

SUPERVISORY NOTES:

1. THIS DESIGN IS IN CONFORMANCE WITH THE TECHNICAL REFERENCE MANUAL FOR LIQUID MANURE STORAGE.
2. THE PROVISION OF SITE INSPECTIONS AND THE ISSUANCE OF A CERTIFICATE OF COMPLIANCE BY DGH ENGINEERING LTD. SHALL NOT IN ANY WAY RELIEVE THE OWNER AND/OR THE CONTRACTOR OF THE STORAGE FROM FULL RESPONSIBILITY FOR CARRYING OUT OR HAVING CARRIED OUT THE WORK IN ACCORDANCE WITH THE PLANS AND SPEC.'s SUPPLIED AND SEALED BY DGH ENGINEERING LTD. AND WITH THE CONDITIONS OF THE PERMIT ISSUED BY MANITOBA CONSERVATION.
3. VERIFY ISSUANCE AND ACCURACY OF CONSTRUCTION PERMIT OR LICENSE PRIOR TO COMMENCEMENT OF WORK. CONFIRM COMPLIANCE WITH ALL STIPULATED CONDITIONS APPROPRIATE TO THE EXECUTION OF THE WORK.
4. NOTIFY THE ENGINEER OF THE DATE AND TIME OF COMMENCEMENT OF THE WORK NOT LESS THAN 48 HOURS PRIOR TO MOBILIZATION.
5. ARRANGE WITH THE ENGINEER FOR AN INSPECTION OF THE SITE WITHIN 48 HOURS OF COMMENCEMENT OF THE WORK TO VERIFY THAT CONSTRUCTION METHODS AND SOIL CONDITIONS ARE CONSISTENT WITH THE DESIGN AND THE PRELIMINARY SOIL INVESTIGATION.
6. CO-ORDINATE WITH THE ENGINEER TO SCHEDULE THE FREQUENCY AND TIMING OF INTERMEDIATE SITE VISITS TO MONITOR PROGRESS, EVALUATE MATERIALS AND CONDUCT TESTING. NOT LESS THAN ONE INSPECTION FOR CUT AND FILL AND NOT LESS THAN TWO INSPECTIONS FOR RECOMPACTED EARTH LINERS ARE REQUIRED.
7. ADVISE THE ENGINEER OF THE COMPLETION OF EARTHWORKS AND SCHEDULE A SITE INSPECTION WHICH IS TO BE COMPLETED PRIOR TO DEMOBILIZATION.
8. A FINAL INSPECTION MUST BE COMPLETED BY THE ENGINEER AFTER ALL WORK AND EQUIPMENT INSTALLATIONS ARE COMPLETE. THE ENGINEER MUST ISSUE A LETTER OF CERTIFICATION PRIOR TO THE STORAGE BEING SET INTO USE.

EARTHWORK SPECIFICATIONS: (FOR IN-SITU SOIL E.M.S.)

- THE EARTHEN BASIN IS TO BE CONSTRUCTED UTILIZING IN-SITU CLAY SOILS.
- ALL TOPSOIL SHALL BE STRIPPED FROM THE E.M.S. SITE INCLUDING THE BERM AREAS PRIOR TO PLACING ANY FILL. THE REMOVED TOPSOIL SHOULD BE STOCKPILED AND MAY BE USED ONLY FOR DRESSING ON THE OUTSIDE SLOPES OF THE STORAGE.
- IN REGIONS WHERE FILL IS NOT REQUIRED, THE BOTTOM AND SIDES SHALL BE DISKED TO A MINIMUM DEPTH OF 8" AND COMPACTED.
- ANY UNSUITABLE MATERIAL EXPOSED DURING CONSTRUCTION (SUCH AS SAND, SILT & GRAVEL) SHALL BE EXCAVATED AND REPLACED WITH 3'-3" OF COMPACTED CLAY. (REFER TO NOTE BELOW FOR COMPACTION SPEC.S)
- TO ACHIEVE COMPACTION OF THE INTERIOR SURFACE, THE MOISTURE CONTENT OF THE CLAY SHALL BE MAINTAINED SUCH THAT A STIFF BALL THAT WILL NOT CRUMBLE CAN BE FORMED IN THE HAND. ALL FILL MATERIAL SHALL BE PLACED IN LAYERS NO THICKER THAN 6" AND EACH LIFT SHALL BE COMPACTED WITH AT LEAST THREE (3) PASSES OF A 350psi SHEEPSFOOT ROLLER. COMPACTION FEET SHALL BE SPACED TO PROVIDE AT LEAST FOUR (4) FEET FOR EACH 2.7 FT² OF CYLINDRICAL SURFACE AREA. MATERIAL SHALL BE COMPACTED TO WITHIN 95% OF MAXIMUM STANDARD PROCTOR DENSITY, AT A MOISTURE CONTENT BETWEEN 0.9 & 1.2 OPTIMUM.
- THE ROLLER SHALL BE EQUIPPED WITH CLEANING FINGERS TO PREVENT THE ACCUMULATION OF MATERIAL BETWEEN THE TAMPERING FEET AND TO ALLOW FULL PENETRATION OF THE FEET INTO THE LIFT BEING COMPACTED.
- TOPSOIL, FROZEN SOIL AND ROCKS LARGER THAN 6" SHALL NOT BE INCLUDED IN THE FILL.
- FINAL GRADING OF ALL SURFACES IS REQUIRED TO PROVIDE A SMOOTH, STABLE STRUCTURE.
- THE INFLUENT LINE AND BACKFLOW PIPE MUST BE SEALED WITH A MINIMUM OF 3" THICK 'BENSEAL', 'HOLE-PLUG' OR OTHER APPROVED BENTONITE SEALANT AROUND THE PIPE FOR A MINIMUM OF 3'-0" ALONG THE PIPE LENGTH FROM THE INTERIOR.
- BELOW GRADE INFLUENT LINES THAT ARE INSTALLED AFTER COMPLETION OF THE BERMS SHOULD BE COVERED WITH CLAY, COMPACTED IN 6" LIFTS. COMPACTION IS TO TAKE PLACE WITH A "JUMPING JACK" HAND COMPACTOR FOR THE FIRST FOOT OF FILL ABOVE THE PIPE. FOLLOWING THIS, EARTH COMPACTOR BACKERS MAY BE USED TO FORM THE REMAINING

CONCRETE SPECIFICATIONS:

- ALL RAMPS, SPLASH PADS, AND THE OVERFLOW CHANNEL LINER SHALL BE CONSTRUCTED OF 4" REINFORCED CONCRETE. LOCATION OF THESE RAMPS ARE AT THE DISCRETION OF THE OWNER.
- ALL CONCRETE IS TO BE 25 MPA AIR ENTRAINED CONCRETE. REINFORCING TO CONSIST OF 10M BARS @ 15" % %.

PUBLIC WARNING!

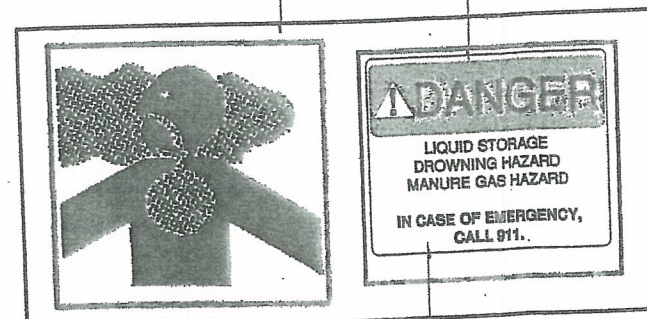
- MANURE GASES HAVE CAUSED FATALITIES IN HUMANS.
- DANGEROUS GASES ARE FORMED WHEN MANURE IS STORED IN ENCLOSED SPACES, THE MOST DANGEROUS GAS IS HYDROGEN SULFIDE.
- CONDITIONS ARE MOST DANGEROUS DURING AGITATION AND EMPTYING OF PITS OR TANKS.
- LETHAL CONCENTRATIONS CAN DEVELOP WITHIN A FEW MINUTES.
- A SINGLE INHALATION MAY CAUSE INSTANT RESPIRATORY PARALYSIS AND DEATH.
- DO NOT ENTER A MANURE STORAGE WITHOUT A SELF CONTAINED BREATHING APPARATUS DESIGNED SPECIFICALLY FOR THAT PURPOSE, SCUBA EQUIPMENT IS NOT ADEQUATE.
- ENTER A MANURE STORAGE, LIFT STATION, OR DISCHARGE WELL ONLY AFTER IS HAS BEEN WELL VENTILATED; WEAR APPROPRIATE BREATHING APPARATUS AND HAVE AN ATTACHED SAFETY ROPE WITH AT LEAST TWO PEOPLE STANDING BY WHO ARE ABLE TO PULL A PERSON OUT AT THE FIRST SIGN OF DIZZINESS.

SIGNAL WORD

- "DANGER"- WHITE LETTERING/RED BACKGROUND
- SAFETY ALERT SYMBOL - WHITE TRIANGLE/RED EXCLAMATION POINT
- "DANGER" SHALL BE SANS SERIF FONT IN UPPER CASE.

PICTORIAL

BLACK PICTORIAL ON WHITE BACKGROUND



BORDER

WHITE OR BLACK OR RED

WORD MESSAGE

BLACK LETTERING ON WHITE BACKGROUND OR WHITE LETTERING ON BLACK BACKGROUND

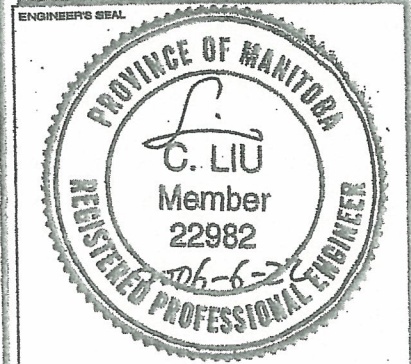
FONT SHALL BE SANS SERIF

LOCATION
INSTALL ONE SIGN AT EACH PUMP-OUT RAMP OR ACCESS TO STORAGE.

SIGNAGE SIZE
36"x18"

SAFETY SIGNAGE DETAIL

ISSUED FOR CONSTRUCTION



NO.	DATE	DESCRIPTION	INITIAL
02	06/06/22	ISSUED FOR CONSTRUCTION	SSM
01	06/05/08	ISSUED FOR CONSTRUCTION	JJM

DATE	DRAWN	CHECKED

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CLIENT
MIAMI COLONY
BOX 131
MORDEN, MANITOBA
R6M 1V9

PROJECT TITLE
EARTHEN MANURE STORAGE BASIN RM OF THOMPSON
LEGAL DESCRIPTION
NE 4-4-6 W
PROJECT NUMBER: 06-1-1400-006-10 DATE: JUNE 2008

DETAILS, & SPECIFICATIONS
L3 REV. 000

APPENDIX B

NORWEST LABS ANALYTICAL RESULTS OF SAMPLES COLLECTED DURING BENCH-SCALE TESTING OF COLONY'S TANNERY PROCESS (March 8-13, 2006)



Report Transmission Cover Page

Norwest Labs
 1357 Dugald Road
 Winnipeg, MB. R2J 0H3
 Phone: (204) 982-8630
 Fax: (204) 275-6019

Bill to: Tetres Consultants
Report to: Tetres Consultants
 603, 386 Broadway
 Winnipeg, MB, Canada
 R3C 3R6
 Attn: Karen Mathers
 Sampled By:
 Company:

Project
ID: 0760-A-01
Name: Miami Colony
Location: Miami, MB
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 451258
Control Number:
Date Received: Mar 22, 2006
Date Reported: Mar 29, 2006
Report Number: 829913

Contact	Company	Address												
Karen Mathers Web x Email Notification	Tetres Consultants	603, 386 Broadway Winnipeg, MB R3C 3R6 Phone: (204) 942-2505 Email: kmathers@tetres.ca												
<table border="1"> <thead> <tr> <th>Copies</th> <th>Delivery Strategy</th> <th>Format</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Post</td> <td></td> </tr> <tr> <td>1</td> <td>Fax</td> <td></td> </tr> <tr> <td>1</td> <td>Courier</td> <td></td> </tr> </tbody> </table>		Copies	Delivery Strategy	Format	1	Post		1	Fax		1	Courier		Fax: (204) 942-2548
Copies	Delivery Strategy	Format												
1	Post													
1	Fax													
1	Courier													

NOTE: P indicates a preliminary report is required
 NOTE: A indicates report is delivered using automated delivery

_____ # OF PAGES IN THIS TRANSMISSION

- Report Transmission Notes**
Agreement Notes
Lot Notes
Sample Notes:

Notes to Clients
Lot Notes:
 Analysis was completed on samples that exceeded the recommended holding time for pH, TSS, TDS analyses.
 Mar 24/06 SR
 Samples 3-12 recieved unpreserved for total water analysis.
Sample Notes:
Batch Notes:
Method Notes:
Method Result Notes:

Reports associated with this Lot

<u>Id/Format/Reported Date</u>	<u>Id/Format/Reported Date</u>	<u>Id/Format/Reported Date</u>
829913 Env2QC 3 Smp & DL		

Comment:
 See Methodology and Notes page of Analytical Report for all comments pertaining to this report.

If this report transmission is not satisfactory, please send report requirements to the address at the top of this page.

3/28/06 829913 28-Mar-2006



Sample Custody

Norwest Labs
1357 Dugald Road
Winnipeg, MB. R2J 0H3
Phone: (204) 982-8630
Fax: (204) 275-6019

Bill to: Tetres Consultants
Report to: Tetres Consultants
603, 386 Broadway
Winnipeg, MB, Canada
R3C 3R6
Attn: Karen Mathers
Sampled By:
Company:

Project
ID: 0760-A-01
Name: Miami Colony
Location: Miami, MB
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 451258
Control Number:
Date Received: Mar 22, 2006
Date Reported: Mar 29, 2006
Report Number: 829913

Sample Disposal Date: Apr 28, 2006

All samples will be stored until this date unless other instructions are received. Please indicate other requirements below and return this form to the address or fax number on the upper right of this page.

_____ Extend Sample Storage Until _____ (MM/DD/YY)

The following charges apply to extended sample storage:

Storage for 1 to 5 samples per month	\$ 10.00
Storage for 6 to 20 samples per month	\$ 15.00
Storage for 21 to 50 samples per month	\$ 30.00
Storage for 51 to 200 samples per month	\$ 60.00
Storage for more than 200 samples per month	\$ 110.00

_____ Return Sample, collect, to the address below via:

_____ Greyhound
_____ Loomis
_____ Purolator
_____ Other (Specify) _____

Name: _____
Company: _____
Address: _____

Phone: _____
Fax: _____
Signature: _____

If no other arrangements have been made, samples will be disposed of on Apr 28, 2006.



Analytical Report

Norwest Labs
 1357 Dugald Road
 Winnipeg, MB. R2J 0H3
 Phone: (204) 982-8630
 Fax: (204) 275-6019

Bill to: Tetres Consultants
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 603, 386 Broadway
 Winnipeg, MB, Canada
 R3C 3R6
 Attn: Karen Mathers
 Sampled By:
 Company:

Project
 ID: 0760-A-01
 Name: Miami Colony
 Location: Miami, MB
 LSD:
 P.O.:
 Acct. Code:

NWL Lot ID: 451258
 Control Number:
 Date Received: Mar 22, 2006
 Date Reported: Mar 29, 2006
 Report Number: 829913

NWL Number		451258-1	451258-2		
Sample Description		"A"	"B"		
Matrix		Water	Water		
Analyte	Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters					
Sulfide	Total	mg/L	328	5.1	0.005
NWL Number		451258-1	451258-2	451258-3	
Sample Description		"A"	"B"	#1-Delime	
Matrix		Water	Water	Water	
Analyte	Units	Results	Results	Results	Detection Limit
Metals Total					
Sodium	Total	mg/L	6630	6050	5780
Routine Water					
pH			12.6	12.3	9.23
NWL Number		451258-3	451258-4	451258-5	
Sample Description		#1-Delime	#2-Bate	#3-Pickle	
Matrix		Water	Water	Water	
Analyte	Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties					
Solids	Total Suspended	mg/L	420	4100	460
Solids	Total Dissolved	mg/L	20100	12500	47500
NWL Number		451258-4	451258-5	451258-6	
Sample Description		#2-Bate	#3-Pickle	#5-Chrome	
Matrix		Water	Water	Water	
Analyte	Units	Results	Results	Results	Detection Limit
Metals Total					
Sodium	Total	mg/L	8050	7990	1660
Chromium	Total	mg/L	-	-	2230
Routine Water					
pH			8.81	1.78	3.53



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Analyte		Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	42	1000	1190	1
Solids	Total Dissolved	mg/L	10000	-	-	5

Analyte		Units	Results	Results	Results	Detection Limit
Metals Total						
Sodium	Total	mg/L	2280	13600	1340	0.4
Chromium	Total	mg/L	8.22	2540	329	0.0005
Routine Water						
pH			12.9	3.59	3.47	

Analyte		Units	Results	Results	Results	Detection Limit
Metals Total						
Sodium	Total	mg/L	1670	1020	1350	0.4
Chromium	Total	mg/L	5.09	17.6	-	0.0005
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	72	50	210	1
Routine Water						
pH			6.82	4.18	3.29	

Approved by: *Lee-ann Hemphill*
 Lee-ann Hemphill, BSc
 Team Leader, Chemistry



Quality Control

Norwest Labs
 1357 Dugaid Road
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 603, 386 Broadway
 Winnipeg, MB, Canada
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 Attn: Karen Mathers
 Sampled By:
 Company:

Project
ID: 0760-A-01
Name: Miami Colony
Location: Miami, MB
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 451258
Control Number:
Date Received: Mar 22, 2006
Date Reported: Mar 29, 2006
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Inorganic Nonmetallic Parameters

Blanks		Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfide		mq/L	<0.005	0.000	-0.005	0.005	✓
Material Used:	Edmonton Method Blank						
Date Acquired:	Mar 27, 2006						
Acquired By:	Gordon Grensmann						
Control Sample		Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfide		mq/L	0.072	0.075	0.064	0.085	✓
Material Used:	Water High						
Date Acquired:	Mar 27, 2006						
Acquired By:	Gordon Grensmann						
Sulfide		mq/L	0.024	0.025	0.017	0.032	✓
Material Used:	Water Low						
Date Acquired:	Mar 27, 2006						
Acquired By:	Gordon Grensmann						



Quality Control

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 Fax: (204) 275-6019

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Metals Total

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sodium	mq/L	<0.4	0.1	-0.2	0.3	✓
Chromium	ug/L	<0.5	0.0	-0.5	0.5	✓
Material Used: Edmonton Method Blank						
Date Acquired: Mar 27, 2006						
Acquired By: Linda Li						
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sodium	mq/L	13600	14000	15.0	1.2	✓
Chromium	ug/L	0.6	0.6	15.0	1.1	✓
Material Used: Edmonton Duplicate						
Date Acquired: Mar 27, 2006						
Acquired By: Linda Li						
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sodium	mq/L	47.2	50.0	45.0	55.0	✓
Chromium	ug/L	31.0	31.8	27.5	36.2	✓
Material Used: Edmonton Digestion Check						
Date Acquired: Mar 27, 2006						
Acquired By: Linda Li						
Sodium	mq/L	241	250.0	225.0	275.0	✓
Material Used: Metals High						
Date Acquired: Mar 27, 2006						
Acquired By: Aleksandra Robert						
Sodium	mg/L	4.8	5.0	4.5	5.5	✓
Chromium	ug/L	99.3	100.0	85.0	115.0	✓
Material Used: Metals Low						
Date Acquired: Mar 27, 2006						
Acquired By: Linda Li						
Chromium	ug/L	5.3	5.0	4.3	5.8	✓
Material Used: Metals Trace						
Date Acquired: Mar 27, 2006						
Acquired By: Linda Li						



Quality Control

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Physical and Aggregate Properties

Blanks		Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids		mg/L	<5	1	-5	7	✓
Material Used:	Water blank						
Date Acquired:	Mar 27, 2006						
Acquired By:	Stepanka Ransome						
Replicates		Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids		mg/L	420	407	20		✓
Material Used:	Water Duplicate						
Date Acquired:	Mar 23, 2006						
Acquired By:	Stepanka Ransome						
Control Sample		Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids		mg/L	98	98	86	110	✓
Material Used:	Water TSS QC High						
Date Acquired:	Mar 23, 2006						
Acquired By:	Stepanka Ransome						
Solids		mg/L	8	9	3	15	✓
Material Used:	Water TSS QC Low						
Date Acquired:	Mar 27, 2006						
Acquired By:	Stepanka Ransome						
Routine Water		Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Replicates							
pH			7.94	7.95	0.09		✓
Material Used:	Water Duplicate						
Date Acquired:	Mar 23, 2006						
Acquired By:	Stepanka Ransome						



Methodology and Notes

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Page: 6 of 6

Method of Analysis:

MethodName	Reference	Method	Date Analysis Started	Location
Metals ICP-MS (Total) in water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	27-Mar-06	Norwest Labs Edmonton
Metals Trace (Total) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	27-Mar-06	Norwest Labs Edmonton
pH, EC and Alkalinity in Aqueous Samples	APHA	* Electrometric Method, 4500-H+ B	23-Mar-06	Norwest Labs Winnipeg
Solids Dissolved (Total, Fixed and Volatile)2	APHA	* Total Dissolved Solids Dried at 180 C, 2540 C	23-Mar-06	Norwest Labs Winnipeg
Solids Dissolved (Total, Fixed and Volatile)2	APHA	* Total Dissolved Solids Dried at 180 C, 2540 C	27-Mar-06	Norwest Labs Winnipeg
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	23-Mar-06	Norwest Labs Winnipeg
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	27-Mar-06	Norwest Labs Winnipeg
Sulphide in water	APHA	* Gas Dialysis, Automated Methylene Blue Method, 4500-S2- E	27-Mar-06	Norwest Labs Edmonton

* Norwest method(s) is based on reference method

References:

APHA Standard Methods for the Examination of Water and Wastewater
 US EPA US Environmental Protection Agency Test Methods

Comments:

Analysis was completed on samples that exceeded the recommended holding time for pH, TSS, TDS analyses.
 Mar 24/06 SR
 Samples 3-12 recieved unpreserved for total water analysis.

Please direct any inquiries regarding this report to our Client Services group.
 Results relate only to samples as submitted

The test report shall not be reproduced except in full, without the written approval of the laboratory

APPENDIX C

CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT CHROMIUM GUIDELINE INFORMATION (1999)



Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health

CHROMIUM
total chromium 1997
hexavalent chromium (VI)
1999

This fact sheet provides soil quality guidelines for total chromium (Cr) in Canada for the protection of environmental and human health (Table 1), and soil quality guidelines for hexavalent chromium (Cr(VI)) for the protection of environmental health (Table 2). Supporting scientific documents are also available (Environment Canada 1996; Health Canada 1996).

Background Information

Chromium (CAS 7440-47-3) is a lustrous metal that melts at $1903 \pm 10^\circ\text{C}$. Although chromium is a naturally occurring element, elemental chromium does not occur in

nature (Shupak 1991). Rather, it is found complexed with oxygen, iron, or lead, forming oxides such as chromite (FeOCr_2O_3), chromitite ($\text{Fe}_2\text{O}_3 \cdot 2\text{Cr}_2\text{O}_3$), and crocitolite (PbCrO_4) (Williams 1988). Although chromium can exist in nine different oxidation (valence) states, trivalent (III) and hexavalent (VI) chromium are the two most common species (Langård 1982; WHO 1988; Shupak 1991). The trivalent form of chromium is generally considered to be the most thermodynamically stable species under ambient redox conditions. Cr(VI) is not thermodynamically stable, behaving as a strong oxidizing agent. While complexed Cr(III) occurs naturally and is ubiquitous in the environment, the principal source of Cr(VI) in the environment is anthropogenic pollution; it rarely occurs naturally due to

Table 1. Soil quality guidelines for total chromium ($\text{mg} \cdot \text{kg}^{-1}$).

Guideline	Land use			
	Agricultural	Residential/ parkland	Commercial	Industrial
Guideline	64 ^a	64 ^a	87 ^a	87 ^a
SQG _{HH}	220	220	630	2300
Limiting pathway for SQG _{HH}	Soil ingestion	Soil ingestion	Soil ingestion	Off-site migration
Provisional SQG _{HH}	NC ^b	NC ^b	NC ^b	NC ^b
Limiting pathway for provisional SQG _{HH}	ND	ND	ND	ND
SQG _E	64 ^c	64 ^c	87	87
Limiting pathway for SQG _E	Nutrient and energy cycling check	Nutrient and energy cycling check	Nutrient and energy cycling check	Nutrient and energy cycling check
Provisional SQG _E	NC ^d	NC ^d	NC ^d	NC ^d
Limiting pathway for provisional SQG _E	ND	ND	ND	ND
Interim soil quality criterion (CCME 1991)	750	250	800	800

Notes: NC = not calculated; ND = not determined; SQG_E = soil quality guideline for environmental health; SQG_{HH} = soil quality guideline for human health.

^aData are sufficient and adequate to calculate an SQG_{HH} and an SQG_E. Therefore the soil quality guideline represents a fully integrated de novo guideline for this land use, derived in accordance with the soil protocol (CCME 1996a). The corresponding interim soil quality criterion (CCME 1991) is superseded by the soil quality guideline.

^bBecause data are sufficient and adequate to calculate an SQG_{HH} for this land use, a provisional SQG_{HH} is not calculated.

^cThe SQG_E for this land use is the geometric mean of the preliminary soil contact value (TEC or ECL).

^dBecause data are sufficient and adequate to calculate an SQG_E for this land use, a provisional SQG_E is not calculated.

The guidelines in this fact sheet are for general guidance only. Site-specific conditions should be considered in the application of these values. The values may be applied differently in various jurisdictions. The reader should consult the appropriate jurisdiction before application of the values.