

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSER: San Gold Corporation
PROPOSAL NAME: San Gold Tailings Management Area Expansion
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Mining
CLIENT FILE NO.: 2435.40

OVERVIEW:

On March 23, 2012, the Department received a Proposal from AECOM on behalf of San Gold Corporation for the expansion and operation of the tailings management area (TMA) located in Mineral Lease 63, Antonio Road, Township 24, Range 13 EPM in the Town of Bissett. The proposed development consists of the construction of an additional main tailings pond and an additional polishing pond located immediately east of the existing TMA and north of PR 304. The construction of three new access roads; two on the south side from PR 304 and one on the east side adjacent to the local landfill are also proposed to access the proposed TMA expansion site. Treated wastewater from the proposed polishing pond would be pumped into the existing TMA polishing pond for discharge to No Name Creek between June 15th and November 30th of any year. No Name Creek discharges into the Wanipigow River.

The Department, on April 19, 2012, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Millennium Public Library, the Manitoba Eco-Network and the Brokenhead River Regional Library. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members and put on the Environmental Approvals Branch online registry. The Department placed public notifications of the Proposal in the Winnipeg Free Press on Saturday, May 5, 2012, the Winnipeg River Echo on Wednesday, May 2, 2012 and the Lac du Bonnet Leader on Thursday, May 3, 2012. The newspaper and TAC notifications invited responses until May 24, 2012.

COMMENTS FROM THE PUBLIC:

The following public comments were received:

- Summary of May 22, 2012 email from the Wanipigow Lake East End Cottager's Association:
 - We would like to know what type of water quality testing is done on Wanipigow River and Lake, how and where it was done, and what the findings of those tests were. Our hope is that you can direct us to either a person or website that can give us this information.

- As an Association we would like to register our care and concern for what happens in Wanipigow Lake and would like to be included in future mailings or meetings with regards to Wanipigow Lake.
- Summary of May 23, 2012 letter from Hollow Water First Nation:
 - San Gold Corporation is situated on Hollow Water First Nation's traditional territories under mineral lease ML63.
 - We, the Kookom's of Hollow Water First Nation, oppose the proposed expansion of San Gold Corporation. We request a formal consultation meeting with San Gold Corporation and the people of Hollow Water First Nation. (Signed by 13 individuals)
- Summary of May 23, 2012 letter from Eugene Bear of Hollow Water First Nation:
 - I am a trapper from Hollow Water First Nations and title-holder of trapline #11. My permit for 2011-2012 is TLP-1131137. I have been trapping for fifty years and still trap today.
 - I am deeply concerned, not only as a trapper, but as a community member of Hollow Water First Nations. Wanipigow River affects the community of Hollow Water because it connects through our community and flows to Lake Winnipeg. The chemical waste being dumped into No Name Creek does discharge into Wanipigow River and will affect the drinking water, fisheries and poison the animals that drink from this river.
 - I oppose the proposal and would like to request a formal consultation process with the people of Hollow Water First Nations. In the proposal a meeting took place in Bissett, Manitoba on October 13th, 2011. The minutes did not identify the two council men that were present and did not include input from residents of Hollow Water First Nations.

Disposition:

- The Cottager's Association was provided with a contact in the Water Quality Management Section who was able to provide information regarding water quality testing.
- The comments received from the Hollow Water First Nation were forwarded to the Mines Branch from the department of Innovation, Energy and Mines to address during the aboriginal consultation process.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Agriculture, Food and Rural Initiatives

- *No comments received.*

Conservation and Water Stewardship – Environmental Programs and Strategies Branch

- *The Air Quality Section has reviewed the above EA proposal and potential air quality concerns are adequately addressed. No significant impact on air quality is expected provided that the measures cited in the proposal are implemented.*

Conservation and Water Stewardship – Aboriginal Relations Branch

- *A Crown Aboriginal Consultation Initial Assessment and Record of Conclusion should be completed by the responsible department (Mines) and that Hollow Water be scoped as a potentially affected community by this decision.*
- *The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of an Aboriginal right or treaty right of that Aboriginal community. This duty arises out of the recognition and affirmation of Aboriginal rights and treaty rights under section 35 of the Constitution Act, 1982.*

Disposition:

These comments were addressed through the aboriginal consultation process which was conducted by the Department of Innovation, Energy and Mines, Mines Branch.

Labour and Immigration – Workplace Safety and Health Division – Mine Safety Branch

- *Workplace Safety and Health have no concerns.*

Conservation and Water Stewardship – Parks and Natural Areas Branch

- *No comments to offer.*

Conservation and Water Stewardship – Water Stewardship Division

- *The Licencee shall not release any effluent from a final discharge point if: a) the quality or toxicity of the effluent is in non-compliance with the federal Metal Mining Effluent Regulations under The Fisheries Act, or b) the effluent quality is resulting in, or is likely to directly or cumulatively result in, a downstream degradation of the water quality immediately beyond a maximum 10% mixing zone (by volume) within No Name Creek and/or the Wanipigow River, relative to the Manitoba Water Quality Standards, Objectives and Guidelines Regulation under The Water Protection Act and/or nutrient control strategies and regulations developed by the Manitoba Department of Conservation and Water Stewardship.*
- *The Licencee shall, in the course of developing a program for the Environmental Effects Monitoring studies, as required by the Metal Mining Effluent Regulations under the Fisheries Act, consult with the Manitoba Department of Conservation and Water Stewardship for possible additional inclusions or considerations respecting site specific water quality and biological issues, prior to finalizing and undertaking the required Environmental Effects Monitoring studies.*
- *All monitoring data shall be summarized and interpreted in an annual report. In addition to current requirements this report would be required to:*
 - *Evaluate the concentrations of metals in reference to previous years monitoring and baseline conditions at each site.*
 - *The report will include any changes in concentrations over baseline conditions and the direction of change.*
 - *The report will include accidents or malfunctions at the site.*
 - *The report will include a summary of results from all toxicity tests including a discussion of all acute and sub lethal toxicity results.*

- *The proponent will provide an electronic copy of all aquatic monitoring data to the Water Quality Management Section of the Manitoba Department of Conservation and Water Stewardship.*
- *The Licencee shall construct the tailings facility to achieve a maximum hydraulic conductivity of 1×10^{-7} cm/s, including implementing a liner of compacted clay, synthetic material, or other approved material.*
- *A concern, for the proposed and increased discharge period, is ensuring that water and sediment quality downstream of the mine are protected to prevent adverse changes to the following receiving surface water: No Name Creek, Horseshoe Creek, Wanipigow River, and Lake Winnipeg.*
- *The Wanipigow River provides habitat throughout the year for a number of large and small-bodied fish. Further, the Wanipigow River is classified as a Class 1 system, meaning it has a high capacity for the production of fish.*
- *Recent discharge data have indicated that dissolved copper levels, in the Wanipigow River, located downstream of the discharge site, were double the concentration found in an upstream location. Hardness in the Wanipigow River is only about a third of No Name Creek, thus this system is more sensitive than No Name Creek. Similarly, ammonia concentrations in recent discharge samples have been near or above water quality objectives, in particular the 30-day objective. Adequate monitoring and if necessary water quality modeling will be required to ensure the proposed development meets this requirement, in particular under low flow conditions in No Name Creek and the Wanipigow River.*
- *The Water Stewardship Division does not object to the approval of this proposal at this time.*
- *The proponent needs to be informed of the following for information purposes:*
 - *Erosion and sediment control measures should be implemented until all of the sites have stabilized.*
 - *The Water Rights Act requires a person to obtain a valid licence to control water or construct, establish or maintain any “water control works.” “Water control works” are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If a proposal advocates any of the aforementioned activities, a person is required to submit an application for a Water Rights Licence to Construct Water Control Works. A contact person is Mr. Geoff Reimer C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Conservation and Water Stewardship, Box 4558, Stonewall, MB R0C 2Z0, telephone: 204-467-4450, email: Geoff.reimer@gov.mb.ca.*

Proponent Response (August 21, 2012):

- *San Gold Mine effluent will be compliant with *Metal Mining Effluent Regulations* prior to the initiation of any effluent discharge and therefore does not object to the inclusion of Part A of the condition in the Environment Act Licence. As outlined in the current Licence, prior to*

discharge, an effluent sample will be collected from the polishing pond surface, middle and bottom of the water column at the deepest location in the polishing pond and each sample will be tested to assure that effluent quality meets the criteria outlined in Schedule 4 of the *Metal Mining Effluent Regulations* and drinking water health related parameters outlined in *Manitoba Water Quality Standards, Objectives and Guidelines Regulations* under the *Water Protection Act*. Samples will also be tested for acute lethality to rainbow trout and *Daphnia magna* following procedures identified in the *Metal Mining Effluent Regulations*.

The condition with respect to the 10% by volume mixing zone typically applies to effluent discharges entering a larger body of water (K. Jacobs, Personal Communication). Because effluent discharge comprises the majority of flow in No Name Creek, the application of mixing zones outlined within the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* under the *Water Protection Act* does not apply in this situation and Part B of the condition should be excluded from the Licence.

- Manitoba Conservation and Water Stewardship are already consulted with respect to the Environmental Effects Monitoring studies conducted at the San Gold Corporation facility as the Environment Canada Technical Advisory Panel that reviews the Study Designs and Interpretative Reports includes two Manitoba Water Stewardship reviewers. In the future, should the Manitoba Water Stewardship lose its representation on the Technical Advisory Panel, San Gold Corporation will seek consultation from Water Stewardship for the possible inclusion or considerations in Environmental Effects Monitoring Study Designs. This condition is included in the current Environment Act Licence and San Gold Corporation does not object to its inclusion in the amended Licence.
- Aspects of the above conditions are already incorporated in the Mine's current Environment Act Licence and have been followed since the Licence was issued on November 6, 2003 and revised on July 14, 2004. San Gold Corporation has no objections with respect to the inclusion of the additional reporting conditions stated above.
- As discussed in Section 2.3.2.3 of the San Gold Corporation Environment Act Proposal, dykes will be constructed of a clay core with a permeability of no greater than $1 \times 10^{-7} \text{cm/s}$. Once the clay materials are identified that will be used in the construction of the dykes are identified, they will undergo Proctor testing and laboratory triaxial permeability testing to confirm that they meet the permeability requirements.

Two soil samples were submitted for geotechnical analysis at the National Testing Laboratories Limited (Winnipeg, MB) on February 13, 2012 to confirm that the area in which the Tailings Area Expansion is located has a hydraulic conductivity no greater than $1 \times 10^{-7} \text{cm/s}$. The two drill core samples from 10 feet to 12 feet had a hydraulic conductivity (k20) of $4.7 \times 10^{-8} \text{cm/s}$ and $1.8 \times 10^{-7} \text{cm/s}$ (Appendix A) and therefore meet permeability requirements.

As the design of the proposed expansion meets the above conditions, San Gold Corporation does not object with its inclusion in the Environment Act Licence.

- San Gold Corporation anticipates that the effects from the proposed increased discharge period will be negligible. Although the period that effluent discharge may occur has been extended, there has only been a marginal increase in the maximum discharge rate and surface water quality should remain unchanged. In fact, the expanded Tailings Management Area should increase effluent quality by providing additional retention time for the volatilization of ammonia, the natural degradation of cyanide and the settling of suspended solids. San

Gold Corporation will continue to monitor surface water quality as outlined in its Environment Act Licence and should water quality decline due to the lengthened discharge period, the Mine will employ mitigative measures (i.e. additional treatment of effluent) to ensure that water quality in the receiver is compliant with *Manitoba Water Quality Standards, Objectives and Guidelines*.

- San Gold Corporation understands the importance of the Wanipigow River as fish habitat and will make every effort to limit the effect that the construction and operation of the proposed expansion will have on surface water quality.
- Although dissolved copper concentrations are greater in downstream Wanipigow River samples they remain below Manitoba Water Quality Standards, Objectives and Guidelines and pose no threat to aquatic life. Ammonia concentrations were elevated in samples collected at the final discharge point in July 2011 but there are no Metal Mining Effluent Regulation criteria or health-related drinking water guidelines for ammonia. Mr. Jacobs from the Manitoba Department of Water Stewardship notes that concentrations of many parameters decrease and typically meet Manitoba Water Quality Standards, Objectives and Guidelines at Station No Name Creek Vanson Road; however, there must be lengths of No Name Creek between the final discharge point and Vanson Road that do not (K. Jacobs, Personal Communication). This section of No Name Creek can be classified as an intermittent creek with 7Q10 flows less than 0.001 m³s (AECOM 2012). This section does contain pools that remain even when no flow is observed in the creek but these pools are not utilized as fish habitat (D. Parks, Personal Communication) and therefore Tier II Water Quality Objectives should not apply.
- The San Gold Environment Act Proposal includes mitigative measures to control erosion such as minimizing the height of stockpiles and covering them, locating stockpiles away from drainage paths and potential sources of water and minimizing and re-vegetating disturbed area, where required. The proposed development is located in a low-lying area which limits exposure to wind and prevents surface run off from flowing into local waterways. Should an increase in suspended solids be observed in surface waters, then additional control structures will be put in place and site runoff will be redirected into the Tailings Management Area for treatment.

San Gold Corporation is aware of its obligation to obtain a Water Rights License to Construct Water Control Works prior to construction of the proposed Tailings Management Area Expansion. Once the project is approved by Manitoba Conservation, Mr. Reimer will be contacted to begin the application process.

Water Stewardship Division Response (September 21, 2012):

- *In order to provide clarification regarding Point 1, on page 10:*
 - *With regard to the application of Tier II water quality objectives, guidance can be found within the Manitoba Water Quality Standards, Objectives and Guidelines, dated on November 28, 2011 (located on the Internet at: http://www.gov.mb.ca/waterstewardship/water_quality/quality/pdf/mb_water_quality_standard_final.pdf). No Name Creek depending on stream flow would be considered an intermittent stream. The aforementioned guidance suggests that Tier II Water Quality Objectives should apply to all such streams when the water flow is 0.003 m³/s or greater. When the water flow is less than 0.003 m³/s, the minimal level*

- of quality should be Tier II water quality objectives in the downstream water body which the intermittent stream is a tributary. However, in the case of where there are pools that support important uses during periods of low natural flow, Tier II Water Quality Objectives should apply at all times, similar to other larger streams. No Name Creek is a tributary that appears to contain many pool type habitats that have been largely created by beaver activity. The proponent requests for discharge to comply with federal Metal Mining Effluent Regulations under the Fisheries Act and Drinking Water Quality Guidelines. Drinking water quality guidelines are much higher than objectives for the protection of aquatic life and may not be protective of aquatic life.*
- *Therefore, the Water Stewardship Division maintains requiring an Environment Act Licence to include the following:*
 - *The Licencee shall not release any effluent from a final discharge point if: a) the quality or toxicity of the effluent is in non-compliance with the federal Metal Mining Effluent Regulations under the Fisheries Act, or b) the effluent quality is resulting in, or is likely to directly or cumulatively result in, a downstream degradation of the water quality immediately beyond a maximum 10% mixing zone (by volume) within No Name Creek and/or the Wanipigow River, relative to the Manitoba Water Quality Standards, Objectives and Guidelines Regulation under The Water Protection Act and/or nutrient control strategies and regulations developed by the Manitoba Department of Conservation and Water Stewardship.*
 - *With regards to comment 2 on page 10 and 11:*
 - *Representatives from Manitoba Conservation and Water Stewardship's Fisheries Branch and Water Quality Management Section participate on the Technical Advisory Panel under federal Metal Mining Effluent Regulations of the Fisheries Act. The purpose of the comment was to enable the Technical Advisory Panel the ability to require the inclusion of parameters to be monitoring or other considerations to comply with good scientific practice when a proponent conducts environmental effects monitoring studies. Additionally, in the past, some proponents have responded uncooperatively to recommendations of the Technical Advisory Panel, only complying with the minimum legal requirements. The Technical Advisory Panel needs an option to require proponents to conduct additional work, beyond the minimum legal requirements.*

Proponent Response (March 12, 2013):

- We appreciate the clarification and have no concerns with the addition of the above noted clause to the Environment Act Licence.
- While the Company recognizes the value that the Technical Advisory Panel can provide in terms of recommendations for improving water stewardship we are concerned that such recommendations are made in isolation without the opportunity for stakeholders to respond and to make comment prior to submissions being made to regulatory authorities. We contend that the recommendations from the Technical Advisory Panel are meant to be advisory as compared to compulsory. San Gold is committed to not just meet the minimum

regulatory standards but to use technology to improve the quality of water being discharged from the TMA.

The federal MMER is designed to elevate monitoring requirements should an environmental effect be detected and pushes monitoring into an Investigation of Cause, that will focus and attempt to determine the cause of any environmental impact. The federal program was designed to protect fish habitat and outlines suitable discharge limits for mining activities.

If the Province of Manitoba does not accept the federal regulations as being sufficient, and wishes to create higher environmental standards than the industry norm, the company will endeavor to comply with more onerous provincial regulatory requirements providing the technology exists to support a higher standard. Prior to implementing new regulatory standards that are more stringent than federal MMER it is imperative that the benefits and costs of these environmental changes be clearly articulated up front to ensure maximum benefits from environmental improvements. The company does not necessarily believe that these maximum benefits will accrue if the province unilaterally accepts any or all TAP recommendations.

San Gold has completed the Cycle 1 and has submitted the Cycle 2 Study Design to the federal government under the MMER and has incorporated the provincial comments during the Cycle 1 program.

Disposition:

- No further comments were received from the Water Stewardship Division.
- Clauses proposed by the Water Stewardship Division have been included in the draft Licence.

Conservation and Water Stewardship – Environmental Compliance and Enforcement Branch

- *2.2 Existing Effluent Quality / 3.3.2.1 Surface Water Quality:*
 - *The proponent has noted elevated Copper and Aluminum levels in recent effluent water samples (p.5) and exceedances of applicable guidelines in water samples collected as part of the EEM program spanning 2007-2010 (p.22). Conservation and Water Stewardship requests information on how exceedances of the applicable criteria for effluent and sediments will be mitigated in the future.*
- *2.3.1.1 Water Balance*
 - *Conservation and Water Stewardship requests further clarification on how the final annual discharge volume is calculated. Specifically, as mine water and mill discharge is pumped back into the TMA, are the water savings resulting from this practice accounted for within a reduction of mine water “input”? In particular, the end use of reclaim water is unclear as this water is presumably discharged back into the TMA upon reuse. Furthermore, the total amount of water reclaimed is based on a best case scenario in which a daily maximum drilling rate of 2,500 sdtpd is practiced.*
- *2.3.3 Operation*
 - *Conservation and Water Stewardship requests an assessment of the potential for suspension of existing polishing pond sediments resulting from the practice of transferring the new polishing pond and exiting tailings pond into the existing polishing pond. This may be further exacerbated by the practice of discharging cell*

- contents until “practically empty”. Should the proponent determine that this practice has the potential to reduce effluent quality beyond the applicable criteria, we request mitigation strategies to address these concerns. Please note that Figure 7 suggests a “continuous” flow from TP1 into PP1 which is not described within section 2.3.3 of the report.*
- *2.3.4.2 Proposed TMA Expansion*
 - *The proponent has indicated “to prevent impounding water against the dyke structures following decommissioning, the general filling strategy of the proposed new main pond will be to create tailings beaches along the upstream side of the dykes.” Conservation and Water Stewardship requests the proponent to identify strategies to prevent excessive mounding of the slurry, which may result in an unauthorized release from the TMA.*
 - *3.3.2.2 Groundwater*
 - *Conservation and Water Stewardship requests the proponent to comment on the risk of groundwater contamination as a result of the proposed TMA and ongoing operation of the existing TMA and how any such risks will be mitigated.*

Proponent Response (August 21, 2012):

- Upon second review, it has been determined that there have been no exceedances of applicable guidelines in effluent samples collect from 2007 to 2011 for copper and aluminum. Because only one sample was collected in November 2010, only the criteria for a grab sample is applicable and the total copper concentration was well below the maximum daily allowable limit. CCME 2011 guidelines are for surface waters only and do not apply to effluent; therefore no exceedances were observed for aluminum. The San Gold Corporation Environment Act Licence requires Mine effluent to meet Metal Mining Effluent Regulation Criteria and Manitoba Water Quality Standards, Objectives and Guidelines Tier III Drinking Water guidelines. Neither of these two regulations have a guideline for aluminum.
- Total copper concentrations in effluent do become elevated at the end of the fall discharge in 2010 as a result of the Mine trying to lower water levels in the polishing pond too far in an attempt to prevent the need for another emergency discharge in 2011. In doing so, it is thought that sediments were disturbed in the pond which resulted in the increase in copper concentrations. This interpretation is supported by a similar increase in turbidity and total suspended solids.
- The exceedances with respect to water quality in the Wanipigow River pertain to total concentrations of copper, aluminum and iron. These three parameters were elevated above CCME guidelines in both upstream and downstream samples which is likely the result of local geological conditions. It should be noted that dissolved concentrations of these parameters did not exceed Manitoba Water Quality Standards, Objectives and Guidelines.
- The final annual discharge volume from the Polishing Pond is a result of various inputs to and outputs from the TMA and Polishing Pond. These include runoff from rainfall/snowmelt, mill discharge pumped into the TMA, mill process recycle water, annual TMA pump out, and evaporation. A water balance was performed calculating the difference between inputs and outputs to draw the total volume stored in the Polishing Pond down to near zero at the end of the milling year.

The water balance model was based on the assumption of annual precipitation, assumptions of tailings and wastewater volumes based on licensed milling rates, and end of milling year release volumes based on the license milling rate of 1,200 short dry tonnes per day (sdt pd). It is understood that a portion of the total mill discharge pumped into the TMA is recycled back into the mill for mine processing. The total annual, or monthly, volume of mill discharge water recycled back into the mill is not explicitly measured. The recycled percentage of the total mill discharge water was reverse engineered based on the difference between the estimated inflows and the annual mill discharge from recent years.

The practice of recycling mill discharge water from the TMA to be used for mill processing is accounted for in the water balance model and reduces the mine production water input. This recycled mill discharge water ultimately returns to the TMA and at year end there is a net surplus of treated water in the TMA that must be released in accordance with the licensed discharge.

The water used for the daily maximum milling rate of 2500 sdt pd comes from the assumption that the recycle rate computed using the 1200 sdt pd would scale proportionally with the milling rate. As such, the total amount of reclaimed water is based on a best case scenario of a 2500 sdt pd milling rate and the same ration of mill discharge to recycle volume.

- The point of transfer from the new polishing pond to the existing polishing pond will occur on the east side of the existing polishing pond. The current and future point for discharge from the existing polishing pond to No Name Creek is situated in the northwest corner of the existing polishing pond which is expected to allow for sufficient settlement of sediment. In addition, discharge to No Name Creek is accomplished using a floating pump and pumping is terminated once the pump is in close proximity to the pond bottom. However, the transfers of water will be monitored and mitigation measures will be employed on as needed basis (such as staggering water transfers between the polishing ponds and the discharge to No Name Creek) to ensure that TSS concentrations do not exceed the maximum water quality discharge allowances stipulated in the current operating license.

With respect to Figure 7, the figure is depicting the continuous flow of water from the existing main pond to the existing tailings pond once tailings are no longer being deposited in the existing main pond and water no longer requires treatment (to be confirmed by analytical results).

- As is current practice in the existing TMA, tailings will be deposited in the new TMA at several discharge points over time to avoid excessive mounding.
- The risk of impact to local groundwater is deemed low as appropriate construction methods have been used for recent dyke raises at the existing TMA (low hydraulic conductivity achieved through appropriate construction methods and compaction testing of placed materials) and will be used for the dykes and base of the proposed TMA (dykes will be constructed in such a manner as to achieve a sufficiently low permeability of materials used in construction and the permeability of base materials will be assessed and amended with synthetic liners as required). The current monitoring well network will be used to monitor groundwater in the vicinity of the existing TMA and the proposed TMA with additional monitoring wells installed to ensure that groundwater quality can be adequately assessed in these areas.

Environmental Compliance and Enforcement Response (September 18, 2012):

- *Conservation and Water Stewardship recognizes corrections made by San Gold Corporation in regards to copper and aluminum exceedances. Environment Act Licence 2628R does not require effluent quality to meet Tier II water quality objectives as was previously reported. However, nutrient and metal concentrations exceeding Tier III drinking water guidelines were reported within the “Annual Effluent Discharge Campaign Report (2011)”. Conservation and Water Stewardship requests what contingency measures or mitigation strategies will be enacted should exceedances of applicable criteria be identified during future discharges.*
- *Reports from San Gold Corporation indicate approximately 97% of the water required by the mill is reclaimed from the TMA. The water balance summary does not appear to reflect this. Conservation and Water Stewardship requests further clarification on how the final annual discharge volume is calculated. Specifically what are the water inputs and outputs, before and after water reclamation efforts.*
- *San Gold Corporation has indicated the risk of impact to local groundwater is low. The environment act proposal references data obtained from 1999 and 2000 sampling results. Do recent groundwater monitoring results support this assessment?*

Proponent Response (March 12, 2013):

- The Company is committed to remain in compliance with Tier II water quality criteria objectives as our permit requires. Please be advised the receiving water course from the No Name Creek discharge location, being the Wanipigow River, currently does not meet drinking water criteria for some parameters including aluminum and iron. The main parameter of concern for us is copper for which the federal limit (MMER) for copper of 0.3 mg/l is less than the criteria identified for the provincial drinking water standard (1.0 mg/l). Through our last discharge in 2012 we maintained an average for copper of 0.10 mg/l. San Gold will continue to monitor effluent discharges to ensure compliance as per our permit. In addition the company is investigating the addition of treatment systems that could be incorporated into our operations to improve overall discharge water quality. One of the systems being investigated is reverse osmosis water treatment but this is in the early stages of review.
- In response to this water balance question San Gold directed AECOM to communicate directly with Mr. Kris Innes with Compliance and Enforcement and to our knowledge his concerns have been satisfied. (AECOM document was provided).
- Based on the data we have collected to date and on our inspections of the physical environment which surrounds the current TMA we believe that the potential impact to local groundwater based on seepage from the TMA is very low.

Environmental Compliance and Enforcement Response (April 22, 2013):

- *Effluent/Surface Water Quality: No further comments.*
- *Water Balance: No further comments.*
- *TMA Operation: No further comments.*
- *Tailings Inlet Pipe: No further comments.*

- *Groundwater: We are not able to provide further comments to San Gold's response as the data referenced is not within Environmental Compliance and Enforcement Branch files.*

Disposition:

- Clauses proposed by Environmental Compliance and Enforcement have been included in the draft Licence.

Conservation and Water Stewardship - Sustainable Resource & Policy Management Branch

- *No concerns with the proposal, but offers the following comments:*
 - *Please be advised that the Manitoba Government is in the process of developing a provincial peatland strategy to assess the status of Manitoba peatlands, their importance in global climate processes in carbon sequestration and their value in relation to biodiversity. International research has indicated that peatlands are the most efficient terrestrial ecosystem in storing carbon and most important and most important long term carbon store. The peatland strategy is a commitment from the Throne Speech (2009) and strategy development is in process.*
 - *The tailings management expansion area outlined in the proposal appears to fall in a wetland/peatland. This may have implications for the peatland strategy under development. Please contact Jenny Harms at 204-945-4363 or jenny.harms@gov.mb.ca (Sustainable Resource and Policy Management Branch) for additional information in this regard.*

Conservation and Water Stewardship - Pollution Prevention Branch

- *No comments received.*

Conservation and Water Stewardship – Wildlife Branch

- *The proposed expanded tailings management area encompasses an area of approximately 1 km² of crown land in south eastern Manitoba. As identified in the environmental assessment, this area provides valuable wildlife habitat for a wide variety of species. By converting functioning forest habitat into an industrial development, the proposed development will negatively affect available wildlife habitat. In this case, the proposed project is located within a newly designated "Moose Conservation Zone". Due to recent rapidly declining moose populations, Manitoba Conservation is undertaking significant efforts to help conserve and restore moose in this area. These measures include closing licensed moose hunting, implementing moose harvesting restrictions for right's based hunters, closing trails and roads, implementing wolf management, and reducing the whitetail deer population. Expanded industrial development in this area of Manitoba may create additional pressures to moose recovery.*
- *It is recognized that the proponent has made an effort to minimize the required size of the project, by considering an area adjacent to an existing disturbed site, and bordering a provincial road. However, where avoidance of major impact on wildlife habitat is not feasible, as in this case, financial compensation would be requested to help meet the draft provincial policy of habitat protection. This policy aims toward a no-net-loss of habitat or*

productivity, and requires compensation for habitat loss arising through industrial and other development.

- *Options for providing compensation are:*
 - *Securing nearby land and restoring, enhancing, or creating habitat;*
 - *Securing alternate high-value wildlife habitat and transferring ownership to a conservation agency;*
 - *Contributing to the Habitat Compensation Fund, as administered by Manitoba Habitat Heritage Corporation.*
- *An additional option may be to partner with a local conservation agency, such as the Manitoba Model Forest, to support research and conservation of local wildlife species, such as moose and woodland caribou.*
- *The proponent is invited to contact the Habitat Mitigation Biologist, Jonathan Wiens at jonathan.wiens@gov.mb.ca 204-945-7764 or the Regional Wildlife Manager, Kelly Leavesley at Kelly.leavesley@gov.mb.ca 204-345-1427, to discuss this matter further.*

Proponent Response (August 21, 2012):

- The alteration that is being proposed is temporary in nature and requires a suitable closure plan, acceptable to the province, to be proposed and completed at the closure of the mine. The Tailings Management Area currently provides habitat for migrating shorebirds and moose, as a cow has been around for the past two years, with successful rearing of a calf annually. The expansion of the TMA will also eliminate hunting in the vicinity for the protection of mine workers.
- San Gold is working with the Hollow Water First Nation to develop some environmental programs to assist in their understanding of our operations and thus financial compensation for the environment is indirectly being provided via the local First Nation.

Disposition:

No further comments were received from the Wildlife Branch. This was assumed to indicate that the original concerns submitted were satisfied.

Innovation, Energy and Mines – Mines Branch

- *Identify all First Nations and Aboriginal communities whose traditional activities may be impacted by the project;*
- *Engage with identified First Nations and Aboriginal communities;*
- *Report on the engagement and integrate any community issues and concerns into the EIS;*
- *Provide an assessment of what effects the project may have on the exercise of Aboriginal and Treaty rights of the identified First Nations and Aboriginal communities;*
- *Outline any proposed accommodations measures to address the identified effects; and*
- *Provide an update to the existing Mine Closure Plan for approval of the Director of Mines by September 30, 2012.*

Proponent Response (August 21, 2012):

- San Gold Corporation began updating its Mine Closure Plan in the fourth quarter of 2011 prior to submitting its Environment Act Proposal. The Closure Plan has been amended to

include decommissioning of the proposed tailings management area expansion and closure costs are currently being assessed. Once the closure costs are calculated, only determining the appropriate form of security remains to be completed. It is anticipated that the updated Mine Closure plan will be submitted to the Director of Mines for approval by September 30, 2012 as requested.

Proponent Response (September 18, 2012):

- Hollow Water First Nation, Little Black River First Nation and Sagkeeng First Nation lie within a 130 kilometre radius of the Rice Lake Mine and tailings facilities. By definition trapping, fishing, hunting and gathering rights for medicines and wild rice would constitute traditional activities. The proposed Expansion of the TMA will sterilize approximately 100 hectares of land on Mine Lease 63. There is no hunting allowed on the Mine Lease due to safety reasons and the requirement to comply with the Manitoba Workplace Safety and Health Act and Regulations. There was no wild rice growing in the area where trees were harvested and to the best of our knowledge there were no other gathering activities being practiced. There are two recognized trap lines in proximity to the proposed expansion (Trap Line #12 owned by Conrad Bushie and Trap Line #11 owned by Eugene Bear). San Gold has negotiated a confidential compensation settlement with Eugene Bear specific to Trap Line #11 for loss of opportunity to trap in the proposed expansion area. (A signed letter from Eugene Bear withdrawing his prior letter of opposition to the project was attached to the response). San Gold is currently in negotiation with Conrad Bushie regarding loss of opportunity to trap as a result of harvesting of trees in the proposed expansion area. San Gold has made a settlement offer to Mr. Bushie which to-date has not been accepted. Hollow Water Chief and Council have encouraged direct negotiation between San Gold and the affected parties.
- Hollow Water First Nation is located downstream from the mine site. Under the Stage II Environmental License San Gold is permitted to discharge water on an annual basis water from the polishing pond in the existing TMA. San Gold is required to sample the discharge and not exceed regulatory standards for water quality. Water is discharged into No Name Creek which flows in the Wanipigow River, passing Hollow Water First Nation and discharging into Lake Winnipeg. Little Black River First Nation and Sagkeeng First Nation are not impacted by the discharge into the Wanipigow River other than being contiguous to Lake Winnipeg.
- San Gold discharged approximately 150 million US gallons of water from the polishing pond in 2011 and expects to discharge approximately 130 to 150 million US gallons in 2012 and subsequent years. The majority of water that is discharged on an annual basis results from precipitation and surface runoff into the TMA. San Gold recirculates 95% of the water used in the milling process. During 2011 San Gold constructed a new dyke on the northwest corner of the TMA (Dyke #8) that has successfully prevented water migrating from entering the TMA from the environment.
- San Gold engages with the local communities in various formal and informal ways. San Gold is the largest industrial employer for constituents of the Hollow Water First Nation. San Gold also employs constituents from Little Black River First Nation and Sagkeeng First Nation. San Gold currently has 435 employees of which 30% are of First Nations and/or Aboriginal descent.

- San Gold sponsors community teams and events such as Black Island Days. Recently San Gold initiated sponsorship of the local radio station in Hollow Water and is the largest industrial sponsor to-date. San Gold Participates in the Hollow Water First Nation Traditional Area Advisory Committee (“TAAC”) which meets on a bi-weekly basis to discuss community issues and consider business development opportunities. The TAAC works as a volunteer organization in conjunction with Hollow Water First Nation Chief and Council. San Gold recently committed to a three (3) year sponsorship of the TAAC at the annualized amount of \$30,000 per annum.
- On June 6, 2012 San Gold made a presentation to the residents of Hollow Water First Nation to outline the proposed expansion plans and discuss the impacts of the project. Hollow Water First Nation Chief and Council have visited the mine property in the last two weeks, met with San Gold management to better understand the proposed expansion and toured the existing TMA and the proposed area for the expansion. The Hollow Water First Nation TAAC is scheduled to visit the property on September 20, 2012 to better understand the project and facilitate discussion within the community.
- San Gold is aware that a group of community members from Hollow Water First Nation called Kookom’s Group of Hollow Water First Nations (“Kookom’s”) has expressed opposition to the proposed expansion. On the advice of Hollow Water First Nation Chief and Council San Gold has not yet met directly with the Kookom’s. It is our understanding that the Kookom’s have no official standing within the community.
- San Gold has made several attempts without success to facilitate a similar information meeting in Little Black River. To-date we have been unable to gain confirmation of dates and times but remain committed to doing so. In addition San Gold intends to join the Little Black River First Nation TAAC and provide sponsorship.
- San Gold intends to continue improving communications with the community through the TAAC, radio station and dialogue with the Hollow Water First Nation Chief and Council. During community meetings a concern was that the community does not have funding for water sampling and analysis. San Gold has committed to increase sampling locations during the annual discharge including a new sampling location at or near Hollow Water. San Gold has also committed to fund the costs of parallel sampling at an independent laboratory to validate the quality of water entering the community and ensure third party objectivity. San Gold also intends to negotiate a TAAC agreement with Little Black River.
- San Gold continues to be a large employer in the local area. San Gold has requested increased local hiring commitments from its contractors. In early October 2012 San Gold has contracted with Workbay.net to build a skills inventory database in the community of Hollow Water First Nation to better facilitate readiness for community members to join the local work forces. This initiative will be funded by San Gold and at no cost to the communities.
- There should be negligible impacts from the proposed TMA expansion other than the two residents of Hollow Water First Nation that have or are engaged in trapping activities. As stated above, one trapper has negotiated a settlement to his satisfaction and a second trapper is in negotiations with the company. In the case of the second trapper, his primary source of income is not trapping. The proposed expansion of the TMA represents less than 5% of surface area covered by Trap Line #12 and it is located between the Wanipigow River and Highway #204. 95% of Trap Line #12 remains accessible for trapping. The company

expects that the annual discharge from the existing TMA and future TMA will not exceed current discharge rates and volumes and as such there will be no change to water quality at Hollow Water First Nation.

- The expanded TMA is located within the company's Mineral Lease #63. There is no hunting within the Mineral Lease and no fish habitat has been impacted. To the best of our knowledge the company's right to develop a mining property on Crown lands outside of designated First Nations lands is not subordinate to a First Nations individual's right to exercise traditional activities such as hunting, fishing, trapping and gathering rights on the same ground.
- As outlined above, there are only two Trap Lines that are impacted by the proposed TMA expansion. A settlement has been reached with the owner of Trap Line #11 and a settlement is currently being negotiated with the owner of Trap Line #12 based on the concept of loss of opportunity to trap. There are no other effects that have been identified outside of our current Operating Licence. To mitigate any concerns regarding quality of water being discharged into the environment San Gold has committed to pay for the costs of sampling and analysis of water at Hollow Water.
- It is apparent that most of the concerns from constituents are as a result of misinformation regarding the project and the project impacts. It is the Company's intent to continue to communicate with and educate community members and elected representatives of the communities regarding the impacts of the project. The Company has committed to additional information meetings in the community to address concerns and utilize the TAAC process to disseminate information.
- The updated version of the Mine Closure Plan is on track to be completed and submitted by September 30, 2012.

Mines Branch Response (October 12, 2012):

- *San Gold Corporation has not adequately provided sufficient information to address the concerns in their letter of response on September 18, 2012.*
- *An updated mine closure plan has not been received as of October 12, 2012.*
- *Further information is required with respect to San Gold's consultation process with affected First Nations and Aboriginal communities. I will provide a written response outlining what information is required from San Gold but October 26, 2012.*

Disposition:

- On October 31, 2012, a meeting was held between San Gold Corporation and the Mines Branch to discuss a path forward and further required information.
- An updated Mine Closure Plan was received November 1, 2012.
- The Mines Branch has indicated that the original concerns submitted have been satisfied.

Culture, Heritage and Tourism - Historic Resources Branch

- *No concerns.*

Infrastructure and Transportation

- *Under The Highways and Transportation Act, permits are required from MIT for any new, modified or relocated access unto a Provincial Road (PR). Therefore, a permit would be required for the 2 proposed access connections unto PR304.*
- *Similarly, any structures (including buildings, dykes, advertising signs, wells, septic fields, etc.) on, under or above the ground within the 38.1 meter (125 ft) controlled area adjacent to a PR, any discharging of water or other liquid materials into the PR's ditch and placing of any plantings within 15.2 metres (50 ft) of the PR's right-of-way will also require permit from MIT.*
- *For permitting requirements, please contact Mr. Kevin Nimchuk, Senior Access Management Analyst, at (204) 945-5658.*

Proponent Response (August 21, 2012):

- *San Gold Corporation is aware of its obligation to obtain the required permits prior to constructing the two proposed access roads described in the Environment Act Proposal.*
- *There are currently no plans to construct any structures within the controlled areas adjacent to Provincial Road 304, discharge any liquids in to Provincial Road 304's ditch or place any plantings within 15.2 m of Provincial Road 304.*
- *San Gold Corporation thanks Mr. Clary-Lemon for providing the appropriate contact information.*

Disposition:

No further comments were received from Manitoba Infrastructure and Transportation. This was assumed to indicate that the original concerns submitted were satisfied.

Manitoba Health

- *No comments received.*

Intergovernmental Affairs – Community Planning Services

- *The subject lands for the expansion of the tailings management area are located within Township 24 Range 13 and 14 EPM approximately 1 km east of Rice Lake Mill, located north of the community of Bissett. According to the application the lands are currently leased by San Gold Corporation.*
- *Community Planning has no concerns with the proposed development.*

Canadian Environmental Assessment Agency

- *Following a review by all federal departments with a potential interest in the proposed development, the application of the Canadian Environmental Assessment Act (the Act) by a federal authority will not be required for this project.*
- *Health Canada, the Department of Fisheries and Oceans and Environment Canada have indicated that they could provide expertise to the responsible authority if requested.*

PUBLIC HEARING:

A public hearing was not requested by the public and is not recommended for this Development.

CROWN-ABORIGINAL CONSULTATION:

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

The Mines Branch from the Department of Science, Technology, Energy and Mines conducted consultations for the proposed Development with potentially affected First Nations and Aboriginal communities.

A Consultation Summary Report was received on April 12, 2013 recommending that an Environment Act Licence be issued for the proposed development with the condition that the proponent mitigate or accommodate the concerns and issues of the communities.

To accommodate the concerns of the communities, Clause 55 (b) was included in the draft Licence. Clause 55 (b) of the draft Licence states that the Licencee shall submit to Hollow Water First Nation, an environmental monitoring report following each effluent discharge campaign. The report would summarize the monitoring data collected during each effluent discharge campaign and describe the environmental impact of the effluent on the receiving waterways relative to non-impacted or pre-impacted baseline data respecting the receiving water and sediment.

RECOMMENDATION:

The Proponent should be issued a Licence for the expansion and operation of the tailings management area in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Environmental Compliance and Enforcement Branch.

PREPARED BY:

Jennifer Winsor, P.Eng.

Environmental Engineer
Environmental Approvals Branch
Telephone: (204) 945-7012
Fax: (204) 945-5229
E-mail Address: Jennifer.Winsor@gov.mb.ca

July 9, 2013