From: Phyllis Beaulieu
To: Robin Ikkutisluk
Subject: FW: Notification to begin dewatering from the PKCA to Stream C3 - Jericho Diamond Mine
Date: Thursday, August 09, 2012 11:10:47 AM

From: Wes Atchison [mailto:watchison@sheardiamonds.com]
Sent: Thursday, June 28, 2012 4:32 PM
To: Eva Paul; Phyllis Beaulieu
Subject: Re: Notification to begin dewatering from the PKCA to Stream C3 - Jericho Diamond Mine

Dear Eva and Phyllis,

In our water license, Section F Part 15 states that we must provide at least 10 days written notice to an Inspector and the Board prior to any planned discharges from the PKCA into Stream C3. Since the water in the PKCA meets the effluent criteria outlined in the license and we have completed the required testing will it be okay for discharge to begin within this 10 day period?

Thank you,

Wes

On Thu, Jun 28, 2012 at 2:19 PM, Eva Paul <Eva.Paul@aandc-aadnc.gc.ca> wrote:

Thanks Wes.
Eva

>>> Wes Atchison <watchison@sheardiamonds.com> 6/28/2012 3:50 PM >>>

Dear Eva and Phyllis:

In accordance with Part F, Item 15, of water licence # 2AM-JER1119, Shear is providing this written notification of our intent to begin dewatering of from Cell C of the Processed Kimberlite Containment Area (PKCA) to Stream C3. Shear has now received all of the analytical results for the samples that were collected on June 4th, 2012. The table below summarizes the criteria provided in Part F, Item 16 of our water licence. Additionally, the results required in Schedule I, Item 2 (v) are included in the table below. The certificates from the lab are attached to this email for your review.

Parameter	Maximum Average Concentration	Maximum Allowable Grab Sample Concentration	SWQ-04 Actual Value from Maxxam Job#B246481 and ALS work order #L1156974
pH	6.0 to 8.8	6.0 to 8.8	7.41
Total Suspended Solids (TSS) (mg/L)	15	25	1.2
Total Dissolved Solids (TDS) (mg/L)	2000	4000	62
Chloride – Cl	500	1000	3.1
Total (T) – Al (mg/L)	1.5	3.0	0.0424

Dissolved (D) – Al (mg/L)	1.0	2.0	0.0223
T-As (mg/L)	0.05	0.1	0.000265
T-Cd (mg/L)	0.0012	0.0024	0.0000084
T-Cr (mg/L)	0.087	0.17	0.00012
T-Cu (mg/L)	0.02	0.04	0.00152
T-Pb (mg/L)	0.01	0.02	0.0000676
T-Mo (mg/L)	0.73	1.5	0.00188
T-Ni (mg/L)	0.05	0.1	0.00154
U (mg/L)	0.5	0.1	0.00387
T-P (mg/L)	0.2	0.4	0.009
T-Zn (mg/L)	0.25	0.50	0.00246
NH_3-N (mg/L)	6	12	<0.050
T-Ni (mg/L)	1	2	0.00154
T-NO_3-N (mg/L)*	28*(20)	56*(40)	5.3
T-NO_2-N (mg/L)	2.5*(1)	5*(2)	0.018
Biological Oxygen Demand (5 day) BOD_5 (mg/L)	15	25	<2.0
Fecal Coliforms (CFU/100ml)	10	20	<1.0
Total Extractable Hydrocarbons (mg/L)	3.0	6.0	<0.10
Acute Lethality to Rainbow Trout			pass
Acute Lethality to *Daphnia magna*			pass
Chronic testing using *Ceriodaphnia dubia*			pass
Chronic testing using *Pseduokirchneriella subcapita*			pass

Discharge will be conducted in accordance with Part F, Item 6 and Item 19.

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

Sincerely,

--
Wes Atchison
(778) 837-2750
Environmental Technician
watchison@sheardiamonds.com

This email, including any attachments, is for the sole use of the intended recipient and may contain confidential information. If you are not the intended recipient, please immediately notify us by reply email or by telephone, delete this email and destroy any copies. Thank you.

--

Wes Atchison
(778) 837-2750
Environmental Technician
watchison@sheardiamonds.com

Shear Diamonds Ltd.
Suite 220, 6 Adelaide Street East
Toronto, ON, M5C 1H6
www.sheardiamonds.com

This email, including any attachments, is for the sole use of the intended recipient and may contain confidential information. If you are not the intended recipient, please immediately notify us by reply email or by telephone, delete this email and destroy any copies. Thank you.