2002 Compliance Report Nanisivik Mine Water Licence NWB1NAN9702

Introduction

The Nunavut Water Board (NWB) issued, on July n31, 1997, licence NWB1NAN9702 (renewal of N5L3-0159) allowing CanZinco Ltd., Nanisivik Mine (formerly Nanisivik Mines Ltd.) the industrial water use and waste disposal associated with mining, milling and associated uses at the Nanisivik Mine. Shortly afterwards (14/11/1997), the NWB agreed to issue SNP Amendment 01, substituting two sampling and flow monitoring requirements. The NWB subsequently issued, on December 9, 1999 Amendment No. 1 thus allowing for open pit operations at Ocean View. On March 20, 2000 Amended No. 2 as issued allowing for exploration drilling. The said licence was schedule to expire on June 30, 2002. On December 7, 2001 the NWB issued an extension to licence NWB1NAN9702, extending the expiry date to September 30, 2002. This report assesses compliance with the licence from January 1, 2002 to July 19, 2002 inclusive.

Compliance Assessment

Part B General Conditions

Condition Number and Summary

- 1. Water use fee shall be paid annually in advance.
- 2. Security Deposit shall be posted and maintained.
- 3. The Security Deposit may be used to fulfill conditions of this licence where there Is a contravention.
- 4. The Licencee may submit the Terms of Reference for the establishment of a Reclamation Trust Fund.

Condition Number and Summary

- 5. Annual report filed with NWB prior to March 31 of the following year.
- A. Monthly and Annual quality of water pumped from East Twin Lake.

Compliance Assessment

Compliance in the form of a

Receipt for water usage from
July 31, 2001 to July 31, 2002

Has been received.

Compliance has been met by increasing the previous security Bond to \$5,000,000. The security Bond expires on July 30, 2003.

No use of the Security Deposit was required in 2002.

Not Applicable

Compliance Assessment

Compliance pending.

Report due on March 31, 2003.

Compliance in the form of Monthly SNP reports for the Period from January 2002 to April 2002 total 70,640 m cubed. May and June have not yet been Received.

B. Monthly and Annual quantity of water pumped from West Twin Lake Disposal Area for use in the mill.

C. Daily/ Monthly/ Annual quantity of waste discharged from East Adit Treatment Facility.

D. Monthly/ Annual quantity of waste discharged from West Twin Lake Disposal Area to West Twin Creek.

E. Daily/ Monthly/ Annual quantity of waste discharge from East Adit Treatment Facility.

F. Report all data collected for SNP.

G. Report on storage capacity, quantity of sub-aqueously deposited tailings, bathymetric survey, and topographical map for West Twin Disposal Area.

H. Summary of construction of modification to any water use/waste facilities.

I. Summary of all work carried out under Waste Rock Disposal Plan.

J. List of all unauthorized discharges and follow-up actions taken.

K. Reports on studies requested by board.

L. Approved revisions to Abandonment and Restoration Plan.

M. Summary of Abandonment and Restoration work undertaken during year.

N. Update of total mine restoration cost.

Compliance in the form of
Monthly SNP Reports for the
Period of January 2002 to April
2002 total 412,010 m cubed. May
And June have not been received.

Compliance pending.
To date no documentation has Been received as to EATF discharges.

Compliance in that total tailings. discharged was 454,920 m3;
Of which solid fraction was 45,450 m3.

No data reported for 2002.

Compliance to date in the form of SNP data from 159-1 for 2001

Tailings disposal plan Feb 2002.

No compliance in the form of
Construction information in
Discharge of wastewater from
Ocean View to underground
Workings at mine.

Waste Rock disposal plan February 2002.

Nothing received about waste Water discharge from Ocean View to underground.

Tailings Disposal Plan and
Waste Rock Disposal Plan
Submitted March and Feb 2002.

Compliance in Closure and Reclamation Plan on February 28 2002.

No data for 2002.

Last cost was \$12.5 million in 2000 annual report.

O. Public consultation report.

Meeting held in 2001 with HTO March 10.

P. Summary of work done to address concerns No summary provided for 2002. listed in inspection/ compliance reports.

Q. Any other details requested by NWB by November 1st.

No data submitted for 2002.

R. Executive summary in Inuktitut of all plans and reports.

No data submitted for 2002.

6. All research shall follow "Ethical Principals for the Conduct of Research in the North".

Compliance with th8is section for 2002.

7. Surveillance Network Program shall be competed.

Not complete for 2002.

8. SNP and compliance dates may be modified by the NWB.

Two amendment were made SNP 01 and 02 on 1997 and 1999.

9. Metres and measuring devices shall be installed, operated and maintained to the satisfaction of the inspector.

No additional meeting required by Inspector.

10. Signs identifying SNP stations to be posted and maintained to the satisfaction of the Inspector.

Compliance with posting SNP.

11. A copy of the Licence shall remain at the site at all times.

Compliance maintained.

Part C- Conditions Applying to Water Use

Condition Number and Summary

1. All fresh water to be obtained from

Compliance Assessment

East Twin Lake.

Compliance in that all fresh water Obtained from East Twin Lake.

2. Quantity of water withdrawn shall not exceed 180,00 m3.

Compliance in that only 70,440 M3 of water withdraw in 2002.

3. Water use shall be minimized by recycling tailings stream water for use in the mill.

Compliance in the form of recy-Cling water from tailings line.

4. No cross connections between reclaim line to or from West Twin Receiver and the freshwater line from East Twin Lake.

Compliance in that no cross connection were noticed by The Inspector.

5. Level of East Twin Lake shall not be lower than the level of West Twin Receiver. Noncompliance was noted in January, February, March and

May 2002.

The wind.

Compliance in that water Recycling appeared to be Adequate in 2002.

- 6. Water use shall be minimized by recycling tailings stream water for use in the mill.
- Part D- Conditions Applying to Waste Disposal
- 1. All tailings shall be deposited in West Twin Disposal Area.
- 2. All mine-water from open pits shall be

deposited to West Twin Disposal Area or East Adit Treatment Facility.

- 3. All runoff water from open pits shall meet effluent quality standards.
- 4. 10 days notice must be provided to Inspector prior to any planned discharges from West Twin Disposal Area and East Adit Treatment Facility.
- 5. All waste discharges shall meet effluent quality standards.
- 6. East Adit Treatment Facility is operated and maintained as per Licence conditions.

Not total compliance in that
A tailings spill occurred on April 11
2002 and tailings were blown by

Non compliance in that wastewater was put underground in June 15, 2002.

No data given for 2002.

Notification given in compliance.

No data given for wastewater Discharges for 2002.

Compliance for 2002.

Condition Number and Summary

- 7. West Twin Disposal Area is operated and maintained as per Licence conditions.
- 8. If tailings are deposited underwater, a bathymetric survey shall be carried out.
- 9. Licence shall submit within 2 months of issuance of licence a plan outlining their tailing inspection and follow-up programs.
- 10. Inspection of earthworks and hydrological regimes is to be carried out annually. Inspection report is to be submitted within 60 of inspection.
- 11. The Licence e shall submit by February 1 1997 a plan for future modifications to the disposal area.
- 12. The elevation of the dykes shall only exceed present elevation with written approval of the NWB.

Compliance Assessment

Compliance in 2002.

Compliance in bathymetry study
On February 2001.

Dyke and Containment Structures on August 23, 1999.

Geotechnical Inspection of Waste Containment Dikes Sept 2001.

Long term Tailing Disposal Plan on March 20, 2000.

Compliance met.

- 13. The licencee shall ensure runoff is diverted Compliance met. away from the temporary storage pad and Ocean View open Pit (nt Amendment No. 01)
- 14. All accumulated Ocean View Pit water is to No compliance water pumped be directed to a sump and hauled to the East Adit under ground. Treatment Plant prior to final discharge. (from Amendment No. 01)
- 15. The Licence shall conduct drilling and exploration according to various proper procedural terms. (From Amendment No. 02)

Compliance met.

Part E- Conditions Applying to Spill Prevention and Contingency Planning

Condition Number and Summary

Compliance Assessment

Licencee shall submit by December 1,
 1997 a revised Contingency Plan.

Compliance on Nov 30, 1998.

2. A backup pump and/or other contingency plan shall be put in place at East Adit Treatment Facility.

Compliance met.

3. The plan referred to in Part E, Item 1 shall be amended to reflect Part E, Item 2.

Compliance met.

4. Contingency Plan shall be reviewed and updated annually.

No compliance noted.

5. Contingency Plan of Part E, Item 1 is not approved by NWB, a revised plan must be submitted within 30 days upon receiving notification by the NWB.

Compliance in January 18, 1999.

6. If a spill occurs, a detailed report must be submitted within 30 days of the spill to the Inspector.

Part f- Conditions Applying to Modifications

Condition Number and Summary

Compliance Assessment

- 1-2. Modifications may be competed without the NWB's approval provided conditions listed in licence are met.
- 3. As-built plans of modifications must be submitted to NWB.

Part G- Conditions Applying to Studies

Condition Number and Summary

Compliance Assessment

1. Licence shall submit by January 1, 1998 the terms of Reference for a study which demonstrates the hydraulic confinement of the West Twin Disposal Area.

Compliance met by Licencee.

2. Licencee shall submit within 6 months of issuance of licence a plan for ARD and geochemical characterizaation, including all the items listed in Licence.

Acid Rock Drainage Assessment
And Prediction January 26,1998
Generating Potential and Shale
Cover Material May 11, 1999 not
approved; Kinetic Testing Final
Report September 24, 1999 not yet
Approved.
Compliance in the form of the
Chronic Toxicity Testing Mouth
of Twin Lakes Creek in StrathCona Sound on February 23, 1998; NWB

3. Licencee shall within 7 months of issuance of the licence the terms of Reference for study on chronic toxicity downstream of West Twin Disposal Area.

Cona Sound on February 23, 1998; NWB approved report
With additional investigation
Suggestions June 3, 1998.

4. Licencee shall submit by April 1, 2000 an Environmental Site Assessment of Waste disposal sites.

Partial compliance met with submition of Environmental Site
Assessment Phase 1 on March 20, 2000;
Environmental Site
Assessment Phase 2 on April 2001, both studies lacked data ans were incomplete.

5. Licencee shall within 3 months of issuance Compliance in the form Proposal of licence a plan for continuation of metal loading study in Twin Lakes Creek.

Compliance in the form Proposal for Continuation of Metal Loading Study in Twin Lakes Creek on

Compliance in the form Proposal for Continuation of Metal Loading Study in Twin Lakes Creek on October 19, 1999 the plan was Approved pending several conditions.

6. Licencee shall submit within 8 months of issuance of licence a study proposal on stabilization of exposed tailings.

Compliance in the form of Tailings Stabilization Operating Study Plan on January 23, 1998; Report additions were given June 15, 1999.

7. Licencee shall submit within 6 months of issuance of licence an updated monitoring plan of on-land disposal of tailings.

Compliance in the form of On Land Disposal of Tailings MonitorIng Plan on January 22, 1998.
NWB approved the Plan pending Several conditions were met.

8. Licencee shall submit within 3 months of issuance of licence an update of the Waste Rock Disposal Plan.

Compliance has been met.

9. Licence shall implement the plans referred to in Part G, Items 1-8, as and when approved by the NWB.

Compliance has been met.

10. If not approved by the NWB, plans referred to in Part G, Item 9 are to be resubmitted within 30 on August 15, 2001; NWB has days of receiving notification of the decision.

Compliance has been met with Requested that Part G Environ-Mental Assessment be resubmit-Ed by November 1, 2003.

11. Plans referred to in Part G, Item 9 are to be received annually.

Partial compliance met in Waste Rock Disposal Plan February 2002, Tailings Disposal Plan 2002

- 12. Licencee shall produce an up-to-date plan of dyke structure and tailings disposal area at least 60 days prior to construction of next dyke in West Twin Disposal Area.
- 13. Licencee shall submit within 2 months the results of stability analysis of existing dyke.
- 14. Licencee shall submit by November 1, 1998 study results of evaluation of shale cover material.
- 15. By March 31, of each year the Licencee shall submit results of Test Cell Evaluation Study and incorporate results into Final Abandonment and Restoration Plan.

Part H- Conditions Applying to Abandonment and Restoration

Condition Number and Summary

1-2. Submission of Abandonment and Restoration Plan within 9 months of issuance of licence. The Plan will include all the elements of Part H, Item 2 of the Licence.

- 3. Licencee shall provide annual update to current mine Restoration liability using RECLAIM.
- 4. If NWB requires revision of plan, revision should be submitted within 6 months of receiving notification. Abandonment and Restoration Plan on If revisions is not approved a new revgision is to be
- 5. Licencee shall implement the abandonment and restoration plan approved by NWB.

submitted within 2 months of notification.

- 6. Licencee shall review the abandonment and restoration plan annually and modified the plan accordingly.
- Licencee shall notify NAB of final closure of mined as soon as feasible.

Compliance Assessment

Compliance in the form of providing an Interim Abandonment and Restoration Plan on May 14, 1998. The NWB Requested that a re-submition consider Various recommendations.

No compliance in 2001 and no annual Update provided in 2002.

> Compliance in the form of 2000 Interim March 20, 2000.

Compliance by licencee.

Compliance in the form of Nanisivik Mine Closure and Restoration Plan on February 28, 2002

> Compliance in the form of Nanisivik Announcing on October 31, 2001 that Nanisivik Mine will be closing in September 2002.

8. If licencee notifies NAB in writing of mine closing indefinity, a final Abandonment and Restoration Plan must be submitted within 60 days of notification.

Compliance in the form of NANISIVIK Mine Closure and Restoration Plan on February 28, 2002 has yet to be Approved by the NAB