a) and (b) of EA T&Cs). | | | | | | | | | | | | |
| EWG present to the MECC the cumulative effects data developed | | | | | | | | | | | | TBD* |
| during the Federal EA process (Condition 8(a) and (b) of EA T&Cs). | | | | | | | | | | | | |
| Draft of Traditional Ecological Knowledge in relation to the Lower | | | | | | | | | | | | TBD in |
| Mattagami River Project. | | | | | | | | | | | | 2012 |
| EWG present to the MECC the results and recommendations of | | | | | | | | | | | | TBD in |
| periodic re-evaluations (Condition 10 of EA T&Cs). | | | | | | | | | | | | 2012 |
| EWG present to the MECC "Hydroelectric Generating Facilities | | | | | | | | | | | | TBD in |
| Decommissioning Plan" (Condition 11(a) of EA T&Cs). | | | | | | | | | | | | 2012 |
| EWG present to the MECC "The Noise Protocol Plan" (Condition 18 | | | | | | | | | | | | TBD in |
| of EA T&Cs). | | | | | | | | | | | | 2012 |

*The MECC will communicate to the EWG the priority list of reports to be presented.

Construction

General

 Permanent Camp – Installation of the last phase of dormitories was completed on December 6th. Approximately 860 rooms are available on site with the completion of the last phase of dormitories.

Smoky Falls

- Work on the winter shelter continued throughout the month of December, and was completed prior to the Christmas shutdown (Figure 1). Over the Christmas period, the heaters were kept on to maintain a constant temperature inside the shelter (Figure 2).
- Concrete pours in the service bay and intake areas continued, with a total of 300 m3 of concrete poured from December 3rd to December 23rd. Rebar and form work continued in the powerhouse and draft tube areas when overhead work was not under way.
- Preparations continue to reconstruct the Smoky Falls Unit 2 / Unit 3 bullnose. Drilling for form anchors, the installation of formwork, and anchor sleeve installations are progressing.
 Excavation operations (drill and blast) in the wet tailrace progressed until mid-December and were then put on hold until spring 2012.
- Excavation and blasting of the abutments for the permanent bridge was completed before the Christmas shutdown.



Figure 1: Smoky Falls Winter Shelter



Figure 2: Smoky Falls Powerhouse from east wall

Little Long

- Concrete work is progressing well, with 894 m3 of concrete poured in the powerhouse and intake areas. Work has continued to advance at an accelerated pace. Little Long is back on plan (Figure 3).
- AFI Hydro mobilized equipment and materials required for mud removal at the G3 intake Gate cavity between the bulkhead and intake gate. Initial efforts to remove mud were unsuccessful due to continuous water seepage. Outage planning is in progress to allow divers to seal the bulkhead stop logs prior to further mud removal.



Figure 3: Little Long Shelter

Harmon

- 52 m³ of concrete was poured in the powerhouse sump.
- Rock breaking continues in the powerhouse area.
- The winter shelter erection was completed prior to the Christmas shutdown (Figure 4).
- Efforts to minimize the sluiceway gate leakage continue. The gate was briefly opened to remove most of the accumulated ice. This was so successful that it was proposed as a daily task to manage undesirable ice formation.



Figure 4: Harmon Winter Shelter

Kipling

- The concrete cap on cofferdam Cell #3 was completed with a 258 m3 concrete pour.
- The template for Cell #2 was moved into position for installation. A fault zone containing clay, old timber and miscellaneous debris was discovered beneath the cell footprint. This created a need for additional engineering work, and the result was that Cell #2 was not able to be installed prior to the Christmas shutdown. The template was removed and placed on flexi-floats within the cofferdam area over the Christmas shutdown period (Figure 5).



Figure 5: Kipling Template #2 removed

| SPILL | .S | | | | | | | | |
|---|---------------------------------|-------------------|---|--|--|--|--|--|--|
| No. of Spills: 2; Spill Reports 180-181 (see Figure 6 for LMRP spills | | | | | | | | | |
| | | | breakdown). | | | | | | |
| Classification of Spills: | | | Project Classification | | | | | | |
| | | | Minor – 2 Moderate – 0 Major – 0 To Water - 0 | | | | | | |
| | | | | | | | | | |
| | | | MOE Classification | | | | | | |
| | | | Non-reportable - 2 | | | | | | |
| | | | Reportable to MOE | | | | | | |
| | | | - Class C - | - 0 | | | | | |
| | | | - Class B - | - 0 | | | | | |
| | | | - Class A - | -0 | | | | | |
| <u>Repo</u> | rtable Spills | <u>s</u> | · | | | | | | |
| No. | Quantity / | Product Spilled | Spill Site | Reason for being Reportable | | | | | |
| 0 n/a | | | n/a | n/a | | | | | |
| Project Classification (KAP) | | | | MOE Classification | | | | | |
| Minor: ≤ 10L | | | | Non-reportable: < 100L | | | | | |
| Moderate: Between 10L and 100L | | | | Reportable to MOE | | | | | |
| Major: ≥100L | | | | Class C - Less Serious | | | | | |
| | • | amount is reporta | Class B – Serious | | | | | | |
| (See Figure 7: KAP Spills Response Flowchart) | | | | Class A – Very Serious | | | | | |
| | | | fluent Objective (>15mg/L | - | | | | | |
| - | No. of | Location | Mitigation Measures used | | | | | | |
| - | eedance | | | | | | | | |
| days | recorded | | | | | | | | |
| | ater, which had previously been | | | | | | | | |
| | 6 | | | charging directly back into the river, was redirected to the | | | | | |
| | Ο | | sediment pond. The addition of the clean seepage water seems | | | | | | |
| | | | to have diluted the pond enough to bring it back under the effluent objective of 15 mg/L. | | | | | | |
| entuent objective of 15 mg/L. | | | | | | | | | |

Monthly Summary – December 2011

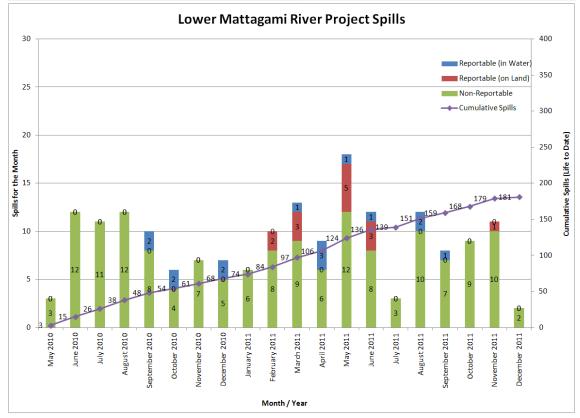


Figure 6: Lower Mattagami River Project spills

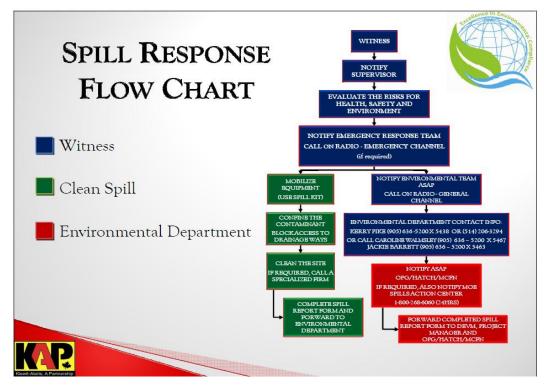
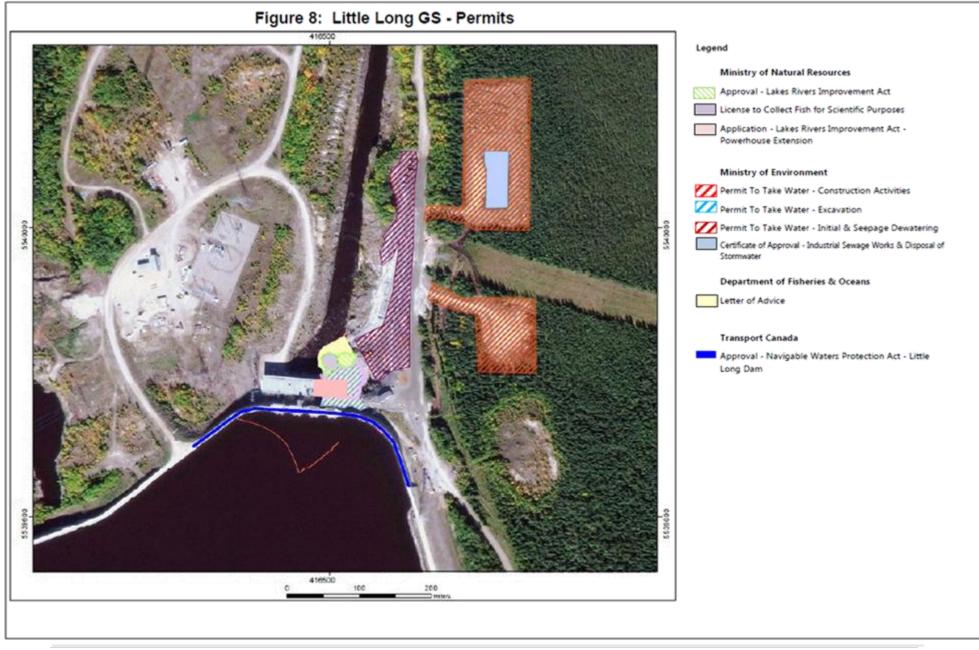
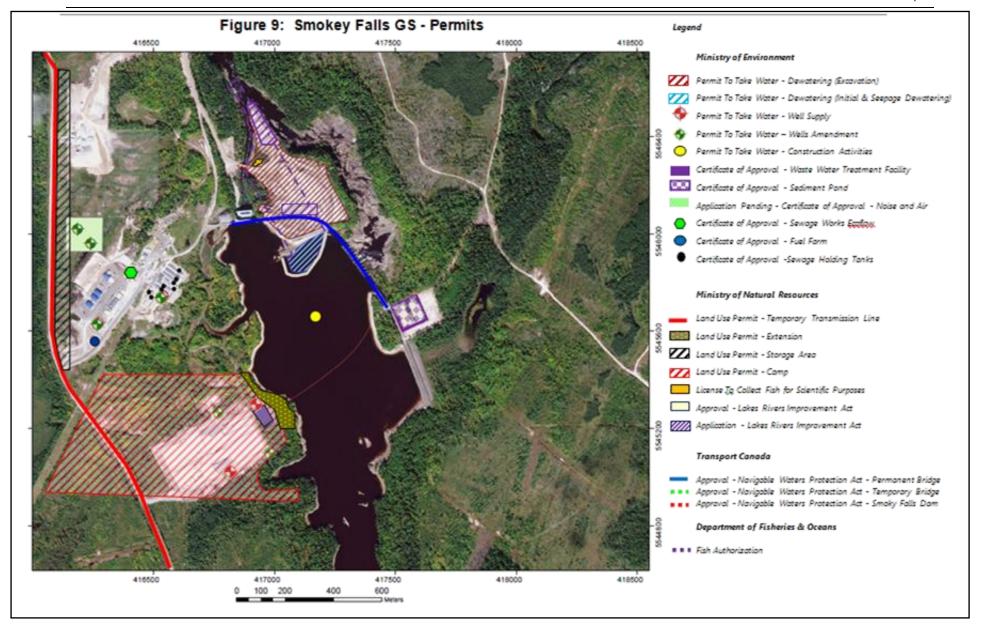


Figure 7: KAP Spills Response Flowchart

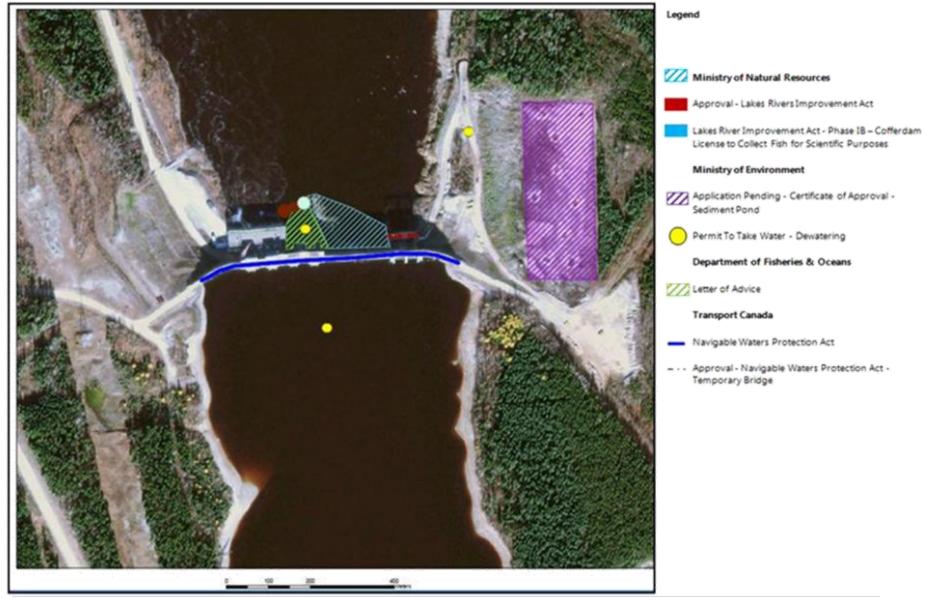
| | 1 | | Transmission Line Clearing |
|-----------------------|----------|------------|---|
| | | | Certificate of Approval (CofA) |
| | | | Amendment Application |
| No. Sent to | 1 | List: | Work Permit Application - Permanent |
| KAP: | | | Transmission Line Clearing |
| Reports Review | | | |
| No. Reviewed | 0 | List | n/a |
| for KAP | | | |
| No. Sent to KAP | 0 | List | n/a |
| No. Reviewed | 3 | List | On-going: |
| for MECC | | | • Cost Benefit Analysis of Mitigating and |
| | | | Reducing Spill in Adam Creek. |
| | | | Operation Overview Report. |
| | | | Baseline Methyl Mercury Reports and |
| | | | Mercury in Fish Flesh Summary Report. |
| No. Review | 0 | | n/a |
| Completed | | | |
| REQUESTS FOR | INFORMAT | ION (RFIs) | |
| No. Reviewed: | 0 | List: | n/a |
| No. Sent to | 0 | List: | n/a |
| KAP: | | | |

Lower Mattagami River Project

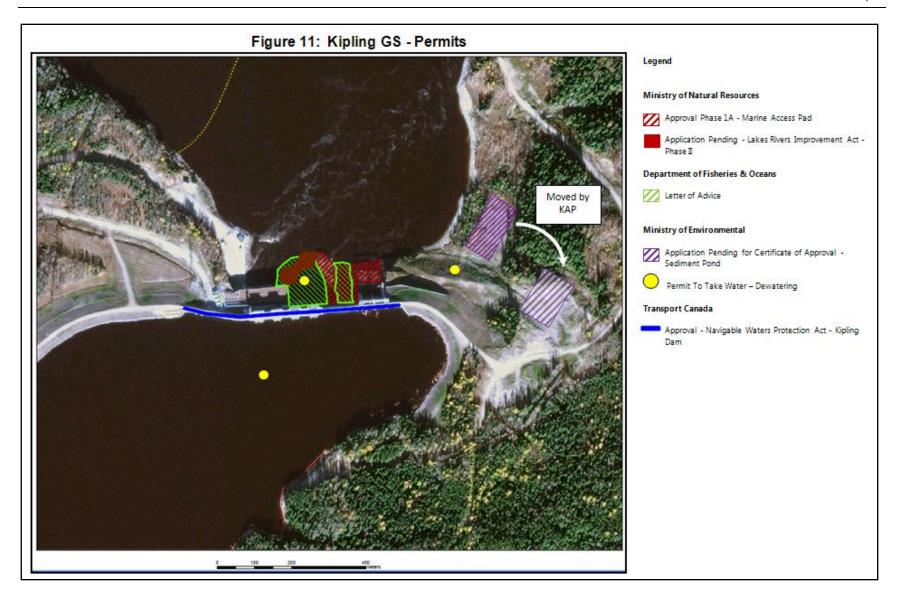








10 | P a g e



Issues and Concerns

• MCFN members of the EWG were concerned with the idling of trucks near the permanent camp. The exhaust from the trucks was being inhaled by workers coming out of the camp.

Action Required: The EWG will ask KAP if the trucks can be moved or idling can be minimized.

• MCFN members of the EWG were concerned that EA reports did not include First Nation perspectives and aboriginal knowledge.

Action Required: The EWG will revise EWG flowchart to include TEK step to make sure it's being considered in all studies or reports.

• MCFN members of the EWG re-evaluated the EWG EA reports review process.

Action Required: EWG EA report review process and flowchart will be adjusted accordingly.