www.aecom.com

March 18, 2013

Phyllis Beaulieu Licensing Manager Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0

Dear Phyllis:

Project No: Water Use License 1BR-DYE0914 2012 Annual Report

Regarding: DYE-M, Cape Dyer DEW Line Site

AECOM Canada Ltd. is providing the attached annual report form as per Section B.1 of the abovenoted water use license. The report is being submitted on behalf of Defence Construction Canada and the Department of National Defence.

In addition to the annual report form, we are providing a summary of the work completed to date at the site. The following is a summary of the work completed and of the samples collected as part of the wastewater monitoring and sewage effluent monitoring:

Work Completed

The following is a detailed summary of the effort and activities that were undertaken by Qikiqtaaluk Logistics Inc. (the contractor) at the DYE-M, Cape Dyer DEW Line site:

Demolition

- The following buildings were demolished: Warehouses B13B and B13F, ATB building, and two billboards. The associated hazardous materials at these former building locations have been removed. Minimal debris remains in the building footprints, and barricades have been placed around the footprints for protection.
- Site investigation monitoring wells around the Dew Drop Area, US Non-Hazardous Waste Facility and the LS POL Storage area have been decommissioned.

Landfill Remediation

- The West Landfill was excavated and reshaped. In addition, drainage swales were constructed and culverts were installed at the West Landfill East Lobe.
- The Pallet Line Landfill was re-graded
- The placement of Type 1 material on the Powerhouse Landfill re-grade was approximately 40% complete at the end of the construction season.



Lower Site Non-Hazardous Waste Landfill

- Non-hazardous waste materials, including demolition waste from the warehouses (B13F & B13B) material from Debris Areas 4 and 7, along with liners from the AST Containment and POL Storage Areas have been placed inside the facility.
- A new temporary access ramp was developed on the east of the facility
- The waste layer was spread out and compacted inside the facility of Cell #2 and intermediate fill was placed over the waste for winter cover.
- Construction of the Type 2 granular cover over Cell #1 of the facility is completed; shaping of the side slopes is currently on hold until the upcoming 2013 construction season.
- Survey data indicates the need for additional Type 2 granular cover layer for the facility. This
 work will be completed in 2013.

Upper-Site Non-Hazardous Waste Landfill:

- Non-hazardous waste material from Debris Areas 14, 18, contaminated soils excavations and segmented billboard pieces from the Dew Drop Area were placed inside the facility.
- The contractor has recovered Tier I soils that were previously leveled and spread throughout the landfill floor. Material is stockpiled inside the landfill for future use as intermediate fill.
- Sufficient Type 6 intermediate cover over waste has been placed and compacted.
- Pending the final survey of the facility, the Type 2 granular cover layer has been completed.
 The forth 250 mm lift has been spread and compacted over the entire facility.

Lower Site Tier II Disposal Facility:

- Tier II Soils from excavations at the POL storage area and AST containment berm have been placed in the facility.
- Tier II soils have been compacted within Cell 2 of the facility and covered with a thin layer of granular material for winter cover.
- The placement of a Type 2 granular cover layer on Cell 1 was in progress at the end of the construction season, and remains to be completed in the 2013 construction season.

Upper Site Tier II Disposal Facility:

- Waste material from Station and Dew Drop Areas were placed within the facility and leveled out into a 200- 300 m lift.
- The placement of Type 5 material over the liner system is complete.
- Type 2 granular cover layer has been completed. The seventh 250 mm lift has been completed.

Thermistors and Monitoring Wells

- Installation of the Vertical Thermistor pipes at the Lower Site and the Upper Site Tier II
 facilities has been completed. Final cover for the facilities is not complete; adequate
 compaction around the installed pipes remains to be completed to suit the construction of the
 top cover layer.
- Monitoring wells were drilled and installed in August at the northwest perimeter of Lower and Upper Tier II Disposal facilities.

Landfarm

 Tilling of the soils and collection of samples for moisture content determination was completed



• Type B soils placed within the landfarm were spread out.

General

- Contaminated soil areas HC-6A and HC-6B were excavated.
- Debris was removed from Areas 4, 7, 14, 16.
- Reshaping of contaminated soil excavations and re-grading of foundation pads by the Dew Drop area was completed.
- Reshaping was completed at the POL storage area containment berms, the beach landing area, the wastewater holding basins and the AST area were reshaped following the completion of the contaminated soil excavations.
- Surveys were completed for the Non-Hazardous Waste Landfills, Tier II Disposal Facilities, Borrow Areas, contaminated soil excavations and known debris areas.

Work to be completed in 2013 includes the collection and disposal of all remaining debris; completion of demolition activities; excavation of remaining contaminated soil areas and disposal in the appropriate landfill or packaged for off-site disposal; final capping and closure of the two Non-Hazardous Waste Landfills and two Tier II Disposal Facilities; completion of land treatment of the hydrocarbon contaminated soils and decommissioning of the landfarm; reclamation of borrow areas; and collection of as-built survey data. Demobilization of the camp, construction equipment and the PCB material currently in temporary storage will also occur in 2013.

Community Consultations: The results of the community meetings held by DCC were submitted with the Project Description. The contractor typically holds a project start up meeting prior to each season; however, a copy of the presentation has not been provided.

Spill Incidences: See attached spill reports.

Monitoring Results: See attached monitoring reports.

We trust the information provided is sufficient. Please feel free to contact the undersigned if you require any additional information.

Sincerely,

AECOM Canada Ltd.

Eva Schulz, P.Ag.

Senior Environmental Scientist

Eva.Schulz@aecom.com

EMS

Encl. Annual Report Form, Monitoring Reports, Spill Reports, Updated Site Figures, Selected Site Photos cc: Tamara Van Dyck, DCC

NWB Annua	Report		Year being reported: 2012					
License No:	1BR-DYE091	14	Issued Date: June 9, 2009 Expiry Date: May 31, 2014					
			Expiry Date: May 31, 2014					
	Project Name:		DYE-M, Cape Dyer DEW Line Site Clean Up					
	Licensee:	Defen	ce Construction Canada					
	Mailing Add	ress:	Defence Construction Canada DGME 101 Colonel By Drive, Ottawa, Ontario, Canada. K1A 0K2					
	AECOM	tween the	filing Annual Report (if different from Name of Licensee please clarify e two entities, if applicable): and Regulatory Support					
eneral Bac	kground Info	rmatior	n on the Project (*optional):					
vith A summary :	Part B report of water	▼ I	see must provide the following information in accodance tem 1 and waste disposal activities, including, but not limited to: methods of eywater management; drill waste management; solid and hazardous					
•	Water Source	e(s):	Water supply lakes					
	Water Quant	. ,	150/day Quantity Allowable Domestic (cu.m) 2200/113 days Actual Quantity Used Domestic (cu.m) n/a Quantity Allowable Drilling (cu.m) Total Quantity Used Drilling (cu.m)					
	Waste Manaş Solid Sewa	Waste Dis ge Waste water	and/or Disposal sposal 1750 cu.m of sewage effluent and greywater deposited into sewage lagoons					
	✓ Other	:						
	Additional De							
	Details regard included with		ste management were provided in the supporting documents lication.					
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4 list of unai	uthorized disc Spill No.: Date of Spill: Date of Notifi		(as reported to the Spill Hot-line)					

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visions	to the Spill Contingency Plan
	SCP submitted and approved - no revision required or proposed
	Additional Details:
visions '	to the Abandonment and Restoration Plan
	AR plan submitted and approved - no revision required or proposed
	Additional Details:
	The project is an abandonment and restoration plan.
-	. Deales and a West Harts date.
gressiv	re Reclamation Work Undertaken Additional Details (i.e., work completed and future works proposed)
	Additional Details (i.e., work completed and future works proposed)
sults of	the Monitoring Program including: The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude)
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Any other details on value being reported.	water use or waste disposal requested by the Board by November 1 of the year
No addition	nal sampling requested by an Inspector or the Board
Additiona	al Details: (Attached or provided below)
Any responses or foll	ow-up actions on inspection/compliance reports
No inspecti	ion and/or compliance report issued by INAC
Additiona	al Details: (Dates of Report, Follow-up by the Licensee)
An insperies and insperies.	ection was completed by AANDC on Aug. 9, 2012; however, no report was
Any additional comme	ents or information for the Board to consider
Date Submitted: Submitted/Prepared b Contact Information:	March 18, 2013 Eva Schulz Tel: 403-270-9220 Fax: 403-270-9196 email: eva.schulz@aecom.com

GPS Coordinates for water sources utilized

	UTM Zone 20N, NAD83					
Source Description	Northing	Easting				
Lower Site Water Supply Lake	7390039	559775				
Summer Water Supply Lake	7389802	565916				
Winter Water Supply Lake	7395600	570250				
		•				

GPS Locations of areas of waste disposal

	UTM Zone 20N, NAD83				
	Northing	Easting			
Landfarm (E01)	7387924.9	562601.4			
Landfarm (E01)	7387931.4	562624.8			
Landfarm (E01)	7387004.7	562765			
Landfarm (E01)	7387922	562808.3			
Landfarm (E01)	7387725.6	562911.1			
Landfarm (E01)	7387645.4	562757.8			
Landfarm (E01)	7387718.1	562525.6			
Landfarm (E01)	7387759.3	562496.2			
Landfarm (E01)	7387843.9	562454.5			
Lower Site Tier II (H01)	7388272.5	561782.6			
Lower Site Tier II (H01)	7388345,3	561925.1			
Lower Site Tier II (H01)	7388242.9	561977.4			
Lower Site Tier II (H01)	7388170.1	561835			
Lower Site Non-Haz (F01)	7387025.5	562989.6			
Lower Site Non-Haz (F02)	7387070.4	563061.8			
Lower Site Non-Haz (F03)	7387943.1	563141.1			
Lower Site Non-Haz (F04)	7387953.3	563034.6			
Upper Site Tier II (X01)	7394628.6	571043.9			
Upper Site Tier II (X02)	7394676.6	571117.6			
Upper Site Tier II (X03)	7394599.5	571167.8			
Upper Site Tier II (X04)	7394551.5	571094			
Upper Site Non-Haz (V01)	7395184.3	572155.5			
Upper Site Non-Haz (V02)	7395144	572311.4			
Upper Site Non-Haz (V03)	7395090.7	572297.6			
Upper Site Non-Haz (V04)	7395105.9	572239.1			
Upper Site Non-Haz (V05)	7395070	572178.1			
Upper Site Non-Haz (V06)	7395075	572158.8			
Upper Site Non-Haz (V07)	7395112.2	572136.9			
Sewage Lagoon North Cell	738934	563383			
Sewage Lagoon South Cell	7386880	563403			

Tom Partridge Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4 ON TAL SCIENCES GAO

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 101 Colonel By Drive Ottawa ON K1A 0K2

Tuesday February 12, 2012

June 2012 Monthly Report for Water Use License Number: IBR-DYE0914

The following results of the Monitoring Program (MP) and/or Water Use License are provided by the Environmental Sciences Group to meet the requirements of the above-noted license for *DYE-M* (*Cape Dyer*).

1. SEWAGE EFFLUENT

A sewage lagoon was constructed at DYE-M in September of 2004. The Water Use License and MP require that samples from treated sewage lagoon effluent at the point of discharge to the receiving water be collected prior to each discharge event.

Two sewage lagoon samples were collected and analyzed from DYE-M in June, 2012. A summary of the results for the parameters tested is provided below. Laboratory results are provided in Appendix A.

LOCATION: SEWAGE LAGOON - NORTH CELL

GPS COORDINATES: 563332/7386905 and 563381/7386905 (composite sample)

SAMPLE: 12-34834 **DATE**: June 4, 2012

Parameter	Allowable Maximum Average Concentration	Units	12-34834 (June 4, 2012)
pН	6.0 to 9.0	pH units	6.6
Oil & Grease	No Visible Sheen	-	None Visible
Total Suspended Solids (TSS)	180	mg/L	190
BOD	120	mg/L	18
Faecal Coliforms	10,000	CFU/100mL	0
Total Coliforms	-	CFU/ 100 mL	23,000



Photograph 1 (DSCO2919): Sample 12-34834 Dye-M Collected from the north cell of the sewage lagoon, facing northeast.

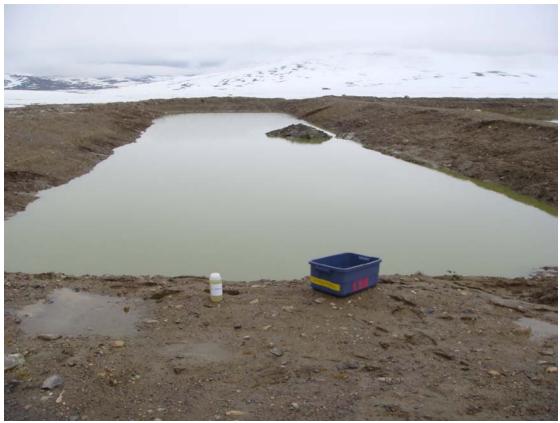
Waste water from north cell of the sewage lagoon was not discharged.

LOCATION: SEWAGE LAGOON - SOUTH CELL

GPS COORDINATES: 563381/7386905 and 563332/7386905 (composite sample)

SAMPLE: 12-34856 **DATE:** June 14, 2012

Parameter	Allowable Maximum Average Concentration	Units	12-34856 (June 14, 2012)
pН	6.0 to 9.0	pH units	-
Oil & Grease	No Visible Sheen	-	None Visible
Total Suspended Solids (TSS)	180	mg/L	120
BOD	120	mg/L	-
Faecal Coliforms	10,000	CFU/100mL	-
Total Coliforms	-	CFU/ 100 mL	-



Photograph 2 (DSCO3102): Sample 12-34856 Dye-M collected from the north cell of the sewage lagoon, facing north.

Waste water from the north cell of the sewage lagoon was discharged to the ground on June 21, 2012. The water was discharged on the northeast side of the lagoon away from the main camp. (0563407, 7386966).

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Tom Partridge

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode (ESG)

APPENDIX A LABORATORY RESULTS



CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---REPORT No. B12-13775

Report To:

RMC Dept of Chem & Chem Eng 11 General Crerar Cres, Kingston Ontario K7K 7B4 Canada Attention: Julie McDonald

DATE RECEIVED: 07-Jun-12

DATE REPORTED: 13-Jun-12 SAMPLE MATRIX: Waste Water

Kingston Ontario K7K 6Z1 Tel: 613-544-2001 Fax: 613-544-2770

JOB/PROJECT NO.: ASG#22723

Caduceon Environmental Laboratories

P.O. NUMBER:

285 Dalton Ave

WATERWORKS NO.

			Client I.D.		34834		
			Sample I.D.		B12-13775-1		
			Date Collecte	ed	04-Jun-12		
Parameter	Units	M.D.L.	Reference Method	Date/Site Analyzed			
BOD(5 day)	mg/L	2	SM 5210B	08-Jun-12/K	18		

lient :	ESG				ASG Login No:	22723
	12 Verite Ave				Site:	DYE-M
	Dept. of Chem. / Chem. Eng.,	RMC			Client No:	12-014
	P.O. Box 17000, Stn. Forces				Samples Received:	06-Jun-12
	Kingston, Ontario K7K 7B4				Date of analysis:	06-Jun-12
	(613) 541-6000 ext 6567				Date Reported:	07-Jun-12
	Fax: (613) 541-6596				Sheet:	1 of 1
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		LABORATO	RY QA/QC			
		Method: ASG 036	Method: ASG 036	Method: ASG 036	Method: ASG 044	
	Sample Identification				Fecal	
		Coliforms	E. coli	Background	Coliforms	
		(CFU/100 mL)	(CFU/100 mL)	(CFU/100 mL)	(CFU/100mL)	
	Blank	0	0	0	0	
	34834*; Duplicate	n/a	n/a	n/a	0;0	
	Control Sample	45	45	0	45	
	Control Target	45	45	0	45	
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		Tel: 613-541-6000 x6684 / Fax: 613-545-8341							
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GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR
Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique
Royal Military College of Canada - Collège militaire royal du Canada
P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4
Tel: 613-541-6000 x6684 / Fax: 613-545-8341

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Sharilyn Hoobin Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4 WORLD SCIENCES GROUND SEGULD OF THE PROPERTY O

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 101 Colonel By Drive Ottawa ON K1A 0K2

Friday February 15, 2012

August 2012 Monthly Report for Water Use License Number: IBR-DYE0914

The following results of the Monitoring Program (MP) and/or Water Use License are provided by the Environmental Sciences Group to meet the requirements of the above-noted license for *DYE-M* (*Cape Dyer*).

1. SEWAGE EFFLUENT

A sewage lagoon was constructed at DYE-M in September of 2004. The Water Use License and MP require that samples from treated sewage lagoon effluent at the point of discharge to the receiving water be collected prior to each discharge event.

One sewage lagoon sample was collected and analyzed from DYE-M in August, 2012. A summary of the results for the parameters tested is provided below. Laboratory results are provided in Appendix A.

LOCATION: SEWAGE LAGOON - SOUTH CELL (CELL 1)

GPS COORDINATES: 563332 / 7386920 and 563333 / 7386906 (composite sample)

SAMPLE: 12-29329 **DATE**: August 30, 2012

Parameter	Allowable Maximum Average Concentration	Units	Sample 12-29329
pН	6.0 to 9.0	pH units	7.3
Oil & Grease	No Visible Sheen	-	None Visible
Total Suspended Solids (TSS)	180	mg/L	270
BOD	120	mg/L	45
Faecal Coliforms	10,000	CFU/100mL	16,00
Total Coliforms	-	CFU/ 100 mL	26,000



Photograph 1 (DSC04617): Sample 12-29329 Dye-M collected from the south cell of the sewage lagoon, facing northeast.

Waste water from south cell of the sewage lagoon was not discharged.

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Sharilyn Hoobin

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode (ESG)

APPENDIX A LABORATORY RESULTS

		Roy	al Military College o	f Canada - Collège i	militaire royal du Ca	nada	
			P.O. Box 17000	Stn. Forces, Kingst	on, ON, K7K 7B4		
			Tel: 613-541-	-6000 x6684 / Fax:	613-545-8341		
Client :	ESG					ASG Login No:	22977
	12 V	erite Ave					Dye-M
	Dept	of Chem. / Chem. Eng.,	RMC			Client No:	
		Box 17000, Stn. Forces				Samples Received:	01-Sep-1
	Kings	ston, Ontario K7K 7B4				Date of analysis:	
		541-6000 ext 6567				Date Reported:	
	,	(613) 541-6596				Sheet:	
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		INLOC	LISOI WILC	KODIOLOGI	CAL ANAL I C)iO	
			Method: ASC 036	Method: ASC 036	Method: ASG 036	Method: ASG 041	1
		Sample Identification	Total	Welliod. ASG 030	Welliou. ASG 030	Fecal	
		Sample Identification	Coliforms	E. coli	Background	Coliforms	
			(CFU/100 mL)	(CFU/100 mL)	(CFU/100 mL)	(CFU/100mL)	
		29329*	26000	7500	> 200000	15500	
		23323	20000	7300	> 200000	13300	
							<u> </u>
				DV 0 1 /0 0			
			LABORATO	DRY QA/QC			
		ĺ	Marila 1 400 000	Marila 1 A00 000	Marilan L. A.O.O. ooool	Made LAGO 044	1
				Method: ASG 036	Method: ASG 036	Method: ASG 041	
		Sample Identification				Fecal	
			Coliforms	E. coli	Background	Coliforms	
		II .	(CFU/100 mL)	(CFU/100 mL)	(CFU/100 mL)	(CFU/100mL)	
					1 2000000 200000		
		29329 ; Duplicate	28000 ; 24000	8000 ; 7000	> 200000 ; > 20000	14000 ; 17000	
		Blank	0	0	0	0	
			,			· · · · · · · · · · · · · · · · · · ·	

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC
GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR
Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique
Royal Military College of Canada - Collège militaire royal du Canada
P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4

			Tel: 613-541-600					
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	Dept. of C	Chem. /	Chem. Eng., RMC			Client	Login No:	-
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			K7K 7B4				f analysis:	
	(613) 541						lethod No:	
	Fax: (613)						Reported:	
	(,						Page:	
			RESULTS C	F BOD	ANALYSIS			
		Í						
			Sample I.D.	Unit	BOD			
			29329*	mg/L	45			
		,	Averaged result of du	plicates				
			LABOR	ATORY (QA/QC			
			Sample I.D.	Unit	BOD			
			Duplicate ; 29329*	mg/L	44 ; 46			
			Blank	mg/L	< 3			
			Control Control Target	mg/L mg/L	176 165			
		Į.	Control rarget	mg/L	100			

			CAL SCIENCES GROUP				
	(S SCIENCES ANALYTIQUE Chem. and Chem. Eng			CMK	
			Military College of Canada				
		ittoyai	P.O. Box 17000 Stn. For				
				684 / Fax: 613-545-834			
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Client:	ESG				ASC	Login No:	22977
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	Dept. of Cl	hem. / Cher	m. Eng., RMC			Client No:	
		17000, Stn.			Samples		01-Sep-12
		Ontario K7					05-Sep-12
		6000 ext 65				/lethod No:	
	Fax: (613)						05-Sep-12
	1 ax. (013)	341 0330			Date		1 of 1
			RESULTS OF	OH ANALYSIS			
			Sample I.D.	рН			
			29329	7.28			
			* Averaged result of dupli	cates			
			Averaged result of dupli	cates			
			LABORAT	ORY QA/QC			
			Sample I.D.	pH			
			Control	7.01			
				7.00			
			Control Target	7.00			
				7.00			
				7.00			

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 Client : ESG ASG Login No: 22977 Site: Dye-M Client Login No: 12-166 Samples Received: 01-Sep-12 12 Verite Ave Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Kingston, Ontario K7K 7B4 Date of analysis: 05-Sep-12 (613) 541-6000 ext 6567 Fax: (613) 541-6596 Method No: ASG 039 Date Reported: 06-Sep-12 Sheet: 1 of 1 **RESULTS OF TOTAL SUSPENDED SOLIDS ANALYSIS** Sample I.D. Sample Total Type^ Suspended Solids 29329* SE mg/L 270 LABORATORY QA/QC Duplicate; 29329* SE;SE mg/L 270 ; 260 Control Control mg/L 200 Control Target Control 200 mg/L ^SW =Surface Water, SI = Sewage Influent SE = Sewage Effluent * Averaged result of duplicates

Tom Partridge Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4 WNOR THE SCIENCES GRANDS FESG. BILLION OF THE SCIENCES FESG.

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 101 Colonel By Drive Ottawa ON K1A 0K2

Thursday February 14, 2012

September 2012 Monthly Report for Water Use License Number: IBR-DYE0914

The following results of the Monitoring Program (MP) and/or Water Use License are provided by the Environmental Sciences Group to meet the requirements of the above-noted license for *DYE-M* (*Cape Dyer*).

1. SEWAGE EFFLUENT

A sewage lagoon was constructed at DYE-M in September of 2004. The Water Use License and MP require that samples from treated sewage lagoon effluent at the point of discharge to the receiving water be collected prior to each discharge event.

Three sewage lagoon samples were collected and analyzed from DYE-M in September, 2012. A summary of the results for the parameters tested is provided below. Laboratory results are provided in Appendix A.

LOCATION: SEWAGE LAGOON – SOUTH CELL

GPS COORDINATES: 563332 / 7386920 and 563333 / 7386906 (composite sample)

SAMPLE: 12-43703 **DATE**: September 6, 2011

Parameter	Allowable Maximum Average Concentration	Units	12-44749 (September 6, 2012)
pН	6.0 to 9.0	pH units	9.2
Oil & Grease	No Visible Sheen	-	None Visible
Total Suspended Solids (TSS)	180	mg/L	58
BOD	120	mg/L	30
Faecal Coliforms	10,000	CFU/100mL	2,000
Total Coliforms	-	CFU/ 100 mL	11,000

No photographic documentation of this sampling event.

Waste water from south cell of the sewage lagoon was not discharged.

LOCATION: SEWAGE LAGOON - SOUTH CELL

GPS COORDINATES: 563332 / 7386920 and 563333 / 7386906 (composite sample)

SAMPLE: 12-44317 **DATE**: September 8, 2011

Parameter	Allowable Maximum Average Concentration	Units	12-44317 (September 6, 2012)
pН	6.0 to 9.0	pH units	8.0*
Oil & Grease	No Visible Sheen	-	-
Total Suspended Solids (TSS)	180	mg/L	-
BOD	120	mg/L	-
Faecal Coliforms	10,000	CFU/100mL	-
Total Coliforms	-	CFU/ 100 mL	-

^{*}field measurement

No photographic documentation of this sampling event.

Waste water from the north cell of the sewage lagoon was discharged to the ground on September 10, 2012. The water was discharged on the east side of the lagoon away from the main camp. (0563403, 7386954).

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Tom Partridge

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode (ESG)

APPENDIX A LABORATORY RESULTS

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 **ESG** ASG Login No: 22993 Client: 12 Verite Ave Site: Dye-M Dept. of Chem. / Chem. Eng., RMC Client Login No: 12-178 P.O. Box 17000, Stn. Forces Samples Received: 05-Sep-12 Kingston, Ontario K7K 7B4 Date of analysis: 06-Sep-12 (613) 541-6000 ext 6567 Method No: ASG 042 Date Reported: 11-Sep-12 Fax: (613) 541-6596 Page: 1 of 1 **RESULTS OF BOD ANALYSIS** Sample I.D. Unit BOD 43703* mg/L 30 *Averaged result of duplicates LABORATORY QA/QC Sample I.D. Unit BOD Duplicate; 29329* 29;30 mg/L Blank mg/L < 3 Control mg/L 160 Control Target mg/L 165

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DIS SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt, de chimie et de génie chimique

Royal Military College of Canada - College militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON. K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341

Client:

ESG ESG
12 Verite Ave
Dept. of Chem. / Chem. Eng., IRMC
P.O. Box 17000, Stn. Forces
Kingston, Ontario K7K 7B4
(613) 541-6000 ext 6567
Fax; (613) 541-6596 ASG Login No: 22993 Sita: Dye-M Client No: 12-178 Samplas Received: 05-Sep-12 Date of analysis: 06-Sep-12 Dete Reported: 07-Sep-12

Sheet: 1 of 1

RESULTS OF MICROBIOLOGICAL ANALYSIS

	Method: ASG 036	Method: ASG 036	Method: ASG 036	Method: ASG 041
Sample Identification	Total			Fecal
	Coliforms	E. coli	Background	Coliforms
	(CFU/100 mL)	(CFU/100 mL)	(CFU/100 mL)	(CFU/100mL)
43703*	11000	2000	4000	2000

^{&#}x27;Averaged results of duplicate

LABORATORY QA/QC

		Method: ASG 036	Method: ASG 036	
Sample Identification	Total			Fecal
II.	Coliforms	E. coli	Background	Califorms
	(CFU/100 mL)	(CFU/100 mL)	(CFU/100 mL)	(CFU/100mL)
43703'; Duplicate	N/A	N/A	N/A	2000 ; 2000
Blank	0	0	0	O O
Control Sample	39	39	0	40
Control Target	45	45	0	45

			P.O. Box 17000				Б4			
		1	Tel: 613-541-6	5000 x6684	l / Fax: (613-545-8341				
Cliant.	ESG						۸۵۵	Login No	22002	
Client:	12 Verite	۸۰۰					ASC		Dye-M	
			m. Eng., RMC					Client No:		
		17000, Stn					Samples		05-Sep-12	,
		Ontario K7							05-Sep-12	
	0 /	6000 ext 65							ASG 037	
	Fax: (613)		007						05-Sep-12)
	1 ax. (010)	041 0000					Date		1 of 1	
								r ago		
			RESULTS	OF pF	I ANA	LYSIS				
			Sample I.D		р	Н				
			43703			18				
			* Averaged result	of duplicat	es					
			LABO	RATO	RY O	10\A				
			Sample I.D Control	٠.	•	0 H				
			Control Targe	et		00				
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Tom Partridge Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 350 Albert Street, Suite 1720 Ottawa ON K1A 0K3

Tuesday, February 19, 2013

RE: Analytical Results for the Wastewater Sample Collected at DYE-M in May 2012

The following report summarizes results of the analysis of the wastewater sample as per the DYE-M (Cape Dyer) DEW Line Cleanup Project (DLCU) Specifications.

The DYE-M specifications require that "wash water, melt water collection, rinse water resulting from the cleaning of fuel tanks and pipelines, and/or any other liquid effluent stream" meet the following guidelines prior to their discharge to land (01560.4.1):

Parameter	Maximum Allowable Concentration	Units
pН	6.0 - 9.0	pH units
Total Arsenic	0.10	mg/L
Dissolved Cadmium	0.01	mg/L
Total Chromium	0.10	mg/L
Dissolved Cobalt	0.05	mg/L
Dissolved Copper	0.20	mg/L
Dissolved Lead	0.05	mg/L
Total Mercury	0.60	$\mu g/L$
Dissolved Nickel	0.20	mg/L
Total Zinc	0.50	mg/L
Oil & Grease	5.0	mg/L
PCBs	1,000	$\mu g/L$
Benzene	370	μg/L
Toluene	2.0	$\mu g/L$
Ethyl benzene	90	μg/L

^{*}In respect to application to a road surface

WASTEWATER SAMPLE

One wastewater sample was collected at DYE-M and analyzed in May 2012. A summary of the details of the results follows. Laboratory results are provided in Appendix A.

LOCATION: LOWER SITE NON-HAZARDOUS WASTE LANDFILL

GPS COORDINATES: 562962 / 7387043

SAMPLE: 12-34825 **DATE:** MAY 31, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34825
pН	6.0 - 9.0	pH units	6.5
Total Arsenic	0.10	mg/L	< 0.003
Dissolved Cadmium	0.01	mg/L	< 0.001
Total Chromium	0.10	mg/L	< 0.049
Dissolved Cobalt	0.05	mg/L	< 0.003
Dissolved Copper	0.20	mg/L	< 0.01
Dissolved Lead	0.05	mg/L	< 0.01
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.005
Total Zinc	0.50	mg/L	0.30
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 1 (DSCO1900): Sample collected from the Lower Site Non-Hazardous Waste Landfill.

Waste water from the Lower Site Non-Hazardous Waste Landfill was discharged to the ground on June 8, 2012. The water was discharged on the north side of the Landfill away from the area. (563140, 7387099).

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Tom Partridge

K REP

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode

APPENDIX A LABORATORY RESULTS

ASU#	14167	Report ID:	Dye-M W3
Client:	ESG	Date Submitted:	04-Jun-12
		Date tested:	04-Jun-12
Site:	Dye-M	Date:	05-Jun-12
	12-008	Matrix:	water
Report of Analysi	S		
Sample	Oil & Grease		
	mg/L		
12-34825	<2.0		
Blank	<2.0		
Control	15.0 ; 15.6		
Control Target	15.7		
Results relate only	to the items tested		

ASU#	14167		Report ID:	Dye-M W4					
Client:	ESG		Date Submitted:	04-Jun-12					
			Date tested:	04-Jun-12					
Site:	Dye-M		Date:	06-Jun-12					
	12-008		Matrix:	Water					
teport of Analysis									
esults relate only to the	e items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34825	-	-	-	-	-	0.30	0.049	< 0.003	*
Blank	-	-	-	-	-	< 0.010	<0.005	< 0.003	
12-34825	-	-	-	-	-	0.32	0.053	< 0.003	+
12-34825	-	-	-	-	-	0.28	0.044	< 0.003	
Control	-	-	-	-	-	2.9	0.79	0.79	
Control Target	-	-	-	-	-	3.0	0.80	0.80	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34825	0.011	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	*
Blank	<0.005	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	
12-34825	0.011	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	
12-34825	0.011	< 0.005	< 0.003	< 0.001	< 0.010	-	-	-	
Control	1.58	1.56	1.55	0.71	7.64	-	-	-	
Control Target	1.60	1.60	1.60	0.80	8.00	-	-	-	

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ESG Client : ASG Login No: 22718 12 Verite Ave Site: Dye-M Dept. of Chem. / Chem. Eng., RMC Client No: 12-008 P.O. Box 17000, Stn. Forces Samples Received: 04-Jun-12 Kingston, Ontario K7K 7B4 Date of analysis: 06-Jun-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 06-Jun-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 12-34825* < 0.4 LABORATORY QA/QC Sample Mercury[^] ID μg/L Duplicate ; 12-34825* < 0.4 ; < 0.4 Blank < 0.4 Control Target 4.0 Control Sample 5.2 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

		ANALYT	ICAL SCIENCES GROU	P AND S	LOWPOKE-2 FACILI	TY AT RMC			
	GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR								
	Dept. of Chem. and Chem. Eng Dépt. de chimie et de génie chimique								
		Roya	al Military College of Can						
		P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4							
		Tel: 613-541-6000 x6684 / Fax: 613-545-8341							
Client:	ESG					ASG Login No:	22718		
	12 Verite Ave					Site:	Dye-M		
	Dept. of Chem. / Che	IC			Client No:	12-008			
	P.O. Box 17000, Stn.				Samples Received:	04-Jun-12			
	Kingston, Ontario K7I	< 7B4				Date of analysis:	04-Jun-12		
	(613) 541-6000 ext 65	67				Method No:	ASG 015		
	Fax: (613) 541-6596					Date Reported:			
						Sheet No:			
					/4TEB 41141 V	7010			
		K	ESULTS OF PC	R IN M	VATER ANALY	SIS			
		Sample	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260			
		Type **	34825*	mg/L	< 0.003	< 0.003			
		VV	34023	IIIg/L	< 0.003	< 0.003			
		*Average re	esult of duplicate						
			alues in PPM**						
		LABORATORY QA/QC							
			LABORA						
			Blank	mg/L	< 0.003	< 0.003			
			Duplicate; 34825*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003			
			Control Sample	mg/L	< 0.003	0.015			
			Control Sample Target	mg/L	< 0.003	0.015			
		** S = Soil	Plant, W = Water, L =	: Leachate					
		All results corrected for the recovery of the surrogate decachlorobiphenyl							

	GRO	ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR						
	D	ept. of Chem. and Chem. Eng	Dépt. de chimie et de g	énie chimique				
		Royal Military College of Canada	- Collège militaire royal	du Canada				
		P.O. Box 17000 Stn. For						
		Tel: 613-541-6000 x66	684 / Fax: 613-545-8341	l				
Client:	ESG			100	Login No:	22710		
Ciletit.	12 Verite Ave			ASC		Dye-M		
		/ Chem. Eng., RMC			Client No:			
				Commiss				
	P.O. Box 1700				Received:			
	Kingston, Onta				of analysis:			
	(613) 541-6000				Method No:			
	Fax: (613) 541-	6596		Date	Reported:			
					Page:	1 of 1		
		RESULTS OF	OH ANALYSIS					
		Sample I.D.	рН					
		34825*	6.46					
		* Averaged result of dupli	cates					
		LABODAT	ORY QA/QC					
		LABORAT	ONT WAVEC					
		Sample I.D.	Hq					
		34825* ; Duplicate	6.45 ; 6.46					
		Control	7.01					
		Control Target	7.00					
		Control raiget	7.00					

lient :	ESG					ASG Login No:	22718
	12 Verite Ave					Site:	Dye-M
	Dept. of Chem. / Chem. E	ng., RMC				Client Login No:	12-008
	P.O. Box 17000, Stn. For	ces				Samples Received:	4-Jun-12
	Kingston, Ontario K7K 7E	34				Date of analysis:	6-Jun-12
	(613) 541-6000 ext 6567					Method No:	ASG 023
	Fax: (613) 541-6596					Date Reported:	7-Jun-12
						Page:	1 of 1
		RESUL	TS OF B	TEX IN WATER	ANALYSIS		
	Compound	34825*	Blank	Duplicate ; 34825*	Control Sample	Control Target	
		mg/L	mg/L	mg/L	mg/L	mg/L	
	Benzene	< 0.002	< 0.002	< 0.002 ; < 0.002	0.010	0.010	
	Toluene	< 0.002	< 0.002	< 0.002 ; < 0.002	0.010	0.010	
	Ethylbenzene	< 0.002	< 0.002	< 0.002 ; < 0.002	0.010	0.010	
	m+p-Xylene	< 0.002	< 0.002	< 0.002 ; < 0.002	0.019	0.020	
	o-Xylene	< 0.002	< 0.002	< 0.002 ; < 0.002	0.010	0.010	
	**Results corrected for su	rrogate toluen	ie d8				
	Results in PPM	0	_				
	TAGGUILO III I I IVI						
	results in i i w						

Tom Partridge Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4 WWO BLITTING GROUND CONTROL OF THE PROPERTY OF

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 350 Albert Street, Suite 1720 Ottawa ON K1A 0K3

Tuesday, February 19, 2013

RE: Analytical Results for Wastewater Samples Collected at DYE-M in June 2012

The following report summarizes results of the analysis of wastewater samples as per the DYE-M (Cape Dyer) DEW Line Cleanup Project (DLCU) Specifications.

The DYE-M specifications require that "wash water, melt water collection, rinse water resulting from the cleaning of fuel tanks and pipelines, and/or any other liquid effluent stream" meet the following guidelines prior to their discharge to land (01560.4.1):

Parameter	Maximum Allowable Concentration	Units	
pН	6-9	pH units	
Total Arsenic	0.10	mg/L	
Dissolved Cadmium	0.01	mg/L	
Total Chromium	0.10	mg/L	
Dissolved Cobalt	0.05	mg/L	
Dissolved Copper	0.20	mg/L	
Dissolved Lead	0.05	mg/L	
Total Mercury	0.60	μg/L	
Dissolved Nickel	0.20	mg/L	
Total Zinc	0.5	mg/L	
Oil & Grease	5.0	mg/L	
PCBs	1,000	μg/L	
Benzene	370	μg/L	
Toluene	2.0	μg/L	
Ethyl benzene	90	μg/L	

^{*}In respect to application to a road surface

WASTEWATER SAMPLES

Ten wastewater samples were collected at DYE-M and analyzed in June 2012. A summary of the details of these results follows. Laboratory results provided in Appendix A.

LOCATION: LOWER SITE NON-HAZARDOUS WASTE LANDFILL

GPS COORDINATES: 562962 / 7387043

SAMPLE: 12-34865 **DATE:** JUNE 20, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34865
pН	6-9	pH units	7.3
Total Arsenic	0.10	mg/L	0.0010
Dissolved Cadmium	0.01	mg/L	0.0020
Total Chromium	0.10	mg/L	0.0090
Dissolved Cobalt	0.05	mg/L	0.0070
Dissolved Copper	0.20	mg/L	0.011
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.0070
Total Zinc	0.50	mg/L	3.1
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 1 (DSCO3303): Sample collected from the Lower Site Non-Hazardous Waste Landfill, facing south.

GPS COORDINATES: 0562612 / 7387930

SAMPLE: 12-34829 **DATE:** JUNE 2, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34829
pН	6-9	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 2 (DSCO2832): Sample collected from the landfarm at overflow pipes, facing northwest.

Waste water from the Landfarm was discharged to the ground on June 8, 2012. The water was discharged on the north side of the Landfarm away from the area. (562859, 7387984).

GPS COORDINATES: 0562612 / 7387930

SAMPLE: 12-34832 **DATE:** JUNE 3, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34832
pН	6-9	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 3 (DSCO2868): Sample collected from the landfarm at overflow pipes, facing northwest.

Waste water from the Landfarm was discharged to the ground on June 8, 2012. The water was discharged on the north side of the Landfarm away from the area. (562859, 7387984).

GPS COORDINATES: 0562612 / 7387930

SAMPLE: 12-34830/31 **DATE:** JUNE 4, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34830/31	
pН	6-9	pH units	-	
Total Arsenic	0.10	mg/L	-	
Dissolved Cadmium	0.01	mg/L	-	
Total Chromium	0.10	mg/L	-	
Dissolved Cobalt	0.05	mg/L	-	
Dissolved Copper	0.20	mg/L	-	
Dissolved Lead	0.05	mg/L	< 0.010	
Total Mercury	0.60	μg/L	-	
Dissolved Nickel	0.20	mg/L	-	
Total Zinc	0.50	mg/L	-	
Oil & Grease	5.0	mg/L	<2.0	
PCBs	1,000	μg/L	<3.0	
Benzene	370	μg/L	<2.0	
Toluene	2.0	μg/L	<2.0	
Ethyl benzene	90	μg/L	<2.0	



Photograph 4 (DSCO2906): Sample collected from the landfarm at overflow pipes, facing northwest.

Waste water from the Landfarm was discharged to the ground on June 8, 2012. The water was discharged on the north side of the Landfarm away from the area. (562859, 7387984).

GPS COORDINATES: 0562764 / 7387997

SAMPLE: 12-34864 **DATE:** JUNE 20, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34864
pН	6-9	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 5 (DSCO3302): Sample collected from the north corner of the landfarm, facing south.

Waste water from the Landfarm was discharged to the ground on July 3, 2012. The water was discharged on the north side of the Landfarm away from the area. (562859, 7387984).

LOCATION: POL STORAGE AREA GPS COORDINATES: 563037 / 7387530

SAMPLE: 12-34833 **DATE:** JUNE 4, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34833
pН	6.0-9.0	pH units	6.3
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.0082
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.11
Oil & Grease	5.0	mg/L	1600
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 6 (DSCO2903): Wastewater sample collected from the POL Storage Area, facing southwest.

LOCATION: HOLDING BASIN 3

GPS COORDINATES: 563044/7387586

SAMPLE: 12-34866 **DATE:** JUNE 28, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34866
pН	6-9	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-

No photo documentation for this wastewater sample.

Waste water from Holding Basin 3 was discharged to the ground on July 5, 2012. The water was discharged on the northeast side of the holding basins away from the area. (563059, 7387729).

LOCATION: UPPER SITE TIER II DISPOSAL FACILITY

GPS coordinates: 5721048/7394626

SAMPLE: 12-34840/41 **DATE:** JUNE 6, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34840/41
pН	6-9	pH units	7.3
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	< 0.010
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 8 (P6060063): Sample collected from Upper Site Tier II Disposal Facility, facing northwest.

Waste water from the Upper Site Tier II Disposal Facility was discharged to the ground on June 15, 2012. The water was discharged on the southwest side of the Tier II Disposal Facility away from the area. (570999, 7394555).

LOCATION: UPPER SITE TIER II DISPOSAL FACILITY

GPS COORDINATES: 571055 / 7394624 & 571096 / 7394562(COMPOSITE SAMPLE)

SAMPLE: 12-34863 **DATE:** JUNE 20, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34863
pН	6-9	pH units	8.0
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.0060
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 9 (DSCO3297): Sample collected from Upper Site Tier II Disposal Facility, facing south.

Waste water from the Upper Site Tier II Disposal Facility was discharged to the ground on July 3, 2012. The water was discharged on the southwest side of the Tier II Disposal Facility away from the area. (570999, 7394555).

LOCATION: UPPER SITE NON-HAZARDOUS WASTE LANDFILL

GPS COORDINATES: 572157 / 7395188

SAMPLE: 12-34842 **DATE:** JUNE 6, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34842
pН	6-9	pH units	7.1
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	0.0041
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.25
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 10 (P6060069): Sample collected from Upper Site Non-Hazardous Waste Landfill, facing east.

Waste water from the Upper Site Non-Hazardous Waste Landfill was discharged to the ground on June 15, 2012. The water was discharged on the northwest side of the Landfill away from the area. (572146, 7395222).

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Tom Partridge

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode

APPENDIX A LABORATORY RESULTS

ASU#	14198		Report ID:	Dye-M W11					Т
Client:	ESG		Date Submitted:	22-Jun-12					
			Date tested:	27-Jun-12					
Site:	Dye-M		Date:	29-Jun-12					+
	12-025		Matrix:	Water					
Report of Analysis **									
Results relate only to the	items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34863	-	-	-	-	-	0.006	< 0.005	< 0.001	+
12-34865	-	-	-	-	-	3.1	0.009	0.001	*
Blank	-	-	-	-	-	<0.005	< 0.005	< 0.001	
Control	-	-	-	-	-	0.048	0.016	0.048	+
Control Target	-	-	-	-	-	0.048	0.016	0.048	
12-34865	-	-	-	-	-	3.1	0.009	0.001	+
12-34865	-	-	-	-	-	3.1	0.010	0.001	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Со	Cd	Pb	Zn	Cr	As	
12-34863	< 0.005	< 0.005	< 0.003	<0.001	< 0.005	-	-	_	+
12-34864	-0.005	-0.005	-0.005	-0.001	< 0.005	-	-	-	+
12-34865	0.016	0.007	0.007	0.002	< 0.005	-	-	-	*
Blank	< 0.005	< 0.005	< 0.003	<0.001	< 0.005	-	-	-	
Control	0.084	0.088	0.086	0.015	0.091	-	-	_	+
Control Target	0.088	0.088	0.088	0.016	0.088	-	-	-	
12-34865	0.016	0.007	0.007	0.002	< 0.005	-	-	-	+
12-34865	0.016	0.007	0.007	0.002	< 0.005	-	-	-	Ŧ
* reporting limits lower	red for certain elements	- analysis by ICI	P-MS						

14198	Report ID:	Dye-M W12
ESG	Date Submitted:	22-Jun-12
	Date tested:	22-Jun-12
Dye-M	Date:	25-Jun-12
12-025	Matrix:	water
3		
Oil & Grease		
mg/L		
<2.0		
<2.0		
<2.0		
<2.0		
14.4		
15.7		
to the items tested		
cracked, some sampl	lost	
	Dye-M 12-025 Oil & Grease mg/L <2.0 <2.0 <2.0 <2.0 14.4 15.7 to the items tested	ESG Date Submitted: Date tested: Dye-M Date: 12-025 Matrix: Oil & Grease mg/L <2.0 <2.0 <2.0 <2.0 <14.4 15.7

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 Client : ESG ASG Login No: 22763 12 Verite Ave Site: Dye-M Client No: 12-025 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 22-Jun-12 Kingston, Ontario K7K 7B4 Date of analysis: 03-Jul-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 03-Jul-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 34863* < 0.4 34865 < 0.4 LABORATORY QA/QC Sample Mercury[^] ID μg/L Duplicate; 34863* < 0.4 ; < 0.4 Blank < 0.4 Control Target 4.00 Control Sample 4.30 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

	GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR										
		Dept.	of Chem. and Chem. Eng	g Dépt.	de chimie et de génie	e chimique					
		Roy									
			P.O. Box 17000 Stn. F			34					
			Tel: 613-541-6000 x6684 / Fax: 613-545-8341								
Client:	ESG					ASG Login No:	22763				
	12 Verite Ave					Site:	Dye-M				
	Dept. of Chem. / Cher	m. Eng., RI	ИC			Client No:	12-025				
	P.O. Box 17000, Stn.	Forces				Samples Received:	22-Jun-12				
	Kingston, Ontario K7h					Date of analysis:					
	(613) 541-6000 ext 65	67				Method No:	ASG 015				
	Fax: (613) 541-6596					Date Reported:	29-Jun-12				
						Sheet No:	1 of 1				
		F	ESULTS OF PC	B IN V	VATER ANALY	/SIS					
		REGOLIO OI I OD III WATER ARAETOIO									
		Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260					
		W	34863*	mg/L	< 0.003	< 0.003					
		W	34864	mg/L	< 0.003	< 0.003					
		W	34865	mg/L	< 0.003	< 0.003					
		*Average	esult of duplicate								
			/alues in PPM**								
			rogate recovery								
			LABORA	ATOR	Y QA/QC						
			Blank	mg/L	< 0.003	< 0.003	i				
			Duplicate ; 34863*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003					
			Control Sample	mg/L	< 0.003	0.013					
			Control Sample Target	mg/L	< 0.003	0.015					
			Coor Campio rarget	mg/L	1 0.000	0.010	4				
		** S = Soi	I , C = Concrete , PC = P	aint Chip	o , SW = Swab , P =	Plant , W = Water, L =	: Leachate				
		All results	corrected for the recovery	v of the s	surrogate decachlorob	iphenvl					

					AND SLOWPOKE UES ET FACILITÉ					
					- Dépt. de chimie et					
			Military Colleg	e of Canad	a - Collège militaire	royal du Car				
					orces, Kingston, ON					
		1	Tel: 613-5	541-6000 x6	6684 / Fax: 613-545	5-8341				
Client:	ESG						ASG	Login No:	22763	
	12 Verite								Dye-M	
			n. Eng., RMC					Client No:		10
		17000, Stn. Ontario K7K				5		Received: f analysis:		
		6000 ext 656						lethod No:		
	Fax: (613)		51					Reported:		
	(3-2)							Page:		
			RESUL	TS OF	pH ANALYSI	IS				
			Sample	e I.D.	рН					
			3486		8.04					
			3486	5*	7.32					
			* Averaged re	esult of dup	licates					
			LA	BORAT	ORY QA/QC					
			Sample		pH					
			34865* ; E		7.31 ; 7.32					
			Control -		7.01 7.00					
			CONTROL	raiget	7.00					
			. Box 17000 Str	n. Forces, Kin	ge militaire royal du Ca gston, ON, K7K 7B4	ınada				
			Tel: 613-541-60	00 x6684 / Fa	ax: 613-545-8341					
SG 2 Verite Ave								ASG I	ogin No:	22763 Dye-M
ept. of Chem. / Chem.	Eng., RMC							Client I	ogin No:	
.O. Box 17000, Stn. Fo	orces							Samples F	Received:	22-Jun-12
ingston, Ontario K7K 7 13) 541-6000 ext 6567										25-Jun-12 ASG 023
ax: (613) 541-6596										27-Jun-12
		RESI	TS OF BT	FX IN W	ATER ANALYS	IS.			. ago.	
Compound	34863*	34864			Duplicate : 34863*		mnle i	Control T	aract	
Compound	34863* mg/L	34864 mg/L	34865 mg/L	Blank mg/L	mg/L	Control Sai mg/L	iibie	mg/l		
Benzene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.011		0.01	0	
Toluene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.011		0.01		
Ethylbenzene m+p-Xylene	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 ; < 0.002 < 0.002 ; < 0.002	0.013 0.023		0.01		
o-Xylene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002 < 0.002 ; < 0.002	0.023		0.02		

ASU#	14173		Report ID:	Dye-M W5					
Client:	ESG		Date Submitted:	06-Jun-12					
			Date tested:	07-Jun-12					
Site:	Dye-M		Date:	08-Jun-12					
2-1-1	12-011		Matrix:	Water					
Report of Analysis									
Results relate only to the	items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Со	Cd	Pb	Zn	Cr	As	
12-34833	-	-	-	-	-	0.108	0.008	< 0.003	*
Blank	-	-	-	-	-	< 0.010	< 0.005	< 0.003	\pm
12 24022						0.115	0.000	<0.002	-
12-34833	-	-	-	-	-	0.115	0.009	< 0.003	+
12-34833	-	-	-	-	-	0.100	0.008	< 0.003	+
Control	-	-	-	-	-	2.90	0.78	0.78	
Control Target	-	-	-	-	-	3.00	0.80	0.80	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34829	_	-	-	-	< 0.010	-	-	-	+
12-34830	-	-	-	-	< 0.010	-	_	_	$^{+}$
12-34831	-	-	-	-	< 0.010	-	-	-	†
12-34832	-	-	-	-	< 0.010	-	-	-	*
12-34833	< 0.005	< 0.005	< 0.003	< 0.001	< 0.010	-	-	-	*
Blank	< 0.005	< 0.005	< 0.003	< 0.001	< 0.010	-	-	-	
12-34832	-	-	-	-	< 0.010	-	-	-	+
12-34832	-	-	-	-	< 0.010	-	-	-	
12-34833	< 0.005	< 0.005	< 0.003	< 0.001	< 0.010	-	-	-	+
12-34833	< 0.005	< 0.005	< 0.003	< 0.001	< 0.010	-	-	-	1
Control	1.53	1.53	1.52	0.74	7.57	-	-	-	+
Control Target	1.60	1.60	1.60	0.80	8.00	-	-	-	

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ASG Login No: 22726 Client : ESG 12 Verite Ave Site: Dye-M Client No: 12-011 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 06-Jun-12 Kingston, Ontario K7K 7B4 Date of analysis: 08-Jun-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 08-Jun-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 34833* < 0.4 LABORATORY QA/QC Sample Mercury[^] ID μg/L Duplicate; 34833* < 0.4 ; < 0.4 Blank < 0.4 Control Target 5.0 Control Sample 5.4 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

			TICAL SCIENCES GROU						
			DES SCIENCES ANALYTIC						
			. of Chem. and Chem. Eng						
		Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4							
			Tel: 613-541-6000	x6684 /	Fax: 613-545-8341				
Ni a sata									
Client:	ESG					ASG Login No:			
	12 Verite Ave						Dye-M		
	Dept. of Chem. / Chem.	_ ·	MC			Client No:			
	P.O. Box 17000, Stn.					Samples Received:			
	Kingston, Ontario K7I					Date of analysis:			
	(613) 541-6000 ext 65	67				Method No:			
	Fax: (613) 541-6596					Date Reported:			
						Sheet No:	1 01 1		
				-					
				D 1111	MATER ANDER	V010			
		F	RESULTS OF PC	RINA	VAIER ANAL	Y 515			
		Sample	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260			
		Type **							
		W	34829*	mg/L	< 0.003	< 0.003	1		
		W	34830	mg/L	< 0.003	< 0.003			
		W	34831	mg/L	< 0.003	< 0.003			
		W	34832	mg/L	< 0.003	< 0.003			
		W	~34833	mg/L	< 0.003	< 0.003			
			2,000	9, _	1 2.000	1 5.000			
			result of duplicate						
			Values in PPM**						
		~ Low su	rrogate recovery						
			LABOR	TOP	V 0 4 (0 0				
			LABORA	ATOR	Y QA/QC				
			Blank	mg/L	< 0.003	< 0.003	1		
			Duplicate ; 34829*	mg/L	< 0.003 ; < 0.003	< 0.003			
			Control Sample	mg/L	< 0.003 , < 0.003	0.003 , < 0.003			
			Control Sample Target	mg/L	< 0.003	0.015			
			Control Sample Target	mg/L	< 0.003	0.015			
		** S = So	oil , C = Concrete , PC = P	aint Chip	p , SW = Swab , P =	Plant , W = Water, L =	- Leachate		
		All manuals	s corrected for the recovery of the surrogate decachlorobiphenyl						
		All results							
		All results	s confected for the recovery	y or tric s	surrogate decacriloro	орнопут			

	G		ES SCIENCES ANALYTIQ			CMR	
			of Chem. and Chem. Eng				
		Royal	Military College of Canada				
			P.O. Box 17000 Stn. Fo				
			Tel: 613-541-6000 x6	6684 / Fax: 613-545-834	11		
Client:	ESG				ASC	Login No:	22726
	12 Verite A	ve					Dye-M
	Dept. of Ch	iem. / Che	em. Eng., RMC			Client No:	12-011
	P.O. Box 1				Samples	Received:	06-Jun-12
	Kingston, C					of analysis:	
	(613) 541-6					Method No:	
	Fax: (613)				Date	Reported:	08-Jun-12
							1 of 1
			RESULTS OF	pH ANALYSIS			
			Sample I.D.	pH	1		
			34833	6.30			
			* Averaged result of dupl	icates			
			LABORAT	ORY QA/QC			
			Sample I.D.	рН			
			Control	7.01			
			Control Target	7.00			

								CILITY AT RMC WPOKE-2 AU CMR		
			Giv		n. and Chem. I					
					ary College of C					
					Box 17000 St					
					Tel: 613-541-60					
							010 010 001			
011 4	ESG								ACC Lawis No.	20720
Client :									ASG Login No:	
	12 Verite Ave	F								Dye-M
	Dept. of Chem. / Chem.								Client Login No:	
	P.O. Box 17000, Stn. Fo								Samples Received:	
	Kingston, Ontario K7K 7B4 (613) 541-6000 ext 6567								Date of analysis:	
									Method No:	
	Fax: (613) 541-6596								Date Reported:	
									Page:	1 01 1
			RES	ULTS OF	BTEX IN \	NATER A	NALYSIS			
	Compound	34829*	34830	34831	34832	34833	Blank	Control Sample	Control Target	
		mg/L	34830 mg/L	34831 mg/L	34832 mg/L	34833 mg/L	Blank mg/L	mg/L	mg/L	
	Compound Benzene		34830	34831	34832	34833	Blank			
		mg/L < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002	mg/L 0.010 0.010	mg/L 0.010 0.010	
	Benzene Toluene Ethylbenzene	mg/L < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010	mg/L 0.010 0.010 0.010	
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010	
	Benzene Toluene Ethylbenzene	mg/L < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010	mg/L 0.010 0.010 0.010	
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	34830 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34831 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34832 mg/L < 0.002 < 0.002 < 0.002 < 0.002	34833 mg/L < 0.002 < 0.002 < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	mg/L 0.010 0.010 0.010 0.010	mg/L 0.010 0.010 0.010 0.020	

ASU#	14173	Report ID:	Dye-M W6	
Client:	ESG	Date Submitted:	06-Jun-12	
		Date tested:	07-Jun-12	
Site:	Dye-M	Date:	08-Jun-12	
	12-011	Matrix:	water	
Report of Analysis	1			
Sample	Oil & Grease			
	mg/L			
12-34829	<2.0			
12-34830	<2.0			
12-34831	<2.0			
12-34832	<2.0			
12-34833	1610			
Blank	<2.0			
Control	16.5			
Control Target	15.7			
Results relate only	to the items tested			
ASU#	14210	Report ID:	Dye-M W13	
Client:	ESG	Date Submitted:	03-Jul-12	
		Date tested:	04-Jul-12	
Site:	Dye-M	Date:	05-Jul-12	
	12-032	Matrix:	water	
D				
Report of Analysis				
Sample	Oil & Grease			
Sample	mg/L			
	mgr			
12-34866	<2.0			
12 54000	12.0			
Blank	<2.0			
Danial	2.0			
Control	13.7			
Control Target	15.7			
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				
Results relate only	to the items tested			
1				
			· · · · · · · · · · · · · · · · · · ·	

ASU#	14176	Report ID:	Dye-M W9
Client:	ESG	Date Submitted:	08-Jun-12
		Date tested:	13-Jun-12
Site:	Dye-M	Date:	14-Jun-12
	12-016	Matrix:	water
Report of Analysis			
Sample	Oil & Grease		
	mg/L		
12-34840	<2.0		
12-34841	<2.0		
12-34842	<2.0		
Blank	<2.0		
Control	15.6		
Control Target	15.7		
Results relate only	to the items tested		

ASU#	14176		Report ID:	Dye-M W10					
Client:	ESG		Date Submitted:	08-Jun-12					
			Date tested:	13-Jun-12					
Site:	Dye-M		Date:	13-Jun-12					
	12-016		Matrix:	Water					
Report of Analysis									
Results relate only to the	items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34840	-	-	-	-	-	< 0.010	< 0.005	< 0.003	
12-34841	-	-	-	-	-	< 0.010	< 0.005	< 0.003	
12-34842	-	-	-	-	-	0.249	< 0.005	< 0.003	*
Blank	-	-	-	-	-	< 0.010	<0.005	< 0.003	
12-34842	-	-	-	-	-	0.265	< 0.005	< 0.003	
12-34842	-	-	-	-	-	0.232	< 0.005	< 0.003	
Control	-	-	-	-	-	3.14	0.87	0.85	
Control Target	-	-	-	-	-	3.00	0.80	0.80	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34840	< 0.005	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	
12-34841	< 0.005	< 0.005	< 0.003	< 0.001	< 0.010	-	-	-	
12-34842	< 0.005	< 0.005	< 0.003	0.004	< 0.010	-	-	-	*
Blank	<0.005	< 0.005	<0.003	<0.001	< 0.010	-	-	-	
12-34842	<0.005	< 0.005	< 0.003	0.004	< 0.010	-	-	-	+
12-34842	<0.005	< 0.005	< 0.003	0.004	< 0.010	-	-	-	
Control	1.67	1.69	1.68	0.80	8.10	-	-	-	+
Control Target	1.60	1.60	1.60	0.80	8.00	-	-	-	

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 Client : ESG ASG Login No: 22732 12 Verite Ave Site: Dye-M Client No: 12-016 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 08-Jun-12 Kingston, Ontario K7K 7B4 Date of analysis: 13-Jun-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 13-Jun-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 34840 < 0.4 34841 < 0.4 34842* < 0.4 LABORATORY QA/QC Sample Mercury[^] ID μg/L Duplicate; 34842* < 0.4 ; < 0.4 Blank < 0.4 Control Target 4.0 Control Sample 4.1 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

	GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR										
			of Chem. and Chem. Eng								
		Roy	Royal Military College of Canada - Collège militaire royal du Canada								
			P.O. Box 17000 Stn. F			34					
			Tel: 613-541-6000 x6684 / Fax: 613-545-8341								
Client:	ESG					ASG Login No:	22732				
Jiiciit.	12 Verite Ave						Dye-M				
	Dept. of Chem. / Cher	n Eng Ri	MC.			Client No:					
	P.O. Box 17000, Stn.	0 ,	WI C			Samples Received:					
	Kingston, Ontario K7h					Date of analysis:					
	(613) 541-6000 ext 65					Method No:					
	Fax: (613) 541-6596					Date Reported:					
	(010) 011 0000					Sheet No:					
						C11001 140.					
			RESULTS OF PC	D IN V	VATED ANALY	/eie					
		Г	COULTS OF FC	D III A	VAIER AIVAL	313					
		Sample	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260					
		Type **	Sample 1.D.	Unit	Arocior 1254	Arocior 1200					
		W	34840*	mg/L	< 0.003	< 0.003					
		W	34841	mg/L	< 0.003	< 0.003					
		W	34842	mg/L	< 0.003	< 0.003					
			result of duplicate								
			/alues in PPM**								
		~ Low sur	rogate recovery								
			LABORA	AIOR	Y QA/QC						
			Blank	mg/L	< 0.003	< 0.003					
		 	Duplicate ; 34841*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003					
		\vdash	Control Sample	mg/L	< 0.003 , < 0.003	0.003 , < 0.003					
		 	Control Sample Target	mg/L	< 0.003	0.015					
			Control Cample Target	mg/L	₹ 0.003	0.013	<u></u>				
		** S = So	il , C = Concrete , PC = P	aint Chir	SW = Swah P =	Plant . W = Water I =	: Leachate				
		0 = 00	, 5 Controlo, 1 C = 1	Carre Offic	,, 5.17 – 51100, 11 –	, ** - ***atol, L =	200011010				
					urrogate decachlorob						

	GRO	UP DES SCIENCES ANALYTIQU	IES ET FACILITÉ SLOW	POKE-2 AU	CMR		
	1	Dept. of Chem. and Chem. Eng	Dépt. de chimie et de gé	nie chimique			
		Royal Military College of Canada	Ailitary College of Canada - Collège militaire royal du Canada				
			P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4				
		Tel: 613-541-6000 x66	Tel: 613-541-6000 x6684 / Fax: 613-545-8341				
Client:	ESG			ASC	Login No:		
	12 Verite Ave					Dye-M	
		. / Chem. Eng., RMC			Client No:		
		00, Stn. Forces			Received:		
	Kingston, Onta				of analysis:		
	(613) 541-6000				Method No:		
	Fax: (613) 541	-6596		Date	Reported:		
					Page:	1 of 1	
		DEOLU TO OF	II ANIAI VOIO				
		RESULTS OF p	OH ANALYSIS				
		Sample I.D.	рН				
		34840*	7.31				
		34841	7.26				
		34842	7.08				
		* Averaged result of duplic	natas				
		Averaged result of dupit	Jales				
		LADODATA					
		LABORATO	DRY QA/QC				
		Sample I.D.	рН				
		34840*; Duplicate	7.31 ; 7.30				
		Control	7.01				
		Control Target	7.00				
		222. 12300					

		ANALYTICAL	SCIENCES GR	OUP AND SL	OWPOKE-2 FACILITY	AT RMC				
	G	GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR								
		Royal Milit	ary College of C	Canada - Collè	ege militaire royal du Ca	anada				
		P.C	. Box 17000 St	n. Forces, Kir	ngston, ON, K7K 7B4					
			Tel: 613-541-60	000 x6684 / F	ax: 613-545-8341					
ESG							ASG Login No:	22722		
12 Verite Ave								Dye-M		
Dept. of Chem. / Chem.	Eng., RMC						Client Login No:	12-016		
P.O. Box 17000, Stn. F	orces						Samples Received:	8-Jun-12		
Kingston, Ontario K7K	7B4						Date of analysis:	8-Jun-12		
(613) 541-6000 ext 6567	7						Method No:	ASG 023		
Fax: (613) 541-6596							Date Reported:	11-Jun-12		
							Page:	1 of 1		
		PESIII	TS OF BI	EY IN W	ATER ANALYS	10				
		KESUL	LISUFDI		ATER ANALTS	io				

Compound	34840*	34841	34842	Blank	Duplicate ; 34840*	Control Sample	Control Target
Compound	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Benzene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.010	0.010
Toluene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.010	0.010
Ethylbenzene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.011	0.010
m+p-Xylene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.022	0.020
o-Xylene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002 ; < 0.002	0.011	0.010
Results in PPM***							

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Tuesday, February 19, 2013

RE: Analytical Results for Wastewater Samples Collected at DYE-M in July 2012

The following report summarizes results of the analysis of wastewater samples as per the DYE-M (Cape Dyer) DEW Line Cleanup Project (DLCU) Specifications.

The DYE-M specifications require that "wash water, melt water collection, rinse water resulting from the cleaning of fuel tanks and pipelines, and/or any other liquid effluent stream" meet the following guidelines prior to their discharge to land (01560.4.1):

Parameter	Maximum Allowable Concentration	Units
pН	6.0 - 9.0	pH units
Total Arsenic	0.10	mg/L
Dissolved Cadmium	0.01	mg/L
Total Chromium	0.10	mg/L
Dissolved Cobalt	0.05	mg/L
Dissolved Copper	0.20	mg/L
Dissolved Lead	0.05	mg/L
Total Mercury	0.60	$\mu \mathrm{g}/\mathrm{L}$
Dissolved Nickel	0.20	mg/L
Total Zinc	0.50	mg/L
Oil & Grease	5.0	mg/L
PCBs	1,000	$\mu g/L$
Benzene	370	$\mu g/L$
Toluene	2.0	μ g/L
Ethyl benzene	90	μg/L

^{*}In respect to application to a road surface

WASTEWATER SAMPLES

Twenty-nine wastewater samples were collected at DYE-M and analyzed in July 2012. A summary of the details of these results follows. Laboratory results are provided in Appendix A.

LOCATION: LOWER SITE TIER II DISPOSAL FACILITY

GPS COORDINATES: 561908 / 7388330

SAMPLE: 12-34918 **DATE:** JULY 20, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34918
pН	6.0 - 9.0	pH units	8.4
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	< 0.0050
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 1 (DSCO3067): Lower Site Tier II Disposal Facility, facing southwest.

LOCATION: LOWER SITE TIER II DISPOSAL FACILITY

GPS COORDINATES: 561908 / 7388330

SAMPLE: 12-34936 **DATE:** JULY 26, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34936
pН	6.0 - 9.0	pH units	7.4
Total Arsenic	0.10	mg/L	0.0021
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.011
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.0037
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 2 (DSCO4098): Lower Site Tier II Disposal Facility wastewater samples, facing south.

Waste water from the Lower Site Tier II Facility was discharged to the ground on August 2, 2012. The water was discharged on the southwest side of the Tier II Facility away from the area. (561813, 7387984).

LOCATION: LOWER SITE NON-HAZARDOUS WASTE LANDFILL

GPS coordinates: 0562962 / 7387043

SAMPLE: 12-34905 **DATE:** JULY 11, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34905
pН	6.0 - 9.0	pH units	6.9
Total Arsenic	0.10	mg/L	0.0030
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.042
Dissolved Cobalt	0.05	mg/L	0.0040
Dissolved Copper	0.20	mg/L	0.0090
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.0050
Total Zinc	0.50	mg/L	4.9
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 3 (DSCO3632): Sample collected from the Lower Site Non-Hazardous Waste Landfill, facing south.

LOCATION: LOWER SITE NON-HAZARDOUS WASTE LANDFILL

GPS coordinates: 0562962 / 7387043

SAMPLE: 12-34939 **DATE:** JULY 26, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34939
pН	6.0 - 9.0	pH units	9.6
Total Arsenic	0.10	mg/L	0.0012
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.021
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.60
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 4 (DSCO4085): Sample collected from the Lower Site Non-Hazardous Waste Landfill, facing southeast.

GPS COORDINATES: 562761 / 7387998

SAMPLE: 12-34895 **DATE:** JULY 11, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34895
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/	<2.0
Toluene	2.0	μg/	<2.0
Ethyl benzene	90	μg/	<2.0



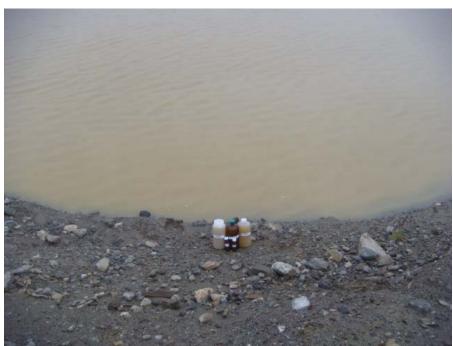
Photograph 5 (DSCO3636): Wastewater sample collected from the north corner of the Landfarm, facing northeast.

Waste water from the Landfarm was discharged to the ground on July 20, 2012. The water was discharged on the northeast side of the Landfarm away from the area. (562761, 7387998).

GPS COORDINATES: 562761 / 7387998

SAMPLE: 12-34937 **DATE:** JULY 26, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34937
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	0.0018
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	0.039
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	0.034
Oil & Grease	5.0	mg/L	2.6
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 6 (DSCO4101): Wastewater sample collected from the north corner of the Landfarm.

Waste water from the Landfarm was discharged to the ground on August 3, 2012. The water was discharged on the northeast side of the Landfarm away from the area. (562761, 7387998).

LOCATION: POL STORAGE AREA GPS COORDINATES: 563045 / 738725

SAMPLE: 12-34937 **DATE:** JULY 26, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34937
pН	6.0 - 9.0	pH units	6.9
Total Arsenic	0.10	mg/L	0.0013
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.035
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.085
Oil & Grease	5.0	mg/L	3.9
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 7 (DSCO4105): Collecting a sample from the POL Storage Area, facing northeast.

Waste water from the Former AST Containment Area was discharged to the ground on August 2, 2012. The water was discharged on the north side away from the area. (563059, 7387729).

LOCATION: HOLDING BASIN 1

GPS COORDINATES: 563044 / 7387586

SAMPLE: 12-34882 **DATE:** JULY 2, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34882
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	10
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 8 (DSCO3488): Sample collected from Holding Basin 1.

LOCATION: HOLDING BASIN 1

GPS COORDINATES: 563042 / 7387594

SAMPLE: 12-34908 **DATE:** JULY 16, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34908
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 9 (P1030758): Sample collected from Holding Basin 1.

Waste water from Holding Basin 1 was discharged to the ground on July 20, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563042 / 7387596

SAMPLE: 12-34919 **DATE:** JULY 23, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34919
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	•
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 10 (DSCO3951): Sample collected from Holding Basin 1.

Waste water from Holding Basin 1 was discharged to the ground on August 6, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563046 / 7387594

SAMPLE: 12-34880/81 **DATE:** JULY 2, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34880/81
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	•
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 11 (DSCO3485): Sample collected from Holding Basin 2, facing east.

Waste water from Holding Basin 1 was discharged to the ground on July 11, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563046 / 7387594

SAMPLE: 12-34917 **DATE:** JULY 19, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34917
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 12 (DSCO5209): Sample collected from Holding Basin 2.

Waste water from Holding Basin 1 was discharged to the ground on July 25, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563040 / 7387588

SAMPLE: 12-34896 **DATE:** JULY 10, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34896
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 13 (DSCO2980): Sample collected from Holding Basin 3.

Waste water from Holding Basin 3 was discharged to the ground on July 18, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563042 / 7387596

SAMPLE: 12-34919 **DATE:** JULY 23, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34919
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	•
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 14 (DSCO3956): Sample collected from Holding Basin 3.

GPS coordinates: 563042 / 7387617

SAMPLE: 12-34890/91 **DATE:** JULY 6, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34890/91
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 14 (DSCO3532): Sample collected from Holding Basin 6.

Waste water from Holding Basin 6 was discharged to the ground on August 3, 2012. The water was discharged on the north side away from the area. (563059, 7387729).

LOCATION: HOLDING BASIN 7A GPS COORDINATES: 563042 / 7387617

SAMPLE: 12-34907 **DATE:** JULY 12, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34907
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 15 (DSCO3030): Sample collected from Holding Basin 7A, facing east.

Waste water from Holding Basin 7A was discharged to the ground on August 3, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563049 / 7387609

SAMPLE: 12-34910/11 **DATE:** JULY 16, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34910/11
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 16 (P1030761): Sample collected from Holding Basin 7B, facing northeast.

Waste water from Holding Basin 7B was discharged to the ground on July 20, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

LOCATION: HOLDING BASIN 7B GPS COORDINATES: 563043 / 7387596

SAMPLE: 12-34920/21 **DATE:** JULY 23, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34920/21
pН	6.0 - 9.0	pH units	6.9
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	0.12
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



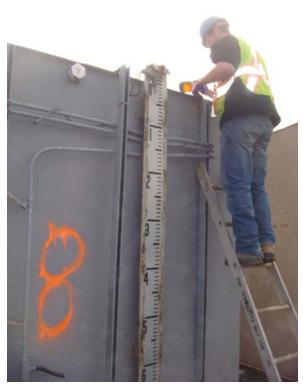
Photograph 17 (DSCO3958): Sample collected from Holding Basin 7B.

Waste water from Holding Basin 7B was discharged to the ground on August 4, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563026 / 7387565

SAMPLE: 12-34889 **DATE:** JULY 6, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34889
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 18 (DSCO3535): Sample collected from Holding Basin 8.

GPS COORDINATES: 563026 / 7387565

SAMPLE: 12-34894 **DATE:** JULY 10, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34894
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	-
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 19 (DSCO2982): Sample collected from Holding Basin 8.

Waste water from Holding Basin 8 was discharged to the ground on July 18, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS coordinates: 563026 / 7387561

SAMPLE: 12-34893 **DATE:** JULY 10, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34893
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-

No photographic documentation for this sampling event.

Waste water from Holding Basin 9 was discharged to the ground on July 23, 2012. The water was discharged on the north side away from the area. (563027, 7387602).

GPS COORDINATES: 563026 / 7387561

SAMPLE: 12-34940/41 **DATE:** JULY 27, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34940/41
pН	6.0 - 9.0	pH units	5.4
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	0.010
Dissolved Copper	0.20	mg/L	0.010
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.023
Total Zinc	0.50	mg/L	0.50
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 21 (DSCO3111): Wastewater in Holding Basin 9.

LOCATION: UPPER SITE TIER II DISPOSAL FACILITY

GPS COORDINATES: 571052 / 7394630

SAMPLE: 12-34904 **DATE:** JULY 11, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34904
pН	6.0 - 9.0	pH units	7.3
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.020
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.064
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 22 (DSCO3639): Wastewater sample collected from the Upper Site Tier II Disposal Facility, facing southeast.

Waste water from the Upper Site Tier II Disposal Facility was discharged to the ground on July 21, 2012. The water was discharged on the west side away from the area. (570999, 7394555).

LOCATION: UPPER SITE NON-HAZARDOUS WASTE LANDFILL

GPS COORDINATES: 572157 / 7395188

SAMPLE: 12-34888 **DATE:** JULY 5, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34888
pН	6.0 - 9.0	pH units	7.9
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.65
Oil & Grease	5.0	mg/L	6.1
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 23 (DSCO3515): Wastewater sample collected from the Upper Site Non-Hazardous Waste Landfill, facing east.

LOCATION: UPPER SITE NON-HAZARDOUS WASTE LANDFILL

GPS COORDINATES: 572157 / 7395188

SAMPLE: 12-34906 **DATE:** JULY 11, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34906
pН	6.0 - 9.0	pH units	7.6
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.27
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 24 (DSCO3651): Wastewater sample collected from the Upper Site Non-Hazardous Waste Landfill, facing south.

Waste water from the Upper Site Non-Hazardous Waste Landfill was discharged to the ground on July 21, 2012. The water was discharged on the west side away from the area. (572146, 7395222).

LOCATION: UPPER SITE NON-HAZARDOUS WASTE LANDFILL

GPS COORDINATES: 572157 / 7395188

SAMPLE: 12-34934 **DATE:** JULY 26, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34934
pН	6.0 - 9.0	pH units	7.2
Total Arsenic	0.10	mg/L	< 0.0010
Dissolved Cadmium	0.01	mg/L	0.0040
Total Chromium	0.10	mg/L	0.010
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.79
Oil & Grease	5.0	mg/L	2.1
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 25 (DSCO4085): Wastewater sample collected from the Upper Site Non-Hazardous Waste Landfill.

LOCATION: WEST LANDFILL EXCAVATION BASE

GPS COORDINATES: 571229 / 7394863

SAMPLE: 12-34892 **DATE:** JULY 10, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34892
pН	6.0 - 9.0	pH units	6.2
Total Arsenic	0.10	mg/L	0.0020
Dissolved Cadmium	0.01	mg/L	0.0040
Total Chromium	0.10	mg/L	0.011
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.0060
Total Zinc	0.50	mg/L	0.026
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 26 (DSCO2985): West Landfill facing west, showing pooled wastewater at excavation base.

LOCATION: WEST LANDFILL EXCAVATION BASE

GPS COORDINATES: 571229 / 7394863

SAMPLE: 12-34935 **DATE:** JULY 26, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34935
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.20	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	-
PCBs	1,000	μg/L	-
Benzene	370	μg/L	5.6
Toluene	2.0	μg/L	16
Ethyl benzene	90	μg/L	<2.0



Photograph 27 (DSCO4090): West Landfill wastewater sampling, showing pooled wastewater at excavation base.

LOCATION: ABANDONED POWERHOUSE GPS COORDINATES: 572700 / 7395080

SAMPLE: 12-34942 **DATE:** JULY 27, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34942
pН	6.0 - 9.0	pH units	7.0
Total Arsenic	0.10	mg/L	0.0019
Dissolved Cadmium	0.01	mg/L	0.011
Total Chromium	0.10	mg/L	0.044
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.0050
Total Mercury	0.60	μg/L	0.90
Dissolved Nickel	0.20	mg/L	< 0.0050
Total Zinc	0.50	mg/L	0.070
Oil & Grease	5.0	mg/L	4.4
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 28 (DSCO4153): Wastewater sample from Abandoned Power House, northeast corner of the excavation. Photo taken facing southwest.

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Tom Partridge

K RA

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode

APPENDIX A LABORATORY RESULTS

ASU#	14250	Report ID:	Dye-M W25
Client:	ESG	Date Submitted:	24-Jul-12
		Date tested:	25-Jul-12
Site:	Dye-M	Date:	25-Jul-12
	12-074	Matrix:	water
Report of Analysis	S		
Sample	Oil & Grease		
	mg/L		
12-34918	< 2.0		
Blank	< 2.0		
Control	15.5		
Control Target	15.8		
Results relate only	to the items tested		

		ANAI Y	TICAL SCIENCES GROU	P AND S	SLOWPOKE-2 FACIL	ITY AT RMC	
			ES SCIENCES ANALYTI				
			of Chem. and Chem. Eng				
		Roy	al Military College of Can				
			P.O. Box 17000 Stn. I			34	
			Tel: 613-541-6000	x6684 /	Fax: 613-545-8341		
Client:	ESG					ASG Login No:	22856
	12 Verite Ave					Site:	Dye-M
	Dept. of Chem. / Cher	n. Eng., RN	1C			Client No:	12-074
	P.O. Box 17000, Stn.	Forces				Samples Received:	24-Jul-12
	Kingston, Ontario K7k	(7B4				Date of analysis:	25-Jul-12
	(613) 541-6000 ext 65	67				Method No:	ASG 015
	Fax: (613) 541-6596					Date Reported:	27-Jul-12
						Sheet No:	1 of 1
		R	ESULTS OF PC	B IN V	VATER ANALY	'SIS	
		Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260	
		W	34918*	mg/L	< 0.003	< 0.003	
							<u> </u>
			esult of duplicate /alues in PPM**				
		report v	aides iii i ivi				
			LABOR	ATOR	Y QA/QC		
			Blank	mg/L	< 0.003	< 0.003	1
			Duplicate : 34918*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003	
			Control Sample	mg/L	< 0.003	0.013	
			Control Sample Target	mg/L	< 0.003	0.015	
		** S = Soi	I , C = Concrete , PC = F	Paint Chip	o , SW = Swab , P = I	Plant , W = Water, L =	: Leachate
		All results	corrected for the recover	v of the s	surrogate decachlorob	iphenvl	
		reculto	2223.00 .00 .300101	, 33 0	5 4.0 4.0 4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1		

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				13-541-6000 x66								
Client:	ESG							۸ ۹ ۵	Login No:	220	56	
Cilent.	12 Verite A	ve						ASG	Site:			
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	Kingston, C								of analysis:			
	(613) 541-6	000 ext 65	67					N	lethod No:	ASC	G 037	
	Fax: (613) 5	541-6596						Date	Reported:			
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			DEG	ULTS OF p	LI A I	INI VEIE						
			KES	OL13 OF P	πА	VAL I 3I3						
				nple I.D.		рН						
			3	34918*		8.38						
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				Control	J.	7.01						_
				trol Target		7.00						
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Р				gston, ON, K7K x: 613-545-8341								_
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2 Verite Ave	Fn= F*	10						_			Dye-M	
Pept. of Chem. / Che P.O. Box 17000, Stn		/IC			-				lient Login			
Cingston, Ontario K7									ples Recei			
613) 541-6000 ext 6					_			Do			ASG 023	
ax: (613) 541-6596								[Date Repo			
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	DE.) III T	OF 5			ANIAL VOIC						
	KE:	SUL I S	OF B	TEX IN WA	I EK	ANALYSIS	<u> </u>					
Compound	3491		Blank	Duplicate ; 34	918*	Control Sam	ple	Con	trol Targe	et		
	mg.	/L	mg/L	mg/L		mg/L			mg/L			
Benzene	< 0.0		< 0.002	< 0.002 ; < 0.		0.010			0.010			
Toluene	< 0.0		< 0.002	< 0.002 ; < 0.		0.010			0.010			
Ethylbenzene	< 0.0		< 0.002	< 0.002 ; < 0.		0.010			0.010			
m+p-Xylene	< 0.0		< 0.002	< 0.002 ; < 0.		0.020			0.020			_
o-Xylene	< 0.0	102	< 0.002	< 0.002 ; < 0.	002	0.010			0.010			
Deculte in DDM*												
Results in PPM*												

	Roy	al Military College of Canada -			
		P.O. Box 17000 Stn. Forces		7B4	
		Tel: 613-541-6000 x6684	4 / Fax: 613-545-8341		
Client :	ESG			ASG Login No:	
	12 Verite Ave				Dye-M
	Dept. of Chem. / Chem.			Client No:	
	P.O. Box 17000, Stn. Fo			Samples Received:	
	Kingston, Ontario K7K 7	B4		Date of analysis:	
	(613) 541-6000 ext 6567			Method No:	
	Fax: (613) 541-6596			Date Reported:	
				Sheet:	1 of 1
	RES	ULTS OF MERCUR	Y IN WATER A	NALYSIS	
		Sample	Mercury^		
		ID	μg/L		
		34918*	< 0.4		
		LABORATO	DRY QA/QC		
		Sample	Mercury^		
		ID	μg/L		
		Duplicate ; 34918*	< 0.4 ; < 0.4		
		Blank	< 0.4		
		Control Target	4.00		
		Control Sample	4.10		
		* Averaged result of dup	licates		
		^ Acid digestion perform			
		# Reported at 0.4 µg/L d			

ASU#	14274		Report ID:	Dye-M W30					Т
Client:	ESG		Date Submitted:	30-Jul-12					
			Date tested:	31-Jul-12					
Site:	Dye-M		Date:	31-Jul-12					
2-111	12-101		Matrix:	Water					
Report of Analysis									
Results relate only to the	items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	ļ
12-34934	-	-	-	-	-	0.79	0.015	< 0.001	
12-34936	-	-	-	-	-	0.037	0.016	0.002	
12-34937	-	-	-	-	-	0.034	0.039	0.002	
12-34938	-	-	-	-	-	0.085	0.035	0.001	
12-34939	-	-	-	-	-	0.60	0.021	0.001	
12-34940	-	-	-	-	-	0.50	< 0.005	< 0.001	
12-34941	-	-	-	-	-	0.50	< 0.005	< 0.001	*
Blank	-	-	-	-	-	< 0.005	<0.005	< 0.001	
Control	-	_	-	-	_	0.046	0.015	0.047	-
Control Target	-	-	-	-	-	0.048	0.015	0.047	+
Control Target	-	-	-	-	-	0.046	0.010	0.048	
12-34941	-	-	-	-	-	0.50	< 0.005	< 0.001	
12-34941	-	-	-	-	-	0.49	<0.005	< 0.001	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34934	< 0.005	< 0.005	<0.003	0.004	< 0.005	-	_	-	+
12-34936	< 0.005	<0.005	<0.003	< 0.004	< 0.005	-	-	-	+
12-34937	- 0.003		- 0.003	-0.001	< 0.005	-	-	-	+
12-34938	< 0.005	< 0.005	< 0.003	< 0.001	< 0.005	-	-	-	
12-34939	< 0.005	< 0.005	< 0.003	< 0.001	< 0.005	-	_	-	
12-34940	0.010	0.023	0.010	< 0.001	< 0.005	-	-	_	
12-34941	0.010	0.023	0.010	<0.001	< 0.005	-	-	-	*
Blank	<0.005	< 0.005	< 0.003	<0.001	< 0.005	-	-	-	
				0.0:-					1
Control	0.085	0.084	0.086	0.015	0.083	-	-	-	_
Control Target	0.088	0.088	0.088	0.016	0.088	-	-	-	+
12-34941	0.010	0.024	0.010	< 0.001	< 0.005	-	-	-	
12-34941	0.009	0.022	0.010	< 0.001	< 0.005	-	-	-	
** reporting limits lower	red for certain elements	- analysis by ICP	-MS						

ASU#	14274	Report ID:	Dye-M W32
Client:	ESG	Date Submitted:	30-Jul-12
		Date tested:	31-Jul-12
Site:	Dye-M	Date:	31-Jul-12
	12-101	Matrix:	water
Report of Analysis			
Sample	Oil & Grease		
	mg/L		
12-34934	2.1		
12-34936	<2.0		
12-34937	2.6		
12-34938	3.9		
12-34939	<2.0		
12-34940	<2.0		
12-34941	3.3		
Blank	<2.0		
Control	16.1		
Control Target	15.8		
Results relate only	to the items tested		

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 Client : ESG ASG Login No: 22880 12 Verite Ave Site: Dye-M Client No: 12-101 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 30-Jul-12 Kingston, Ontario K7K 7B4 Date of analysis: 31-Jul-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 31-Jul-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 34934 < 0.4 34936 < 0.4 34938 < 0.4 34939 < 0.4 34940 < 0.4 34941 < 0.4 LABORATORY QA/QC Sample Mercury[^] ID μg/L Blank < 0.4 Control Target 4.0 Control Sample 4.1 ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

			CAL SCIENCES GROUP							
		GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng Dépt. de chimie et de génie chimique								
		Royal	Military College of Canada							
			P.O. Box 17000 Stn. For		7B4					
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						r ago.	1 01 1			
			RESULTS OF p	H ANALYSIS						
			Sample I.D.	рН						
			34934	7.23						
			34936	7.44						
			34938	6.94						
			34939	9.57						
			34940	5.38						
			34941	5.34						
			* Averaged result of duplic	cates						
			LABORAT	ORY QA/QC						
			Sample I.D.	рН						
			Control	7.01						
			Control Target	7.00						
			John Targot	1.00						
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								WPOKE-2 FACII					
		GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR											
					Dept. of Chem. and Chem. Eng Dépt. de chimie et de génie chimique								
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					P	.O. Box 17000 S	tn. Forces, King	ston, ON, K7K 7	B4				
						Tel: 613-541-6	000 x6684 / Fax	: 613-545-8341					
nf ·	ESG											ASG Login No:	22880
viit i	12 Verite Ave												Dye-M
	Dept. of Chem. / Chem. E	na RMC										Client Login No:	,
	P.O. Box 17000, Stn. Fo											Samples Received:	
	Kingston, Ontario K7K 7E											Date of analysis:	
	(613) 541-6000 ext 6567											Method No:	
	Fax: (613) 541-6596											Date Reported:	1-Aug-12
	,											Page:	1 of 1
												, and the second	
					RESULTS (OF BTEX II	I WATER A	NAI YSIS					
					(LOOL I O	JI DIEXII		IIIAL I OIO					
	Compound	34934	34935	34936	34937	34938	34939	34940	34941	Blank	Control Sample	Control Target	
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
	Benzene	< 0.002	0.0056	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.010	0.010	
	Toluene	< 0.002	0.016	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.010	0.010	
	Ethylbenzene	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.010	0.010	
		< 0.002	0.012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.020	0.020	
	m+p-Xylene			0.000	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.010	0.010	
_	m+p-Xylene o-Xylene	< 0.002	0.0069	< 0.002	< 0.002	< 0.002	₹ 0.002	₹ 0.002	(0.00L		<u> </u>		
		< 0.002	0.0069	< 0.002	< 0.002	₹ 0.002	₹ 0.002	V 0.002	10.002				
		< 0.002	0.0069	< 0.002	< 0.002	< 0.002	V 0.002	V 0.002	10.002				
		< 0.002	0.0069	< 0.002	< 0.002	< 0.002	V 0.002	V 0.002	V.00E				
	o-Xylene	< 0.002	0.0069	< 0.002	< 0.002	< 0.002	V002	V 0.002	0.002				
		< 0.002	0.0069	< 0.002	< 0.002	< 0.002	V	V 0.002	V 0.00E				

ASU#	14234		Report ID:	Dye-M W18					
Client:	ESG		Date Submitted:	13-Jul-12					
			Date tested:	13-Jul-12					
Site:	Dye-M		Date:	17-Jul-12					
	12-050		Matrix:	Water					
Report of Analysis **									
Results relate only to the	itame tastad								
cesums relate only to the	i items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34892	-	_	-	-	_	0.026	0.016	0.002	
12-34893	-	-	-	-	-	-	< 0.005	-	
12-34904	-	-	-	-	_	0.064	0.020	< 0.001	
12-34905	-	-	-	-	-	4.9	0.042	0.003	+
12-34906	-	-	-	-	-	0.27	< 0.005	< 0.001	*
Blank	<u>-</u>	-	-	-	<u>-</u>	< 0.005	< 0.005	< 0.001	
Control	-	-	-	-	-	0.047	0.015	0.047	
Control Target	-	-	-	-	-	0.048	0.016	0.048	+
12-34906	-	-	-	-	-	0.28	< 0.005	< 0.001	
12-34906	-	-	-	-	-	0.27	< 0.005	< 0.001	
Dissolved Metals	Results in mg/L								
	Ţ,								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34892	< 0.005	0.006	< 0.003	< 0.001	< 0.005	-	-	-	
12-34895	-	-	-	-	< 0.005	-	-	-	
12-34904	< 0.005	< 0.005	< 0.003	< 0.001	< 0.005	-	-	-	
12-34905	0.009	< 0.005	0.004	< 0.001	< 0.005	-	-	-	
12-34906	< 0.005	< 0.005	< 0.003	0.001	< 0.005	-	-	-	*
Blank	< 0.005	< 0.005	< 0.003	< 0.001	< 0.005	-	-	-	
Control	0.000	0.004	0.000	0.015	0.006				+
Control	0.088	0.084	0.088	0.015	0.086	-	-	-	+
Control Target	0.088	0.088	0.088	0.016	0.088	-	-	-	
12-34906	<0.005	< 0.005	< 0.003	0.001	< 0.005	-	-	-	
12-34906	<0.005	< 0.005	< 0.003	0.001	< 0.005	-	-	-	+
** reporting limits lower	red for certain elements	- analysis by ICF	-MS						

ASU#	14234	Report ID:	Dye-M W19
Client:	ESG	Date Submitted:	13-Jul-12
		Date tested:	16-Jul-12
Site:	Dye-M	Date:	16-Jul-12
	12-050	Matrix:	water
Report of Analysis	5		
Sample	Oil & Grease		
	mg/L		
12-34892	<2.0		
12-34893	<2.0		
12-34895	<2.0		
12-34896	< 2.0		
12-34904	< 2.0		
12-34905	< 2.0		
12-34906	<2.0		
Blank	<2.0		
Control	15.5		
Control Target	15.7		
Results relate only	to the items tested		

			CILITY AT RN VPOKE-2 AU				
			Chem. and Chem. Eng [
			Military College of Canada				
		,	P.O. Box 17000 Stn. Ford				
				84 / Fax: 613-545-8341			
Client:	ESG				ASC	Login No:	22801
	12 Verite A	Ave				Site:	Dye-M
	Dept. of Cl	hem. / Chen	n. Eng., RMC			Client No:	12-050
	P.O. Box	17000, Stn.	Forces		Samples	Received:	13-Jul-12
	Kingston,	Ontario K7K	7B4			of analysis:	
	(613) 541-6	6000 ext 65	67		1	Method No:	ASG 037
	Fax: (613)	541-6596			Date	e Reported:	16-Jul-12
						Page:	1 of 1
			DE0111 TO 0E				
			RESULTS OF p	H ANALYSIS			
			Sample I.D.	рН			
			34892	6.15			
			34904	7.25			
			34905	6.94			
			34906*	7.55			
			 Averaged result of duplic 	ates			
			LABORATO	DRY OA/OC			
			LADONAIC	INT WAVE			
			Sample I.D.	nH Ha			
			34906* ; Duplicate	pH 7.54 ; 7.55			
				1.04, 1.00			
				7.02			
			Control	7.02			
				7.02 7.00			
			Control				
			Control				

ASU#	14219	Report ID:	Dye-M W14
Client:	ESG	Date Submitted:	05-Jul-12
		Date tested:	10-Jul-12
Site:	Dye-M	Date:	11-Jul-12
	12-039	Matrix:	water
Report of Analysis	S		
Sample	Oil & Grease		
	mg/L		
12-34880	<2.0		
12-34881	<2.0		
12-34882	10.2		
Blank	<2.0		
Control	17.6		
Control Target	15.9		
Results relate only	to the items tested		

ASU#		14	4244			Report	ID:	Dye-l	M W23
Client:		I	ESG			Date Su	ubmitted:	18-Jul-12	
						Date te	sted:	19	Jul-12
Site:		D	ye-M			Date:		19	Jul-12
			2-064			Matrix	•	W	ater
Report of An	alysis								
Sample		Oil &	d Grease						
-		r	ng/L						
12 24009	0		<2.0						
12-34908			<2.0 <2.0						
12-3491			<2.0						
Blank		<	<2.0						
Control			15.5						
Control Tar	Control Target		15.7						
Results relate	only	to the ite	ems tested						
ASU#		14264 ESG		Report ID: Date Submitted:	Dye-M W27 26-Jul-12				
Site:		Dye-M 12-080		Date tested: Date: Matrix:	27-Jul-12 27-Jul-12 30-Jul-12 Water				
Report of Analysis		12 000			, ate				
Results relate only to the	ne items to	ested							
Total Metals	Resul	ts in mg/L							
SAMPLE		Cu	Ni	Co	Cd	Pb	Zn	Cr	As
		-	-	-	-	-	0.12	<0.005	-
12-34920		-	-	-	-	-	0.11	< 0.005	-
12-34920 12-34921						-	< 0.005	< 0.005	
		-	-	-	-		<0.003	<0.003	-
12-34921 Blank Control		-	-	-	-	-	0.048	0.016	-
12-34921 Blank									

ASU#	14264	Report ID:	Dye-M W28
Client:	ESG	Date Submitted:	26-Jul-12
		Date tested:	31-Jul-12
Site:	Dye-M	Date:	01-Aug-12
	12-080	Matrix:	water
Report of Analysis	5		
Sample	Oil & Grease		
	mg/L		
12-34919	< 2.0		
12-34920	<2.0		
12-34921	< 2.0		
12-34922	< 2.0		
Blank	< 2.0		
Control	16.1		
Control Target	15.8		
Results relate only	to the items tested		

	GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR								
			Chem. and Chem. Eng						
			Military College of Canada						
		.,	P.O. Box 17000 Stn. For						
				684 / Fax: 613-545-834					
Client:	ESG				ASG	Login No:	22870		
	12 Verite A	ve					Dye-M		
	Dept. of Ch	nem. / Chei	n. Eng., RMC			Client No:	12-080		
	P.O. Box 1	7000, Stn.	Forces		Samples	Received:	26-Jul-12		
	Kingston, (Ontario K7	C 7B4			of analysis:			
	(613) 541-6	6000 ext 65	67		N	/lethod No:	ASG 037		
	Fax: (613)	541-6596			Date	Reported:	01-Aug-12		
						Page:	1 of 1		
			RESULTS OF p	H ANALYSIS					
			Sample I.D.	pH					
			34920	6.85					
			34921*	6.82					
			* Averaged result of duplic	cates					
			LABORAT	ORY QA/QC					
			Sample I.D.	рН					
			34921*; Duplicate	6.81 ; 6.83					
			Control	7.01					
			Control Target	7.00					

ASU#	14249	Report ID:	Dye-M W24
Client:	ESG	Date Submitted:	24-Jul-12
		Date tested:	25-Jul-12
Site:	Dye-M	Date:	25-Jul-12
	12-070	Matrix:	water
Report of Analysis	3		
Sample	Oil & Grease		
	mg/L		
12-34917	<2.0		
Blank	<2.0		
Control	15.5		
Control Target	15.8		
Results relate only	to the items tested		

ASU#	14228	Report ID:	Dye-M W15
Client:	ESG	Date Submitted:	10-Jul-12
		Date tested:	10-Jul-12
Site:	Dye-M	Date:	11-Jul-12
	12-043	Matrix:	water
Report of Analysis	5		
Sample	Oil & Grease		
	mg/L		
12-34888	6.1		
12-34889	< 2.0		
12-34890	<2.0		
12-34891	<2.0		
Blank	< 2.0		
Control	17.6		
Control Target	15.9		
Results relate only	to the items tested		

ASU#	14228		Report ID:	Dye-M W16				
Client:	ESG		Date Submitted:	10-Jul-12				
			Date tested:	11-Jul-12				
Site:	Dye-M		Date:	12-Jul-12				
	12-043		Matrix:	Water				
Report of Analysis **								
esults relate only to the	e items tested							
Total Metals	Results in mg/L							
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As
SAMIFLE	Cu	111	Co	Cu	FU	ZII	CI	AS
12-34888	-	-	-	-	-	0.65	< 0.005	< 0.001
Blank	-	-	-	-	-	< 0.005	<0.005	< 0.001
Control	-	-	-	-	-	0.044	0.015	0.045
Control Target	-	-	-	-	-	0.048	0.016	0.048
12-34888	-	-	-	-	-	0.69	< 0.005	< 0.001
12-34888	-	-	-	-	-	0.61	< 0.005	< 0.001
Dissolved Metals	Results in mg/L							
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As
12-34888	< 0.005	< 0.005	<0.003	<0.001	< 0.005	-	-	-
Blank	<0.005	< 0.005	< 0.003	<0.001	< 0.005	-	-	-
Control	0.083	0.083	0.085	0.014	0.086	-	-	-
Control Target	0.088	0.088	0.088	0.016	0.088	-	-	-
12-34888	< 0.005	< 0.005	< 0.003	< 0.001	< 0.005	-	-	-
12-34888	< 0.005	< 0.005	< 0.003	< 0.001	< 0.005	-	-	-
* reporting limits lower	red for certain elements	- analysis by ICP	-MS					
** reporting limits lower								

		ANALY	TICAL SCIENCES GROU	P AND S	SLOWPOKE-2 FACIL	ITY AT RMC						
			ES SCIENCES ANALYTIC									
		Dept.	of Chem. and Chem. Eng	g Dépt.	de chimie et de génie	e chimique						
		Roy	Royal Military College of Canada - Collège militaire royal du Canada									
			P.O. Box 17000 Stn. F	Forces, k	Kingston, ON, K7K 7E	34						
			Tel: 613-541-6000	x6684 /	Fax: 613-545-8341							
Client:	ESG					ASG Login No:	22790					
	12 Verite Ave					Site:	Dye-M					
	Dept. of Chem. / Cher	m. Eng., RI	MC			Client No:	12-043					
	P.O. Box 17000, Stn.	Forces				Samples Received:	10-Jul-12					
	Kingston, Ontario K7h	< 7B4				Date of analysis:	10-Jul-12					
	(613) 541-6000 ext 65	67				Method No:						
	Fax: (613) 541-6596					Date Reported:	12-Jul-12					
						Sheet No:	1 of 1					
		F	RESULTS OF PC	B IN V	VATER ANALY	/SIS						
		Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260						
		W	34888*	mg/L	< 0.003	< 0.003						
			0.1000	iiig/L	0.000	. 0.000						
			result of duplicate									
		Report \	Values in PPM									
			LABORA	ATOR	Y QA/QC							
			Blank	mg/L	< 0.003	< 0.003						
			Duplicate ; 34888*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003						
		 	Control Sample	mg/L	< 0.003	0.011						
			Control Sample Target	mg/L	< 0.003	0.015						
		** S = So	il , C = Concrete , PC = P	aint Chip	o , SW = Swab , P =	Plant , W = Water, L =	: Leachate					
		A II	and the state of t	- 6 11		Sala a sa d						
		All results	s corrected for the recovery	y of the s	surrogate decachlorob	ipnenyl						

	G	ROUP DE	S SCIENCES ANALYTIQU	JES ET FACILITÉ SL	OWPOKE-2 AU	CMR	
			f Chem. and Chem. Eng				
			Military College of Canada				
		•	P.O. Box 17000 Stn. For	ces, Kingston, ON, K	7K 7B4		
			Tel: 613-541-6000 x6	684 / Fax: 613-545-83	41		
Client:	ESG				ASG	Login No:	22790
	12 Verite Av	ve				Site:	Dye-M
	Dept. of Che	em. / Che	m. Eng., RMC			Client No:	12-043
	P.O. Box 1	7000, Stn	Forces		Samples	Received:	10-Jul-12
	Kingston, C	ntario K7	K 7B4		Date of	of analysis:	16-Jul-12
	(613) 541-60	000 ext 65	567		l l	Method No:	ASG 037
	Fax: (613) 5	541-6596			Date	Reported:	16-Jul-12
						Page:	1 of 1
			RESULTS OF	OH ANALYSIS			
			Sample I.D.	pH	1		
			34888*	7.86			
			* Averaged result of dupli	cates			
			Averaged result of dupit	cates			
			LABORAT	ORY QA/QC			
			Sample I.D.	pH	1		
			34888* ; Duplicate	7.86 ; 7.85	-		
			Control	7.00 , 7.05	-		
			Control Target	7.02	-		
			Control raiget	7.00	4		

ASU#	14239	Report ID:	Dye-M W21
Client:	ESG	Date Submitte	e d: 16-Jul-12
		Date tested:	16-Jul-12
Site:	Dye-M	Date:	17-Jul-12
	12-058	Matrix:	Water
Report of Analysis **			
Results relate only to the ite	ems tested		
Total Metals			
SAMPLE	Cr		
GI IIVII EE	mg/L		
12-34907	< 0.005	*	
Blank	< 0.005		
Control	0.015		
Control Target	0.016		
10.01005	0.005		
12-34907	< 0.005		
12-34907	< 0.005		
** reporting limits lowered	for certain element	s - analysis by ICP-MS	
ASU#	14233	Report ID:	Dye-M W17
Client:	ESG	Date Submitte	e d: 13-Jul-12
		Date tested:	13-Jul-12
Site:	Dye-M	Date:	16-Jul-12
	12-049	Matrix:	Water
Report of Analysis **			
Results relate only to the ite	ems tested		
Total Metals			
Total Metals			
SAMPLE	Cr		
	mg/L		
12-34894	< 0.005		
Blank	< 0.005		
Control	0.015		
Control Target	0.016		
** reporting limits lowered	for certain element	s - analysis by ICP-MS	
reporting minis lowered	ioi ceitani elentelli	5 ununyolo by 101 -1910	

ASU#	14273	Report ID:	Dye-M W31
Client:	ESG	Date Submitted:	30-Jul-12
		Date tested:	31-Jul-12
Site:	Dye-M	Date:	31-Jul-12
	12-106	Matrix:	water
Report of Analysis	8		
Sample	Oil & Grease		
	mg/L		
12-34942	4.4		
Blank	<2.0		
Control	16.1		
Control Target	15.8		
Results relate only	to the items tested		

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ESG Client : ASG Login No: 22883 12 Verite Ave Site: Dye-M Client No: 12-106 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 30-Jul-12 Kingston, Ontario K7K 7B4 Date of analysis: 31-Jul-12 (613) 541-6000 ext 6567 Method No: ASG 021 Date Reported: 31-Jul-12 Fax: (613) 541-6596 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 34942* 0.9 LABORATORY QA/QC Sample Mercury[^] ID μg/L 0.7 ; 1.1 Duplicate; 34942* Blank < 0.4 Control Target 4.0 Control Sample 4.1 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

		Do	yal Military College of Can	ada Call	làgo militoiro royal d	u Canada				
		KU								
			P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341							
			Tel. 013-341-0000	X0004 / I	ax. 013-343-0341					
Client:	ESG					ASG Login No:	22883			
	12 Verite Ave						Dye-M			
	Dept. of Chem. / Che	m. Eng., R	MC			Client No:				
	P.O. Box 17000, Stn.	Forces				Samples Received:	30-Jul-12			
	Kingston, Ontario K7I	K 7B4				Date of analysis:	31-Jul-12			
	(613) 541-6000 ext 65	567				Method No:	ASG 015			
	Fax: (613) 541-6596					Date Reported:	01-Aug-12			
	,					Sheet No:				
			RESULTS OF PC	B IN W	ATER ANAL	VCIC				
		-	LOULIO UP PU	א אוו ס	IA I ER ANAL	1 313				
		Sample	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260				
		Type **	•							
		W	34942	mg/L	< 0.003	< 0.003				
		—								
		*Average	result of duplicate							
			Values in PPM**							
		rtoport	valado III I I IVI							
			LABORA	ATOP\	/ 0 A/OC					
			LADONA	AT OIL	i wavec					
			Blank	mg/L	< 0.003	< 0.003				
			Control Sample	mg/L	< 0.003	0.013				
			Control Sample Target	mg/L	< 0.003	0.015				
				3						
		** S = Sc	oil , C = Concrete , PC = P	Paint Chin	SW = Swab P =	Plant W = Water I =	: Leachate			
		0.00	, 2 00.10.10.10, 1 0 = 1		,	,,				
		All results	s corrected for the recovery	y of the s	urrogate decachlorol	oiphenyl				

						LOWPOKE-2 FA FACILITÉ SLO				
						de chimie et de g				
		Royal				ege militaire roya ingston, ON, K7I				
						ax: 613-545-834				
011							• • • •		2000	20
Client:	12 Verite	۸۷۵					ASC	Login No:	2288 Dye	
		hem. / Cher	m Eng	RMC				Client No:		
		17000, Stn.		Tuvio			Samples	Received:		
	Kingston,	Ontario K7k	< 7B4				Date	of analysis:	31-J	ul-12
		6000 ext 65	67					Method No:		
	Fax: (613)	541-6596					Date	Reported:		
								Page:	1 Of	1
			RE	SULTS OF	pH A	NALYSIS				
			Sa	ample I.D.		pН				
				34942		6.97				
			* Avera	ged result of du	nlicates					
				g						
				LABORA	TORY	QA/QC				
			Sa	ample I.D.		рН				
				Control		7.01				
			Co	ntrol Target		7.00				
	ANALY	TICAL SCI	ENCES	GROUP AND S	SLOWPO	KE-2 FACILITY	AT RMC			
						TÉ SLOWPOKE				
						ie et de génie ch				
	RO			Of Canada - Co Stn. Forces, F		taire royal du Ca	anaua			
				1-6000 x6684 /	-				-	
			. 0.00.	. 0000 1000 17						
ESG								ASG Login	No	22882
12 Verit	e Ave									Dye-M
	Chem. / Che	em. Ena R	MC				0	lient Login		•
	ox 17000, Str	<u> </u>						ples Recei		
Kingsto	n, Ontario K7	7K 7B4					D	ate of analy		
. ,	11-6000 ext 6									ASG 023
Fax: (6'	13) 541-6596							Date Repo		
								P	age:	1 of 1
		RESUL	_TS C	F BTEX I	N WA	TER ANAL	YSIS			
С	ompound	34	942	Blank		Control Sam	ple Cor	trol Targe	et	
			g/L	mg/L		mg/L		mg/L		
	Benzene		.002	< 0.002		0.010		0.010		
1	Toluene		.002	< 0.002		0.010		0.010		
	hylbenzene n+p-Xylene		.002	< 0.002 < 0.002		0.010 0.020		0.010	-	
			.002	< 0.002		0.020		0.020	-1	
	o-Xvlene									
	o-Xylene			10.002						
	o-Xylene			1 01002						

Sharilyn Hoobin Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4 WWO BILLINGS GROUND CONTRACT OF THE PROPERTY O

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 350 Albert Street, Suite 1720 Ottawa ON K1A 0K3

Tuesday, February 19, 2013

RE: Analytical Results for Wastewater Samples Collected at DYE-M in August 2012

The following report summarizes results of the analysis of wastewater samples as per the DYE-M (Cape Dyer) DEW Line Cleanup Project (DLCU) Specifications.

The DYE-M specifications require that "wash water, melt water collection, rinse water resulting from the cleaning of fuel tanks and pipelines, and/or any other liquid effluent stream" meet the following guidelines prior to their discharge to land (01560.4.1):

Parameter	Maximum Allowable Concentration	Units
pН	6.0 - 9.0	pH units
Total Arsenic	0.10	mg/L
Dissolved Cadmium	0.01	mg/L
Total Chromium	0.10	mg/L
Dissolved Cobalt	0.05	mg/L
Dissolved Copper	0.20	mg/L
Dissolved Lead	0.05	mg/L
Total Mercury	0.60	μg/L
Dissolved Nickel	0.200	mg/L
Total Zinc	0.50	mg/L
Oil & Grease	5.0	mg/L
PCBs	1,000	$\mu g/L$
Benzene	370	μg/L
Toluene	2.0	$\mu \mathrm{g}/\mathrm{L}$
Ethyl benzene	90	μg/L

^{*}In respect to application to a road surface

WASTEWATER SAMPLES

Eight wastewater samples were collected at DYE-M and analyzed in August 2012. A summary of the details of these results follows. Laboratory results are provided in Appendix A.

LOCATION: LOWER SITE NON-HAZARDOUS WASTE LANDFILL

GPS coordinates: 562962 / 7387043

SAMPLE: 12-34948 **DATE:** AUGUST 4, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34948
pН	6.0 - 9.0	pH units	7.2*
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.200	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	-
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-

^{*}Measurement was taken in the field



Photograph 1 (DSC4280): Sample collected from the Lower Site Non-Hazardous Waste Landfill, facing southeast.

Waste water from the Lower Site Non-Hazardous Waste Landfill was discharged to the ground on August 7, 2012. The water was discharged on the northeast side of the facility away from the area. (563140, 7387099).

LOCATION: WASTEWATER HOLDING BASIN 1 GPS COORDINATES: 0563046 / 7387598

SAMPLE: 12-34970/71 **DATE:** AUGUST 13, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34970/71
pН	6.0 - 9.0	pH units	-
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.200	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 2 (DSC04297): Collecting sample from Holding Basin 1, facing east.

Waste water from Holding Basin 1 was discharged to the ground on August 15, 2012. The water was discharged on the northeast side of the Holding Basins away from the area. (0563059/7387729).

LOCATION: WASTEWATER HOLDING TANK 8

GPS COORDINATES: 563026/7387565

SAMPLE: 12-34960/61 **DATE:** AUGUST 9, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34960/61
pН	6.0 - 9.0	pH units	7.4
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.200	mg/L	-
Total Zinc	0.50	mg/L	0.090
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-



Photograph 3 (DSC04290): Collecting sample from Holding Tank 8, facing east.

Waste water from Holding Tank 8 was discharged to the ground on August 15, 2012. The water was discharged on the northeast side of the Holding Basins away from the area. (0563059/7387729).

LOCATION: WASTEWATER HOLDING TANK 9 GPS COORDINATES: 0562612 / 7387930

SAMPLE: 12-34962 **DATE:** AUGUST 9, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34962
pН	6.0 - 9.0	pH units	5.3*
Total Arsenic	0.10	mg/L	-
Dissolved Cadmium	0.01	mg/L	-
Total Chromium	0.10	mg/L	-
Dissolved Cobalt	0.05	mg/L	-
Dissolved Copper	0.20	mg/L	-
Dissolved Lead	0.05	mg/L	-
Total Mercury	0.60	μg/L	-
Dissolved Nickel	0.200	mg/L	-
Total Zinc	0.50	mg/L	-
Oil & Grease	5.0	mg/L	-
PCBs	1,000	μg/L	-
Benzene	370	μg/L	-
Toluene	2.0	μg/L	-
Ethyl benzene	90	μg/L	-

^{*}Measurement was taken in the field.



Photograph 4 (DSC04288): Collecting sample from Holding Tank 9, facing east.

Waste water from Holding Tank 9 was discharged to the ground on August 12, 2012 without ESGs recommendation. The water was discharged on the northeast side of the Landfarm away from the area. (0563059/7387729).

LOCATION: WASTEWATER HOLDING TANK 9 GPS COORDINATES: 0562612 / 7387930

SAMPLE: 12-34969 **DATE:** AUGUST 13, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-34969
pН	6.0 - 9.0	pH units	9.1
Total Arsenic	0.10	mg/L	0.010
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	0.010
Dissolved Lead	0.05	mg/L	0.0092
Total Mercury	0.60	μg/L	6.1
Dissolved Nickel	0.200	mg/L	0.044
Total Zinc	0.50	mg/L	2.3
Oil & Grease	5.0	mg/L	37
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	3.0
Toluene	2.0	μg/L	10.0
Ethyl benzene	90	μg/L	2.2



Photograph 5 (DSC04296): Collecting sample from Holding Tank 9, facing northeast.

LOCATION: WASTEWATER FLOWER POT 1 GPS COORDINATES: 563026/7387566

SAMPLE: 12-44349 **DATE:** AUGUST 30, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-44349
pН	6.0 - 9.0	pH units	9.1
Total Arsenic	0.10	mg/L	0.14
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	0.0060
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.200	mg/L	< 0.0050
Total Zinc	0.50	mg/L	< 0.010
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 6 (DSC04608): Wastewater samples collected from Wastwater Flower Pot 1, facing southwest.

LOCATION: WASTEWATER FLOWER POT 2 GPS COORDINATES: 563027/7387569

SAMPLE: 12-44350/51 **DATE:** AUGUST 30, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-44350/51
pН	6.0 - 9.0	pH units	8.2
Total Arsenic	0.10	mg/L	0.030
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.200	mg/L	0.010
Total Zinc	0.50	mg/L	< 0.010
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 7 (DSC04610): Wastewater samples collected from Wastwater Flower Pot $\overline{\bf 2}$, facing south.

Waste water from Flower Pot 2 was discharged to the ground on September 11, 2012. The water was discharged on the northeast side of the holding basins away from the area. (563059, 7387729).

LOCATION: WASTEWATER FLOWER POT 3 GPS COORDINATES: 563028/7387573

SAMPLE: 12-44352 **DATE:** AUGUST 30, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-44352
pН	6.0 - 9.0	pH units	8.2
Total Arsenic	0.10	mg/L	0.011
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	0.011
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	5.5
Dissolved Nickel	0.200	mg/L	0.011
Total Zinc	0.50	mg/L	0.010
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 8 (DSC04609): Wastewater samples collected from Wastwater Flower Pot 3, facing southwest.

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Sharilyn Hoobin

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode

APPENDIX A LABORATORY RESULTS

ASU#	14298	Report ID:	Dye-M W35
Client:	ESG	Date Submitted:	15-Aug-12
		Date tested:	15-Aug-12
Site:	Dye-M	Date:	15-Aug-12
	12-123	Matrix:	water
Report of Analysis			
Sample	Oil & Grease		
	mg/L		
12-34969	37.0		
12-34970	<2.0		
12-34971	<2.0		
Blank	<2.0		
Control	14.9		
Control Target	15.8		
Results relate only	to the items tested		

	GROUP	P DES SCIENCES ANALYTIQU	IES ET FACILITÉ SLOWP	OKE-2 AU	CMR			
		pt. of Chem. and Chem. Eng I						
	R	oyal Military College of Canada	- Collège militaire royal du	Canada				
		P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4						
		Tel: 613-541-6000 x66	84 / Fax: 613-545-8341					
Client:	ESG			ASG	Login No:			
	12 Verite Ave					Dye-M		
		Chem. Eng., RMC			Client No:			
	P.O. Box 17000,					15-Aug-12		
	Kingston, Ontario	K7K 7B4		Date o	f analysis:	17-Aug-12		
	(613) 541-6000 e	xt 6567		N	lethod No:	ASG 037		
	Fax: (613) 541-65	596		Date		17-Aug-12		
					Page:	1 of 1		
		RESULTS OF p	OH ANALYSIS					
		Sample I.D.	рН					
		34969	9.08					
		* Averaged result of duplic						
		* Averaged result of duplic						
		* Averaged result of duplic	cates					
		LABORATO	DRY QA/QC					
		LABORATO Sample I.D. Control	DRY QA/QC pH 7.00					
		LABORATO	DRY QA/QC					
		LABORATO Sample I.D. Control	DRY QA/QC pH 7.00					

ASU#	14298		Report ID:	Dye-M W36				
Client:	ESG		Date Submitted:	15-Aug-12				
			Date tested:	16-Aug-12				
Site:	Dye-M		Date:	17-Aug-12				
	12-123		Matrix:	Water				
Report of Analysis **								
Results relate only to the	e items tested							
Total Metals	Results in mg/L							
SAMPLE	Cu	Ni	Со	Cd	Pb	Zn	Cr	As
12-34969	-	-	-	-	-	2.3	<0.005	0.010
Blank	-	-	-	-	-	<0.005	<0.005	<0.001
Control	-	_	-	-	-	0.049	0.016	0.045
Control Target	-	-	-	-	-	0.048	0.016	0.048
Dissolved Metals	Results in mg/L							
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As
12-34969	0.013	0.044	< 0.003	<0.001	0.009	-	-	-
Blank	< 0.005	< 0.005	< 0.003	<0.001	< 0.005	-	-	-
Control	0.090	0.087	0.089	0.016	0.086	-	-	-
Control Target	0.088	0.088	0.088	0.016	0.088	-	-	-
* reporting limits lower	red for certain elements	- analysis by ICI	P-MS					
. _F		, , 101	-					

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				CILITÉ SLOWPOKE-2 AU			
				himie et de génie chimique			
				militaire royal du Canada			
	F		Stn. Forces, Kings				
		Tel: 613-541					
Client :	ESG					ASG Login No:	22927
	12 Verite Ave					Site:	Dye-M
	Dept. of Chem. / Chem. E	Eng., RMC				Client Login No:	12-123
	P.O. Box 17000, Stn. Fo	rces				Samples Received:	15-Aug-12
	Kingston, Ontario K7K 7E	B4				Date of analysis:	20-Aug-12
	(613) 541-6000 ext 6567					Method No:	ASG 023
	Fax: (613) 541-6596					Date Reported:	21-Aug-12
		RES	ULTS OF BT	EX IN WATER AN	ALYSIS	Page:	1 of 1
	Compound						1 of 1
	Compound	34969*	Blank	Duplicate ; 34969*	Control Sample	Control Target	1 of 1
		34969 * mg/L	Blank mg/L	Duplicate ; 34969*	Control Sample mg/L	Control Target	1 of 1
	Benzene	34969* mg/L 0.0030	Blank mg/L < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029	Control Sample mg/L 0.010	Control Target mg/L 0.010	1 of 1
	Benzene Toluene	34969* mg/L 0.0030 0.011	Blank mg/L < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010	Control Sample mg/L 0.010 0.010	Control Target mg/L 0.010 0.010	1 of 1
	Benzene Toluene Ethylbenzene	34969* mg/L 0.0030 0.011 0.0022	Blank mg/L < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021	Control Sample mg/L 0.010	Control Target mg/L 0.010	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene	34969* mg/L 0.0030 0.011 0.0022	Blank mg/L < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021	Control Sample mg/L 0.010 0.010 0.010	Control Target mg/L 0.010 0.010 0.010	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1
	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	34969* mg/L 0.0030 0.011 0.0022 0.0068	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate ; 34969* mg/L 0.0030 ; 0.0029 0.011 ; 0.010 0.0022 ; 0.0021 0.0069 ; 0.0067	Control Sample mg/L 0.010 0.010 0.010 0.010 0.020	Control Target mg/L	1 of 1

Dept. of Chem. / Cher	m. Eng., RI	MC			Client No:	12-123
P.O. Box 17000, Stn.					Samples Received:	15-Aug-12
ingston, Ontario K7k	(7B4				Date of analysis:	
613) 541-6000 ext 6567 ax: (613) 541-6596					Method No:	
ax: (613) 541-6596					Date Reported:	21-Aug-12
,					Sheet No:	
	F	RESULTS OF PC	B IN V	VATER ANALY	'SIS	
			l			
	Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260	
	W	34969*	mg/L	< 0.003	< 0.003	
	*Average	result of duplicate				
	Report \	/alues in PPM				
		LABORA	TOD	/ O N/O C		
		LABURA	AT OR	Y QA/QC		
		Blank	mg/L	< 0.003	< 0.003	
		Duplicate; 34969*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003	
		Control Sample	mg/L	< 0.003	0.012	
		Control Sample Target	mg/L	< 0.003	0.015	
	*** 0 0					
	S = S0	il , C = Concrete , PC = P	aint Chip	, SVV = SWab , P = I	riant , vv = vvater, L =	Leacnate
	All results	corrected for the recovery	of the s	urrogate decachlorobi	iphenyl	
		,			. ,	

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 Client : ESG ASG Login No: 22927 12 Verite Ave Site: Dye-M Dept. of Chem. / Chem. Eng., RMC Client No: 12-123 P.O. Box 17000, Stn. Forces Samples Received: 15-Aug-12 Kingston, Ontario K7K 7B4 Date of analysis: 20-Aug-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 20-Aug-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 34969 6.1 LABORATORY QA/QC Sample Mercury[^] ID μg/L Blank < 0.4 Control Target 4.00 Control Sample 4.20 ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

ASU#	14295		Report ID:	Dye-M W34					
Client:	ESG		Date Submitted:	13-Aug-12					
			Date tested:	14-Aug-12					
Site:	Dye-M		Date:	16-Aug-12					
	12-121		Matrix:	Water					
Report of Analysis									
Results relate only to the	he items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-34960	-	-	-	-	-	0.090	< 0.005		
12-34961	-	-	-	-	-	0.089	< 0.005	-	*
Blank	-	-	-	-	-	< 0.005	< 0.005	-	
Control	-	-	-	-	-	0.054	0.016	-	
Control Target	-	-	-	-	-	0.048	0.016	-	
12-34961	-	-	-	-	-	0.089	<0.005	-	
12-34961	-	-	-	-	-	0.088	< 0.005	-	

		LYTICAL SCIENCES GROUP A P DES SCIENCES ANALYTIQU				
		pt. of Chem. and Chem. Eng				
		Royal Military College of Canada				
		P.O. Box 17000 Stn. For				
			684 / Fax: 613-545-8341	704		
		Tel. 013-341-0000 X00	J04 / 1 ax. 013-343-0341			
Client:	ESG			ASC	Login No:	22926
	12 Verite Ave					Dye-M
	Dept. of Chem.	Chem. Eng., RMC			Client No:	
	P.O. Box 17000			Samples	Received:	15-Aug-12
	Kingston, Ontari				of analysis:	
	(613) 541-6000 6				Method No:	
	Fax: (613) 541-6			Date	e Reported:	17-Aug-12
					Page:	1 of 1
		RESULTS OF p	OH ANALYSIS			
		Sample I.D.	рН			
		34960	7.47			
		34961*	7.20			
		* Averaged result of duplic	cates			
		LABORATO	ORY QA/QC			
		Sample I.D.	рН			
		Duplicate ; 34961	7.20 ;7.19			
		Control	7.00			
		Control Target	7.00			

ASU#	14295	Report ID:	Dye-M W33
Client:	ESG	Date Submitted:	13-Aug-12
		Date tested:	15-Aug-12
Site:	Dye-M	Date:	15-Aug-12
	12-121	Matrix:	water
Report of Analysis			
Sample	Oil & Grease		
	mg/L		
12-34960	<2.0		
12-34961	<2.0		
Blank	<2.0		
Control	14.9		
Control Target	15.8		
Results relate only	to the items tested		

ASU#	14337		Report ID:	Dye-M W40					
Client:	ESG		Date Submitted:	04-Sep-12					
			Date tested:	07-Sep-12					
Site:	Dye-M		Date:	10-Sep-12					
	12-167		Matrix:	Water					
Report of Analysis									
Results relate only to the	items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-44349	-	-	-	-	-	< 0.010	< 0.005	0.14	
12-44350	-	-	-	-	-	< 0.010	< 0.005	0.029	
12-44351	-	-	-	-	-	< 0.010	< 0.005	0.030	
12-44352	-	-	-	-	-	0.012	< 0.005	0.017	*
Blank	-	-	-	-	-	< 0.010	< 0.005	< 0.003	
Control	-	-	-	-	_	2.9	0.81	0.82	+
Control Target	-	-	-	-	-	3.0	0.80	0.80	
12-44352	-	_	-	-	_	0.012	<0.005	0.018	+
12-44352	-	-	-	-	-	0.013	< 0.005	0.017	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Со	Cd	Pb	Zn	Cr	As	
12-44349	0.006	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	+
12-44350	< 0.005	0.010	< 0.003	< 0.001	< 0.010	-	-	-	
12-44351	< 0.005	0.010	< 0.003	< 0.001	< 0.010	-	-	-	\top
12-44352	0.015	0.017	< 0.003	< 0.001	< 0.010	-	-	-	*
Blank	< 0.005	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	
Control	1.60	1.61	1.61	0.75	7.87	-	-	_	+
Control Target	1.60	1.60	1.60	0.80	8.00	-	-	-	
12-44352	0.015	0.017	< 0.003	<0.001	< 0.010	-	-	-	+
12-44352	0.015	0.017	< 0.003	< 0.001	< 0.010	-	-	-	

ASU#	14337	Report ID:	Dye-M W41
Client:	ESG	Date Submitted:	04-Sep-12
		Date tested:	05-Sep-12
Site:	Dye-M	Date:	06-Sep-12
	12-167	Matrix:	water
Report of Analysis			
Sample	Oil & Grease		
•	mg/L		
12-44349	<2.0		
12-44350	<2.0		
12-44351	<2.0		
12-44352	<2.0		
Blank	<2.0		
Control	14.4		
Control Target	15.8		
Results relate only	to the items tested		

GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ASG Login No: 22983 Client : ESG 12 Verite Ave Site: Dye-M Client No: 12-167 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 04-Sep-12 Kingston, Ontario K7K 7B4 Date of analysis: 11-Sep-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 11-Sep-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] μg/L 44349 < 0.4 44350 < 0.4 44351 < 0.4 44352* 5.5 LABORATORY QA/QC Sample Mercury[^] ID μg/L Duplicate; 44352* 4.9;6.2 Blank < 0.4 Control Target 4.00 Control Sample 4.00 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

Client: ESG		Dept. of		JES ET FACILITE SLOWF	OKE-2 AU	CIVIR				
Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341				Dánt de chimie et de gáni	a chimiaua					
P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ASG Login No: 22983 12 Verite Ave Dept. of Chem. / Chem. Eng., RMC Client No: 12-167 P.O. Box 17000, Stn. Forces Kingston, Ontario K7K 7B4 Date of analysis: 05-Sep-1 (613) 541-6000 ext 6567 Fax: (613) 541-6596 RESULTS OF pH ANALYSIS Sample I.D. PH 44349 9.05 44350* 8.16 44351 8.13 44352 8.18 * Averaged result of duplicates * Averaged result of duplicates LABORATORY QA/QC Sample I.D. PH Duplicate ; 44350 8.16; 8.16 Control 7.01		Roval								
Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ASG Login No. 22983 Site: Dye-M Client No. 12-167 P.O. Box 17000, Stn. Forces Samples Received: 04-Sep-1 Kingston, Ontario K7K 7B4 Date of analysis: 05-Sep-1 Method No. 18-Sep-1 ASG 03: 18-Sep-1		rtoyar								
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Control Cont										
Method No. ASG 037 Fax: (613) 541-6596 Date Reported: 05-Sep-1 Page: 1 of 1										
Fax: (613) 541-6596 RESULTS OF pH ANALYSIS Sample I.D. pH										
Page: 1 of 1	. ,		6/							
Sample I.D.	Fax: (613)	541-6596			Date					
Sample I.D.						Page:	1 of 1			
Sample I.D.										
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### Averaged result of duplicates LABORATORY QA/QC Sample I.D. pH Duplicate; 44350 8.16; 8.16 8.16 Control 7.01										
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# Averaged result of duplicates * Averaged result of duplicates * Averaged result of duplicates LABORATORY QA/QC										
* Averaged result of duplicates * Averaged result of duplicates * LABORATORY QA/QC Sample I.D. pH Duplicate ; 44350 8.16 ; 8.16 Control 7.01										
* Averaged result of duplicates * Averaged result of duplicates * LABORATORY QA/QC Sample I.D. pH										
LABORATORY QA/QC Sample I.D.			44352	8.18						
Sample I.D. pH Duplicate; 44350 8.16; 8.16 Control 7.01			* Averaged result of duplic	cates						
Sample I.D. pH Duplicate; 44350 8.16; 8.16 Control 7.01										
Duplicate ; 44350 8.16 ; 8.16 Control 7.01			LABORATO	ORY QA/QC						
Duplicate ; 44350 8.16 ; 8.16 Control 7.01			Sample I.D.	рН						
21				8.16 ; 8.16						
Control Target 7.00			Control	7.01						
			Control Target	7.00						
		12 Verite A Dept. of Cl P.O. Box Kingston, (613) 541-6	12 Verite Ave Dept. of Chem. / Cher P.O. Box 17000, Stn. Kingston, Ontario K7h (613) 541-6000 ext 65	12 Verite Ave Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Kingston, Ontario K7K 7B4 (613) 541-6000 ext 6567 Fax: (613) 541-6596 RESULTS OF p Sample I.D. 44349 44350* 44351 44352 * Averaged result of duplic LABORAT (Sample I.D. Duplicate; 44350 Control	12 Verite Ave Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Kingston, Ontario K7K 7B4 (613) 541-6000 ext 6567 Fax: (613) 541-6596 RESULTS OF pH ANALYSIS Sample I.D. pH	12 Verite Ave Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Kingston, Ontario K7K 7B4 (613) 541-6000 ext 6567 Fax: (613) 541-6596 RESULTS OF pH ANALYSIS Sample I.D. pH 44349 9.05 44350* 8.16 44351 8.13 44352 8.18 * Averaged result of duplicates * Averaged result of duplicates LABORATORY QA/QC Sample I.D. pH Duplicate ; 44350 8.16 ; 8.16 Control 7.01	Site: Dept. of Chem. / Chem. Eng., RMC			

		ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC									
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			P.			ston, ON, K7K 7B4					
				Tel: 613-541-60	000 x6684 / Fax	c: 613-545-8341					
Client :	ESG								ASG Login No:		
	12 Verite Ave									Dye-M	
	Dept. of Chem. / Chem. E								Client Login No:		
	P.O. Box 17000, Stn. For	rces							Samples Received:		
	Kingston, Ontario K7K 7E	B4							Date of analysis:		
	(613) 541-6000 ext 6567								Method No:		
	Fax: (613) 541-6596								Date Reported:		
									Page:	1 of 1	
				D=0::: =0							
				RESULIS	OF BTEX	IN WATER AN	ALYSIS				
	Compound	44349*	44350	44351	44352	Blank	Duplicate ; 44349*	Control Sample	Control Target		
	·	mg/L	44350 mg/L	44351 mg/L	44352 mg/L	Blank mg/L	Duplicate ; 44349*	mg/L	mg/L		
	Benzene	mg/L < 0.002	44350 mg/L < 0.002	44351 mg/L < 0.002	44352 mg/L < 0.002	Blank mg/L < 0.002	Duplicate ; 44349* mg/L < 0.002 ; < 0.002	mg/L 0.010	mg/L 0.010		
	Benzene Toluene	mg/L < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002	44352 mg/L < 0.002 < 0.002	Blank mg/L < 0.002 < 0.002	Duplicate; 44349* mg/L < 0.002; < 0.002 < 0.002; < 0.002	mg/L 0.010 0.010	mg/L 0.010 0.010		
	Benzene Toluene Ethylbenzene	mg/L < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002	Duplicate ; 44349* mg/L < 0.002 ; < 0.002 < 0.002 ; < 0.002 < 0.002 ; < 0.002 < 0.002 ; < 0.002	mg/L 0.010 0.010 0.010	mg/L 0.010 0.010 0.010		
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate; 44349* mg/L < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002	mg/L 0.010 0.010 0.010 0.020	mg/L 0.010 0.010 0.010 0.020		
	Benzene Toluene Ethylbenzene	mg/L < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002	Duplicate ; 44349* mg/L < 0.002 ; < 0.002 < 0.002 ; < 0.002 < 0.002 ; < 0.002 < 0.002 ; < 0.002	mg/L 0.010 0.010 0.010	mg/L 0.010 0.010 0.010		
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate; 44349* mg/L < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002	mg/L 0.010 0.010 0.010 0.020	mg/L 0.010 0.010 0.010 0.020		
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate; 44349* mg/L < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002	mg/L 0.010 0.010 0.010 0.020	mg/L 0.010 0.010 0.010 0.020		
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate; 44349* mg/L < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002	mg/L 0.010 0.010 0.010 0.020	mg/L 0.010 0.010 0.010 0.020		
	Benzene Toluene Ethylbenzene m+p-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002	44350 mg/L < 0.002 < 0.002 < 0.002 < 0.002	44351 mg/L < 0.002 < 0.002 < 0.002 < 0.002	### ##################################	Blank mg/L < 0.002 < 0.002 < 0.002 < 0.002	Duplicate; 44349* mg/L < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002	mg/L 0.010 0.010 0.010 0.020	mg/L 0.010 0.010 0.010 0.020		

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		,	P.O. Box 17000 Stn. F				
					Fax: 613-545-8341		
Client:	ESG					ASG Login No:	
	12 Verite Ave		_				Dye-M
	Dept. of Chem. / Cher		С			Client No:	
	P.O. Box 17000, Stn.					Samples Received:	
	Kingston, Ontario K7k					Date of analysis:	
	(613) 541-6000 ext 65	67				Method No:	
	Fax: (613) 541-6596					Date Reported:	
						Sheet No:	1 01 1
				D 151.14	VATED ANIAL V	7010	
		R	ESULTS OF PC	R IN A	VAIER ANALY	SIS	
							1
		Sample	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260	
		Type **	·				
		W	44349*	mg/L	< 0.003	< 0.003	
		W	44350	mg/L	< 0.003	< 0.003	
		W	44351	mg/L	< 0.003	< 0.003	
		W	44352	mg/L	< 0.003	< 0.003	
		*Average re	esult of duplicate				
		Report V	alues in PPM				
			LABORA	ATOR'	Y QA/QC		
			Blank	mg/L	< 0.003	< 0.003	1
			Duplicate ; 44349*	mg/L	< 0.003 ; < 0.003	< 0.003 ; < 0.003	
			Control Sample	mg/L	< 0.003	0.016	
			Control Sample Target	mg/L	< 0.003	0.015	
			1				
		** S = Soil	, C = Concrete , PC = P	aint Chir	o , SW = Swab , P = F	Plant , W = Water. L =	Leachate
			,,,		,	.,, =	
		All results	corrected for the recovery	of the s	urrogate decachlorobi	phenyl	
					-		

Tom Partridge Environmental Sciences Group The Royal Military College of Canada PO Box 17000 Stn. Forces Kingston, ON K7K 7B4 NOBITAL SCIENCES GROOM

Tamara Van Dyck Environmental Officer Defence Construction Canada DEW Line Cleanup PMO 350 Albert Street, Suite 1720 Ottawa ON K1A 0K3

Tuesday, February 19, 2013

RE: Analytical Results for the Wastewater Sample Collected at DYE-M in September 2012

The following report summarizes results of the analysis of the wastewater sample as per the DYE-M (Cape Dyer) DEW Line Cleanup Project (DLCU) Specifications.

The DYE-M specifications require that "wash water, melt water collection, rinse water resulting from the cleaning of fuel tanks and pipelines, and/or any other liquid effluent stream" meet the following guidelines prior to their discharge to land (01560.4.1):

Parameter	Maximum Allowable Concentration	Units
pН	6.0 - 9.0	pH units
Total Arsenic	0.10	mg/L
Dissolved Cadmium	0.01	mg/L
Total Chromium	0.10	mg/L
Dissolved Cobalt	0.05	mg/L
Dissolved Copper	0.20	mg/L
Dissolved Lead	0.05	mg/L
Total Mercury	0.60	μg/L
Dissolved Nickel	0.20	mg/L
Total Zinc	0.50	mg/L
Oil & Grease	5.0	mg/L
PCBs	1,000	$\mu g/L$
Benzene	370	$\mu g/L$
Toluene	2.0	μg/L
Ethyl benzene	90	μg/L

^{*}In respect to application to a road surface

WASTEWATER SAMPLE

One wastewater sample was collected at DYE-M and analyzed in September 2012. A summary of the details of the results follows. Laboratory results provided in Appendix A.

LOCATION: LOWER SITE TIER II DISPOSAL FACILITY

GPS COORDINATES: 561908 / 7388330

SAMPLE: 12-43537

DATE: SEPTEMBER 3, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-43537
pН	6.0 - 9.0	pH units	7.8
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	0.0087
Dissolved Copper	0.20	mg/L	< 0.0050
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.010
Total Zinc	0.50	mg/L	< 0.010
Oil & Grease	5.0	mg/L	<2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 1 (DSCO4659): Sample collected from the Lower Site Tier II Disposal Facility, photo facing northeast.

LOCATION: PLASTIC BARREL 1 IN WAREHOUSE B13E

GPS COORDINATES: 563013 / 7387093

SAMPLE: 12-29473

DATE: SEPTEMBER 5, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-29473
pН	6.0 - 9.0	pH units	8.1
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	< 0.0010
Total Chromium	0.10	mg/L	0.011
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	0.15
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.023
Total Zinc	0.50	mg/L	0.80
Oil & Grease	5.0	mg/L	2.0
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 2 (DSCO4702): Sample collected from the Plastic Barrel 1 in Warehouse B13E.

LOCATION: PLASTIC BARREL 2 IN WAREHOUSE B13E

GPS COORDINATES: 563013 / 7387093

SAMPLE: 12-29474

DATE: SEPTEMBER 5, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-29474
pН	6.0 - 9.0	pH units	8.1
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	0.0013
Total Chromium	0.10	mg/L	0.010
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	0.22
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.025
Total Zinc	0.50	mg/L	0.53
Oil & Grease	5.0	mg/L	3.5
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 3 (DSCO4706): Sample collected from the Plastic Barrel 2 in Warehouse B13E.

LOCATION: PLASTIC BARREL 3 IN WAREHOUSE B13E

GPS COORDINATES: 563013 / 7387093

SAMPLE: 12-29475

DATE: SEPTEMBER 5, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-29475
pН	6.0 - 9.0	pH units	8.0
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	0.0012
Total Chromium	0.10	mg/L	< 0.0050
Dissolved Cobalt	0.05	mg/L	< 0.0030
Dissolved Copper	0.20	mg/L	0.15
Dissolved Lead	0.05	mg/L	< 0.010
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.010
Total Zinc	0.50	mg/L	0.22
Oil & Grease	5.0	mg/L	5.9
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 4 (DSCO4707): Sample collected from the Plastic Barrel 3 in Warehouse B13E.

Waste water was not discharged from the area.

LOCATION: TOTE TANK IN MARINE CONTAINER

GPS COORDINATES: 562925 / 7387097

SAMPLE: 12-29476

DATE: SEPTEMBER 5, 2012

Parameter	Maximum Allowable Concentration	Units	Sample # 12-29476
pН	6.0 - 9.0	pH units	1.8
Total Arsenic	0.10	mg/L	< 0.0030
Dissolved Cadmium	0.01	mg/L	0.0039
Total Chromium	0.10	mg/L	0.069
Dissolved Cobalt	0.05	mg/L	0.0043
Dissolved Copper	0.20	mg/L	0.12
Dissolved Lead	0.05	mg/L	0.13
Total Mercury	0.60	μg/L	< 0.40
Dissolved Nickel	0.20	mg/L	0.13
Total Zinc	0.50	mg/L	1.7
Oil & Grease	5.0	mg/L	3.1
PCBs	1,000	μg/L	<3.0
Benzene	370	μg/L	<2.0
Toluene	2.0	μg/L	<2.0
Ethyl benzene	90	μg/L	<2.0



Photograph 5 (DSCO4709): Sample collected from the Tote Tank in the Marine Container.

Waste water was not discharged from the area.

We trust that the information provided meets current requirements. Please contact the undersigned if you have any questions or concerns.

Sincerely,

Tom Partridge

K REP

Environmental Sciences Group

cc: Eva Schulz (AECOM)

Daniela Loock, Darren White, Shari Reed, Dean Morrow, Ian Goode

APPENDIX A LABORATORY RESULTS

ASU#	14348	Report ID:	Dye-M W42
		-	-
Client:	ESG	Date Submitted	1
		Date tested:	05-Sep-12
Site:	Dye-M	Date:	06-Sep-12
	12-183	Matrix:	water
Report of Analysis	S		
Sample	Oil & Grease		
	mg/L		
12-43537	< 2.0		
Blank	<2.0		
Control	14.4		
Control Target	15.8		
Results relate only	to the items tested		

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military Gollege of Canada - Collège militaire royal du Canada P.O. Box: 17000 Str. Forces, Kingeton, ON, KTK 7B4 Tel: £13-541-6000 x6684 / Fax: 613-545-8341

Client: ESG

12 Verite Ave Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Kingston, Ontario K7K 7B4 (613) 541-6000 ext 6567 Fax: (613) 541-6596

ASG Login No: 22992 Site: Dye-M Client Login No: 12-183

Careful Logari Not 12-103
Samples Received; 5-Sep-12
Date of analysis; 6-Sep-12
Method No; ASG 023
Date Reported; 7-Sep-12
Page; 1 of 1

RESULTS OF BTEX IN WATER ANALYSIS

Compound	435:17 mg/L	Blank mg/L	Control Sample mg/L	Control Target mg/L
Benzene	< 0,002	< 0.002	0.010	0.010
Toluena	< 0.002	< 0.002	0.010	0.010
Ethylbenzene	< 0.002	< 0.002	0,010	0.010
m+p-Xylene	< 0.002	< 0.002	0,020	0.020
p-Xylene	< 0.002	< 0.002	0,010	0.010

^{***}Results in PPM***

ANALYTICAL SCIENCES GROUP AND SLOWPOKE-2 FACILITY AT RMC GROUP DES SCIENCES ANALYTIQUES ET FACILITÉ SLOWPOKE-2 AU CMR Dept. of Chem. and Chem. Eng. - Dépt. de chimie et de génie chimique Royal Military College of Canada - Collège militaire royal du Canada P.O. Box 17000 Stn. Forces, Kingston, ON, K7K 7B4 Tel: 613-541-6000 x6684 / Fax: 613-545-8341 ASG Login No: 22992 Client : ESG 12 Verite Ave Site: Dye-M Client No: 12-183 Dept. of Chem. / Chem. Eng., RMC P.O. Box 17000, Stn. Forces Samples Received: 05-Sep-12 Kingston, Ontario K7K 7B4 Date of analysis: 06-Sep-12 (613) 541-6000 ext 6567 Method No: ASG 021 Fax: (613) 541-6596 Date Reported: 06-Sep-12 Sheet: 1 of 1 **RESULTS OF MERCURY IN WATER ANALYSIS** Sample Mercury[^] ID μg/L 43537* < 0.4 LABORATORY QA/QC Sample Mercury[^] μg/L ID Duplicate; 43537* < 0.4 ; < 0.4 Blank < 0.4 Control Target 4.00 Control Sample 4.30 * Averaged result of duplicates ^ Acid digestion performed # Reported at 0.4 µg/L detection limit

		ANALY	TICAL SCIENCES GROU	P AND S	LOWPOKE-2 FACIL	ITY AT RMC						
			ES SCIENCES ANALYTIC									
			of Chem. and Chem. Eng									
		Roy	al Military College of Can									
			P.O. Box 17000 Stn. F			34						
			Tel: 613-541-6000	X6684 /	Fax: 613-545-8341							
lient:	ESG					ASG Login No:	22992					
	12 Verite Ave						Dye-M					
	Dept. of Chem. / Chem. Eng., RMC											
	P.O. Box 17000, Stn.					Samples Received:	05-Sep-12					
	Kingston, Ontario K7h					Date of analysis:						
	(613) 541-6000 ext 65					Method No:						
	Fax: (613) 541-6596					Date Reported:	06-Sep-12					
						Sheet No:	1 of 1					
		F	RESULTS OF PC	B IN W	ATER ANALY	/SIS						
		Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260						
		W	43537	mg/L	< 0.003	< 0.003						
			result of duplicate									
		Report \	Values in PPM									
			LABORA	TOR	Y QA/QC							
			Blank	mg/L	< 0.003	< 0.003						
			Control Sample	mg/L	< 0.003	0.016						
			Control Sample Target	mg/L	< 0.003	0.015						
		** S = So	il , C = Concrete , PC = P	aint Chip	, SW = Swab , P =	Plant , W = Water, L =	Leachate					
		All regults	All results corrected for the recovery of the surrogate decachlorobiphenyl									

	GROUP	DES SCIENCES ANALYTIQU	JES ET FACILITÉ SLOWP	OKE-2 AU	CMR	
	Dep	t. of Chem. and Chem. Eng I	Dépt. de chimie et de géni	e chimique		
		yal Military College of Canada				
			ces, Kingston, ON, K7K 78			
		Tel: 613-541-6000 x66	684 / Fax: 613-545-8341			
Client:	ESG			ASG	Login No:	22992
	12 Verite Ave				Site:	Dye-M
	Dept. of Chem. / 0	Chem. Eng., RMC			Client No:	12-183
	P.O. Box 17000,	Stn. Forces		Samples	Received:	05-Sep-12
	Kingston, Ontario	K7K 7B4		Date of	of analysis:	05-Sep-12
	(613) 541-6000 ex	t 6567		N	lethod No:	ASG 037
	Fax: (613) 541-65	96		Date	Reported:	06-Sep-12
						1 of 1
		RESULTS OF p	H ANALYSIS			
		Sample I.D.	Hq			
		43537	7.80			
		40007	7.00			
		* Averaged result of duplic	cates			
		* Averaged result of duplic	cates			
			DRY QA/QC			
		LABORATO	DRY QA/QC			
		LABORATO	DRY QA/QC			
		LABORATO Sample I.D. Control	DRY QA/QC pH 7.01			
		LABORATO Sample I.D. Control	DRY QA/QC pH 7.01			

	Report ID:	Dye-M W43					
	Date Submitted:	05-Sep-12					
	Date tested:	07-Sep-12					
	Date:						
	Matrix:	Water					
Ni	Co	Cd	Pb	Zn	Cr	As	
-	-	-	-	< 0.010	< 0.005	< 0.003	*
-	-	-	-	< 0.010	< 0.005	< 0.003	
-	-	-	-	2.9	0.81	0.82	
-	-	-	-	3.0	0.80	0.80	
-	-	-	-				
-	-	-	-	< 0.010	< 0.005	< 0.003	
Ni	Co	Cd	Pb	Zn	Cr	As	
0.013	0.009	<0.001	< 0.010	-	-	-	*
< 0.005	<0.003	< 0.001	< 0.010	_	_	_	
0.000	0.005	0.001	0.010				
1.61	1.61	0.75	7.87	-	-	-	
1.60	1.60	0.80	8.00	-	-	-	
0.013	0.009	< 0.001	< 0.010	_	_	_	
0.013	0.009	< 0.001	< 0.010	-	-	-	
	Ni	Date Submitted:	Date Submitted: 05-Sep-12 Date tested: 07-Sep-12 Date: 10-Sep-12 Matrix: Water	Date Submitted: 05-Sep-12 Date tested: 07-Sep-12 Date: 10-Sep-12 Matrix: Water Ni Co Cd Pb	Date Submitted: 05-Sep-12 Date: 10-Sep-12 Matrix: Water Ni Co Cd Pb Zn - - - <0.010	Date Submitted: 05-Sep-12 Date: 07-Sep-12 Date: 08-Sep-12 Date: 08-Date: 08-	Date Submitted: 07-Sep-12 Cosep-12 Date: 10-Sep-12 Cosep-12 Matrix: Water Water Ni Co Cd Pb Zn Cr As - - - - <0.010

ASU#	14362		Report ID:	Dye-M W44					
Client:	ESG		Date Submitted:	10-Sep-12					
			Date tested:	11-Sep-12					
Site:	Dye-M		Date:	12-Sep-12					
	12-185		Matrix:	Water					
Report of Analysis									
Results relate only to the	items tested								
Total Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-29473	-	-	-	-	-	0.80	0.016	< 0.003	
12-29474	-	-	-	-	-	0.53	0.011	< 0.003	
12-29475	-	-	-	-	-	0.22	< 0.005	< 0.003	
12-29476	-	-	-	-	-	1.7	0.069	< 0.003	*
Blank	-	-	-	-	-	< 0.010	< 0.005	< 0.003	
Control	_	-	_	-	_	3.0	0.80	0.82	+
Control Target	-	-	-	-	-	3.0	0.80	0.80	
12-29476	-	-	-	-	_	1.7	0.074	0.003	+
12-29476	-	-	-	-	-	1.7	0.065	< 0.003	
Dissolved Metals	Results in mg/L								
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As	
12-29473	0.15	0.023	< 0.003	<0.001	< 0.010	-	-	_	
12-29474	0.22	0.025	< 0.003	0.001	< 0.010	-	-	-	
12-29475	0.15	0.015	< 0.003	0.001	< 0.010	-	-	-	
12-29476	0.12	0.13	0.004	0.004	0.13	-	-	-	*
Blank	< 0.005	< 0.005	< 0.003	<0.001	< 0.010	-	-	-	
Control	1.5	1.6	1.6	0.74	7.8	-	-	-	
Control Target	1.6	1.6	1.6	0.80	8.0	-	-	-	
12-29476	0.12	0.13	0.004	0.004	0.13	-	-	-	
12-29476	0.12	0.14	0.004	0.004	0.14	-	-	-	

ASU#	14362	Report ID:	Dye-M W45
Client:	ESG	Date Submitted:	10-Sep-12
		Date tested:	10-Sep-12
Site:	Dye-M	Date:	12-Sep-12
	12-185	Matrix:	water
Report of Analysis			
Sample	Oil & Grease		
	mg/L		
12-29473	2.0		
12-29474	3.5		
12-29475	5.9		
12-29476	3.1		
Blank	<2.0		
Control	14.0		
Control Target	15.7		
Results relate only	to the items tested		

		GROUP DE	S SCIENCES ANALYTI	QUES EI	FACILITE SLOWPO	DKE-2 AU CMR	
			of Chem. and Chem. En				
		Roya	al Military College of Can				
			P.O. Box 17000 Stn.			34	
			Tel: 613-541-6000	x6684 /	Fax: 613-545-8341		
Client:	ESG					ASG Login No:	23001
	12 Verite Ave						Dye-M
	Dept. of Chem. / Cher	n. Eng., RM	IC			Client No:	,
	P.O. Box 17000, Stn.					Samples Received:	10-Sep-12
	Kingston, Ontario K7h					Date of analysis:	
	(613) 541-6000 ext 65					Method No:	
	Fax: (613) 541-6596					Date Reported:	
	, ,					Sheet No:	
		R	ESULTS OF PC	R IN V	VATER ANALY	(SIS	
		R	ESULTS OF PC	B IN V	VATER ANALY	'SIS	
		R	ESULTS OF PC	B IN V	VATER ANALY	'SIS	
			ESULTS OF PC	B IN V	VATER ANALY	'SIS	
		Sample	Sample I.D.	B IN V	VATER ANALY Aroclor 1254	Aroclor 1260	
		Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260	
		Sample Type **	Sample I.D. 29473*				
		Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260	
		Sample Type ** W	Sample I.D. 29473* 29474 29475	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type **	Sample I.D. 29473* 29474	Unit mg/L mg/L	Aroclor 1254 < 0.003 < 0.003	Aroclor 1260 < 0.003 < 0.003	
		Sample Type ** W	Sample I.D. 29473* 29474 29475	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W	Sample I.D. 29473* 29474 29475 29476	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate alues in PPM**	Unit mg/L mg/L mg/L	<pre>< 0.003 < 0.003 < 0.003 < 0.003 < 0.003 < 0.003</pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate alues in PPM**	Unit mg/L mg/L mg/L	<pre></pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate alues in PPM**	Unit mg/L mg/L mg/L mg/L	<pre>< 0.003 < 0.003 < 0.003 < 0.003 < 0.003 < 0.003</pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate alues in PPM**	Unit mg/L mg/L mg/L	<pre>< 0.003 < 0.003 < 0.003 < 0.003 < 0.003 < 0.003</pre>	Aroclor 1260< 0.003< 0.003< 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate alues in PPM** LABORA Blank Duplicate; 29473*	Unit mg/L mg/L mg/L mg/L	<pre></pre>	Aroclor 1260 < 0.003 < 0.003 < 0.003 < 0.003 < 0.003	
		Sample Type ** W W W	Sample I.D. 29473* 29474 29475 29476 esult of duplicate alues in PPM** LABORA	Unit mg/L mg/L mg/L mg/L mg/L	<pre></pre>	 Aroclor 1260 < 0.003 < 0.003 < 0.003 < 0.003 < 0.003 	

	Benzene Toluene Ethylbenzene m+p-Xylene o-Xylene	mg/L < 0.002 < 0.002 < 0.002 < 0.002 < 0.002	mg/L < 0.002 < 0.002 < 0.002 < 0.002 < 0.002	mg/L < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002	mg/L < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002	mg/L < 0.002 < 0.002 < 0.002 < 0.002 < 0.002	mg/L < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002 < 0.002; < 0.002	mg/ 0.01 0.01 0.01 0.02 0.02	1 1 1 3	mg/L 0.010 0.010 0.010 0.020 0.010	
-	Compound	29473*	`29474	`29475	`29476	N WATER AN	Duplicate ; 29473	Control S		ontrol Target	
P K	SG 2 Verite Ave ept. of Chem. / Chen .O. Box 17000, Stn. ingston, Ontario K7K 513) 541-6000 ext 656 ax: (613) 541-6596	Forces 7B4								ASG Login No: Site: Client Login No: amples Received: Date of analysis: Method No: Date Reported: Page:	Dye-M 12-185 10-Sep-12 11-Sep-12 ASG 023 13-Sep-12
				Control		7.0					
				Sample Duplicate Cont	e I.D. ; 29476	pl- 1.80; 7.0	1.81				
				Averaged re		ORY QA	/OC				
							'				
				294 294 2947	75	8.1 8.0 1.8	0				
				Sample 294		pl 8.1					
				RESUL	TS OF	pH ANAI	YSIS				
		Fax: (613)	241-6596					Date		12-Sep-12 1 of 1	
		(613) 541-0	Ontario K7K 6000 ext 656					N	lethod No:	12-Sep-12 ASG 037	
		Dept. of Cl	nem. / Chem 17000, Stn. F	0 /	:			Samples	Client No:		
		ESG 12 Verite A	Ave.					ASG	Login No:	23001 Dye-M	
				Tel: 613-	541-6000 x6	6684 / Fax: 6	13-545-8341				
				P.O. Box 17	000 Stn. Fo	rces, Kingsto	on, ON, K7K 7B				
			Royal M	filitary Collec	ge of Canada	a - Collège m	mie et de génie ilitaire royal du (on. ON. K7K 7B	Canada			





Canada NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

											RE	PORT LINE USE ONLY	
Α	REPORT DATE: MONTH – DAY – YEAR 06-16-2012				REPORT TIME I 1:30 am		☑ ORIGINAL SPILL REPORT			RT, OR	REPO	ORT NUMBER	
В	OCCURRENCE DATE: 06-15-2012	URRENCE DATE: MONTH – DAY – YEAR 15-2012		OCCL 8:30		RRENCE TIME am			TE# ORIGINAL SPILL REPORT			-	
С	LAND USE PERMIT NUMBER (IF APPLICABLE) N2008X003			WATER LICENCE NUM 1BR-DYE0914			IUMBER	JMBER (IF APPLICABLE)					
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM THE DYE-M Dew Line Site, Cape Dyer					LOCATION		REGION ☐ NWT ☑ NUNAVUT ☐ ADJACENT JURISDICTION OR					
Е	LATITUDE DEGREES 66 MINUTE	es 38 seconds 29 .		LONGITUDE DEGREES 61 MINUTES 26 SECONDS 0.06									
F	RESPONSIBLE PARTY OR VESSEL NAME Defence Construction Canada			RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION DCC/DGME, 101 Colonel By Dr, Ottawa, ON K1P 0B6									
G	ANY CONTRACTOR IN Qikiqtaaluk Logis	CONTRACTOR ADDRESS OR OFFICE LOCATION P.O. Box 1228, Building 2007 West 40, Iqaluit, Nunavut, X0A 0H0											
Н	PRODUCT SPILLED Hydraulic Oil				QUANTITY IN LITRES, KILOGRAMS OR C 265 liters				RES	U.N. NUM None	U.N. NUMBER None		
• •	SECOND PRODUCT SI	E)	QUANTITY N/A	INL	IN LITRES, KILOGRAMS OR CUBIC ME			RES	U.N. NUMBER N/A				
I	SPILL SOURCE Rock Truck			SPILL CAUSE Equipment Failure				AREA OF CONTAMINATION IN S 100m2			N SQUARE METRES		
J	FACTORS AFFECTING SPILL OR RECOVERY None			DESCRIBE ANY ASSISTANCE REQUIRED None				HAZARDS TO PERSONS, PROPERTY OR ENVIRONMEN None. Spill was remediated immediately.					
K	A truck driver was hauling granular material when a metal pipe broke under the truck. The hydraulic oil leaked on the road until the truck stopped running as the operator did not realized the pipe was broken (200m long x 0.5m wide). Personnel was mobilized with appropriate equipment and tools. Sorbent sheets were immediately used to contain oil. Impacted soil was shoveled by hand where possible and using an excavator for harder surfaces. Soil was placed in the on-site non-hazardous waste landfill to use as intermediate fill. Used sorbent sheets have been containerized for disposal.												
L	REPORTED TO SPILL I Tamara Van Dyck		POSITION Environmental Officer			EMPLOYER LOCATION OF LOCATION			ATION CALLING FROM			TELEPHONE 613-995-9741	
M	ANY ALTERNATE CONTACT Nahed Farah		POSITION			IPLOYER	ALTERNATE CONT. Ottawa			ACT LOCATION		ALTERNATE TELEPHONE 613-996-1137	
REPOR	RT LINE USE ONLY		l									L	
N	RECEIVED AT SPILL LINE BY		POSITION Station operator		EM	MPLOYER	LOCATION CALLED Yellowknife, N					REPORT LINE NUMBER (867) 920-8130	
LEAD AGENCY EC CCG GNWT GN] ILA □ INAC □ NEB □ TC		SIC	SIGNIFICANCE MINOR MAJO			UNKNO	NWN	FILE ST	ATUS OPEN CLOSED		
AGENCY CON		CONTACT NAME	CONTACT NAME			CONTACT TIME REMARI			RKS				
LEAD AGENCY													
FIRST SUPPORT AGENCY													
SECOND SUPPORT AGENCY													
THIRD SUPPORT AGENCY													





Canadä NT-NU SPILL REPORT

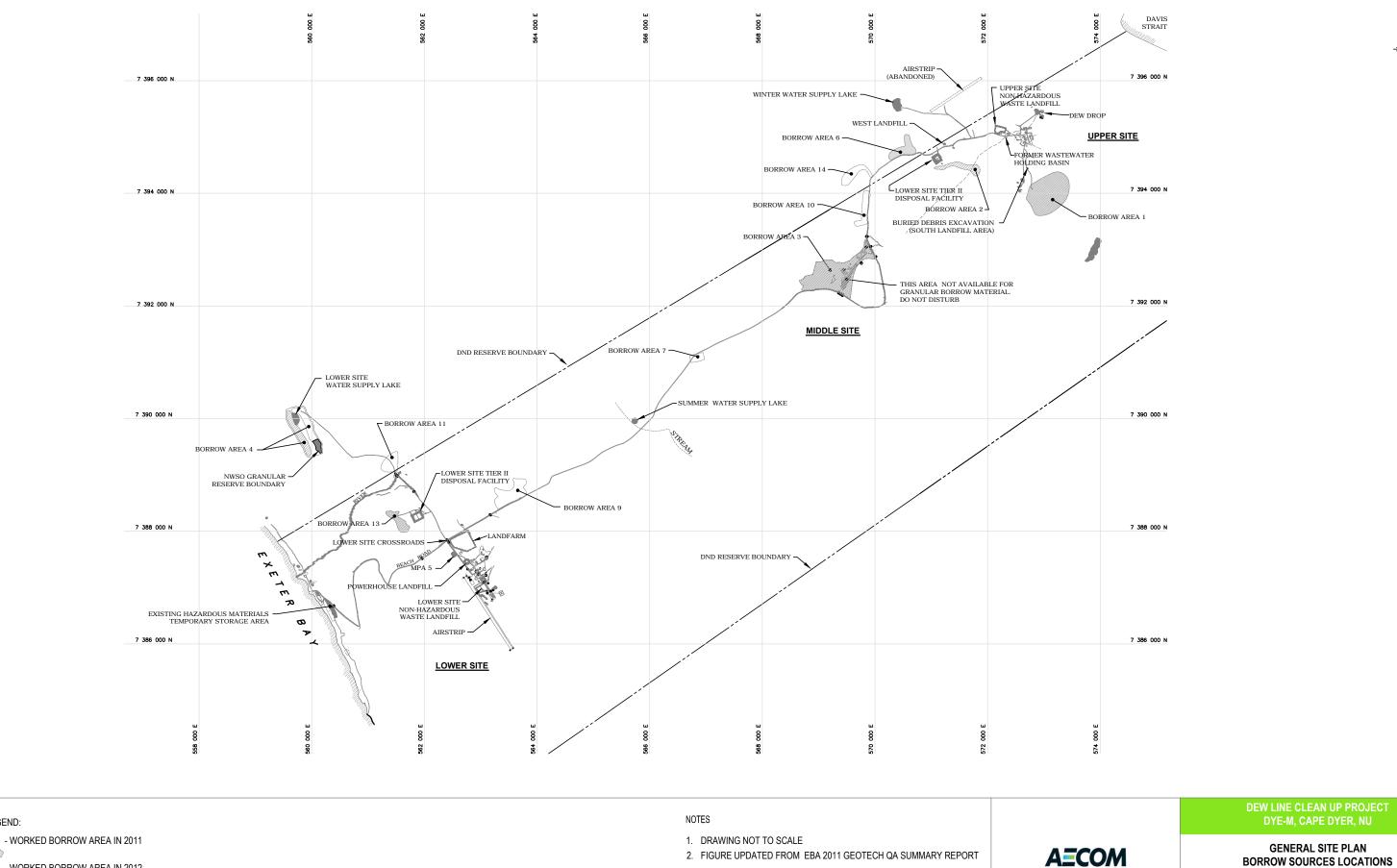
OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

REPORT LINE LISE ONLY

											NE.	PORT LINE USE UNLT
Α	REPORT DATE: MONTH – DAY – YEAR 06-16-2012			REPORT TI 16:45 pn			⊠ ORK	GINAL SPILL	AL SPILL REPORT, OR		REPORT NUMBER	
В	OCCURRENCE DATE: MONTH – DAY – YEAR 06-16-2012				CCURREN 45 pm	NCE TIME	UPDATE# TO THE ORIGINAL SPILL R			EPORT		-
С	LAND USE PERMIT NU N2008X003	WATER LICENCE NUMBI 1BR-DYE0914			UMBER	ER (IF APPLICABLE)						
D	GEOGRAPHIC PLACE I	DM THE NAMED LOCATION				REGION ☐ NWT ☑ NUNAVUT ☐ ADJACENT JURISDICTION OR						
Е	LATITUDE DEGREES 66 MINUTE		LONGITUDE DEGREES 61 MINUTES 38 SECONDS 35.66									
F	RESPONSIBLE PARTY OR VESSEL NAME Defence Construction Canada			RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION DCC/DGME, 101 Colonel By Dr, Ottawa, ON K1P 0B6								
G	ANY CONTRACTOR IN	CONTRACTOR ADDRESS OR OFFICE LOCATION P.O. Box 1228, Building 2007 West 40, Iqaluit, Nunavut, X0A 0H0										
Н	PRODUCT SPILLED Diesel Fuel			QUANTITY IN LITRES, KILOGRAMS OR CUE 400 liters				IBIC METRES U.N. NUI		U.N. NUM 1202	MBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A			QUANTITY IN LITRES, KILOGRAMS OR CUBIC N/A				SIC METRES	U.N. NUMBER N/A			
I	SPILL SOURCE Fuel Truck			SPILL CAUSE Overflow due to unattended pur				p AREA OF CONTAMINATION IN SQUARE METRES 10m2				N SQUARE METRES
J	FACTORS AFFECTING SPILL OR RECOVERY None			DESCRIBE ANY ASSISTANCE REQUIRED None				HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT None. Spill was remediated immediately.				
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS Crew was transfering fuel into a fuel truck. The spotter at the top of the truck got down to assist with opening another resevoir and left the pump running. Employees were reminded not to leave a running pump unattended. Personnel was mobilized with appropriate equipment and tools. Sorbent booms and sheets were used to contain fuel. Impacted soil was shoveled using an excavator. Soil was placed in the landfarm for treatment. Used sorbent booms and sheets have been containerized for disposal.											
L			POSITION Environmental	OSITION Environmental Office D		YER	LOCATION CALLING 613-995-9741			G FROM		TELEPHONE
М	ANY ALTERNATE CONTACT Nahed Farah		l		EMPLOY DCC	YER	ALTERNATE CONT. 613-996-1137			ACT LOCATION		ALTERNATE TELEPHONE
REPOR	RT LINE USE ONLY											
Ν	RECEIVED AT SPILL LINE BY		POSITION Station operator		EMPLOY	YER		LOCATION CALLED Yellowknife, NT				REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY EC CCG GNWT GN		ILA 🗆 INAC 🗆 NEB 🗆 TC S		SIGNIFICANCE MINOR M		MAJOR □ UNKNOWN FILE		FILE ST	E STATUS ☐ OPEN ☐ CLOSED			
AGENCY CONT		CONTACT NAME	CONTACT NAME			CT TIME	R	REMARKS				
LEAD AGENCY												
FIRST SUPPORT AGENCY		NCY										
SECOND SUPPORT AGENCY												
THIRD SUPPORT AGENCY												



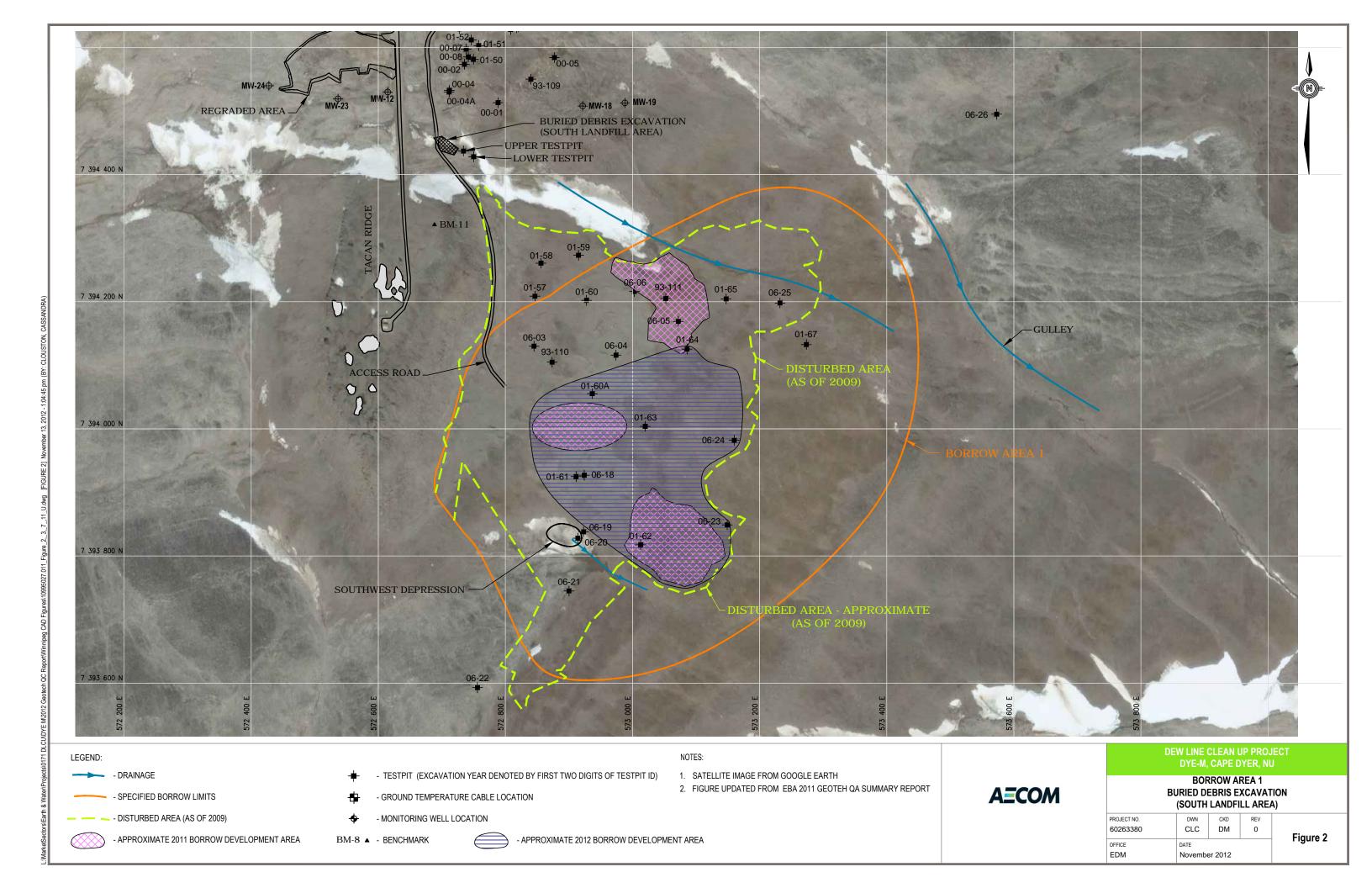
LEGEND:

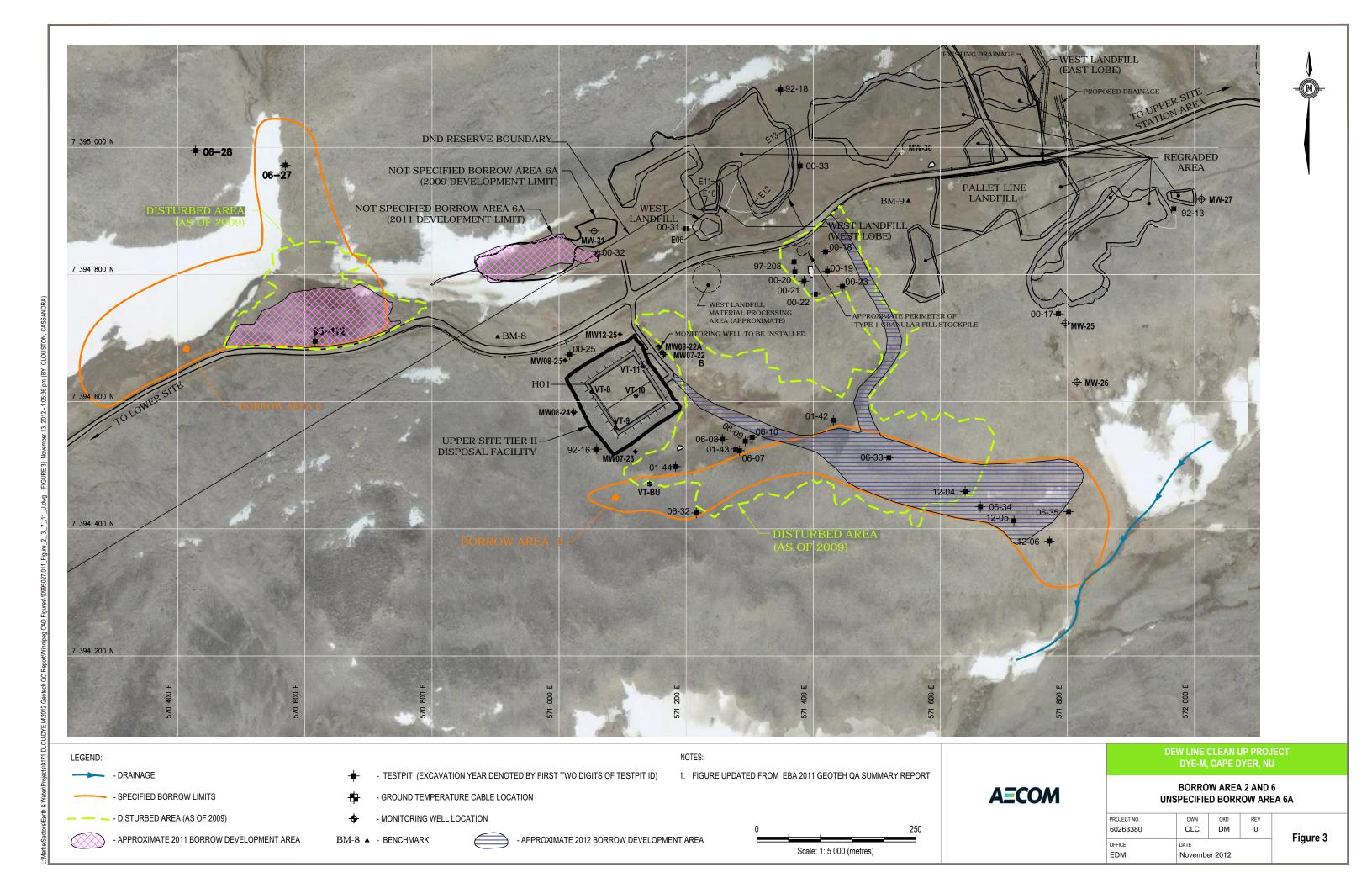
- WORKED BORROW AREA IN 2012

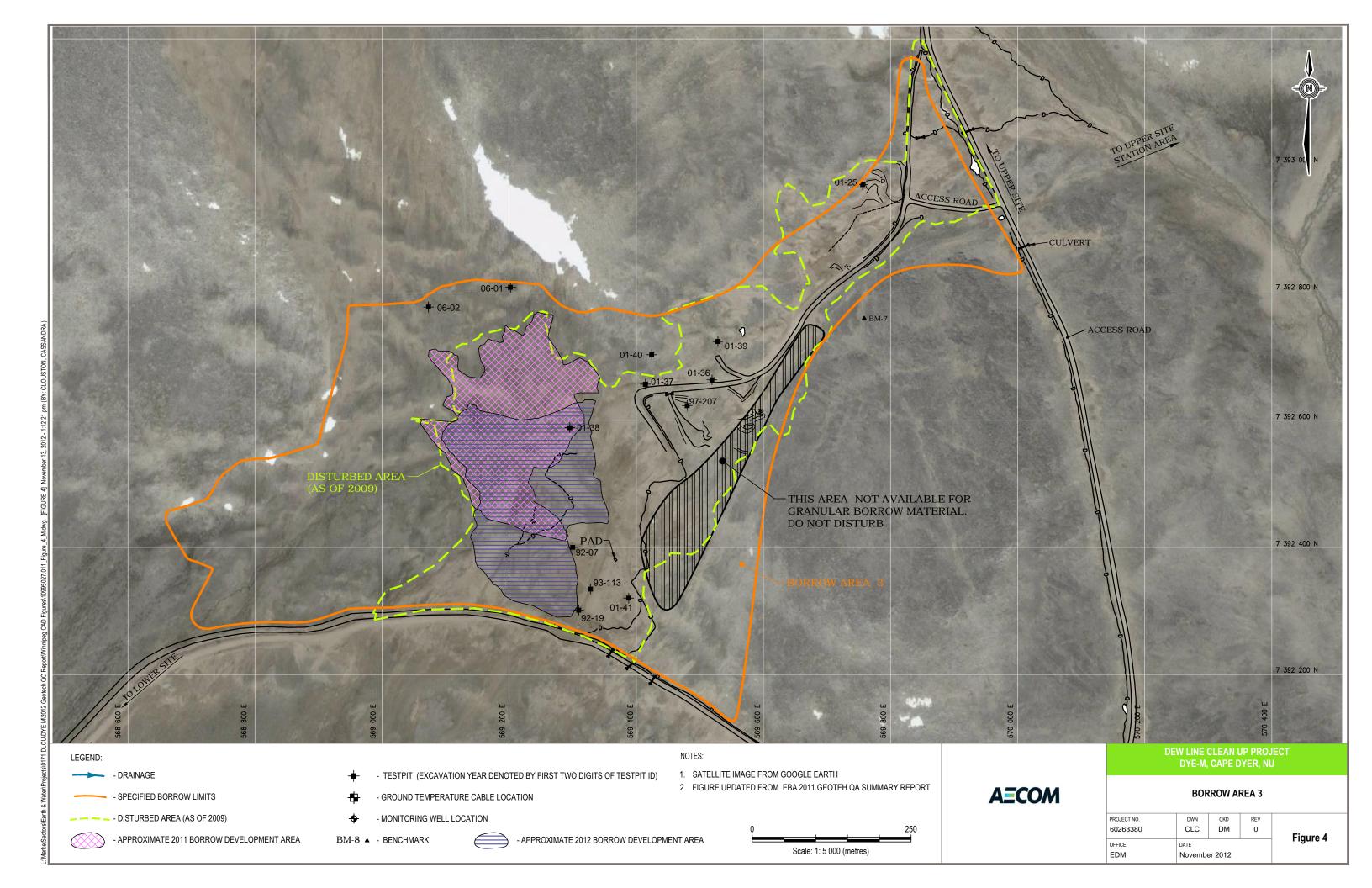
GENERAL SITE PLAN BORROW SOURCES LOCATIONS

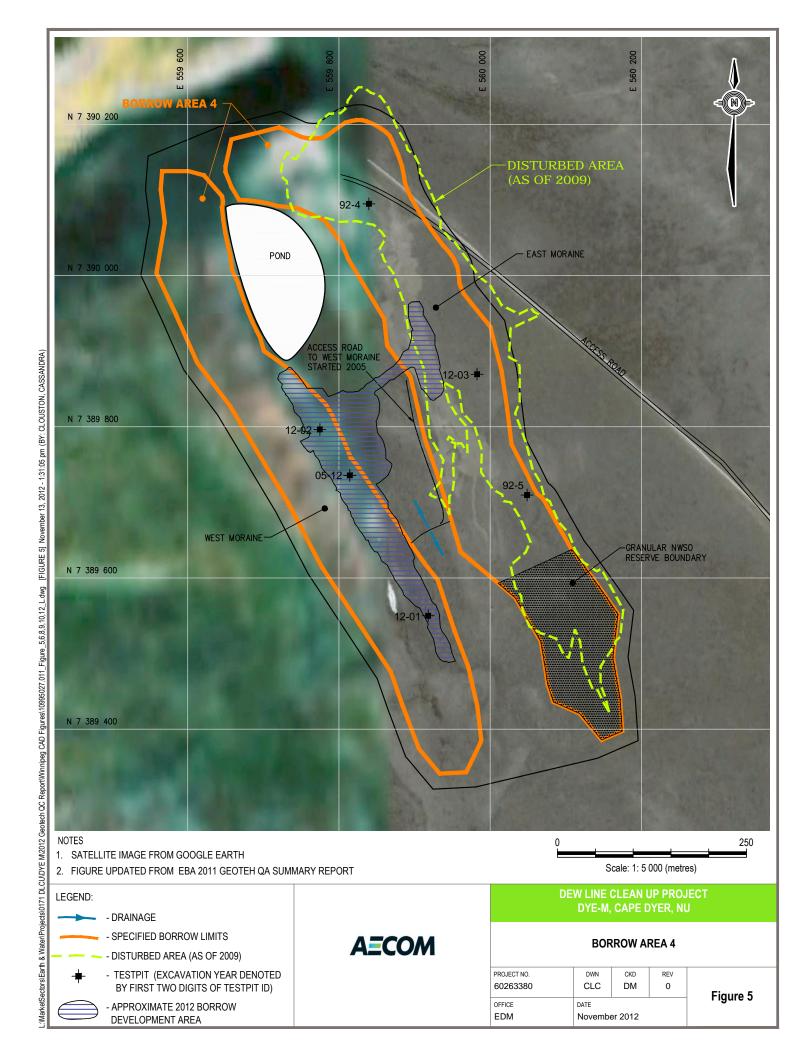
PROJECT NO. CKD 60263380 CLC DM 0 OFFICE DATE EDM November 2012

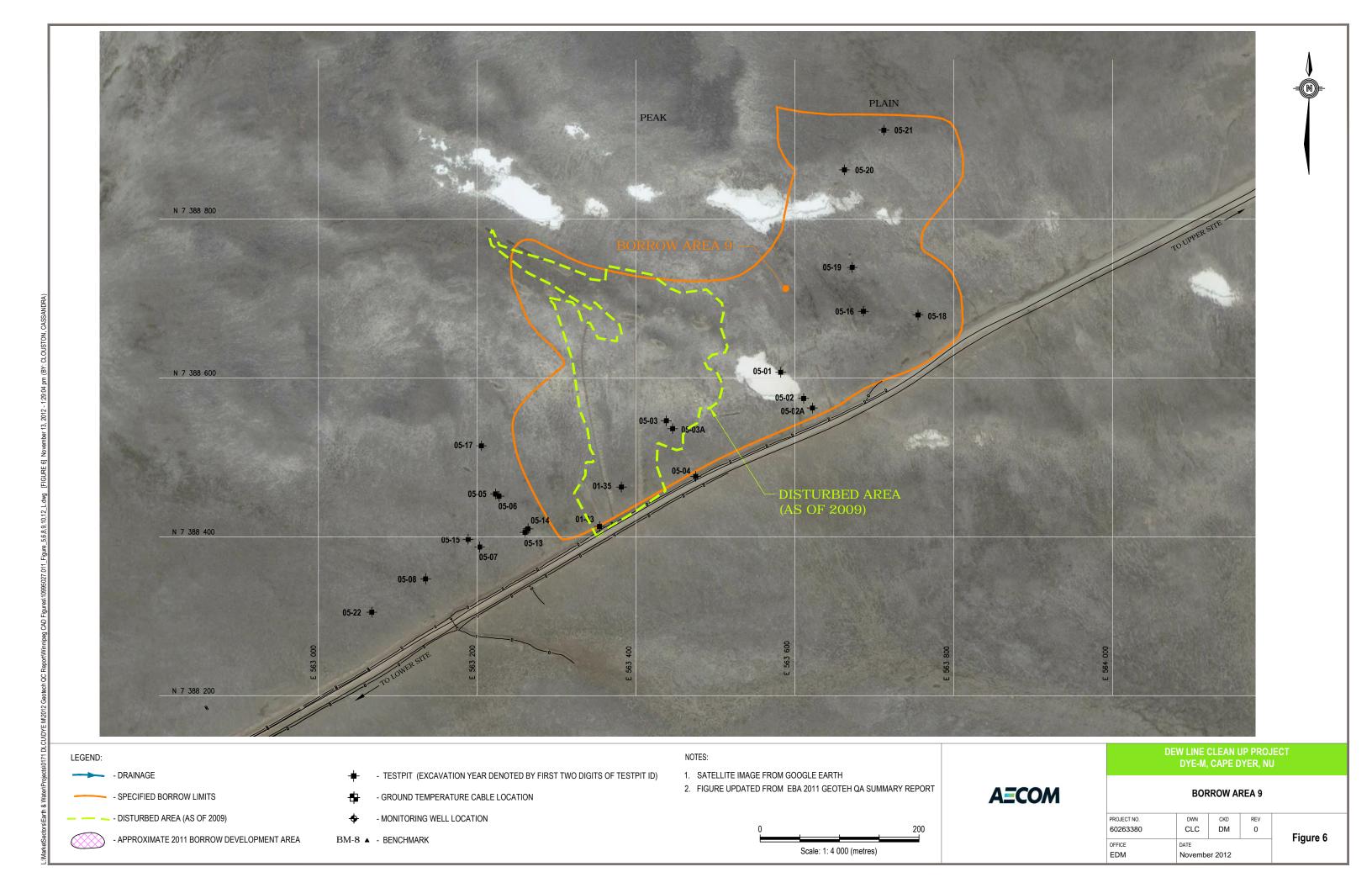
Figure 1

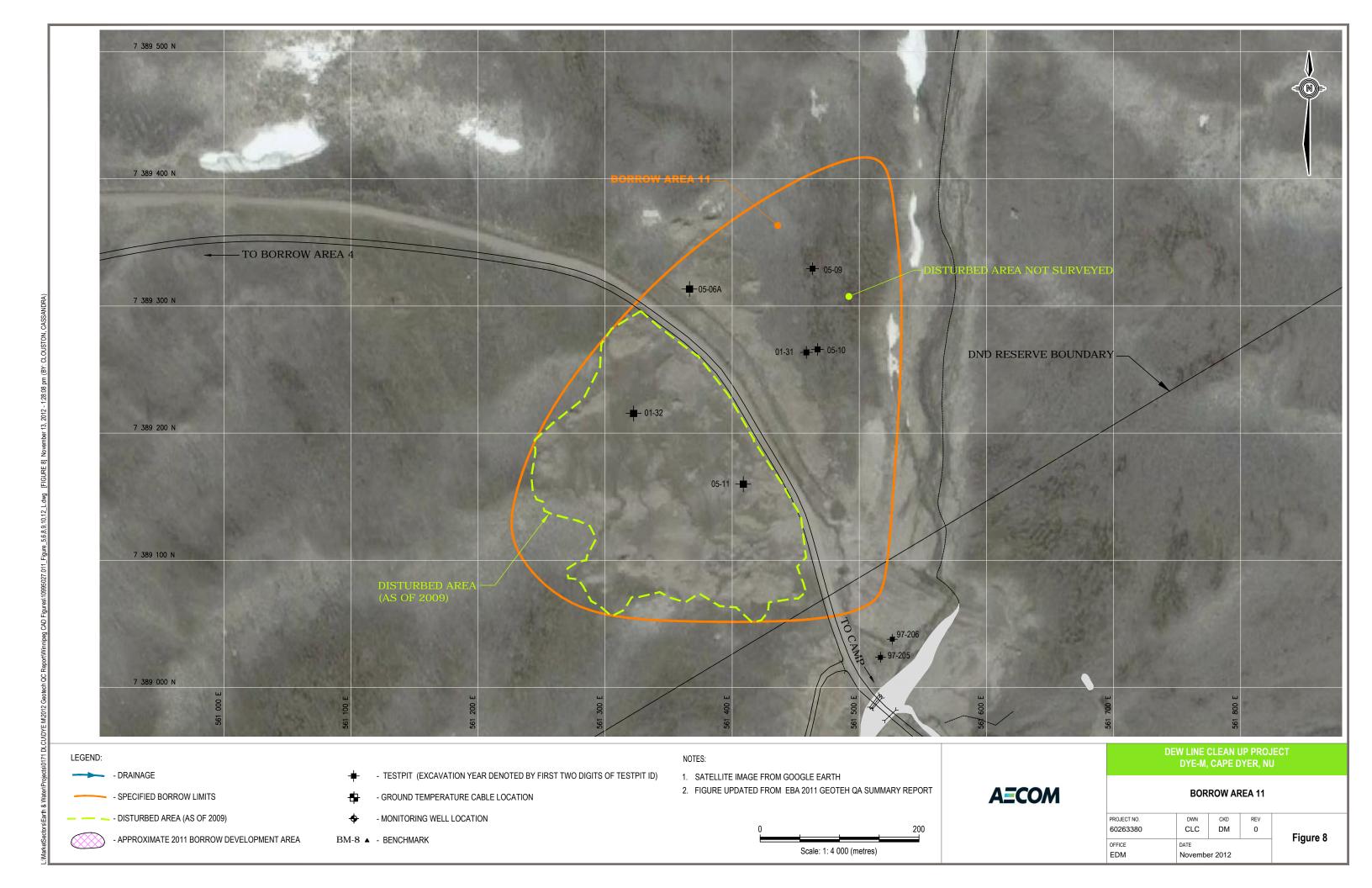


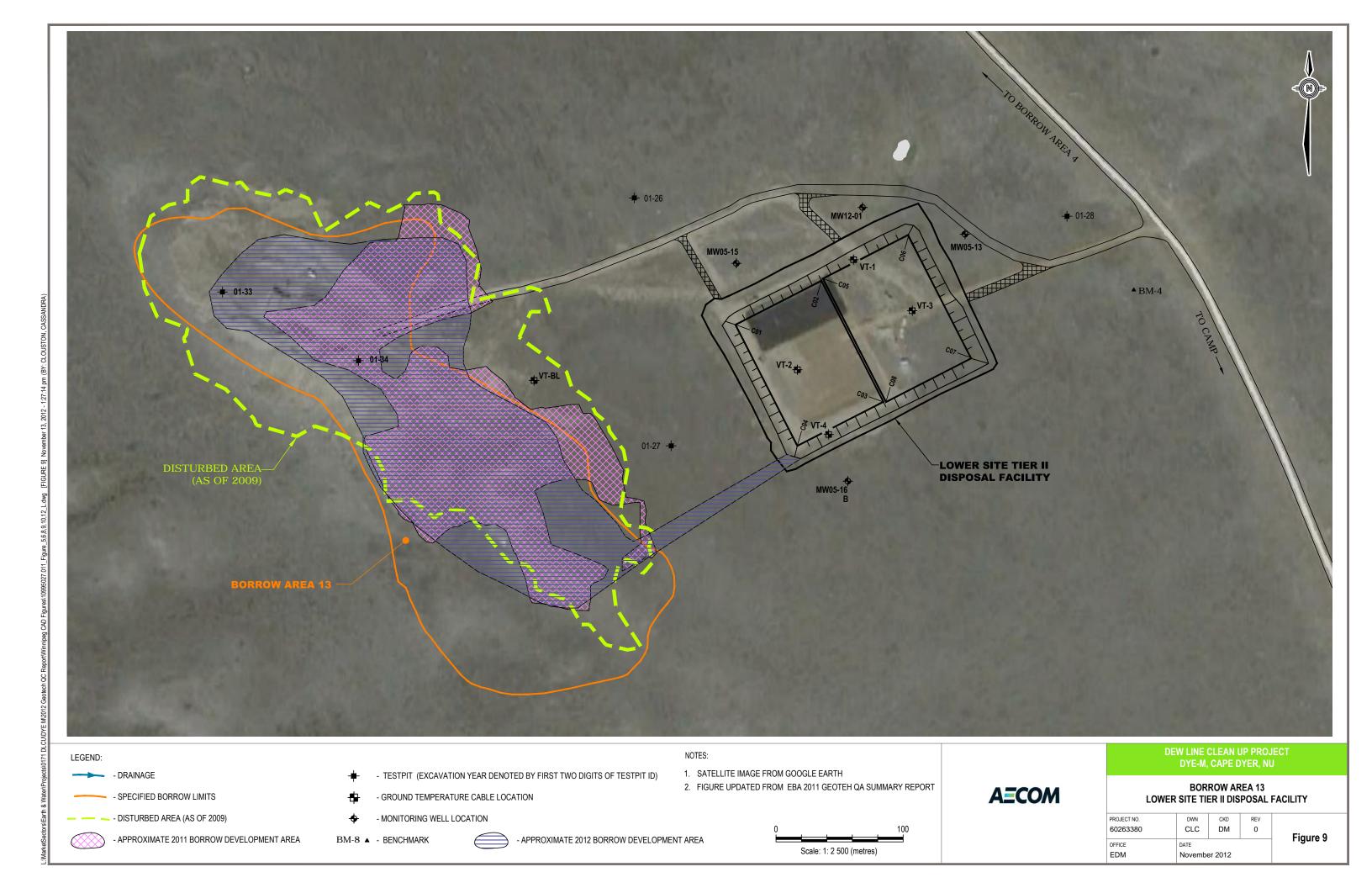












250

Scale: 1: 5 000 (metres)

PROJECT NO.

60263380

EDM

DWN

CLC

November 2012

DATE

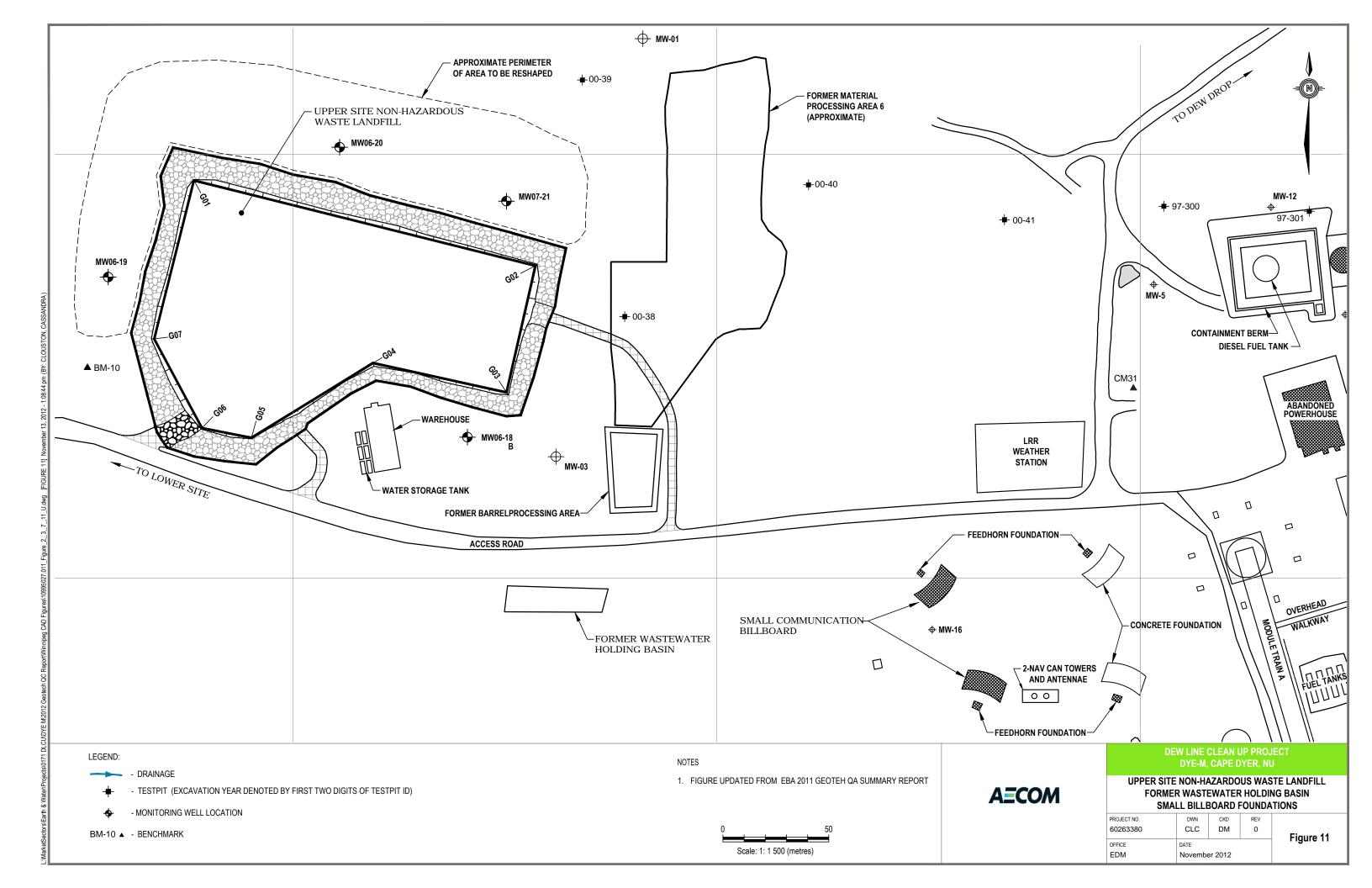
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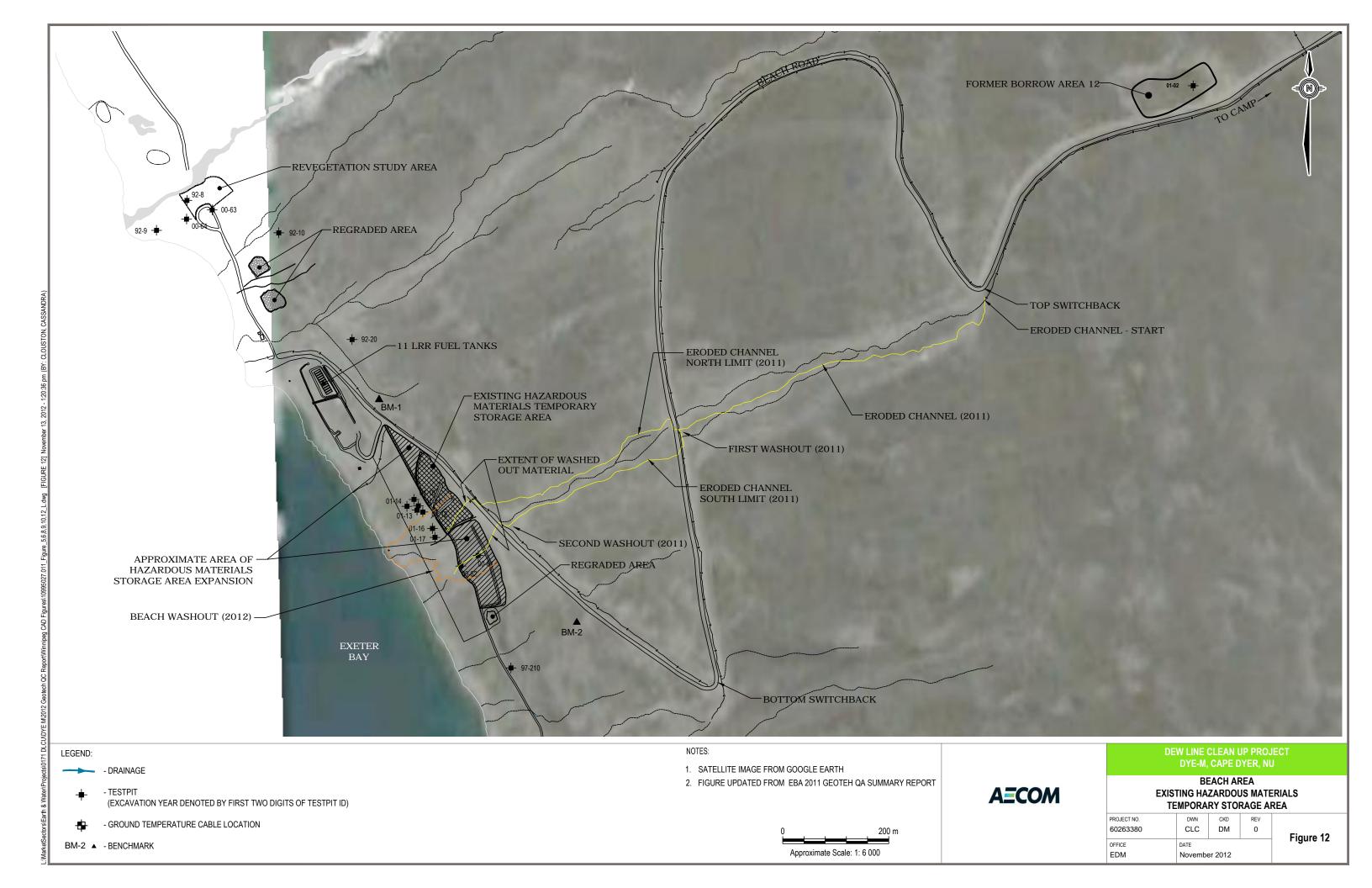
DM

REV

0

Figure 10







Site Name: DYE-MSite Location: Cape Dyer, NUProject No.
60263359

Photo No.

Date: June 15, 2012

Direction Photo

Taken:

South

Description:

Upper Site Tier I DF..



Photo No.

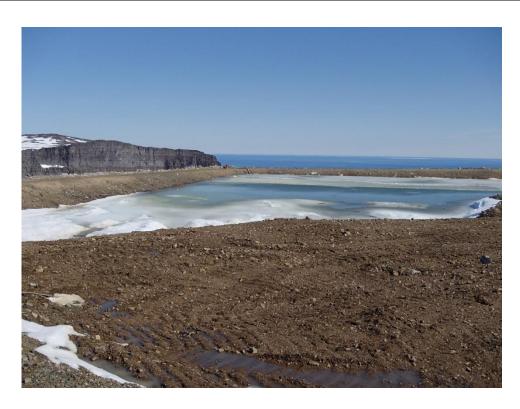
Date: June 15, 2012

Direction Photo Taken:

North

Description:

Upper Site NHWL





Project No. 60263359 Site Location: Cape Dyer, NU Site Name: DYE-M

Photo No.

Date: June 20, 2012

Direction Photo

Taken:

South

Description:

Borrow Area 4 – Access roadway construction.



Photo No.

Date: 4 June 20, 2012

Direction Photo Taken:

North

Description:

Landfarm.





Site Name: DYE-M Site Location: Cape Dyer, NU Project No. 60263359

Photo No. 5

Date: June 20, 2012

Direction Photo

Taken:

North

Description:

Upper Site NHWL.



Photo No.

6

Date: June 25, 2012

Direction Photo Taken:

South

Description:

Borrow Area 4 – Screening Type 2 Granular Fill.





Site Name: DYE-M Site Location: Cape Dyer, NU Project No. 60263359

Photo No.

Date:July 4,
2012

Direction Photo

Taken:

East

Description:

Lower Site NHWL – Construction of Type 2 Granular Cover Layer.



Photo No.

Date:July 6,
2012

Direction Photo Taken:

North

Description:

Landfarm – Tilling Event.





Site Name: DYE-M Site Location: Cape Dyer, NU Project No. 60263359

Photo No.

Date: July 11, 2012

Direction Photo Taken:

East

Description:

Pallet Line Landfill – Type 1 Granular Fill Placement.



Photo No. 10 **Date:** July 20, 2012

Direction Photo Taken:

North

Description:

Lower Site Tier II DF – Removal of Spilled Soils.





Site Name: DYE-MSite Location: Cape Dyer, NUProject No.
60263359

Photo No.

Date: July 21, 2012

Direction Photo

Taken:

Northeast

Description:

DEW Drop Area – Large Billboard Demolition.



Photo No.

Date: July 24, 2012

Direction Photo Taken:

West

Description:

Upper Site NHWL – Segmentation of Large Generators.





Site Name: DYE-M Site Location: Cape Dyer, NU Project No. 60263359

Photo No.

Date: August 3, 2012

Direction Photo Taken:

West

Description:

Unloading Sealift.

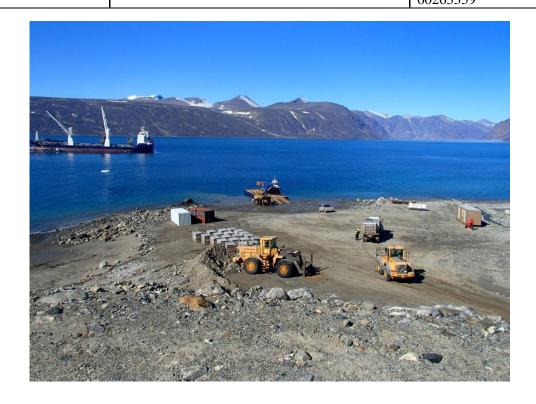


Photo No.

14

Date: August 10, 2012

Direction Photo Taken:

South

Description:

Upper Site NHWL – Landfilling of Large Billboard.





Project No. 60263359 Site Location: Cape Dyer, NU Site Name: DYE-M

Photo No. 15

Date: August 11, 2012

Direction Photo

Taken:

South

Description:

Upper Site Tier II DF – Installation of Geotextile.



Photo No. 16

Date: August 20, 2012

Direction Photo Taken:

Northwest

Description:Upper Site Tier II DF –
Backfilling Ramp Area.





Site Name: DYE-M Site Location: Cape Dyer, NU Project No. 60263359

 Photo No.
 Date:

 17
 August 21, 2012

Direction Photo Taken:

Not Applicable

Description:

Upper Site Tier II DF – Installation of Geomembrane Boot on VT-10..



Photo No. Date:
August
30, 2012

Direction Photo Taken:

West

Description:

Lower Site Station Area – Demolition of Warehouse B13F.





Site Name: DYE-M Site Location: Cape Dyer, NU Project No. 60263359

Photo No.

Date: Sept 8, 2012

Direction Photo Taken:

West

Description:

Upper Site Tier II DF – Construction of Type 2 Granular Cover Layer.



Photo No.

Date: Sept 13, 2012

Direction Photo Taken:

North

Description:

Lower Site Tier II DF – Placement of Winter Cover Layer on Cell 2.

