

# Minutes of Meeting

## Vermilion River Stewardship

Tuesday, June 19, 2013

7:00-9:30 pm

379 Ronka Road

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Present: Linda Heron, Terry Little, Lesley Flowers, Dale Kilbey, Sheri Purdon, Marc Samson, Bob Little, Betsy Little, John Healy

**1. Adoption of Agenda:**

Moved by Dale Kilbey

Seconded by Leslie Flowers - Carried

**Adopted**

**2. Adoption of Minutes of Meeting**

- **March 26, 2013**

Moved by Mark Samson

Seconded by Dale Kilbey - Carried

**Adopted**

**3. Reports**

- **Executive Report – Attached as Addendum 1 – Highlights below**

- a) Site visit to Cedar Rapids with Waterpower Group. Dave Kilgore is supporting the project. No peaking or cycling proposed. Eleven meter drop on the dam is planned. They are offering to build a bridge for a walking trail along the old rail bed. No FIT contract has been awarded for this project.
- b) David Pearson gave an excellent presentation on talking science and engaging audiences. Tips on keeping overheads simple and more detail on handouts.
- c) Linda presented at the 20<sup>th</sup> Annual St Lawrence River Symposium and learned more about methyl mercury and need for sediment sampling.

- **Correspondence:**

- a) Response from Arlene King, Chief Medical Officer for the Sudbury District Health Unit regarding signage for blue green algae on Ella Lake. The letter did not recommend signage as it was felt to be “alarmist”. The normal protocol is to notify immediate residents and post on their website.
- b) Letter was sent to the City from the Green Space Advisory Panel asking to protect the island off Centennial Park in order to prevent development for the At Soo Crossing power plant. The land currently belongs to Vale.

- **Finance**

Brad Benson donated \$500 to the VRS and there was \$145 in memberships so there is \$1269 in the general account. Two checks have been written to Conservation Sudbury, one for \$5000 for technicians and one at \$3609 for laboratory analyses fees. The second round of funding from Trillium for \$24,325 has been received so there is \$42,200 in the grant account.

Adoption of reports moved by Dale

**4. Old Business**

**Lower Vermilion Source Water Quality Monitoring Project - Update**

- One full round of sampling has been done in May. The lake partner program has been working well for transportation on the lakes.
- Sediment core sampling is to be done by Queens University on Vermilion and Wabagishik Lakes in 2013. Simon and Cascade will be done in 2014. Results will become a 4<sup>th</sup> Year thesis. Cost will be \$2000 for lab work which will be offset by \$4000 savings from overlapping water sampling by Conservation Sudbury. Transportation will be needed for this project.

**Blue Green Algae on Ella Lake**

- Al Gereghty, the engineer responsible for repairs at the Lorne Falls dam, sent Linda a hydrograph for Ella Lake for last year. They are increasing the size of the bypass gates in preparation for anticipated extreme rain events due to climate change.

**Vermilion River Hydroelectric Proposals**

- McPherson hydro dam project has been dropped by Xeneca.
- All 17 chiefs of the Robinson Huron Treaty area have notified MNR and MOE regulators of their support for Chief Miller of the Whitefish Lake First Nation in his opposition of the proposed hydro development on the Vermilion.
- In an email exchange, the MOE and MNR regulators refuted a statement by Xeneca that the regulators discourage making public the draft EA report for a project. The regulators stated that the opposite is the case in order to prevent Part II order requests when the EA report is made public.

**Fundraising**

- Fundraising membership cards were distributed.
- The Lake Advisory Panel awarded VRS a grant in the amount of \$454 towards producing a VRS brochure.

**Action:** Betsy, Sheri and Linda volunteered to be on a committee to produce the brochure.

**Xstrata Zinc**

- VRS representatives met with Xstrata team on June 12<sup>th</sup> (**Addendum 2**) who gave a very comprehensive presentation on the Errington Vermilion Mine project. It does not require an EA but they seem to be doing and plan to do all the right things to protect the VR watershed.

**5. New Business**

**KGHM International – Victoria Mine Project – Public Meeting**

- KGHM (former FNX) is developing a mine on the Victoria Mine site and are having an open house on July 3<sup>rd</sup> in Lively.

**Large Renewable Energy Projects**

- Large renewable energy projects (greater than 500 KW) are being removed from the FIT program and procurement will now be done through a bidding process.

- The MNR is moving to a larger regional approach where they may not be familiar with the local conditions.

**Annual General Meeting**

- The AGM will be in October.

**Motion:** Betsy and Leslie will form a committee to review and audit VRS books.

Moved by Sheri Purdon

Seconded by Marc Samson.

**Carried**

**Walden Waste Water Treatment Facility**

- The final Environmental Report for Walden Waste Water Treatment facility, including tertiary treatment, is due out this summer.

**Next Meeting:** Wednesday, September 11th, 7PM at the Beaver Lake Sports & Cultural Centre

# Addendum 1

## Vermilion River Stewardship

### EXECUTIVE REPORT

19 June 2013

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#### Report from Chair

#### Meetings:

- **13 May 2013** – MNR Water Management Plan Review Meeting – Huntsville.
- **15 & 16 May 2013** – 20<sup>th</sup> Annual St. Lawrence River Symposium.
- **21 May 2013** – Talking Science & Engaging Audiences – workshop by Dr. David Pearson
- **25 May 2013** – Sudbury Garden Festival – volunteered to help GSWA with display booth.
- **6 June 2013** – GSAP meeting with City Planners – Official Plan Input
- **12 June 2013** – Xstrata Zinc held an information session for our Board at the Beaver Lake Sports & Cultural Club. [Vermilion and Errington proposed mine developments](#). See presentation posted on our VRS website.
- **13 June 2013** – Site visit with Waterpower Group to proposed Cedar Rapids waterpower site – Capreol.
- **17 June 2013** – GSWA Board Meeting

#### Presentation:

- **10 May 2013** – Penage Women’s Institute – Green Energy Gold Rush  
The presentation reviewed the many challenges to the Vermilion River, Wanapitei River, and Ontario rivers all across Ontario – with a focus on the Green Energy Act. Well received with a large group in attendance.
- **16 May 2013** – 20<sup>th</sup> Annual St. Lawrence River Symposium – Green Energy Gold Rush  
The presentation reviewed the many challenges Ontario rivers are experiencing – with a special focus on the Green Energy Act. MNR, MOE, DFO representatives in attendance – well received.
- **23 May 2013** – Sudbury Voices – Our City of Lakes  
The presentation was about the challenges on the Vermilion, what Vermilion River Stewardship is doing, and what others can do to help.
- **14 June 2013** – Presentation at Royal Bank – Blue Water Day  
Presentation regarding Our City of Lakes – well received.

#### Correspondence:

- **30 May 2013** – [Response to VRS from Dr. Arlene King](#) – Chief Medical Officer of Health – Signage – rejected our request and referred us to SDHU response to France Gelinias, dated 27 March 2013.

- 9 May 2013 – [Join letter to City of Sudbury](#) in strong support of Terry Kett's motion to immediately begin work on Watershed Studies when waterways will be impacted.

Linda Heron

# **Addendum 2**

## **Meeting Notes**

### **VRS & XSTRATA ZINC**

#### **Errington - Vermilion Mine Project**

Wednesday, June 12th, 2013, 10:00 am to 2:00 pm

Beaver Lake Sports & Cultural Centre

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**PRESENT:**

**VRS:** Linda Heron, Sheri Johnson Purdon, Al Stanley, Terry Little, Dale Kilbey, Neeltje Van Roon, Bob Little, Betsy Little, Ken Shamus

**Xstrata:** Brad Ryder (Corporate Affairs), Aline Cole (Project Director), Richard Schwenger (Reclamation Project Manager), Dana Wilson (Waste water treatment), Steve Aiken (Knight Piesold Ltd Environmental Consultant), Jason (Knight Piesold Ltd Environmental Consultant)

**PURPOSE:**

After an initial meeting with Xstrata on May 4<sup>th</sup>, VRS requested a further meeting to go over detail plans for water usage, containment, and treatment with Xstrata's planning team for this project.

**1. Opening Remarks by Brad Ryder – [Vermilion – Errington Project - Presentation](#)**

- Brad thanked everybody for attending and noted that Xstrata has been amalgamated with Glencore and a new logo is being rolled out.
- Mine development, via ramp access, is expected to begin in 2014 on the previous Errington mine site (brownfield) near the confluence of the Whitson and Vermilion Rivers.
- Production ore shipments, by truck, to the Strathcona mill site (Levack) are expected by 2016 at 2900 tons per day.
- The deposits are Lead-Zinc as opposed to Sudbury's traditional nickel-copper deposits. The deposit is small with an expected life of 7-10 years
- Glencor, formerly known as Xstrata or Falconbridge plus Noranda and Bathurst, has experience with this type of mining and milling in Canada.
- Have an excellent safety record plus experience in mine closures.
- Linda asked if the commitment to safety and the environment will continue with Glencore. Brad stated that Glencore had been a majority shareholder in Xstrata and is familiar with their values.
- The same Xstrata people involved in the development will continue to be involved.

**2. Geology of the Deposit by Aline Cole**

- Aline explained that since 2010 her team has rebuilt the ore body model from the old drill data.

- The Errington deposit has about 6 million tons of 4% zinc, 1.2% copper, 1% lead plus minor silver and gold and the Vermilion deposit has 2.5 million tons of a similar grade.
- Since 2010 Xstrata has drilled 60,000 meters to depths of 400 meters to provide more data for the mining model and processing analyses.
- The Vermilion deposit is smaller and 5Km west of Errington but will not be mined until Errington is finished.
- There is potential for more ore at depth at Errington but that will be extracted before Vermilion begins
- The milling, concentrating and tailings disposal will be done at an existing facility and tailings disposal area at Strathcona.
- The permitting for this area will be amended to accommodate the different ore type and comingling of the different type of tailings.
- The dry concentrate will be trucked to Montreal and Noranda for further processing.
- No crushing will be done at the Errington site.
- The surface ore stockpile (up to 30,000 tons) and truck loading area (dirty side) will be lined and ditched to collect any runoff to be sent to the effluent treatment facility.
- Vehicles leaving this area will pass through a truck wash to remove ore from tires and undercarriage before entering the “clean side” of the operation.
- Aline stated that this ore type does not ‘dust’ so surface stockpiles will be open to the environment.

### **3. Water Treatment by Richard Schwenger**

- Baseline studies have been undertaken since 2011. These include hydrology and analysis of surface and groundwater samples.
- Groundwater samples were taken from 4 previously drilled monitoring holes, 12 newly drilled holes, plus boreholes drilled into the old mine workings to determine treatment measures needed for dewatering the old workings.
- Ore and waste rock samples were taken from recent drilling which determined that they are acid generating so water from the ‘dirty side’ of the mine will be treated by the effluent treatment plant.
- Surface water samples were taken from the Vermilion and Whitson rivers as well as Vermilion Lake as well as sediment samples. Water samples are taken seasonally.
- Packing and response testing of the wells was done to determine potential groundwater flows into the future workings in order to design pumping and treatment systems.
- All of the waste rock will be used as cemented backfill during the mining process. No waste rock will be left on surface at closure.
- Cementing the backfill mitigates the acid generating process.

- As part of the closure process water coming from the mine will be treated and monitored as per MDM closure regulations (~5 years)
- Current sampling on the Whitson River upstream and downstream of the mine site indicates the impact of the current mine site (mine workings, plus former ore, waste and tailings sites) is very negligible.
- The future ore, waste rock, load out and water treatment pond will be dammed, moated and lined with an impervious layer (currently planned to be high density polyethylene).
- Species at risk (Blanding turtles and whippoorwills) were not encountered during the observation period nor has there any historical sightings.
- The condition of the fish population was good and no abnormalities were noted. Metal scanning (mercury) was done and results will be made available.
- Stage two archeological study was done and no artifacts were found other than evidence from the period of the previous mining.
- A packaged sewage treatment plant will be used to treat water from the showers and washrooms.
- Solids will be shipped out and treated water released.
- Specs for the plant will be made available to VRS.
- VRS concern is whether phosphates will be removed.
- Treated water from the effluent treatment plant released to the Vermilion will be about 1000 L/Min compared to the annual flow of 180,000 L/Min in the river.
- Treated water from the sewage treatment will be released to the environment to make its way to the Vermilion through seepage at about 150 L/Min.
- The plans for the effluent treatment are to exceed the effluent water quality standards.
- The treated water from the effluent treatment plant will be mixed with Vermilion River water in a “mixing zone”, the size of which is yet to be determined. The resulting water will meet provincial water quality standards.
- The treated water temperature will be ambient and the PH will be neutral.
- The plant will be automated and monitoring of PH, suspended solids, and dissolved solids will be continuous.
- The VRS concern is that existing, and future, inputs from mining and sewage treatment will have a cumulative effect on the river.
- At closure the ore and waste pad liners will be put into the ramp access, all buildings and plants will be removed.
- The foundation for the maintenance garage will be removed.
- The ventilation, cement hole and shafts will be capped.

- Once the MDM closure regulations have been met the water treatment pond liner will be put into the ramp, the packaged effluent treatment plant will be removed then the site will be graded and vegetated.
- VRS requested that if Xstrata has to restrict recreational access to the Vermilion on their site that they provide alternate access at another point. Brad agreed to ensure river access.
- Noise from the proposed ventilation fan on surface at Errington is behind a ridge away from residences so noise should not be a problem.
- At Vermilion this is not the case so Xstrata is looking at putting the ventilation fan underground.
- A background noise study is being undertaken.
- Eighteen permits are being, or have been obtained, as per the slide presentation on the VRS website
- Consultation with First Nations groups is ongoing and public meetings are being held.

#### **4. Closing comments by Aline, Rick and Linda**

- Xstrata expects to have the closure plan approved this year, and the mining plan completed by the first quarter of 2014, for approval by Glencore management to begin construction with ore production expected in 2016 at Errington.
- The biggest challenge appears to be the Aboriginal consultations.
- During the merger with Xstrata, Glencore was forced by the European Union to sell some of its Zinc production. Glencore chose to keep the Errington – Vermilion property which indicates that there is a strong chance that the project will go ahead.
- Linda thanked the Xstrata team for their openness, and for their very informative presentation. It was noted that it was refreshing to have a mining company seek out the VRS to get our input and insights into making a better and more environmentally friendly project. Their approach has built trust and confidence in Xstrata, and their project.

#### **5. Social**

- Xstrata team arranged for the Beaver Lake Sports & Cultural Club to provide a delightful repast.

**Next Meeting:** Wednesday, June 19<sup>th</sup>, 7PM at the Beaver Lake Sports & Cultural Club