

TABLE Inventory of transferred CEPA PCB waste

Summary of 2004 Technical Activities - Resolutic

and

Nb	ID #	EC registered PCB number	Container	Location	Contents	Origin
18		PN 10006	salvage drum	seacan # 2	CEPA waste drum	seacan # 2
19		PN 10007	salvage drum	seacan # 2	CEPA waste drum	seacan # 2
20		PN 10008	salvage drum	seacan # 2	CEPA waste drum	seacan # 2
21		PN 10009	salvage drum	seacan # 2	CEPA waste drum	seacan # 2
22		PN 10010	salvage drum	seacan # 5	CEPA waste drum	seacan # 2
23		PN 10011	salvage drum	seacan # 2	CEPA waste drum	seacan # 2
1	RI - 544	PN 10061	flower pot	disposed	CEPA soil	blue plastic drums (14) from Iqaluit
2	RI - 493	PN 10062	flower pot	disposed	CEPA soil	blue plastic drums (12) from Iqaluit
3	RI - 525	PN 10063	flower pot	disposed	CEPA soil	blue plastic drums (15) from Iqaluit
4	RI - 633	PN 10064	flower pot	disposed	CEPA soil	blue plastic drums (14) from Iqaluit
5	RI - 700	PN 10065	flower pot	disposed	CEPA soil	blue plastic drums (14) from Iqaluit
1		PN 10501	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
2		PN 10502	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
3		PN 10503	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
4		PN 10504	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
5		PN 10505	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
6		PN 10506	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
7		PN 10507	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
8		PN 10508	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
9		PN 10509	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
10		PN 10510	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
11		PN 10511	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
12		PN 10512	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
13		PN 10513	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
14		PN 10514	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
15		PN 10515	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
16		PN 10516	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
17		PN 10517	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
18		PN 10518	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
19		PN 10519	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
20		PN 10520	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
21		PN 10521	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
22		PN 10522	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
23		PN 10523	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
24		PN 10524	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
25		PN 10525	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
26		PN 10526	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit

Nb	ID #	EC registered PCB number	Container	Location	Contents	Origin
27		PN 10527	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
28		PN 10528	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
29		PN 10529	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
30		PN 10530	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
31		PN 10531	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
32		PN 10532	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
33		PN 10533	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
34		PN 10534	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
35		PN 10535	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
36		PN 10536	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
37		PN 10537	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
38		PN 10538	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
39		PN 10539	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
40		PN 10540	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
41		PN 10541	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
42		PN 10542	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
43		PN 10543	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
44		PN 10544	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
45		PN 10545	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
46		PN 10546	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
47		PN 10547	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
48		PN 10548	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
49		PN 10549	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
50		PN 10550	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
51		PN 10551	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
52		PN 10552	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
53		PN 10553	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
54		PN 10554	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
55		PN 10555	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
56		PN 10556	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
57		PN 10557	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
58		PN 10558	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
59		PN 10559	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
60		PN 10560	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
61		PN 10561	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
62		PN 10562	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
63		PN 10563	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit

Nb	ID #	EC registered PCB number	Container	Location	Contents	Origin
64		PN 10564	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
65		PN 10565	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
66		PN 10566	salvage drum	seacan # 2	CEPA concrete	blue plastic drum from Iqaluit
67		PN 10567	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
68		PN 10568	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
69		PN 10569	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
70		PN 10570	salvage drum	seacan # 4	CEPA concrete	blue plastic drum from Iqaluit
71		PN 10571	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
72		PN 10572	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
73		PN 10573	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
74		PN 10574	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
75		PN 10575	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
76		PN 10576	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
77		PN 10577	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
78		PN 10578	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
79		PN 10579	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
80		PN 10580	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
81		PN 10581	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
82		PN 10582	salvage drum	seacan # 1	CEPA concrete	blue plastic drum from Iqaluit
83		PN 10583	salvage drum	seacan # 1	CEPA concrete	blue plastic drum from Iqaluit
84		PN 10584	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
85		PN 10585	salvage drum	seacan # 5	CEPA concrete	blue plastic drum from Iqaluit
86		PN 10586	salvage drum	seacan # 1	CEPA concrete	blue plastic drum from Iqaluit
87		PN 10599	salvage drum	seacan # 1	CEPA concrete	blue plastic drum from Iqaluit
88		PN 10600	salvage drum	seacan # 3	CEPA concrete	blue plastic drum from Iqaluit
1		PN 10034	salvage drum	seacan # 5	CEPA concrete	S4 building floor
2		PN 10977	salvage drum	seacan # 5	CEPA concrete	S4 building floor

Appendix 4

Geomembrane installation QA/QC report

PRODUITS
GÉOSYNTHÉTIQUES,
FOURNITURE ET
INSTALLATION,
ASSISTANCE
TECHNIQUE,
CONTRÔLE
DE LA QUALITÉ

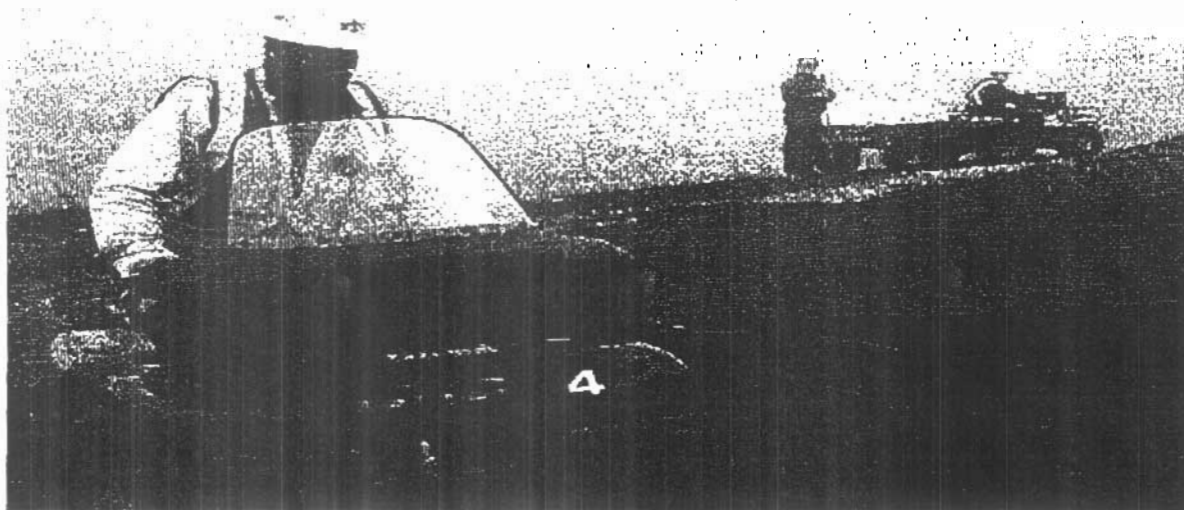
WORK REPORT

Work site documentation and registry



Z-TECH / GEOGARD INC.
4025 Lavoisier,
Bolsbriand (Québec)
Canada J7H 1N1
tél : (450) 430-5333 • Mtl : 980-7463
fax : (450) 430-9352 • e-mail : ZTG@zotel.net

GEOSYNTHETIC
PRODUCTS,
SUPPLY AND
INSTALLATION,
TECHNICAL
ASSISTANCE,
QUALITY
CONTROL



QIKIQTAAALUK CORP.
Resolution Island

SUPPLY AND INSTALLATION OF GEOMEMBRANE
HDPE 1,5 mm (60 mil)
FILE #: ZTG-03-023

Prepared for:

Sinanni Inc.
3333 Queen Mary, suite 580
Montréal, Quebec
H3V 1A2

September 2004

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II	Geomembrane manufacturer's quality control
III	Technical data sheet for – HDPE 1,5 mm
IV	«As built » drawings

INTRODUCTION

Z-tech/Geogard Inc. prepared this report, to the attention of Sinanni Inc., for the projects of Resolution Island.

This report contains a brief description of the quality control methods used at the work site, the geomembrane manufacturer's quality control along with our work site registries. Also included in this report is the « As built » assembly plans.

The work realised during the months of August and September 2004 consisted of the installation of a geomembrane of high-density polyethylene (HDPE) for the base and foundation of petroleum tanks. The work surface represented approximately 7350 m² and more than 1222 linear meters of welding.

The procedures of assembling the geomembrane were done with due diligence in accordance with the geosynthetic industry and conform to all requirements and specifications of the tender document.

Hopping that all is to your entire satisfaction.

Z-TECH/GEOGARD INC.

1

1.0 REALISATION OF THE WORK:

The installation of the geomembrane was done in one phase over a total period of 31 days, from the 13th of August to the 14th of September 2004.

The work consisted of recovering a surface with a smooth membrane of black Hi Density Polyethylene (HDPE) of 1,5 mm (60 mil.) in thickness.

1.1 Implicated parties :

This project implicated the following parties:

Indian and northern affaires Canada. Owner

Sinanni Inc., Consultant

- M. Philippe Simon, eng.
- M. Karl Côté, eng.
- M. Greg Johnson, eng

Qikiqtaaluk Corp.. General contractor

- M. Harry Flaherty

Z-TECH/GEOGARD INC., Geomembrane installer

- M. Marco Pigeon, Director construction division
- M. Jean-Marc Brunet, technical director
- M. Robert Bélanger, director of sales
- M. Denis Bolduc, supervisor, welding technician
- M. Martin Fontaine, welding technician

1.2 Work site installation :

1.2.1 Reception and storage of materials .

The geomembrane rolls were stored in an acceptable location near the work site. The rolls were well identified and their numbers were recorded before deployment.

1.2.2 Inspection of work surfaces :

At our arrival on the work site in date of the 16th of August 2004, the sand foundation was prepared to our requirements

2

1.2.3 Installation of geomembrane panels :

After the deployment of each panel the quality control technician or the supervisor did a visual inspection to find any defects. A number was then attributed and inscribed to each panel. This number was then rewritten on the « as built » drawings.

1.2.4 Welding of the geomembrane panels :

All major welds between panels were done by fusion of polymers. The welding machines used for this are known as wedge-welders, which use the wedge as heat source. These welders produce an air chamber between two welds, which lets us do non-destructive air pressure tests of the welds

The second type of welds were done with a manual extrusion process for the fusion of polymers. This type of weld was used, to fuse the geomembrane to the Seal Lock integrated in the cement foundation, at the intersection of 3 panels and for general repairs. Non destructive testing for this type of weld was the vacuum test

2.0 QUALITY CONTROL

2.1 Quality control on the assembly of geomembrane panels.

2.1.1 Welding calibration

All welding equipment was calibrated prior to usage. A weld sample was produced in the same environmental conditions and with the same materials that were to be used that day by the welding technicians.

From the sampled weld we took 25mm in width by 150mm in length samples and tested their resistance with peel and sheer strength. Only after positive results could the technicians start welding the panels.

2.1.2 Weld integrity tests :

All welds were visually inspected and tested by non-destructive means. These tests were “air pressure tests” or “vacuum tests”. These tests let us verify that the welds are sealed tight.

2.1.2.1 Air pressure test :

This type of test was used on all longitudinal welds with a central air chamber. The method consists to inject air with a controlled pressure (15 to 40 PSI) in the air chamber and to verify that there is no pressure loss. If there is a loss of pressure in the air chamber than there is a breach in the weld. The breach will be found by visual inspection or by vacuum testing the weld.

2.1.2.2 Vacuum test :

This type of test was used in small areas where pressure testing was difficult or at welds done by extrusion. This method consisted of putting soapy water on the welds, we then put an airtight box on the weld and pump out the air in order to create negative pressure over the weld. If the weld is breached than bubbles will form over the breach thus locating the area to repair.

2.1.3 Repairs

All nicks and/or tears were repaired by extrusion. These repairs were then vacuum tested to verify that the welds are sealed tight.

2.1.4 «As built » drawings :

The «As built » drawings represent the layout of geomembrane panels, the details of construction and the location of the repairs.

2.2 Geomembrane manufacturer's quality control :

The results of the geomembrane manufacturers quality control are presented in annex II.

3.0 WORK CERTIFICATION :

This document prepared by Z-Tech/Geoguard inc. for the contract given by Sinanni Inc. certifies that the installation of geosynthetics was realised with due diligence in accordance to the geosynthetic industry and conform to the plans and tender document issued by Indian and northern affaires Canada..

Z-Tech/Geogard inc.



Jean-Marc Brunet,
Technical director

CERTIFICATE OF SURFACE APPROBATIONProject name: **Resolution Island**

File #: ZTG-03-023

Description: Sand Foundation

This here-by confirms the acceptance of the visible surfaces by the representative of Z-TECH/GEOGUARD INC. This acceptance permits the installation of geomembrane on the accepted surfaces.

Partial acceptance:

Complete acceptance: **X**

Comments: None

Signature:


Supervisor or Quality control technician

Date: 16/08/04

This acceptance is limited to the surface verified. Z-TECH/GEOGUARD INC. endorses no responsibility to eventual tears to the geomembrane due to defects or non-accessible vices while visually inspecting the surfaces.

RECEPTION INSPECTION SHEET

[illegible]

PLACEMENT REGESTRY

Project name :Resolution island

File # : ZTG-03-023

Localization Nunavut

C.Q. Technician : Denis Bolduc and Martin fontaine

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Panel #	Roll #	Deployment date	Width (meters)	Length (meters)	Area M ²
1	103121057	23/08/2004	6,85	48,2	330,17
2	103121057	23/08/2004	6,85	14,4	98,64
3	103121057	23/08/2004	6,85	14,2	97,27
4	103121057	23/08/2004	6,85	14,2	97,27
5	103121057	23/08/2004	6,85	14,7	100,7
6	103121057	23/08/2004	6,85	14,5	73,15*
7	103121057	23/08/2004	6,85	10,1	58,05*
8	103121057	23/08/2004	6,85	6,85	23,46*
9	103121194	24/08/2004	6,85	15,5	76,55*
10	103121194	24/08/2004	6,85	14,3	72,44*
11	103121194	24/08/2004	6,85	7,5	25,69*
12	103121194	24/08/2004	6,85	5,2	17,81*
13	103121194	27/08/2004	6,85	48,8	334,28
14	103121194	27/08/2004	6,85	49,2	337,02
15	103121191	27/08/2004	6,85	50	342,5
16	103121191	29/08/2004	6,85	51	349,35
17	103121191	29/08/2004	6,85	52	356,2
18	103121194	29/08/2004	6,85	8	54,8
19	102121553	29/08/2004	6,85	64	438,4
20	102121553	01/09/2004	1,3	28	18,2
21	102121553	01/09/2004	6,85	11	75,35
22	102121553	02/09/2004	6,85	12	82,2
23	102121553	03/09/2004	6,85	13	89,05
24	102121553	01/09/2004	6,85	19	130,15
25	102121552	02/09/2004	6,85	21	143,85
26	102121552	03/09/2004	6,85	22	150,7
27	115139833	01/09/2004	6,85	35	239,75
28	115139833	02/09/2004	6,85	35	239,75
29	115139833	03/09/2004	6,85	35	239,75
30	115139833	11/09/2004	6,85	65	445,25
31	102121552	11/09/2004	6,85	68	465,8
32	102121552	11/09/2004	6,85	47	321,95

PLACEMENT REGISTRY page 2 of 2

Panel #	Ref.#	Deployment date	Width (meters)	Length (meters)	Area M ²
33	102121555	12/09/2004	6,85	24	164,4
34	102121555	12/09/2004	6,85	25	85,63*
35	102121555	12/09/2004	6,85	24	82,2*
36	102121555	12/09/2004	6,85	17	58,23*
37	102121555	12/09/2004	6,85	10	34,25*
38	102121555	12/09/2004	6,85	10	34,25*
39	102121555	12/09/2004	6,85	24	164,4
40	102121555	12/09/2004	6,85	18	123,3
41	102121555	12/09/2004	6,85	15	102,75
42	102121555	12/09/2004	6,85	13	89,05
43	102121555	12/09/2004	6,85	11	75,35
44	102121555	12/09/2004	6,85	10	68,5
45	115139826	12/09/2004	6,85	10	68,5
46	115139826	12/09/2004	6,85	4	27,4
47	115139826	12/09/2004	6,85	6	41,1
48	115139826	11/09/2004	6,85	24	164,4

Total : 7350,31

