

June 28, 2016

Via Electronic-mail: <u>Jennifer.Winsor@gov.mb.ca</u> Hardcopy via Registered Post

Ms. Jennifer Winsor Environmental Approvals Branch Conservation and Water Stewardship 123 Main Street, Suite 160 Winnipeg, Manitoba R3C 1A5

Re: Notice of Minor Proposed Alteration
Licencee and Minor Clause Change
Rice Lake Gold Mine - Environment Act Licence 2628RR
Klondex Canada Ltd.

Dear Ms. Winsor:

Klondex Canada Ltd. (Klondex) is submitting this Notice of Alteration (NOA) to the Environmental Approvals Branch (Branch) of the Manitoba Sustainable Development to change the Development name and issue the Licence to Klondex Canada Ltd. This submission also includes minor alterations to Environmental Act Licence 2628RR (EA Licence), as listed below:

- 1. Licence issued to Klondex Canada Ltd.;
- 2. Development name change to True North Gold Mine;
- 3. Clause 11: Update of reference document specified
- 4. Clause 17, 18: Quality control of tailings dyke construction;
- 5. Clause 25: Exception for fire pump;
- 6. Clause 36: Waste rock stockpile;
- 7. Clause 44: Addition of East Tailings Pond to sampling program;
- 8. Clause 46: Groundwater monitoring wells name and location changes; and
- 9. Clause 53: Three-year sediment sampling clarification.

Klondex has included the required processing fee in the amount of \$500 cheque (Cheque No. 000464), payable to the Minister of Finance.

Background Information

Current Status of Rice Lake Mine

The Rice Lake Gold Mine (Mine) was placed into care and maintenance on April 14, 2015 by San Gold Corporation. Klondex purchased the Rice Lake Gold Mine on December 17, 2015 and is currently working to re-open mining facilities. Under San Gold Corporation, mining operations ceased on April 16, 2015. The EA License also provides permission for a 2,500-ton per day mining, milling, and refining operation in Mineral Lease 63, Township 24, Range 13 and 14. As required by Section 14 of *The Environment Act*, this NOA outlines the proposed minor alterations and includes a summary of the insignificant potential environmental effects.

Licencee and Development Name Change

Klondex is proposing that Environmental Act Licence 2628RR has the Licencee changed from San Gold Corporation to Klondex Canada Ltd. to reflect the recent acquisition of the Development by Klondex. In addition, the Development will be known as the "True North Gold Mine". Past Development names such as Bissett Gold Mine and Rice Lake Mine will no longer be used to refer to the Development. An updated plan of the True North Gold Mine is included on Attachment 1. In addition, the Rice Lake Mine shaft will also be named the True North Gold Mine.

Clause 11

The emergency planning guidelines (*Industrial Emergency Response Planning Guide, Miac, September 1996*) provided in clause 11 as a reference document are no longer in publication. Klondex requests that the reference document be updated to the Canadian Center for Occupational Health and Safety "Emergency Response Planning Guide".

Clause 17, 18, and 19

The East Tailings Management Area is approved for construction to a height of 284.5 meters above sea level (ASL) as outlined in the San Gold Corporation Request for Alteration to San Gold Corporation's Tailings Management Area (March 22, 2012). In the EA Licence, the Branch requires Klondex to ensure that impoundment dyke engineering and construction meet the requirements of the San Gold Corporation Request for Alteration to San Gold Corporation's Tailings Management Area (March 22, 2012). These requirements are outlined in clauses 16, 17, 18, and 19 and ensure the integrity of the East Tailings Management Area. Klondex is proposing changes to clause 16 and the removal of clauses 17, 18, 19, and Appendix F from the EA Licence.

The engineering design for the impoundment dykes within the East Tailings Management Area were not designed to be drilled, as required by 16, 17, 18, and as outlined in Appendix F.

Drilling these impoundment dykes will reduce the structural integrity by introducing a variation in the engineering design. Construction material samples are taken several times prior to and during the construction process to ensure materials and work meets the specifications of the design and engineering document submitted to the Branch.

The recent construction of Dyke 9, for the East Tailings Management Area expansion, included a performance monitoring program as outlined in the May 12, 2014 letter, *Dyke Construction Performance and Quality Control* submitted by San Gold Corporation. In addition once construction activities were complete, the performance monitoring data was submitted to the Branch on February 9, 2016 in the *Construction As-Built Report and Record Drawing – East Tailings Management Area Dyke 9 (Stage1/Starter Dyke)* by AECOM Canada Ltd. 2016. Klondex believes that the requirements of clause 16 address the Branch's needs to ensure that impoundment dyke raises are effectively engineered and constructed.

Klondex is requesting the removal of clauses 17, 18, 19, and Appendix F to be replaced with the following additional requirement in clause 16:

d) the Licencee shall prepare a Construction Performance and Quality Control document that outline the construction of all impoundment dykes. All impoundment dyke engineering and quality control during construction will be undertaken by licenced geotechnical engineers. The Licencee will provide a Construction As-Built Report and Record Drawings two weeks prior to the operation of the expanded tailings management area.

Clause 25

Klondex is requesting an alteration to clause 25 to allow for a 682-litre diesel tank and secondary containment of 110% that is located within the 100-meter buffer zone from Rice Lake. The diesel tank is used to supply fuel to the emergency fire pump for the Mine's hydrant system and was constructed previous to Klondex ownership of the Mine. Both the pump and diesel tank are enclosed within a sea container and spill response material is located adjacent to the sea container. The fire pump is located 21 meters from the lakeshore as shown on Attachment 2.

Clause 36

Waste rock is currently stored in the Waste Rock Stockpile Area (WRSA) and released for use as a construction material throughout the Mine and community. Recent construction projects involving the use of waste rock include the impoundment dykes at the Tailings Management Area and road surfaces throughout the Mine. The WRSA was identified as a storage area in 1997 (KGS Group, Bissett Gold Mine Environmental Act Licence No. 2161 S1R, Clause 18 Variance) and surface waste rock stockpiling was approved in Licence No. 2161 S1 RR in 1998. Klondex believes that the WRSA became fully operational sometime in 2008. The WRSA was

constructed, by San Gold Corporation, without an impervious liner and lined down-gradient runoff collection ditch as outlined in clause 36. Klondex is requesting an alteration to clause 36 to ensure compliance with the EA Licence.

In order to manage runoff from the WRSA as required by clause 36, Klondex is proposing developing a surface water management plan for the WRSA. The surface water management plan will be submitted to the Branch for review to ensure that the implemented practices cover the requirements intended under clause 36.

Clause 44

Klondex is requesting an amendment to clause 44 to add the East Tailings Pond to ensure surface sampling of mine water is taken from each tailings ponds. Tailings deposition will begin in the East Tailings Pond in July 2016. Both the Tailings Pond and East Tailings Pond will have surface samples collected every three months.

Clause 46

The groundwater monitoring well system has been upgraded as outlined in the 2015 Annual Groundwater Monitoring Report submitted to the Branch on May 12, 2016 and AECOM letter reports dated November 4, 2015 and March 31, 2016. Klondex is proposing the groundwater monitoring wells be designated as:

MW15-01

MW15-02

MW15-03

MW15-04

MW15-05

MW 15-06

MW 16-01

MW 16-01

MW 16-03

The location of these groundwater monitoring wells is shown on Attachment 3.

Clause 53

Sediment quality monitoring was recommended as part of the Stage II Environmental Act Licence Application (Harmony Gold, 2001) and introduced into subsequent Environmental Act Licences. In EA Licence sediment sampling is required under clauses 52 and 53. Klondex requests that clause 53 be reworded to match the requirement of clause 52 to ensure that the three-year sediment sampling be completed within one month post discharge with sampling required under clause 52.

- 53. The Licencee shall, once every three years, and within 30 days of the completion of the discharge campaign, collect sediment samples from the receiving stream at the stations designated as WR-US and WR-DS as shown in Appendix E of this Licence and have the samples analyzed for the following parameters;
 - a) total metals;
 - b) total organic carbon;
 - c) moisture content; and
 - *d*) *pH*.

Potential Environmental Effects

Klondex does not believe the alterations requested in this NOA will cause any additional environmental effects as there are no proposed changes to infrastructure or processes. Klondex believes that all alterations outlined in this letter are minor.

If you have any concerns or require further information please don't hesitate to contact me at (204) 277-5411.

Sincerely,

Klondex Canada Ltd.

Mike Kernick General Manager, True North Gold Mine

Attachments: Cheque No. 000464

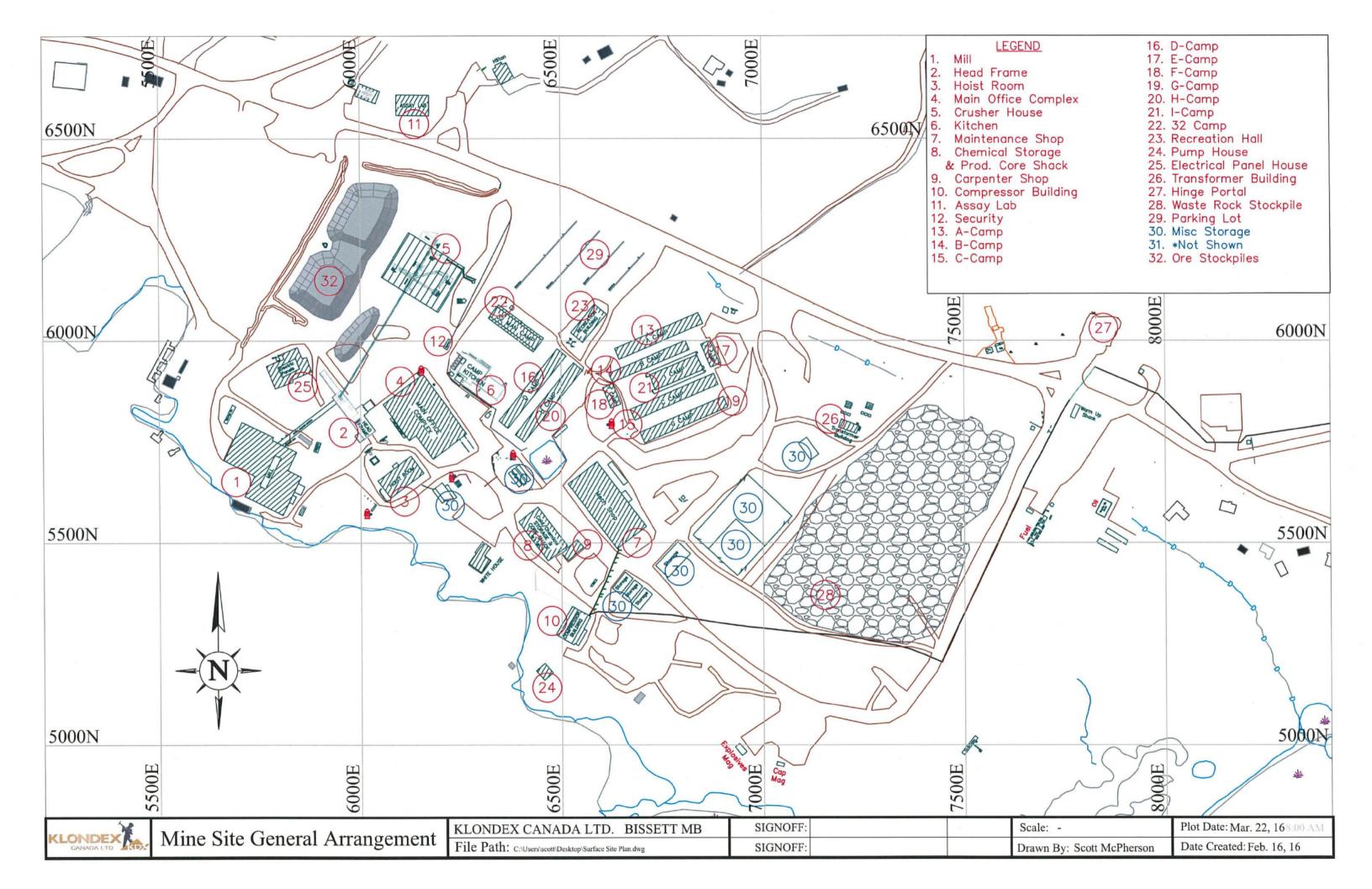
Attachment 1 Mine Site Plan Attachment 2 Fire Pump System

Attachment 3 Groundwater Well Monitoring System

cc. Amelia Bauer, Environmental Superintendent, Klondex Canada Ltd.
Lucy Hill, Environmental Manager, Klondex Mines Ltd.
Mike Doolin, Chief Operating Officer, Klondex Mines Ltd.
Neil Rentz, Enforcement Branch, Manitoba Conservation
Siobhan Burland Ross, Approvals Branch, Manitoba Conservation

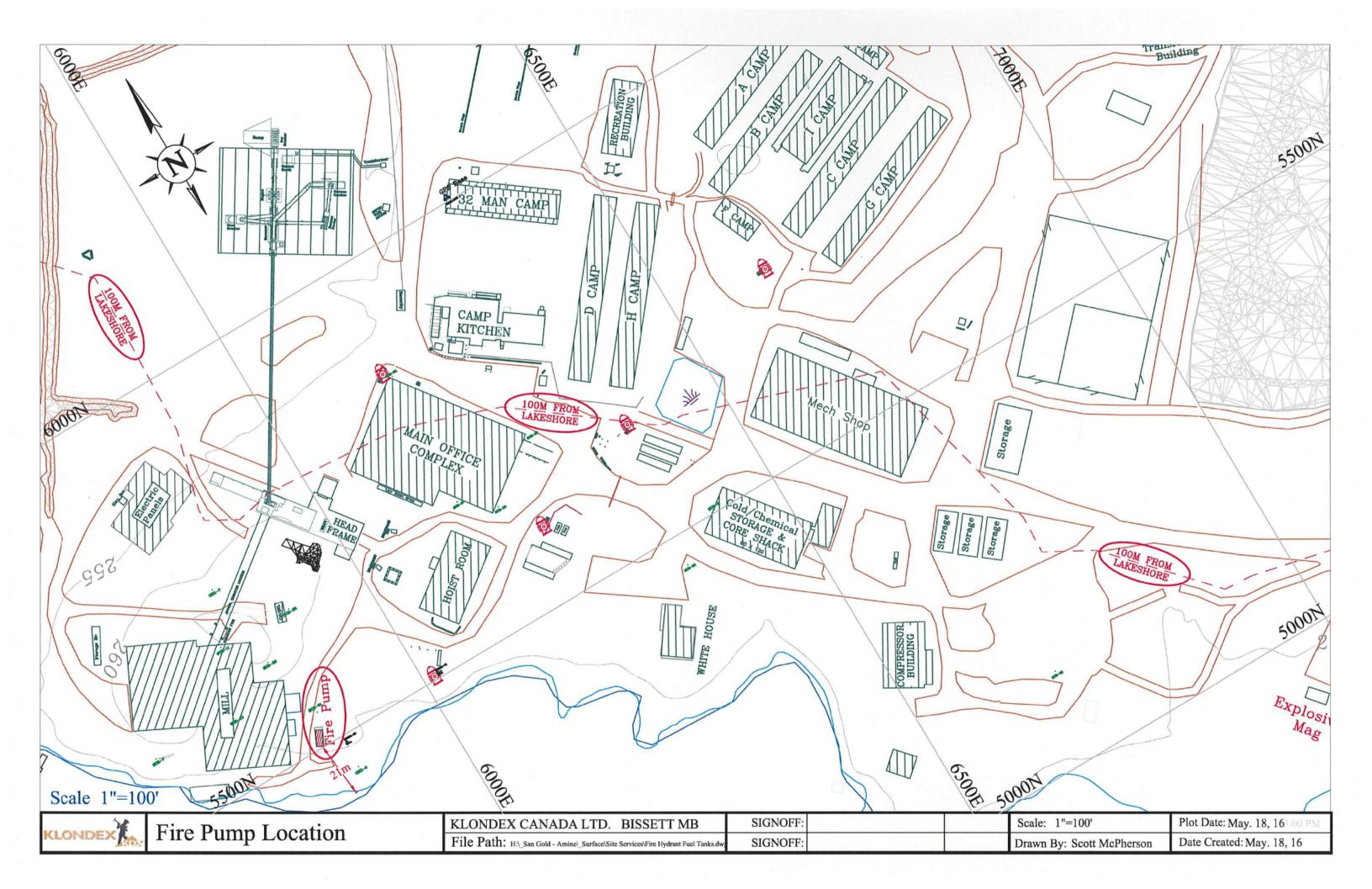
Attachment 1

Mine Site Plan



Attachment 2

Fire Pump System



Attachment 3

Groundwater Monitoring Well System

