May 3, 2019

Suite 1000 - 1050 West Pender Street Vancouver, British Columbia Canada V6E 3S7

Saul Schneider, Regional Director Environmental Protection Operations Division – Pacific and Yukon Region **Environment and Climate Change Canada** Douglas Jung Building, 201-401 Burrard Street, 5th Floor Vancouver, British Columbia V6C 3S5 Email: EC.RPYAA-AOPYR.EC@canada.ca

Sent by email

tel: (604) 682-5122 fax: (604) 682-5232

RE: Notice of Mine Subject to the Metal and Diamond Mining Effluent Regulations

Dear Mr. Schneider,

Please accept this letter as notice as required under paragraph 8 of the Metal and Diamond Mining Effluent Regulations (MDMER) that on April 20, 2019 StrataGold Corporation's (SGC) Eagle Gold Mine in the Yukon became subject to the MDMER. On April 20, 2019, approximately 5,000m³ of contact water was discharged from the Final Discharge Point (FDP) listed as the LDSP Outlet in Table 1 herein.

StrataGold Corporation, a wholly owned-directly held subsidiary of Victoria Gold Corp., is the operator of the Eagle Gold Mine. The name and address for both entities is as follows:

StrataGold Corporation 1000 - 1050 West Pender Street Vancouver, BC V6E 3S7

Victoria Gold Corp. 303 - 80 Richmond Street West Toronto, ON M5H 2A4

SGC completed the Yukon Environmental and Socioeconomic Assessment Board assessment process for the Eagle Gold Mine in early 2013, and subsequently obtained a Type A Water Use licence and Quartz Mining Licence for the construction, operation and closure of the Eagle Gold Mine. As a result of the territorial licencing process, SGC is required to meet strict effluent quality discharge criteria in accordance with our Type A Water Use Licence QZ14-041. The operational discharge criteria mandated by QZ14-041 have been set at limits well below the MDMER Schedule 4 Authorized Limits of Deleterious Substances.

The Quartz Mining Licence includes capacity limits for operations which have been utilized as the "design-rated capacity" for the Eagle Gold Mine. The "design-rated capacity" is a maximum ore processing rate of 29,500 tonnes per day, based upon a 12-month average.

There are five potential FDPs positioned to represent SGCs last point of control in relation to Eagle Gold Mine infrastructure as shown on the enclosed figure. These are the HLF Construction Sump, the outlet of the Events Pond Emergency Spillway, the Lower Dublin South Pond (LDSP) outlet, the LDSP Emergency Spillway and the



LDSP Contingency Sump. Additionally, downstream water quality monitoring stations are also shown. FDP information required by Section 9 of the MDMER is provided in Table 1.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Mark Ayranto Chief Operating Officer

Enclosure

CC: Travis Teel, Enforcement Officer, ECCC, travis.teel@canada.ca / Tel: 867-393-6705

Table 1: New Final Discharge Point Information

FDP Description	Latitude	Longitude	Description	Design & Maintenance	Receiving Waterbody
FDP #1 HLF Construction Sump	64° 2'9.18"N	135°49'49.93"W	The purpose of the HLF Construction Sump, is to manage sediment laden water from the HLF areas currently under construction.	The HLF Construction Sump is monitored regularly, and will only be used until construction of the HLF and Events Pond and associated permanent water management infrastructure are complete.	n/a
FDP #2 Events Pond Emergency Spillway	64°2'8.66"N	135°50'8.77"W	Process solution from the Heap Leach Facility will be conveyed via a lined spillway to the Events Pond in the event that HLF storage capacity is temporarily exceeded.	The Events Pond is designed to store the runoff volume of a Probable Maximum Flood from the drainage basin. The Events Pond spillway is designed to pass the routed peak flow of the Probable Maximum Flood with 0.5 m of freeboard. The Events Pond will be kept empty during normal operation except for temporary storage of precipitation accumulation that would be used within the process circuit. Discharge from this FDP is not anticipated during the life of the mine and would only occur as a result of an emergency.	Dublin Gulch
FDP #3 LDSP Outlet	64°1'56.39"N	135°50'42.43"W	Contact water is directed to LDSP, which acts as the main water settling and control pond for the mine. Discharge from the LDSP during normal operations is controlled at the Low-Level Outlet (LLO).	The pond has been designed to store the 10-year, 24hr storm event while at the same time providing a detention time of at least 24 hours for any sediment particles sized 0.005 mm (and larger) to settle out. The LDSP is designed with a LLO, where a valve will allow control of effluent discharge. Water will be sampled to ensure compliance with Water Use Licence and MDMER effluent discharge criteria prior to release.	Haggart Creek
FDP#4 LDSP Emergency Spillway	64° 1'55.52"N	135°50'46.03"W	The LDSP is designed with an emergency spillway to protect the pond infrastructure in the event of extreme rainfall or runoff events.	The spillway of the pond is designed to pass the 1000-year, 24-hour storm while still maintaining at least 0.5 m of freeboard. Discharge from this FDP would only be in the unlikely event of extreme rainfall or runoff events that exceed the LDSP storage capacity.	Haggart Creek
FDP #5 LDSP Contingency Sump.	64° 2'0.84"N	135°50'9.11"W	The LDSP Contingency Sump, is to be used as an emergency measure in the event that LDSP water samples are above Water Use Licence discharge criteria and pond volumes are nearing the design capacity.	The LDSP contingency sump is a backup planning measure that would only be used if, after closing the LDSP valve to allow for increased retention time and making full use of the flocculent injection system, pond water does not have water quality meeting QZ14-041 discharge criteria and accumulation in the pond may result in a risk of pond overtopping or damage to pond infrastructure.	n/a





May 28, 2019

Suite 1000 - 1050 West Pender Street Vancouver, British Columbia Canada V6E 3S7

Saul Schneider, Regional Director Environmental Protection Operations Division – Pacific and Yukon Region Environment and Climate Change Canada Douglas Jung Building, 201-401 Burrard Street, 5th Floor Vancouver, British Columbia V6C 3S5 Email: EC.RPYAA-AOPYR.EC@canada.ca

Sent by email

tel: (604) 682-5122 fax: (604) 682-5232

RE: Notification of New Mine Subject to MDMER

Dear Mr. Schneider,

Thank you for the MDMER information provided in your letter received May 16, 2019. In response to the letter, additional information on Victoria Gold's Final Discharge Point (FDP) that has been constructed and currently being periodically used to deposit effluent, is provided herein.

FDP #3 "LDSP Outlet" is located at approximately 64°1'56.39"N 135°50'42.43"W. Mine site contact water is directed to LDSP (Lower Dublin South Pond), which acts as the main water settling and control pond for the mine. Discharge from the LDSP during normal operations is controlled at the Low-Level Outlet (LLO). The pond has been designed to store the 10-year, 24hr storm event while at the same time providing a detention time of at least 24 hours for any sediment particles sized 0.005 mm (and larger) to settle out. The LDSP is designed with a LLO, where a valve allows control of effluent discharge to Haggart Creek, the receiving water body.

Figure 1 provides an overview of the LDSP with infrastructure related to FDP #3. Once water meets discharge criteria it is discharged through LLO and discharged into the V-notch weir. The sampling station is located directly downstream of the V-notch weir (64°01'57.16"N 135°50'48.32"W).



Figure 2 below shows the infrastructure in place to move water from the LDSP and the location of the discharge control valve. Discharge is controlled by the valve in the LLO. Water flow can be manual controlled by the LLO, water is discharge through an 8" pipe that empties into the weir.



Figure 2: Valve Location and Piping to FDP

Figure 3 shows the outlet from the 8" pipe that empties into a containment structure and then flows through the vnotch weir, which is the primary device for measuring effluent flows. The effluent sampling location is located directly below the weir.

A bridge has been installed above the weir crossing the channel and a staff gauge has been installed off the bridge. Field staff take manual readings when the site is visited, the staff gauge is surveyed annually to ensure accuracy. A Solinst LT F15/M5 Level Logger has also been installed to take continuous measurement and is maintained as per manufactures recommendations.



Figure 3: Control Pond Discharge and Weir Location

Should you have any further questions, please do not hesitate to contact me.

Sincerely,

Hugh Coyle Lands & Permitting Manager

CC: Travis Teel, Enforcement Officer, ECCC, travis.teel@canada.ca / Tel: 867-393-6705



July 24, 2019

Suite 1000 - 1050 West Pender Street Vancouver, British Columbia Canada V6E 3S7

Saul Schneider, Regional Director Environmental Protection Operations Division – Pacific and Yukon Region Environment and Climate Change Canada Douglas Jung Building, 201-401 Burrard Street, 5th Floor Vancouver, British Columbia V6C 3S5 Email: EC.RPYAA-AOPYR.EC@canada.ca

Sent by email

tel: (604) 682-5122

fax: (604) 682-5232

RE: Additional Details Regarding Final Discharge Points

Dear Mr. Schneider,

Thank you for the MDMER information provided in your letter received May 16, 2019. In response to the letter, additional information on Victoria Gold's Final Discharge Points (FDP), other than FDP #3 "LDSP Outlet" which was provided in our letter dated May 28, 2019, is provided herein.

FDP #1 HLF Construction Sump (renamed "HLF Underdrain Monitoring Vault")

FDP #1 "HLF Construction Sump" was located at approximately 64°2'9.18"N 135°50'42.43"W. The purpose of the HLF Construction Sump was to manage sediment laden water from the HLF areas currently under construction. Construction has been advanced to the extent that permanent water management infrastructure is complete, and sediment control is no longer an issue at this location. An underdrain monitoring vault (Figure 1) has now been constructed at this same location. This FDP should now be called the "Heap Leach Facility (HLF) Underdrain Monitoring Vault".



The purpose of the vault is to monitor the HLF underdrain system. The underdrain system is intended to intercept naturally occurring (non-contact) groundwater beneath the HLF and convey it to the vault thereby limiting upward hydrostatic pressure on the liner. Non-contact groundwater flows at a fairly steady rate through the underdrain system and discharges to Dublin Gulch at approximately 64°2'5.99" N 135°49'47.98" W. Monitoring at the vault will allow for the detection of measurable leakage that may occur through the HLF liner system.

The vault is configured to allow for sampling of water quantity and quality. In the unlikely event that a leak is detected through sampling, the vault is equipped with a fluid-level activated pump that will be set to automatically direct flows to the HLF where the water would be added to the process make-up water circuit. The vault is equipped with a flow meter, the primary flow measurement device, which will be monitored weekly.

FDP #2 Events Pond Emergency Spillway

FDP #2 "Events Pond Emergency Spillway" is located at approximately 64°2'8.66"N 135°50'8.77"W. The Events Pond spillway is designed to pass the routed peak flow of the Probable Maximum Flood with 0.5 m of freeboard (assuming the Events Pond was full). The Events Pond will be used for temporary storage of water (e.g., precipitation accumulation) that would subsequently be used as make-up water within the process circuit. While discharge from this FDP is highly unlikely during the life of the mine and would only occur as a result of an emergency scenario, the outlet of the spillway is to Dublin Gulch, the receiving waterbody.

Figure 2 and 3 provide an overview of the Events Pond Emergency Spillway with infrastructure related to FDP #2. A sampling location for water in the Events Pond can be accessed from the drivable swale. Water levels in the events pond are measured routinely, and during the very low likelihood of discharge through FDP #2, when water begins to flow over the spillway, flow through the spillway would be estimated using the broad-crested weir formula, where $Q = 2.69LH^{1.5}$, and as summarized in Table 1 and based on the dimensions of the emergency spillway shown in Figure 4. During an event, pond elevations would be surveyed more often (perhaps from daily to hourly based on the observed rise in levels), such that a more accurate flow volume discharged over time would be calculated.

	Pond Elevation (m asl)	H (m)	Q (m³/s)
Spillway Crest	894.50	0.00	0.000
	894.55	0.05	0.120
	894.56	0.06	0.158
	894.57	0.07	0.199
	894.58	0.08	0.243
	894.59	0.09	0.291
	894.60	0.10	0.340
	894.70	0.20	0.962
	894.80	0.30	1.768
	894.90	0.40	2.722
	895.00	0.50	3.804
	895.10	0.60	5.001
	895.20	0.70	6.302
	895.30	0.80	7.699
	895.40	0.90	9.187
Embankment Crest	895.50	1.00	10.760

Table 1. Events Pond Spillway Flow Rating



Figure 2: Events Pond Infrastructure



Figure 3: Events Pond Emergency Spillway Infrastructure



Figure 4: Events Pond Emergency Spillway Dimensions

FDP #4 LDSP Emergency Spillway

FDP#4: "LDSP Emergency Spillway" is located at approximately 64° 1'55.52"N 135°50'46.03"W. The LDSP is designed with an emergency spillway to protect the pond infrastructure in the event of extreme rainfall or runoff events. The spillway of the pond is designed to pass the 1000-year, 24-hour storm while maintaining at least 0.5 m of freeboard. Discharge from this FDP would only be in the event of extreme rainfall or runoff events that exceed the LDSP storage capacity.

In the event of discharge through the emergency spillway, the receiving waterbody would be Haggart Creek at 64° 2'6.78"N and 135°51'22.33"W via Ditch C. The spillway is wide and reinforced with cobbles and boulders, making it difficult to get an accurate low flow measurement. During low flows (when water is moving within the cobbles and boulders) a salt dilution method (accuracy of +/-20%) in Ditch C just downstream of the outflow culvert will be used. However, the water levels in the pond are measured routinely, and in the event when water begins to flow over the spillway, flow through the spillway would be estimated using the broad-crested weir formula, where Q = 1.72LH^{1.5}, and as summarized in Table 2. During an event, pond elevations would be surveyed more often (perhaps from daily to hourly based on the observed rise in levels), such that a more accurate flow volume discharged over time would be calculated.

Table 2. LDSP Spillway Flow Rating

	Pond Elevation (m asl)	H (m)	Q (m3/s)
Spillway Crest	812.0	0.0	0.00
	812.1	0.1	0.44
	812.2	0.2	1.23
	812.3	0.3	2.26
	812.4	0.4	3.48
	812.5	0.5	4.86
	812.6	0.6	6.40
	812.7	0.7	8.06
	812.8	0.8	9.85
	812.9	0.9	11.75
	813.0	1.0	13.76
	813.1	1.1	15.87
	813.2	1.2	18.09
	813.3	1.3	20.40
	813.4	1.4	22.79
Embankment Crest	813.5	1.5	25.28

Figure 5 provides an overview of the LDSP Emergency Spillway with infrastructure related to FDP #4.



Figure 5: Lower Dublin South Pond and Infrastructure

FDP #5 LDSP Contingency Sump

FDP#5: This contingency sump is no longer used and has been filled and graded to match surrounding topography. LDSP Contingency Sump was located at approximately 64° 2'0.84"N 135°50'9.11"W and was to be used as an emergency measure during construction in the event that LDSP water quality did not meet discharge criteria. Instead of letting water accumulate in the pond and risk overtopping or damage to pond infrastructure water would have been pumped to the sump for ex-filtration.

Now that construction has advanced, the Events Pond is now available for storage and infrastructure is currently in place to pump water from the LDSP to the Events Pond. The scenario contemplated would utilize the Events Pond storage capacity rather than the contingency sump (FDP #5).

This is aligned with the Guidance Document for Flow Measurement of Metal Mining Effluents (2001), which states that non-point source flows should be collected and conveyed to a FDP, in this case, the FDP#2 Events Pond Emergency Spillway.

Should you have any further questions, please do not hesitate to contact me.

Sincerely,

Me

Hugh Coyle Lands & Permitting Manager

CC: Travis Teel, Enforcement Officer, ECCC, travis.teel@canada.ca / Tel: 867-393-6705