

July 25, 2008

Minnesota Department of Natural Resources
Division of Ecological Services, Box 25
Attention: Randall Doneen
500 Lafayette Road
St. Paul, MN 55155-4025

Comments on Teck Cominco mandatory EAW, exploration sampling with the potential for significant environmental effects

I request a full Environmental Impact Statement, based upon the following:

1. This sampling will disrupt sulfide bearing rocks with the potential for acid mine drainage.
There will be broken rock on the site. "Borrow material will be compacted in and around any broken mineralized rock, as well as 2 feet above it, to minimize water percolation." All of this indicates the potential for AMD. In a situation such as this, AMD might not become apparent for several years. There is no indication of monitoring for this possibility in the EAW.
2. This sampling will require access roads, the clearing of vegetation, and the use of mining equipment such as 40 ton trucks, 16 sidedump tractor trailers, 5000 gallon water tankers, and diesel fuel generators. This is a mini-mining project which will create noise, drilling, blasting, dust emissions, air pollutants, and the potential for grease and fuel spills. The EAW does not include enough monitoring, oversight, or plans for treatment of potential contamination. The amount of land required for access roads to handle this size equipment should be worth an EIS in itself.
3. The final destination of this sampling is not indicated in the EAW. Evidently the 1st sampling in 2001 was sent to Montana. Some form of oversight is needed when transporting potential acid producing material great distances.
4. The EAW does not include an assessment of cumulative effects on wildlife, air, vegetation, and water pollution. The EAW does mention taconite mines, power generating facilities, the proposed steel plant, Mesabi Nugget, and the proposed Polymet project. It does not include exploration already in progress by Franconia, Duluth Metals, Encampment, and other exploration by Teck Cominco. What is the straw that breaks the camel's back?
5. The EAW does not include alternatives. The EAW does mention that a similar sample was taken by Teck Cominco in 2001. I believe that an EIS needs to evaluate whether a second sample of this size is necessary, or whether other types of assessment could be used.

6. The EAW does not evaluate the effect of loss of peatlands which sequester carbon and the effect on local climate change. Wetlands are mentioned but not evaluated as to quality.

7. These wetlands are adjacent to the Partridge and Dunka Rivers. The Partridge River will be impacted by the proposed Polymet project, and is currently receiving sulfates from leaching tailings on the former LTV site. The Dunka area is already contaminated with heavy metals from the Dunka Pit site. Hydrological studies need to determine the impact that potential AMD from this sampling would add to the cumulative effects.

8. The sampling is scheduled to take place during the latter part of the summer, under dry conditions. Since public comment on the mandatory EAW is due on July 29, 2008, how is it that this sampling project is projected to commence in August of 2008? If the DNR has already reached a foregone conclusion in regard to this project, even though it has potential significant environmental effects, then what part of public policy is this mandatory EAW neglecting to follow?

9. An EIS needs to clarify how the "quantity and quality of the site runoff will be similar to before the project" and the time needed for full restoration of any such sampling site to its former quality/diversity of plant and tree species and ability to sustain habitat for the enumerated species. For example, I don't see how the grasses suggested for reclamation resemble true native vegetation. The addition of fertilizer indicates that soil disruption would be too extensive to vegetate naturally within a reasonable period of time.

I believe that the ecological division of the DNR is designed to perform this kind of further indepth analysis; and that a mandatory EAW mandates a thorough environmental process - *a complete EIS.*

Sincerely,

Elanne Palcich
29 SE 5th St.
Chisholm, MN 55719

Elanne Palcich

TO: Minnesota Department of Natural Resources
Randall Doneen, Environmental Review Planning Director
Email: environmental.review@dnr.state.mn.us
with "Teck Cominco" in SUBJECT line

RE: Project title: Teck Cominco American Incorporation Metallurgical Sampling Project

FROM: Diadra Decker email: diadra@att.net

DATE: July 28, 2008

This writing comprises my comments on the EAW (Environmental Assessment Worksheet) prepared by Teck Cominco American Incorporated (hereafter, TCAI).

According to "4410.2000 PROJECTS REQUIRING AN EIS.

Subpart 1. Purpose of EIS. The purpose of an EIS is to provide information for governmental units, the proposer of the project, and other persons to evaluate proposed projects which have the potential for significant environmental effects, to consider alternatives to the proposed projects, and to explore methods for reducing adverse environmental effects.

Subp. 3. Discretionary EIS. An EIS shall be prepared:

A. when the RGU determines that, based on the EAW and any comments or additional information received during the EAW comment period, the proposed project has the potential for significant environmental effects;"

An EIS (Environmental Impact Statement) is hereby requested for the project for the reasons outlined below.

1) There is significant potential for environmental impact, due mainly to disturbing sulfur-bearing rock, which causes acidification under most circumstances when increased surface area, air and moisture are present. Not all circumstances that could create acid and/or toxins from the "sampling" sites have been accounted for in the EAW, nor mitigation plans delineated.

2) This "sampling" project is a pilot strip mine, exceeding the scale of exploratory drilling by a significant margin. That similar sample extraction was allowed in 2001 does not imply a commitment to do so now. There are no alternatives to the project mentioned in the EAW.

Considering that the ultimate purpose of these small test mines is to evaluate the feasibility of developing a full-scale mine, one example of an alternative that may be preferable to minimize environmental impacts is the use of shaft mining techniques instead of surface/strip techniques, in order to disturb as little of the surface as possible and expose as little sulfide rock to air and moisture as possible. There is abundant evidence from industry activities that disturb sulfur-bearing material indicating that the damage caused by strip mining techniques far surpasses deep extraction. Therefore, a better evaluation of a possible preferred alternative could be made by using deep

extraction for the test mines in this project.

3) The project description given in the EAW is incomplete in several important respects (in approximate order of worksheet):

- Construction of access roads to the two sites may create significant impacts.
- The SWPPP is missing, so it is not possible to assess adequacy of the plan to handle storm water.
- It is not certain that, in clearing topsoil and overburden, no sulfur-bearing material will be disturbed. "... from past experience, the bedrock surface will be very irregular." If the stored material does contain sulfides, the design of the storage area would need specific features to prevent development and migration of acid. Additionally, the use of this material for backfill may not be appropriate due to potential future acidification.
- Beyond mounding of the finished topography of reclamation, there are no strategies to ensure subsurface water does not collect and percolate or otherwise migrate through the disturbed material, causing acid drainage to groundwater or surface water.
- The pulverization of sulfide rock during excavation and the fracturing of pit walls and floor due to use of explosives will create access by air and moisture that is virtually certain to develop acid and leach toxic metals into the water medium present. Pit surfaces will still be reactive after closure. There is no acknowledgment of this, even though it will be necessary to design and implement strategies to prevent release of this acidic water.
- The precautionary principle of preventing future damage is extremely important, but not adequately addressed. Site reclamation should require, at a minimum, long-term (I suggest a minimum of 20 years) monitoring of acid mine drainage and require sealing of the pit to prevent AMD (Acid Mine Drainage). Effective redundant strategies should be employed, such as using imported buffering material in backfill and/or lining the pit with clay or other impervious sealing materials that would be far preferable to merely compacting overburden.
- Future responsibility for any release of AMD or other environmental damage is not determined in the EAW. Due to the potential for future AMD, to protect the taxpayers of Minnesota from unintended consequences, including environmental degradation and possible mitigation or clean-up, it is reasonable to require adequate financial assurance to cover a worst-case scenario before the project is allowed to proceed. Due to historical failures of Tech Cominco worldwide and MDNR in Minnesota to prevent significant impacts associated with mining activities, it is prudent to indemnify the citizens of the state.
- The idling of hauling trucks or other engines could create significant emissions concentration on site. Fugitive dust may contribute to regional haze. Will haul trucks be covered off site to prevent dust dispersion or water collection?
- Cumulative impacts item lists related projects, but does not evaluate the extent of nor project contribution to environmental impacts.

4) There are virtually no known sulfide mining operations that do not create AMD problems. This factual backdrop should motivate extreme caution about ignoring potential impacts. Citing small areas, low ore quantities or sulfide content, or short durations of disturbance are not adequate reasons to deny that the scale of the project can or will have significantly serious or long-term effects. Yet, the EAW repeatedly excuses potential impacts, citing how minimal the scale of the project would be relative to other mining activity in the area. It also wrongly implies that ferrous mining is comparable to the proposed non-ferrous mining activity.

Respectfully submitted,
Diadra Decker

From: Jennifer Engstrom
To: Randall Doneen
Date: 7/31/2008 10:55 PM
Subject: Fwd: Teck Cominco Bulk Sampling EAW

Hi Randall,

Here are some comments received from Matt Norton at MCEA.

Thanks,
Jennifer

>>> "Norton, Matt" <mnorton@mncenter.org> 7/29/08 6:06 PM >>>
Good afternoon-

I was concerned that I was going to be unable to get a quick memorialization of my comments in to you today, but I do have just a minute.

In conversation with David late last week, he answered many of my questions, and I resolved my various comments down to just a few comments, which I asked to noted for the record as oral comments, delivered by phone. Again, I made that request because I was fairly certain I would be unable to write a more formal comment letter. To summarize those few comments as I recall them, the first comment was that there should be more thorough water quality sampling and testing during the project operation. This comment is based on the view that previous sampling of discharged water at an earlier bulk sampling site - which included no samples for turbidity, and only one sample taken and tested for suspended solids - was insufficient. Also, at this same earlier bulk sampling site, which discharged to Langley Creek, there were a couple samples that showed "elevated metal levels." The permit should address means to avoid repeating these earlier problems (lack of testing in the case of turbidity, insufficient testing of suspended solids, and problems demonstrated in the samples analyzed for metals).

The second comment was/is that ground water samples should be taken before and after the project is begun, as well as at several points in time after the project site has been reclaimed. This comment is based upon the explanation given me, in response to my questions, that

groundwater samples at earlier (now reclaimed) bulk sampling sites have never been taken, and it is therefore not possible to allay concerns held no doubt by the DNR and certainly by MCEA that bulk sampling project sites should not be sources of acid and/or metal contamination of groundwater or surface waters fed by groundwater. It was also stated in response to my question that it would do little good now to go and drill and take groundwater samples for testing of such things, because it would be impossible to distinguish current levels (of things like dissolved metals concentrations, or acids) from natural background levels - impossible because there was no pre-project sampling done of groundwater at those earlier bulk sampling sites. Therefore, it is essential now to gauge the level of risk or incidence of contamination of groundwater with acids, dissolved metals, or any other consequential factors from the bulk sampling work, including the drilling, blasting, excavating, and the later re-filling and reclaiming of these sites. It is essential now because this information may help the DNR better to gauge the level of risk from the same drilling, blasting, excavating, (etc.) activities carried out on a larger scale such as would be associated with a full-scale mining project. It is also essential here, near the headwater fringes of the Hudson Bay drainage in Minnesota, in part because waters here will drain through the Boundary Waters Canoe Area Wilderness and other areas of tremendous, even unparalleled local, state, national, and international significance. Any claims that might be made as to the improbability of contamination of ground and/or surface water due to mine discharges should be supported with evidence including, at a minimum, test results derived from pre-process, in-process, several post-process ground water samples.

The third comment related to the fact that there is proposed to be no discharge of water from the project site, in contrast to at least one and perhaps most or all earlier bulk sampling sites. As I understand it from David's effort to explain, instead of being discharged (after settling) to a nearby surface water, the de-watering volume will be collected and taken to Babbitt's WWTF and processed there, at least up to a certain volume of water and certain levels of contamination. This change stems from the experience last time a bulk sampling project was underway, when a large rain event produced roughly three times the discharge volumes that were anticipated and thus three times the amount that the on-site settling trench/ponds could handle. MCEA's specific comment is that the "Plan B" must be spelled out in the permit for this site. In other words, if the total or daily water volumes or the levels of contamination are greater than Babbitt has contractually allowed and Babbitt therefore refuses to accept some or all of the collected water, how then will that water be treated and to what standards? It is MCEA's

view that if that water too voluminous or too contaminated for Babbitt to handle under the contract then it should likewise not be discharged to waters of the state.

Fourth and finally, as I recall my phone conversations with Jennifer and Marty, I urged the state to require an appropriately-scaled financial assurance to cover reclamation and any level of continued treatment or monitoring that might, even in some less-likely yet possible eventuality, be required to protect the people of Minnesota from environmental liability. Ancillary benefits of doing so include affording the state to go through the extensive thought process of calculating proper amounts and determining the ideal form that such financial assurance should take in the context of copper-nickel-etc. group metals mining (non-ferrous mining, for short). It is not clear to me that the state has sufficient experience in that exercise and yet it seems likely, given the number of sampling projects and press releases and mining companies that we are seeing in Minnesota lately, that there will be a great need for fresh expertise in that area for a full-scale mining proposal in the immediate future. Please consider going through the process now, for the project-specific reasons and these ancillary reasons, both.

The conversations we have had (back on Thursday, July 10th and afterward, concluding last week) were very helpful to me, as they helped to bring specificity to MCEA's interests and concerns with this project. I hope my comments on the phone and here in this email, on behalf of MCEA, were/are clearly expressed and reasoned, and that the email reflects the substance of our conversations and the comments I have already made to you about this project. If not, please contact me and I can clarify.

I greatly appreciate the time each of you spent with me on the phone, and I look forward to talking with you on this and other projects in the future.

Yours,

-Matt

Matt Norton

Staff Attorney

Minnesota Center for Environmental Advocacy

26 E. Exchange St., Suite 206

St. Paul, MN 55101

(651) 223-5969 /-5967 (fax)

www.mncenter.org

mnorton@mncenter.org

From: Gary Glass <gglass143@charter.net>
To: <environmental.review@dnr.state.mn.us>
Date: 7/29/2008 4:23 PM
Subject: Teck Cominco American Inc. Metallurgical Sampling Project

To: Minnesota Department of Natural Resources

Randall Doneen, Environmental Review Planning Director

Email: environmental.review@dnr.state.mn.us

with "Teck Cominco" in SUBJECT line

From: Gary E. Glass, Ph.D. Adjunct. Prof. UMD

Home Office: 143 Occidental Blvd., Duluth, MN 55804 Email: gglass143@charter.net Phone: 218-525-2384.

The proposed sampling by Teck Cominco is the latest in a great number of expected mining efforts across the northern half of Minnesota, most all projects will be expected to be wanting a "bulk sample" to assess the potential for profitable mining. The use of "strip mining" or "open pit" techniques for taking a bulk sample will undoubtedly leave exposed sulfide ore behind, just as was done at the Dunka Mine pit in the early 1970s, and that covered sulfide ore still leaches acid and heavy metals to the surface and ground water today, exceeding water quality standards in surface streams and runoff.

The practice of strip or open pit mining should not be permitted for bulk sampling and more conservative methods similar to "shaft" mining should be used, so that surface area disturbance is minimized, and all future water flows in and out of the sampling shaft are monitored and any continued acid formation and metal leaching is closely monitored and controlled.

The example of the Dunka Mine pit copper-nickel leaching does not want to be repeated again and again, especially now, when the interest is high for sulfide ores, and the conversion of sulfide to sulfuric acid is known to occur for certain. Minnesota can not afford to lose its surface water related fish and game resources and end up like the State of Penn. in the 1970s with thousands of miles of damaged streams from acid mine drainage.

Special precautions are warranted when pursuing sulfide ores, if high quality waters are to be preserved. Every sulfide ore sampling pit is a potential source for damaging future leaching and toxic runoff. Monitoring and re-mediation, when needed, are imperative requirements for each and every proposed new ore body sampling, now and in the future.

From: "Cheryl Storm" <cstorm10@hotmail.com>
To: <environmental.review@dnr.state.mn.us>
CC: "Cheryl Storm" <cstorm10@hotmail.com>
Date: 7/29/2008 3:07 PM
Subject: Teck Cominco EAW

Dear Mr. Doneen,

Per our phone conversation, I would like to see ground water testing done at the 2001 test site to see if leaching has occurred. It seems that considering the nature of opening sulfide rock deposits to air and water, it would be prudent to test a previous site to see if there had been leaching. I did call and speak with Dave Antinson(sp) whose number you provided me with. Mr. Antinson informed me that there had been no water testing done on the previous site to see if leaching had occurred. I have been informed that due to the small scale of these test sites there is no need to worry about the sulfide rock leaching acid or heavy metals into surface or ground water. I believe it would be prudent to test water at these sites several years after the sulfide rock has been broken into. EAW's should take into consideration the possibility of leaching, and a previous site treated in a manner similar to what is being proposed would be a good example of what can be expected as far as leaching acid and heavy metals, or the lack there of. Thank you for taking the time to speak with me.

Sincerely,
Cheryl Storm

Cheryl Storm
6068 Murphy Lake Road
Brimson, MN 55602



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
SIBLEY SQUARE AT MEARS PARK
190 FIFTH STREET EAST, SUITE 401
ST. PAUL MINNESOTA 55101-1638

July 22, 2008

REPLY TO
ATTENTION OF

Operations
Regulatory (2008-03137-TWP)

Randall Doneen
Environmental Review Planning Director
Environmental Policy and Review Section
Minnesota Department of Natural Resources
Division of Ecological Services
500 Lafayette Road, Box 25
St. Paul, Minnesota 55155-4025

Dear Mr. Doneen:

We have reviewed the information provided in the Environmental Assessment Worksheet prepared for the proposed Teck Cominco American Incorporation Metallurgical Sampling Project in the City of Babbitt. The project site is in the SE 1/4 of the NE 1/4 of Sec.36, T. 60 N., R. 13W.; and the N 1/2 of Sec. 29, T. 60N., R. 12W., St. Louis County, Minnesota.

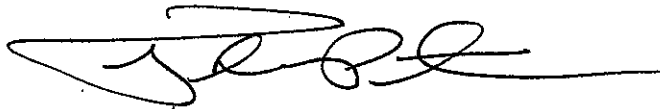
Based upon the information provided, it appears that the work proposed at the locations stated is not within the regulatory jurisdiction of the Corps of Engineers. No work will be done in a navigable water of the United States, and no dredged or fill material, including that associated with mechanical land clearing, will be discharged in any water of the United States, including wetlands. Therefore, a Department of the Army permit is not required to do this work.

This letter is valid only for the project referenced above. If any change in design, location, or purpose is contemplated, contact this office to avoid doing work that may be in violation of Federal law. PLEASE NOTE THAT THIS CONFIRMATION LETTER DOES NOT ELIMINATE THE NEED FOR STATE, LOCAL, OR OTHER AUTHORIZATIONS, SUCH AS THOSE OF THE DEPARTMENT OF NATURAL RESOURCES OR COUNTY.

The decision regarding this action is based on information found in the administrative record which documents the District's decision-making process, the basis for the decision, and the final decision.

If you have any questions, contact Tim Peterson in our Two Harbors office at (218) 834-6630. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Whiting', with a long horizontal line extending to the right.

For Robert J. Whiting
Chief, Regulatory Branch

Copy furnished to:

David W. Godlewski
Vice President, Environmental and Public Affairs
Teck Cominco American Incorporated
501 Riverpoint Boulevard, Suite 300
Spokane, WA 99202

July 29, 2008

Minnesota Department of Natural Resources
Division of Ecological Services, Box 25
Attention: Randall Doneen
500 Lafayette Road
St. Paul, MN 55155-4025

Dear Sir,

There are numerous reasons to do a complete EIS of the Teck Cominco exploratory mining project.

However, I am going to be brief and to the point.

To even consider letting Teck Cominco into our Lake District is criminal.

Teck Cominco is on the top ten list of worst mining companies in Canada. They were sued by the State of Washington for polluting the Columbia River. They were sued for pollution at the Red Dog mine in Alaska.

They are a dirty company with a dirty record. They have a one time "back in" with Franconia. They could easily be the major player in Minnesota.

Our State motto is Minnesota, Land of 10,000 Lakes. If the DNR doesn't care, we could easily become known as "Land of 10,000 Dead Lakes".

Think what that would do for our economy.

Sincerely,
Carla Arneson
P.O. Box 336
Ely, Minnesota 55731

Carla Arneson

July 14, 2008

Mr. Randall Doneen
Environmental Review Planning Director
MN Dept. of Natural Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

RE: EAW – Cominico American Incorporation Metallurgical Sampling Project
Babbitt, Saint Louis County
SHPO Number: 2008-2510

Dear Mr. Doneen:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

We understand that a cultural resources survey was conducted for this project. We look forward to reviewing the results of that survey.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal license or permit, it should be submitted to our office with reference to the appropriate federal agency.

If you have any questions on our review of this project, please contact me at (651) 259-3456.

Sincerely,



Dennis A. Gimmestad
Government Programs and Compliance Officer

