



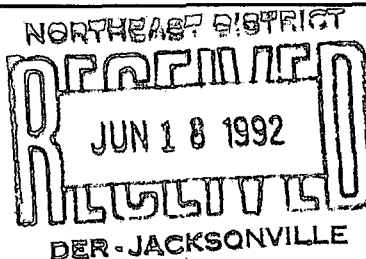
GEOSYNTEC CONSULTANTS

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33628

SC16-184444



9 June 1992

Douglas C. Miller, P.E.
England-Thims & Miller, Inc.
3131 St. Johns Bluff Road
South Jacksonville, Florida 32216

Subject: Installation of Leachate Control Flaps
and Protective Sand Cover Placement for Cell IB
Trail Ridge Landfill, Jacksonville, Florida

Dear Mr. Miller:

GeoSyntec Consultants has completed on-site Construction Quality Assurance (CQA) monitoring services for Cell IB of the Trail Ridge Landfill in Jacksonville, Florida.

CQA services for installation of the geosynthetic lining system components were completed on 2 May 1992. Certification of the lining system installation was provided by GeoSyntec Consultants in the Final CQA Report entitled "Construction Quality Assurance Monitoring of the Geosynthetic Lining System for the Trail Ridge Landfill, Phases 1A and 1B, Jacksonville, Florida". This certification report was dated 11 May 1992.

On the date the Final CQA Report was issued, installation of the leachate control flaps and placement of the 2 ft (0.6 m) thick protective sand cover were not complete. Therefore, these items were not addressed in GeoSyntec Consultants' 11 May Final Report. Installation of the leachate control flaps between Cells IB and IC and Cells IB and IIB are now complete. In addition, placement of the protective sand cover is also complete. This correspondence is to serve as the CQA certification for installation of the leachate control flaps and placement of the protective cover soil layer thereby completing the certification of Cell IB.

Installation of the Cell IB leachate control flaps was completed by NSC on 30 May 1992. GeoSyntec Consultants' CQA services for installation of the leachate control flaps included monitoring of nondestructive tests performed by the National Seal Company (NSC). Vacuum box and spark tests were conducted as part of the nondestructive geomembrane seam testing program. These tests were observed by GeoSyntec Consultants to have been conducted in accordance with the project-specific Quality Assurance

FQ2030-06/Q920252

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Dennis C. Miller, P.E.

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Manual (QA Manual) dated 3 January 1992 and accepted industry practices. GeoSyntec Consultants' Daily Field Reports and CQA Logs documenting the nondestructive testing locations and results are attached.

GeoSyntec Consultants on-site CQA personnel also monitored placement of the protective sand cover in Cell IB. The protective sand cover was placed by the Barco-Duval Company of Jacksonville, Florida. GeoSyntec Consultants closely monitored the protective sand cover placement operations paying close attention to the protection of the underlying geosynthetics. GeoSyntec Consultants was not responsible for verification of the final protective sand cover thickness.

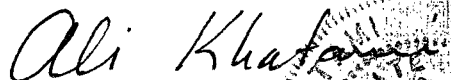
Based on the documented observations of GeoSyntec Consultants' on-site CQA personnel, installation of the leachate control flaps and placement of the protective sand cover in Cell IB of the Trail Ridge Landfill is considered to have been performed in accordance with the project specifications and QA Manual.

If you have any questions concerning this matter, please do not hesitate to contact the undersigned.

Sincerely,

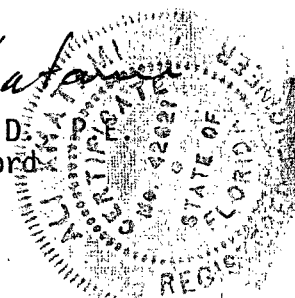


Daniel A. Schauer, P.G.
Project Manager



Ali Khatami, Ph.D.
Engineer of Record

Copy to: Clarke Lundell
Luke DeBock



FQ2030-06/Q920252





GEOSYNTEC CONSULTANTS
Boynton Beach, Florida



Trail Ridge Landfill, Inc.

Daily Field Report

Sheet No. 1 of 1

Project: Trail Ridge Landfill Saturday Phase: I & II
Project No.: FQ2030 Date: (mo/dy) 05-30 Year: 1992
Location: Jacksonville, Florida Contractor: National Seal Company

0700	GEOSYNTEC & N.S.C. ARRIVE ON JOBSITE. SITE CONDITIONS: 68°F, CALM WIND, CLEAR SKY.
0715	N.S.C. PERFORMS EXTRUSION TRIAL WELD TESTS. 3 EXTRUSION GUNNS & 6 TECHNICIANS PASS. N.S.C. INSTALLS THE LAST 250' OF CONTROL FLAP ON SOUTH SIDE OF PHASE 1-C. 2 N.S.C. TECHNICIANS MAKE LAST WELDS TO NORTH END OF PHASE 1-B/2-B CONTROL FLAP AND BOOT AT LEACHATE COLLECTION PIPE PENETRATION THROUGH THE SAME CONTROL FLAP.
0845	GEOSYNTEC MONITORS SPARK TEST AND ⁽¹²⁾ AT INTERSECTION OF CONTROL FLAP AT NORTH-WEST CORNER OF PHASE 1-B. SPARK TEST PASSES AND COMPLETES INSTALLATION OF PHASE 1-B/2-B CONTROL FLAP. GEOSYNTEC MONITORS SPARK TEST ⁽¹³⁾ AT INTERSECTION OF CONTROL FLAPS AND AT SOUTH-WEST CORNER OF PHASE 1-B. NON-DESTRUCTIVE TEST PASSES.
1030	GEOSYNTEC MONITORS SPARK TEST AT PIPE PENETRATION AT LEACHATE COLLECTION TRENCH THROUGH PHASE 1-B/2-B CONTROL FLAP - TEST PASSED
1315	N.S.C. PERFORMS 2 TENSIONMETER TESTS ON EXTRUSION SAMPLES. 1 GUN & 2 TECHNICIANS PASS.
1330	GEOSYNTEC MONITORS NON-DESTRUCTIVE SPARK TEST ON PHASE 1-B SECONDARY RISER PIPE BOOT - TEST PASSED.
1430	PHASE 1-C CONTROL FLAP WAS COMPLETED IN THE MORNING ^{BY 2065 V.BOX.} . N.S.C. TUCKS TEXTILE AROUND POLY-NET AROUND CONTROL FLAP.
1500	N.S.C. DEPLOYS POLY-NET ON SOUTH SIDE OF CONTROL FLAP IN PHASE 1-C AND COMPLETES INSTALLATION OF 1-B/1-C CONTROL FLAP INCLUDING NON-DESTRUCTIVE TEST. (PASS)
1700	N.S.C. STOPS WORK FOR THE DAY AND DEPARTS JOBSITE.

Copy to: Trail Ridge Landfill, Inc. Total Hrs.: 10 hrs Per: JR. Roccapriore



GEOSYNTec CONSULTANTS
Boynton Beach, Florida



Trail Ridge Landfill, Inc.

Daily Field Report

Sheet No. 1 of 1

Project: Trail Ridge Landfill Friday Phase: I & II
Project No.: FQ2030 Date: (moldy) 05-29 Year: 1992
Location: Jacksonville, Florida Contractor: National Seal Company

0700	N.S.C. & GEOSYNTec arrive on jobsite. Site Conditions: wet, calm, light fog, 70°F. The subgrade in Phase 2-A is tacky and not in satisfactory condition to deploy claymax. N.S.C. details Phase 1-B/1-C Tie-in seam and deploy Poly-Net in Phase 1-C.
0800	N.S.C. performs 5 extrusion trial weld tests. 3 extrusion guns and 5 technicians are approved for extrusion welding. 2 technicians work in Phase 2-A extrusion welding repairs to the secondary geomembrane. 2 technicians install the control flap that will separate Phase 1-B from Phase 2-B. The flap is located approximately 15 ft east of the west end of Phase 1-B. N.S.C. installs H.D.P.E. boot on secondary riser pipe of Phase 1-B. Vacuum test of extruded seam along pipe was performed & passed.
1300	Site Conditions: Partly cloudy, calm, 88°F. N.S.C. performs 4 extrusion trial seam tests. 3 guns - 4 technicians pass. N.S.C. continues detailing secondary liner in Phase 2-A. N.S.C. completes Phase 1-B/2-B control flap installation & done non-destructive vacuum box testing - test passes.
1440	Rain begins to fall.
1500	N.S.C. stops work and prepares to depart jobsite.
1515	Rain stops. N.S.C. remains on site to continue installation of control flaps. GEOSYNTec monitors Phase 1-C rain flap installation.
1630	Starts to rain again. N.S.C. stops work & departs job site.
1645	N.S.C. & GEOSYNTec leave site.
7:15 AM	Federal Express Delivery

Copy to: Trail Ridge Landfill, Inc. Total Hrs.: 10 hrs Per: J.P. Roccapriore JP



Daily Field Report

Sheet No.: _____ of _____

Project: Trail Ridge Landfill THURSDAY Phase: I & II

Project No.: FQ2030 Date: (mo/dy) 05-28-92 Year: 1992

Location: *Jacksonville, Florida* **Contractor:** *National Seal Company*

0930 GEOSYNTEC ARRIVES ON TRAILRIDGE JOBSITE. N.S.C. IS DEPLOYING
PRIMARY GEOMEMBRANE AT EAST END OF PHASE I-C.
GEOSYNTEC PREPARES FIELD SKETCHES OF PANEL LAYOUT AND
REPAIR LOCATIONS.

1300	N.S.C. DETAILS PRIMARY LINER DEPLOYED IN THE MORNING.
	GEOSYNTEC MONITORS EXTRUSION WELDING OF REPAIRS AND LOCATES REPAIRS ON FIELD DRAWINGS. N.S.C. COMPLETES CONTROL FLAP AT 1-C/2-C

1600 | LIGHT RAIN FALLS.

1715 DUE TO RAIN WORK STOPS FOR THE DAY. N.S.C. SECURES EQUIPMENT. GEOSYNTEC & N.S.C. DEPART JOBSITE.

+15 min.	FEDERAL EXPRESS DELIVERY OF DESTRUCTIVE TEST SAMPLES.
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NOTE: CONTROL FLAP AND WEST END OF PHASE I-C WAS COMPLETED
IN THE AFTERNOON. VACUUM TEST OF EXTRUSION WELD COMPLETED
ALSO BY OPERATORS 2004 & 2060
FLAP IS LOCATED ON PANEL # P-259 RUNNING NORTH AND SOUTH.

Copy to: Trail Ridge Landfill, Inc. Total Hrs.: 8 Per: J.P. Luccarelli

Date: / /
 YY MM DD

Reviewed by:

Date: / /
 YY MM DD

Project: TRAIL RIDGE

Project/Proposal No.: *F.G.-2030* Task No.: *04*

Phase I & II

Written by: J.P. ROCCAPEDORE Date: / / Reviewed by: / /

Client: W.M.N.A. Project: Trail Ridge Project/Proposal No.: F.Q.#2030 Task No.: 04

Control/Rain Flap Non-Destructive Test Log

Date	Location	Operator	Pass/ Fail	Q.A. I.D.	Remarks
APR 25	CONTROL FLAP BROWN 1-A AND 1-B	P.W.		JR	CONTROL FLAP COMPLETED
APR 26	CONTROL FLAP BROWN 1-A AND 1-B	P.W.	P	SE.B JR	VACUUM TEST COMPLETED
MAY 13	CONTROL FLAP 1-A/1-B MODIFICATION	T.S.	P	JR	VACUUM TEST COMPLETED SOUTH EAST CORNER 1-A
MAY 13	CONTROL FLAP 1-A / 2-A	T.S.	P	JR	CONTROL FLAP COMPLETED NORTH WEST CORNER PHASE 1-A. VACUUM TEST COMPLETED
MAY 28	CONTROL FLAP 1-C / 2-C	2004	P	JR	CONTROL FLAP COMPLETED VACUUM TEST COMPLETED
MAY 29	CONTROL FLAP 1-B / 2-B	T.S. 2036	P	JR	CONTROL FLAP COMPLETED VACUUM TEST COMPLETED
MAY 29	PHASE 1-B BOOT SECONDARY RISER PIPE	2060	P	JR	VACUUM TEST COMPLETED
MAY 30	CONTROL FLAP PHASE 1-C (SOUTH EDGE)	2065	P	JR	CONTROL FLAP COMPLETED VACUUM TEST COMPLETED
MAY 30	CONTROL FLAP PHASE 1-B/1-C	2065	P	JR	CONTROL FLAP COMPLETED VACUUM TEST COMPLETED

