

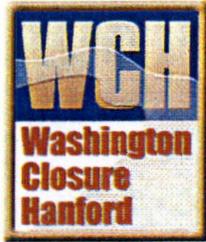
0094055

FINAL REPORT

CONSTRUCTION QUALITY ASSURANCE (CQA)

SECTION

3 OF 20



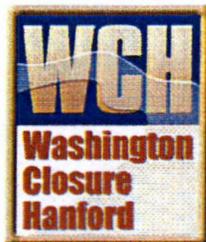
FINAL REPORT
CONSTRUCTION QUALITY ASSURANCE (CQA)
ENVIRONMENTAL RESTORATION DISPOSAL FACILITY (ERDF)
SUPER CELLS 9 & 10
SUBCONTRACT S013213A00
010.032-00-ROB

APPENDIX B.

EVENTS REPORTS

AND

CORRECTIVE ACTIONS



FINAL REPORT
CONSTRUCTION QUALITY ASSURANCE (CQA)
ENVIRONMENTAL RESTORATION DISPOSAL FACILITY (ERDF)
SUPER CELLS 9 & 10
SUBCONTRACT S013213A00
010.032-00-ROB

B.1

SUPPLIER DEVIATION DISPOSITION REPORTS

SUPPLIER DEVIATION DISPOSITION REQUEST LOG (SDDR'S)

Subcontract No: S013213A00 ERDF Cells 9 & 10 CQA

Subcontractor: Envirotech Engineering and Consulting

WCH SDDR No. S013213A00-	EEC SDDR #	Description	Date WCH Received	Disposition		
				Date	Drawing Rev/DCN/Spec. No.	Completion Date
001	001	Request to change 0600XSP-C-0077, Rev. 1 to accommodate current length of geomembrane rolls. Therefore, change length from 492 LF to 540LF.	8/14/2010	Accepted 8/21/10	DCN 0600X-SP-C0077, 01-03, CN-017 written by C. Skiba	12/21/2010
002	002	Accept deviation on acceptance of sand cone verification vs nuclear gauge for material	7/15/2010	Accepted 8/9/10	0600X-QA-G0005	8/11/2010
003	003	Envirotech technician failed to weigh sand cone thus voiding test. Accept historical and process knowledge information	7/15/2010	Accepted 8/11/10	0600X-QA-G0005	8/11/2010
004	004	Accept deviation on acceptance of sand cone verification vs nuclear gauge for material	8/11/2010	Accepted 8/12/10	0600X-QA-G0005	8/12/2010
005	005	CQA did not meet requirements of Troxler Daily Calibration 8/7/10	8/19/2010	Accepted 8/30/10	N/A	8/30/2010
006	006	Anchor Trench Density Testing	10/11/2010	Accepted 10/25/10	0600X-SP-C0075 Sect.3.11.3	10/25/2010
007	007	CQA did not meet requirements of Troxler Daily Calibration 10/11/10	10/18/2010	Accepted 10/25/10	N/A	10/25/2010

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No	Date Submitted	Project S013213A00	WCH SDDR No
SDDR-1	6/14/10	Job No	Date Received
1 Supplier Name		Address	
Envirotech Engineering and Consulting		2500 N. 11th Street	
		City State & Zip	
		Enid, OK 73701	
2 Supplier's Order No	3 Supplier's Part No	4 Supplier's Part Name	5 Deviation Detected (Date & Method)
N/A	N/A	N/A	N/A
7 WCH P.O. & Rev No	8 WCH MR No (Part Item Rev etc)	9 WCH Part Name	10 WCH PQAR Notified (Date & Method)
N/A	N/A	N/A	6/10/10 - Verbal
6. All Previous SDDR (Date & Details)			
N/A			
11 WCH Eng. Notified (Date/Method)			
6/10/10 - Verbal			
12 Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial No.'s as applicable). COA requests a change in the geosynthetic's specification 0600X-SP-C0077 Section 3.5.3.2 Geomembrane Seam Testing / Destructive Seam Strength Testing / Location and Frequency. The section indicates "Sampling frequency shall be a minimum of one sample per 492 feet of seam length per welding machine per day (this minimum frequency shall be determined as an average taken from the panels, including welds for caps), or a minimum of two samples per factory panel whichever gives the largest number of samples." COA requests modifying the seam length to 540-ft.			
13 Supplier's Proposed Disposition Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14 Cost Impact -		15 Schedule Impact -	
16 Proposed Disposition and Technical (plus Cost/Schedule, if applicable) Justification. Attach extra sheets, sketches, etc. as necessary. The panel lengths for this project were specifically modified from the standard 500-ft lengths to 540-ft, which was the assumed standard when the specification was written. This causes COA to gather up to four (4) destructs per panel placed, which is excessive. The intent of CQC/COA is to provide a quality product through adequate testing, removing/replacing damaging subgrade, minimizing cuts to the liner, and minimizing installation damage. By adding 50-ft of length to the frequency, a significant number of cuts to the liner can be removed.			
17 Associated Supplier Document Change(s)			
18 Supplier's Authorized Representative			
Name <u>JOSEPH E VOSS</u>		Signature <u>[Signature]</u>	
Title <u>COA Engineer</u>		Date <u>6/14/10</u>	
19 WCH Engineering Action	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change
	<input checked="" type="checkbox"/> Accepted	<input checked="" type="checkbox"/> Spec/Req Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment
<input type="checkbox"/> Rejected	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20 WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc. as necessary)			
<u>WCH accepts the proposed disposition and will revise the spec accordingly. See Attached</u>			
21 WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM <u>C.V. SKIBA / [Signature]</u> For <u>N.F. MELVIN</u>		Date <u>12-22-10</u>	
PE/SE <u>[Signature]</u>		Date <u>12-22-10</u>	
22 Supplier <u>[Signature]</u>		Date <u>12/22/10</u>	
23 WCH PQAR		Date	

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WCH

Sampling frequency shall be a minimum of one sample per ⁵⁰⁰~~100~~ feet of seam length per ^{welder per welding}~~welding~~ machine per day (this minimum frequency shall be determined as an average taken from the panels, including welds for caps), or a minimum of two samples per factory panel, whichever gives the largest number of samples. This frequency may be increased at the discretion of the CQA Subcontractor or CONTRACTOR.

3.5.3.3 Sampling Procedures. Samples shall be cut by the SUBCONTRACTOR as the seaming progresses to provide laboratory test results before completion of installation. The SUBCONTRACTOR shall assign a number to each sample, mark it accordingly, and record the sample location on the layout drawing.

Holes in the geomembrane resulting from destructive seam sampling shall be immediately repaired in accordance with repair procedures. The continuity of the new seams in the repaired area shall be tested as described in this Technical Specification.

3.5.3.4 Sample Size. The samples shall be 12 inches wide by 42 inches long with the seam centered lengthwise. One 1 inch wide strip shall be cut from each end of the samples, and these shall be tested in the field as described below. The remaining sample shall be cut into three parts and distributed as follows:

- a. One portion to the SUBCONTRACTOR for testing at his discretion, 12 inches x 12 inches.
- b. One portion to the CONTRACTOR for archive storage, 12 inches x 12 inches.
- c. One portion to the CQA Subcontractor for testing, 12 inches x 16 inches.

3.5.3.5 Field Testing. The two 1 inch wide strips described above shall be tested in the field by tensiometer for peel and shear and shall not fail in the seam. If any test sample fails to pass, then the procedures outlined below (Procedures for Destructive Test Failure) shall be followed.

The CQA Subcontractor will mark samples and portions with their number. The CQA Subcontractor will also record the date and time, ambient temperature, number of seaming unit, name of seamer, welding apparatus temperatures and pressures, and pass or fail descriptions, and attach a copy to each sample portion.

3.5.3.6 Procedures for Areas Failing Destructive Tests. The following procedures shall apply whenever a sample fails a destructive test, whether that test is conducted by the CQA Laboratory, the SUBCONTRACTOR's laboratory, or by field tensiometer. The SUBCONTRACTOR has two options:

- a. Cap the seam or replace the seam between any two passing test locations, or
- b. Trace the seam to two intermediate locations 10 feet minimum from the point of the failed test in each direction and take a small sample for an additional field test

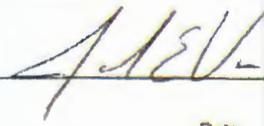
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No	Date Submitted	Project S013213A00	WCH SDDR No
SDDR-2	7/15/10	Job No 14655	SC13213A00-100
1 Supplier Name		Date Received	
Envirotech Engineering and Consulting		7/13/10	
Address		City State & Zip	
2500 N 11th Street		Enid, OK 73701	
2 Supplier's Order No	3 Supplier's Part No	4 Supplier's Part Name	5 Deviation Detected (Date & Method)
N/A	N/A	N/A	N/A
6 All Previous SDDR (No's & Dates)	N/A		
7 WCH P O & Rev No	8 WCH MR No (Part Item Tag, etc.)	9 WCH Part Name	10 WCH PQAR Notified (Date & Method)
N/A	N/A	N/A	5/11/10 & 6/1/10 - Verbal
11 WCH Eng. Notified (Date/Method)			
N/A			
12 Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial No.'s as applicable). CQA did not meet the requirements of the construction specification 0600X-QA-G0005 by failing to conduct one (1) sand cone test per shift for Troxler gauge verification on the days of 5/10/10 and 5/27/10.			
13 Supplier's Proposed Disposition			
Use As-Is <input checked="" type="checkbox"/>		Repair <input type="checkbox"/>	
		Modify WCH Requirement <input type="checkbox"/>	
14. Cost Impact -		15. Schedule Impact -	
16 Proposed Disposition and Technical (plus Cost/Schedule, if applicable) Justification Attach extra sheets, sketches, etc. as necessary On both days sand cones were performed to verify the calibration of the Troxler moisture density gauge, however, the sand cones were performed on sand fill part of the embankments. While this does not meet the required testing in table 4-1.2 in the CQA plan, the Troxler device was compared to a sand cone on the days of operation.			
17 Associated Supplier Document Change(s)			
18 Supplier's Authorized Representative:			
Name <u>Joseph Voss</u>		Signature <u>[Signature]</u>	
Title <u>CQA Engineer</u>		Date <u>7/15/10</u>	
19 WCH Engineering Action	Engineering Action	Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	Licensing Document Change <input type="checkbox"/>
<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Spec/Req Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment	
<input type="checkbox"/> Rejected	Follow-Up <input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other	
20. WCH Disposition Statement including Justification (Attach extra sheets sketches etc. as necessary) <u>WCH accepts the proposed disposition to "use as-is"</u>			
21 WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM <u>[Signature]</u>		Date <u>7/10/10</u>	
PE/SE <u>[Signature]</u>		Date <u>8/9/10</u>	
22 Supplier <u>[Signature]</u>		Date <u>8/11/10</u>	
23 WCH PQAR		Date	

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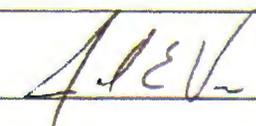
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No	Date Submitted	Project: S013213A00	WCH SDDR No
SDDR-2	7/15/10	Job No: 14655	5013213A00-000
1 Supplier Name		Date Received	
Envirotech Engineering and Consulting		7/15/10	
Address		City State & Zip	
2500 N. 11th Street		Enid, OK 73701	
2. Supplier's Order No	3. Supplier's Part No	4. Supplier's Part Name	5. Deviation Detected (Date & Method)
N/A	N/A	N/A	N/A
6. All Previous SDDR (No's & Dates)	N/A		
7. WCH P.O. & Rev. No	8. WCH MR No. (part item tag, etc.)	9. WCH Part Name	10. WCH PQAR Notified (Date & Method)
N/A	N/A	N/A	5/11/10 & 6/1/10 - Verbal
11. WCH Eng. Notified (Date/Method)			
N/A			
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). CQA did not meet the requirements of the construction specification 0600X-QA-G0005 by failing to conduct one (1) sand cone test per shift for Troxler gauge verification on the days of 5/10/10 and 5/27/10.			
13. Supplier's Proposed Disposition			
Use As-Is		<input checked="" type="checkbox"/> Repair	<input type="checkbox"/> Modify WCH Requirement
14. Cost Impact -		15. Schedule Impact -	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. On both days, sand cones were performed to verify the calibration of the Troxler moisture density gauge, however, the sand cones were performed on sand fill part of the embankments. While this does not meet the required testing in table 4-1.2 in the CQA plan, the Troxler device was compared to a sand cone on the days of operation.			
17. Associated Supplier Document Change(s)			
18. Supplier's Authorized Representative.			
Name: Joseph Voss		Signature: 	
Title: CQA Engineer		Date: 7/15/10	
19. WCH Engineering Action:			
<input type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change
<input type="checkbox"/> Rejected		<input type="checkbox"/> Spec/Req Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment
	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20. WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc., as necessary)			
21. WCH Disposition Approval/Signature			
FM _____		Date _____	
PE/SE _____		Date _____	
22. Supplier _____		Date _____	
23. WCH PQAR _____		Date _____	

COMPLETED BY SUPPLIER

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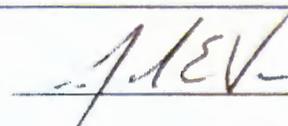
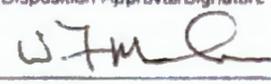
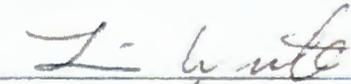
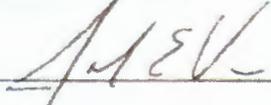
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No	Date Submitted	Project S013213A00	WCH SDDR No
SDDR-3	7/15/10	Job No. 14655	S013213A00-003
1. Supplier Name		Address	
Envirotech Engineering and Consulting		2500 N 11th Street	
		City, State & Zip	
		Enid, OK 73701	
2 Supplier's Order No.	3 Supplier's Part No.	4 Supplier's Part Name	5 Deviation Detected (Date & Method)
N/A	N/A	N/A	N/A
6 All Previous SDDR (No's & Dates)	7 WCH P.O. & Rev. No.		8 WCH MR No (part, item, tag, etc.)
N/A	N/A		N/A
9 WCH Part Name		10 WCH POAR Notified (Date & Method)	
N/A		6/22/10 - Verbal	
11 WCH Eng. Notified (Date/Method)		12 Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial No.'s as applicable). CQA did not meet the requirements of the construction specification 0600X-QA-G0005 by failing to conduct one (1) sand cone test per shift for Troxler gauge verification on the days of 6/18/10	
N/A			
13 Supplier's Proposed Disposition			
Use As-Is <input type="checkbox"/> Repair <input checked="" type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>			
14. Cost Impact -		15. Schedule Impact -	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable) Justification: Attach extra sheets, sketches, etc. as necessary. A sand cone was performed on the day of 6/18/10, however, the sand cone was not weighed when empty. Sand cone tests prior to the event and following the event compare favorable with the Troxler results. In addition, standard counts of the Troxler device show no interrupt in the calibration of the device in this time period. Give the sizable amount of data supporting the Troxler continuing to act within calibration limits. CQA suggests a use-as-is disposition.			
17 Associated Supplier Document Change(s)			
18. Supplier's Authorized Representative			
Name Joseph Voss		Signature 	
Title CQA Engineer		Date 7/15/10	
19 WCH Engineering Action			
<input type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change
<input type="checkbox"/> Rejected		<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment
	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20 WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			
21 WCH Disposition Approval/Signature			
FM _____		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
PE/SE _____		Date _____	
22 Supplier _____		Date _____	
23 WCH POAR _____		Date _____	

COMPLETED BY SUPPLIER

WCH

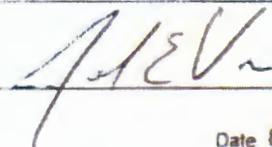
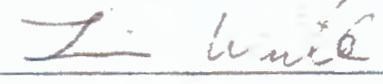
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No SDDR-4	Date Submitted 8/10/10	Project S013213A00	WCH SDDR No 004
		Job No.	Date Received 8-11-10
1 Supplier Name Envirotech Engineering and Consulting		Address 2500 N 11th Street	City State & Zip Enid, OK 73701
2 Supplier's Order No N/A	3 Supplier's Part No N/A	4 Supplier's Part Name N/A	5 Deviation Detected (Date & Method) N/A
6 All Previous SDDR (Nos & Dates) N/A			
7 WCH P O & Rev No N/A	8 WCH MR No. (part term, tag, etc) N/A	9 WCH Part Name N/A	10 WCH PQAR Notified (Date & Method) 8/3/10 Verbal
11 WCH Eng. Notified (Date/Method) 8/10/10			
12 Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable) COA did not meet the requirements of the construction specification 0600X-QA-G0005 by failing to conduct one (1) sand cone test per shift for Troxler gauge verification on the days of 8/18/10			
13. Supplier's Proposed Disposition Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>			
14. Cost Impact -		15. Schedule Impact -	
16. Proposed Disposition and Technical (plus Cost/Schedule if applicable) Justification Attach extra sheets, sketches, etc., as necessary. A sand cone was performed on the day of 8/21/10 however, the oven dried sample was not weighed prior to disposal. Sand cone tests prior to the event and following the event compare favorable with the Troxler results. Standard counts of the Troxler device show no interrupt in the calibration of the device in this time period. Give the sizable amount of data supporting the Troxler continuing to act within calibration limits. COA suggests a use-as-is disposition. In addition, COA has held a corrective action meeting to discuss previous sand cone failures and to assign specific job tasks.			
17. Associated Supplier Document Change(s).			
18. Supplier's Authorized Representative: Name Joseph Voss Signature  Title CQA Engineer Date 8/10/10			
19. WCH Engineering Action		Engineering Action	
<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change	
<input type="checkbox"/> Rejected	<input type="checkbox"/> Spec/Req Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment	
Follow-Up		<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20. WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc. as necessary) WCH accepts the proposed disposition to use "as-is"			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM 			Date 8/12/10
PE/SE 			Date 8/11/10
22. Supplier 			Date
23. WCH PQAR			Date

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No	Date Submitted	Project S013213A00	WCH SDDR No
SDDR-5	8/18/10	Job No	S013213A00-005
1. Supplier Name		Date Received	
Envirotech Engineering and Consulting		8/19/10	
Address		City, State & Zip	
2500 N 11th Street		Enid OK 73701	
2. Supplier's Order No	3. Supplier's Part No	4. Supplier's Part Name	5. Deviation Detected (Date & Method)
N/A	N/A	N/A	N/A
6. All Previous SDDR (No's & Dates)	N/A		
7. WCH P.O. & Rev No	8. WCH MR No (part num tag, etc.)	9. WCH Part Name	10. WCH POAR Notified (Date & Method)
N/A	N/A	N/A	8/18/10 - SDDR
11. WCH Eng. Notified (Date/Method)			
8/18/10			
12. Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial No.'s as applicable) CQA did not meet the requirements of Troxler Daily Calibration the day of Saturday 8/7/10. The gauge dry density standard count was out of calibration by few of numbers, however, due to a miscalculation by the technician the gauge was thought to be within calibration. The gauge was utilized to perform sixteen (16) test the day of 8/7/10.			
13. Supplier's Proposed Disposition			
Use As-Is <input checked="" type="checkbox"/>		Repair <input type="checkbox"/>	
		Modify WCH Requirement <input type="checkbox"/>	
14. Cost Impact -		15. Schedule Impact -	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable): Justification. Attach extra sheets, sketches, etc., as necessary. See attached sheet.			
17. Associated Supplier Document Change(s)			
18. Supplier's Authorized Representative			
Name <u>Joseph Voss</u>		Signature 	
Title <u>CQA Engineer</u>		Date <u>8/18/10</u>	
19. WCH Engineering Action			
<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change
		<input type="checkbox"/> Spec/Req Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment
<input type="checkbox"/> Rejected	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20. WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc. as necessary) <u>WCH Accepts the suppliers proposed disposition to "use as is"</u>			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM		Date	<u>8/30/10</u>
PE/SE		Date	<u>8/30/10</u>
22. Supplier		Date	<u>8/30/10</u>
23. WCH POAR		Date	

COMPLETED BY SUPPLIER

WCH

SDDR-5
S013213A00



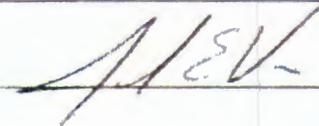
Justification

The gauge is within Troxler calibration limits. Daily calibration is based upon the last 3 readings of the Troxler unit. Dry density standard counts from both before and after 8/7/10 indicate the gauge is functioning properly.

The dry density reading from 8/7/10 was within the normal acceptable "window" of readings; however, the standard count the day before, 8/6/10, shifted the acceptable window slightly higher, pulling the reading from 8/7/10 just outside of acceptable. If the number from 8/6/10 was not calculated, the dry density standard count would have been acceptable. The margin of failure on the calibration is relatively small; therefore, due to the large number of acceptable readings, and the relative proximity of the reading to the acceptable range of dry density standard counts, CQA recommends a use-as-is.

As a corrective action, the CQA engineer shall have a meeting with all technicians reviewing the standard count calculation. In addition, all standard counts shall be double checked by a second technician/CQA staff member.

SUPPLIER DEVIATION DISPOSITION REQUEST

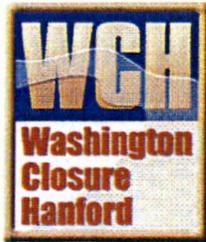
FOR SUPPLIER USE			FOR WCH USE	
Supplier SDDR No	Date Submitted	Project S013213A00	WCH SDDR No	Date Received
SDDR-06	10/11/10	Job No	006	10-12-10
1 Supplier Name		Address		City, State & Zip
Envirotech Engineering and Consulting		2500 N 11th Street		Enid, OK 73701
2 Supplier's Order No	3 Supplier's Part No	4 Supplier's Part Name	5 Deviation Detected <small>(Date & Method)</small>	6 All Previous SDDR <small>(Nos & Dates)</small>
N/A	N/A	N/A	N/A	N/A
7 WCH P O & Rev No	8 WCH MR No <small>(part item tag etc.)</small>	9 WCH Part Name	10 WCH PQAR Notified <small>(Date & Method)</small>	11 WCH Eng. Notified <small>(Date/Method)</small>
N/A	N/A	N/A	10/11/10	10/11/10
12 Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). COA requests a deviation/change from the construction quality assurance plan 0600X-QA-G005 Table 4-1.5 Anchor Trench/Side Slope Riser Pipe Trench. COA requests that In-place Density (D6938) be removed as a test for anchor trenches, or the words anchor trench be removed from the title.				
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>				
14. Cost Impact: -			15. Schedule Impact: -	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. According to 0600X-SP-C0075 Section 3.11.3 Fill for Anchor Trenches, the anchor trench has no associated end specification for compaction. The specification is a methodology specification, and COA can verify this specification with observation as outlined in 0600X-QA-G005 Section 4.5.1				
17. Associated Supplier Document Change(s)		0600X-QA-G005		
18. Supplier's Authorized Representative:				
Name <u>Joseph Voss</u>		Signature 		
Title <u>COA ENGINEER</u>		Date <u>10/11/10</u>		
COMPLETED BY SUPPLIER	19. WCH Engineering Action			
	<input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) Follow-Up <input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment <input type="checkbox"/> Other	
WCH	20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			
	WCH accepts the deletion of the compaction testing of the Anchor Trench. COA is directed to observe and note the Compaction Methodology to be included in the appropriate reports			
	21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	FM <u>W. F. Mahan</u>	Date <u>10/26/10</u>		
PE/SE <u>L. W. Wile</u>	Date <u>10/25/10</u>			
22. Supplier	Date			
23. WCH PQAR	Date			

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE	
Supplier SDDR No	Date Submitted	Project S013213A00	WCH SDDR No	Date Received
SDDR-07	10/18/10	Job No	S013213A00-007	10-18-10
1 Supplier Name		Address		City State & Zip
Envirotech Engineering and Consulting		2500 N 11th Street		Enid, OK 73701
2. Supplier's Order No	3 Supplier's Part No	4. Supplier's Part Name	5 Deviation Detected (Date & Method)	6 All Previous SDDR (No's & Dates)
N/A	N/A	N/A	N/A	N/A
7 WCH P O & Rev No	8 WCH MR No (part item tag etc.)	9. WCH Part Name	10. WCH POAR Notified (Date & Method)	11. WCH Eng Notified (Date/Method)
N/A	N/A	N/A	10/13/10	10/13/10
12. Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial No.'s as applicable) COA did not meet the requirements of Troxler Daily Calibration the day of Monday October 11, 2010. The gauge dry density standard count was out of calibration by few of numbers due to a miscalculation by the technician. The gauge was thought to be within calibration. The gauge was utilized to perform ten (10) tests that day on the Tank 4 ring wall backfill.				
13. Supplier's Proposed Disposition Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>				
14. Cost Impact -		15. Schedule Impact -		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc. as necessary. The gauge moisture count was slightly off due to the low temperatures experienced in the morning hours. Since the gauge was only off by a couple of numbers, and subsequent tests show the gauge within calibration, it is believed that the gauge readings were correct the day of the testing. In addition, COC results corroborate COA testing on the tank 4 ring wall. From this point forward, all gauge calibrations shall be conducted by the COA engineer prior to gauge usage.				
17. Associated Supplier Document Change(s)				
18. Supplier's Authorized Representative				
Name: <u>Joseph V. V...</u>		Signature: <u>[Signature]</u>		
Title: <u>COA Engineer</u>		Date: _____		
19. WCH Engineering Action				
<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change	
		<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment	
<input type="checkbox"/> Rejected	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other	
20. WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc. as necessary) <u>WCH accepts the proposed disposition.</u>				
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No				
FM: <u>[Signature]</u>		Date: <u>10/26/10</u>		
PE/SE: <u>[Signature]</u>		Date: <u>10/25/10</u>		
22. Supplier _____		Date _____		
23. WCH POAR _____		Date _____		

COMPLETED BY SUPPLIER

WCH

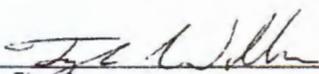
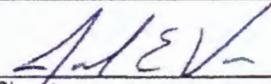
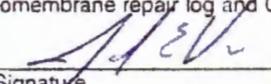
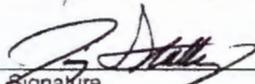


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010.032-00-ROB

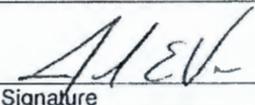
B.2

NON-CONFORMANCE REPORTING DOCUMENTATION

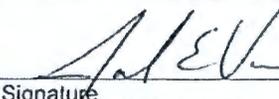
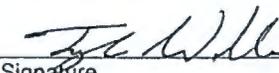
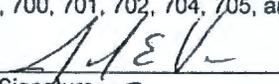
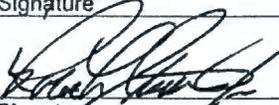
Envirotech Nonconformance Report Form

NCR No NCR-ERDF 9/10 - 01	Project: Hanford	Date: 9/3/10
Item/Part: CQA secondary geomembrane logs	Serial/Lot No. N/A	Supplier: N/A
<p>Nonconforming Condition: CQA missed identifying and logging a repair in the Cell 9 sump. The hole left in the secondary geomembrane allowed for storm water to be introduced under the secondary geomembrane in the Cell 9 sump. The hole occurred during the first repair of the Cell 9 sump. The secondary geocomposite was folded back and a hole was cut in the secondary geomembrane to inspect the subgrade for moisture. After finding no evidence of moisture, secondary geocomposite was replaced over the secondary geomembrane. The repair location was not logged by the CQA liner lead.</p>		
<p>Referenced Inspection/Calibration Reports: The CQA secondary geomembrane repair log, The CQA geomembrane installation procedure</p>		
<p>Reported By: Tyler Williams</p>		
Name		Date
	Signature	Date
<p>Validated By/Reported to: Joseph E Voss</p>		
Name		Date
	Signature	Date
<p>Disposition: <input type="checkbox"/> Rework <input type="checkbox"/> Repair <input type="checkbox"/> Reject <input checked="" type="checkbox"/> Use As-Is</p>		
<p>The hole in the secondary geomembrane was identified and repaired. A corrective action plan was initiated in response to this NCR. see Corrective Action Report</p>		
<p>Affected Documents: CQA secondary geomembrane repair log and CQA geomembrane inspection procedures</p>		
<p>Joseph E Voss</p>		
Name		Date
	Signature	Date
<p>Concurrence: Jimmy Stallings</p>		
Name		Date
	Signature	Date
<p>Re-work / Repair:</p>		
<p>Rejected Materials Disposition: Re-inspection Results</p>		
	<input type="checkbox"/> Unsatisfactory	<input type="checkbox"/> Satisfactory
<p>Verification of Disposition:</p>		
Name	Signature	Date

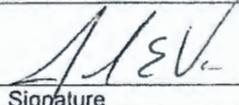
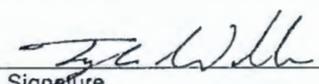
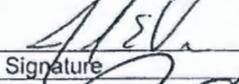
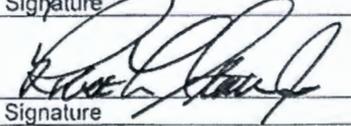
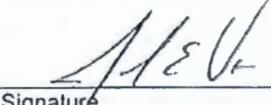
Envirotech Nonconformance Report Form

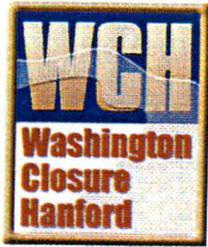
NCR No. NCR-ERDF 9/10 - 02	Project: Hanford	Date: 11/8/10
Item/Part: CQA geomembrane liner survey as-built	Serial/Lot No. N/A	Supplier: N/A
Nonconforming Condition: CQA surveyors did not accurately survey and record all repair locations on the secondary and primary geomembrane.		
Referenced Inspection/Calibration Reports: As defined by Exhibit D 2.1.9.2 – In the CQA as-built surveys, no repair location information exists for SR-163, SR-293, SR-326, SR-333, and SR-334 as well as PR-90, PR-113, PR-146, and PR-147.		
Reported By: Joseph Voss		
Name	 Signature	11/8/10 Date
Validated By/Reported to: Tyler Williams		
Name	 Signature	11-8-10 Date
Disposition: <input type="checkbox"/> Rework <input type="checkbox"/> Repair <input type="checkbox"/> Reject <input type="checkbox"/> Use As-Is		
Affected Documents:		
Name	Signature	Date
Concurrence:		
Name	Signature	Date
Re-work / Repair:		
Rejected Materials Disposition:	Re-inspection Results <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory	
Verification of Disposition:		
Name	Signature	Date

Envirotech Nonconformance Report Form

NCR No. NCR-ERDF 9/10 - 02	Project: Hanford	Date: 11/8/10
Item/Part: CQA geomembrane liner survey as-built	Serial/Lot No. N/A	Supplier: N/A
Nonconforming Condition: CQA surveyors did not accurately survey and record all repair locations on the secondary and primary geomembrane.		
Referenced Inspection/Calibration Reports: As defined by Exhibit D 2.1.9.2 – In the CQA as-built surveys, no repair location information exists for SR-163, SR-293, SR-326, SR-333, and SR-334 as well as PR-90, PR-113, PR-146, and PR-147.		
Reported By: Joseph Voss		
Name	 Signature	11/8/10 Date
Validated By/Reported to: Tyler Williams		
Name	 Signature	11-8-10 Date
Disposition: <input checked="" type="checkbox"/> Rework <input type="checkbox"/> Repair <input type="checkbox"/> Reject <input type="checkbox"/> Use As-Is		
The CQA geosynthetic lead and the CQC liner technician both accurately recorded the location of the repairs though the use of field stationing based on the panel layout, which was surveyed by the CQA surveyors. The sheets will be updated with the repair locations based upon work by the CQC liner technician and CQA geosynthetic lead.		
Affected Documents: 0600X-DD-CO699, 700, 701, 702, 704, 705, and 706		
Joseph Voss		
Name	 Signature	11/8/10 Date
Concurrence: Robert Stallings		
Name	 Signature	11/8/10 Date
Re-work / Repair:		
Rejected Materials Disposition:	Re-inspection Results <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory	
Verification of Disposition:		
Name	Signature	Date

Envirotech Nonconformance Report Form

NCR No. NCR-ERDF 9/10 - 02	Project: Hanford	Date: 11/8/10
Item/Part: CQA geomembrane liner survey as-built	Serial/Lot No. N/A	Supplier: N/A
Nonconforming Condition: CQA surveyors did not accurately survey and record all repair locations on the secondary and primary geomembrane.		
Referenced Inspection/Calibration Reports: As defined by Exhibit D 2.1.9.2 – In the CQA as-built surveys, no repair location information exists for SR-163, SR-293, SR-326, SR-333, and SR-334 as well as PR-90, PR-113, PR-146, and PR-147.		
Reported By: Joseph Voss		
_____		11/8/10
Name	Signature	Date
Validated By/Reported to: Tyler Williams		
_____		11-8-2010
Name	Signature	Date
Disposition: <input checked="" type="checkbox"/> Rework <input type="checkbox"/> Repair <input type="checkbox"/> Reject <input type="checkbox"/> Use As-Is		
The CQA geosynthetic lead and the CQC liner technician both accurately recorded the location of the repairs though the use of field stationing based on the panel layout, which was surveyed by the CQA surveyors. The sheets will be updated with the repair locations based upon work by the CQC liner technician and CQA geosynthetic lead. Affected Documents: 0600X-DD-CO699, 700, 701, 702, 704, 705, and 706		
Joseph Voss		
_____		11/8/10
Name	Signature	Date
Concurrence: Robert Stallings		
_____		11/8/10
Name	Signature	Date
Re-work / Repair: CQA engineer and the CQA surveyor located the repairs on the as-built drawings. The locations were then assigned a northing and easting based upon surveyed seam locations and field stationing data.		
Rejected Materials Disposition:	Re-inspection Results	
	<input type="checkbox"/> Unsatisfactory <input checked="" type="checkbox"/> Satisfactory	
Verification of Disposition: Joseph Voss		
_____		11/8/10
Name	Signature	Date



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010.032-00-ROB

B.3

SUPER CELL 9 SUMP REPAIR REPORT

Cell 9 Sump Repair

The repair was accomplished by removing the overlying layers and exposing the admix surface. This surface was repaired, and then the overlying layers replaced. The initial steps involved with repairing the Cell 9 sump included:

- Removing the storm water from the Cell 9 sump and floor,
- Removing the secondary geomembrane on the floor of Cell 9 and exposing the underlying admix. In addition, part of the secondary geomembrane removed will provide an equipment entry corridor to allow access to the Cell 9 sump.
- Removing the drainage gravel, secondary geocomposite, and secondary geomembrane in the Cell 9 sump.
- Repairing the admix soil in the Cell 9 sump.
- Deploying secondary geomembrane and secondary geocomposite in the Cell 9 sump.
- Replacing and grading the Type B drainage gravel in the Cell 9 sump.
- After the construction equipment left the Cell 9 sump, and the admix on the Cell 9 floor was repaired,
- And the secondary geomembrane on the Cell 9 floor replaced.

The following account is a day-by-day account of the events leading up to and encompassing the Cell 9 Sump repair performed between Thursday, July 29th, 2010 and August 11th, 2010.

Thursday, July 29th 2010 – Earlier in the week, ESI (Environmental Specialties International) cut panel S-59 next to the Cell 9 sump in order to allow payhauler trucks better access to the sump. The hole created was approximately 8-ft wide by 70-ft long. On Thursday, July 29th, TWS (Tradewind Services) completed repairing the admix material that had been damaged from the passage of Payhauler trucks transporting Type B drainage gravel to the Cell 9 sump. The construction water associated with the admix repair collected in the panel S-59 cut, resulting in admix that was not suitable for secondary geomembrane placement. ESI chose to deploy secondary geomembrane panels to the east of panel S-59, creating a hole in the secondary geomembrane. ESI chose not to repair panel S-59, leaving the admix under panel S-59 exposed overnight.

Friday, July 30th, 2010 – During the morning hours, a rain storm with lightning delayed the start of construction activities until approximately 8:10. Cells 9 and 10 sumps were half filled with storm water and the section of admix left exposed on panel S-59 also collected storm water. Upon CQA (Construction Quality Assurance – ENVIROTECH) inspection, it was observed that no storm water from the storm penetrated under the secondary geomembrane. By the end of the day, the admix in the panel S-59 gap was not sufficiently repaired to allow secondary geomembrane deployment. CQA did not approve the admix subgrade for secondary geomembrane placement. ESI chose to leave the admix exposed to facilitate drying.

Saturday, July 31st, 2010 – On Saturday morning, the site received approximately 0.42-in of rain. As a result the storm water flooded the Cell 9 sump and the water level rose over the exposed portion of panel S-59. This resulted in Storm water being introduced under the secondary geomembrane.

Monday, August 2nd, 2010 – TWS was observed working on pumping the storm water from the Cell 9 sump.

Tuesday, August 3rd, 2010 – CQA observed TWS continuing to pump the storm water from the Cell 9 sump. Near the middle of the day, TWS decided to leister a patch over the exposed area of secondary panel S-59 as a temporary seal in the event additional rain fell.

Wednesday, August 4th, 2010 –TWS was observed continuing to pump the storm water from the Cell 9 sump. Dave Einan with EPA and Owen Robertson with DOE were on-site to survey the damage to the Cell 9 sump and discuss repair details. ESI cut holes in the secondary geomembrane in the Cell 9 sump to release the water trapped under the Cell 9 secondary geomembrane.

Thursday, August 5th, 2010 – ESI cut and removed or peeled back the secondary geomembrane in the Cell 9 sump to expose the underlying admix material. The geomembrane was cut on the floor of Cell 9 up to the limits of sump, but not in the sump. In addition, ESI cut and peeled back an entry corridor from the east end of the sump to allow for equipment access.

Friday, August 6th, 2010 – CQA observed TWS utilizing the CAT 312 excavator to remove the Type B drainage gravel from the Cell 9 secondary sump. Approximately 75% of the gravel in the sump was removed from the east side and center of the Cell 9 sump and stockpiled to the west and east of the sump. As the gravel was removed, the underlying geosynthetic was removed in order to expose the admix surface. Parts of the underlying admix surface were saturated with water. TWS laborers removed the excess water and saturated admix. The admix was left exposed to dry overnight.

Saturday, August 7th, 2010 –CQA observed TWS and ESI restoring the Cell 9 sump. The admix surface dried overnight to a mostly unsaturated condition, with only small pockets of saturated admix. CQA witnessed TWS replacing the saturated admix and regrading the admix surface with hand tools. CQA then observed TWS utilizing the double smooth drum roller to finish and seal the entire exposed admix surface. CQA tested and verified that the repaired admix met construction specifications. See Submittal 5-18J for more information. Stratton Survey was on-site to verify that the admix surface was built as per the design drawings.

CQA observed ESI deploying five (5) secondary geomembrane panels, S-67 thru S-72, in the Cell 9 sump. The first panel was deployed under the Cell 9 riser pipes along with the secondary geocomposite. The subsequent panels were placed to the east and west of panel S-67. The panels were fusion welded together with the double wedge welder. A large triangular section of secondary panels were removed when the Cell 9 floor was opened up for drying. CQA witnessed ESI double wedge welding the panel back into the same location. In addition, CQA observed ESI conducting repairs to the deployed secondary geomembrane as necessary. After the welding and repairs were completed, CQA witnessed ESI performing air and vacuum testing on the deployed secondary geomembrane.

Monday, August 9th, 2010 – CQA observed ESI completing the repairs for the secondary geomembrane in Cell 9. CQA witnessed ESI completing air and vacuum testing on the secondary geomembrane repair in Cell 9. In addition, the CQA surveyors completed a survey of the repair area.

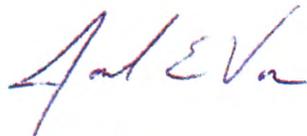
After the testing and survey was complete, CQA observed ESI placing two (2) new rolls of secondary geocomposite into the Cell 9 sump. CQA verified that the geocomposite panels on the floor were intact and undamaged. After the rolls were deployed, ESI joined all the geocomposite rolls together and CQA verified that all geocomposite rolls were joined together as per construction specifications. CQA also witnessed ESI leistering 8 oz. geotextile over the butt seams as per construction specifications.

After the secondary geocomposite was placed into the Cell 9 sump, TWS replaced the Type B drainage gravel in the Cell 9 sump with the CAT 312 excavator aided by the TWS surveyor. The Type B drainage gravel was spread from the stockpiled gravel across the sump and graded with the aid of the TWS surveyor. The CQA surveyor was on-site to verify that the gravel met the design drawings. Subsequent to the removal of the CAT 312 excavator from Cell 9, the access road was compacted with the double smooth drum roller, and the secondary geomembrane replaced and repaired.

Tuesday, August 10, 2010 – CQA witnessed ESI deploying Cell 9 secondary geomembrane panels S-73 to S-75 to the east of the Cell 9 sump. After the panels were placed, CQA witnessed ESI fusion welding the panels together. CQA also observed ESI performing extrusion repairs to the secondary geomembrane as needed.

Wednesday, August 11, 2010 – CQA observed ESI air pressure testing panels S-73 to S-75. CQA also witnessed ESI performing vacuum testing on the repairs to the secondary geomembrane.

This above narrative documents the construction contractor TWS and its subcontractor ESI actions to repair the Cell 9 sump. CQA certifies that the Cell 9 sump repair has been completed and all installed materials meet contract specifications.



Joseph E. Voss
Envirotech Engineering and Consulting
ERDF 9-10 Construction
CQA Engineer

CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

Storm Water Event - Thursday, 7/29/10 through Tuesday, 8/3/10



Facing S - On Thursday, compaction activities left the subgrade near the Cell 9 sump unacceptable for secondary geomembrane placement. TWS chose to leave the admix material exposed to dry.



Facing SE - After a rain event Friday morning, water gathered in the gap panel S-59. The gap in panel S-59 was left open at the end of the day.



Facing S - Storm water runoff from a rain storm on Saturday morning rose over the top of the sump, flooding the surrounding area.



Facing SW - Rainwater was introduced under the secondary liner from the gap in panels S-59.



Facing S - TWS began evacuating the storm water from the Cell 9 sump.



Facing S - ESI leistering a patch over the repair in the secondary geomembrane to protect the admix from future storm water events.

CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

Damage Assessment – Wednesday 8/4/10 through Thursday 8/5/10



Facing NW – TWS added a second pump to expedite water removal from the Cell 9 sump.



Facing SW – Storm water seeping through a hole cut in the secondary geomembrane in the north east corner of the sump.



Facing W – ESI cut the secondary geomembrane to allow equipment access to the Cell 9 sump.



Facing W – ESI peeling back the secondary geomembrane to allow equipment access to the Cell 9 sump.



Facing SE – ESI peeling back the secondary geomembrane to expose underlying admix near the Cell 9 sump.



Facing S – The admix surface east of panel S-59, where storm water introduction occurred.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

Damage Assessment – Wednesday 8/4/10 through Thursday 8/5/10



Facing S – ESI preparing to cut the secondary geomembrane in Cell 9 south of the Cell 9 sump.



Facing W – ESI peeling back the secondary geomembrane in Cell 9 south of the Cell 9 sump.



Facing S – ESI peeled back the secondary geomembrane in Cell 9 south of the Cell 9 sump. TWS allowed the admix to dry all day Thursday.



Facing SW – ESI cut holes in the secondary geomembrane to allow storm water trapped under the secondary geomembrane to drain.

**CQA PHOTOGRAPH LOG
CELL 9 SUMP REPAIR**

Sump Investigation, Friday, 8/6/10



Facing W – TWS removing Type B drainage gravel from the Cell 9 sump.



Facing E – TWS removing Type B drainage gravel from the Cell 9 sump.



Facing N – Admix surface under the west side of the Cell 9 sump.



Facing NE – TWS continuing to remove Type B drainage gravel from the Cell 9 sump.



Facing E – ESI exposing the admix surface at the south end of the Cell 9 sump.



Facing SW – TWS removing the Type B gravel from over the Cell 9 riser pipes.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

Sump Investigation, Friday, 8/6/10



Facing NE – ESI removing the Type B drainage gravel from the Cell 9 sump.



Facing NE – ESI removing the Type B drainage gravel from the Cell 9 sump.



Facing NW – ESI removing the secondary geocomposite from the Cell 9 sump.



Facing NW – ESI removing the secondary geomembrane in the Cell 9 sump to expose the admix surface.



Facing NW – The admix surface along the NE crotch of the Cell 9 sump.



Facing SW – ESI cutting and removing the secondary geomembrane in the Cell 9 sump.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

Sump Investigation, Friday, 8/6/10



Facing NE – The admix surface on the east side of the Cell 9 sump.



Facing SW – The admix surface on the south side of the Cell 9 sump.



Facing N – The admix surface on the north side of the Cell 9 sump.



Facing N – ESI and TWS evaluating the admix on the north side of the Cell 9 sump. The majority of the moisture is due to the runoff from the riser trench and moisture on the secondary geomembrane.



Facing SW – TWS removing the secondary geomembrane under the secondary riser pipes in Cell 9



Facing W – The Cell 9 sump after all secondary geomembrane had been removed.

**CQA PHOTOGRAPH LOG
CELL 9 SUMP REPAIR**

Sump Investigation, Friday, 8/6/10



Facing SE – The Cell 9 sump after the secondary geomembrane had been removed.



Facing NE – The Cell 9 sump after the secondary geomembrane had been removed.



Facing SW – TWS reworking the admix surface in the Cell 9 sump.



Facing N – A TWS removing the saturated admix from the Cell 9 sump.



**CQA PHOTOGRAPH LOG
CELL 9 SUMP REPAIR**

Admix and Secondary Geomembrane Repair, Saturday, 8/7/10



Facing NE – TWS removing the admix trimmings from the Cell 9 sump.



Facing SW – TWS utilizing the double smooth drum roller to finish the admix surface in the Cell 9 sump.



Facing N – TWS utilizing the double smooth drum roller to finish the admix surface in the Cell 9 sump.



Facing SW – TWS repairing the depressions left in the admix surface with admix material.



Facing SW – TWS completing admix repairs, while the CQA surveyor re-surveys the admix surface.



Facing W – TWS completing repairs to the admix surface.

**CQA PHOTOGRAPH LOG
CELL 9 SUMP REPAIR**

Admix and Secondary Geomembrane Repair, Saturday, 8/7/10



Facing N – ESI and TWS deploying secondary geomembrane and secondary geocomposite under the riser pipes in the Cell 9 sump.



Facing S – ESI deploying secondary geomembrane in the Cell 9 sump.



Facing S – ESI deploying secondary geomembrane on the east side of the Cell 9 sump.



Facing SW – ESI deploying secondary geomembrane on the west side of the Cell 9 sump.



Facing N – ESI performing repairs on the secondary geomembrane in the Cell 9 sump.



Facing N – ESI performing repairs to the secondary geomembrane in the Cell 9 sump.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

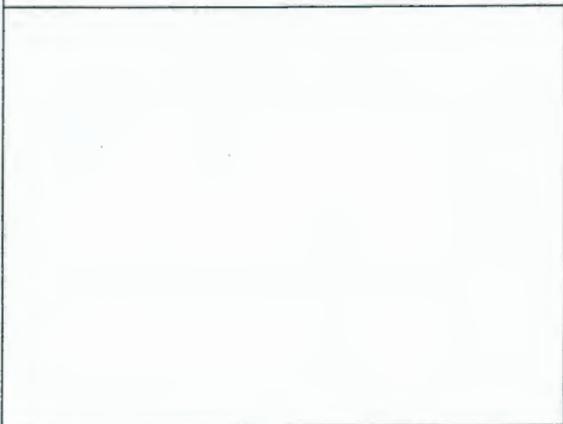
Admix and Secondary Geomembrane Repair, Saturday, 8/7/10



Facing W – ESI redeploying the secondary geomembrane onto the Cell 9 floor.



Facing NE – The Cell 9 sump repair at the end of the day, Saturday, 8/7/10.



**CQA PHOTOGRAPH LOG
CELL 9 SUMP REPAIR**

Composite and Gravel Replacement – Monday 8/9/10



Facing SW – ESI cleaning the secondary geomembrane prior to secondary geocomposite placement.



Facing N - ESI conducting secondary geomembrane repairs in the Cell 9 sump.



Facing W – ESI deploying secondary geocomposite in the Cell 9 sump.



Facing N – TWS preparing to place Type B drainage gravel into the Cell 9 sump.



Facing N – TWS placing Type B drainage gravel into the Cell 9 sump.



Facing W – TWS placing Type B drainage gravel into the Cell 9 sump.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG CELL 9 SUMP REPAIR

Equipment Access Road Repair – Tuesday 8/10/10



Facing SW – Completed rock placement in the Cell 9 sump.



Facing SE – TWS preparing the admix subgrade of the Cell 9 sump access road for secondary geomembrane placement.



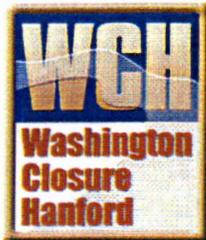
Facing W – ESI air testing the Cell 9 sump access road secondary geomembrane repair.



Facing NW – ESI deploying secondary geomembrane in Cell 9 along the north toe of slope.



Facing SE – The completed Cell 9 sump repair.



B.4

SUPER CELL 9 CORRECTIVE ACTION 01 AND SUMP REPAIR DOCUMENTS

CORRECTIVE ACTION PLAN

ENVIRONMENTAL RESTORATION DISPOSAL FACILITY (ERDF)

CELL NOS. 9 & 10

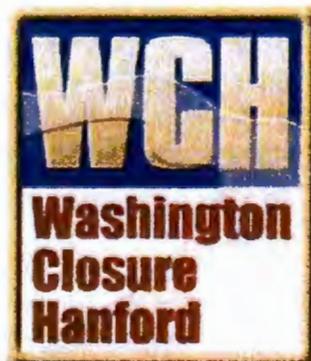
SUBCONTRACT NO. S013213A00

SUBMITTAL NO. 5-19-01 NCR-01

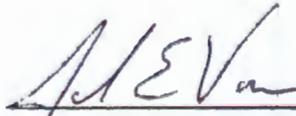
Submitted By



SEPTEMBER 14, 2010



010032


ENVIROTECH— CQA ENGINEER

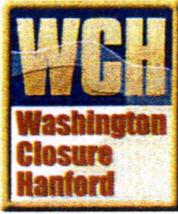


TABLE OF CONTENTS

1. INTRODUCTION 1.

2. BACKGROUND 1.

3. CORRECTIVE ACTION 2.

 3.1 Defining the Non-Conforming Condition 2.

 3.2 Fact Finding..... 2.

 3.3 Corrective Actions 3.

 3.4 Training..... 3.

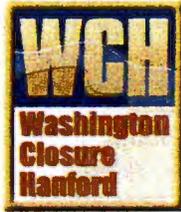
4 CELL 9 SUMP REPAIR..... 3.

5. SUMMARY 3.

APPENDIX A. NCR-01

APPENDIX B. PHOTOGRAPH LOG

APPENDIX C NEW PROCEDURAL BRIEFING SIGN-OFF SHEET



1. INTRODUCTION

On September 2, 2010, stormwater was discovered beneath the secondary geomembrane in the Cell 9 sump. An investigation located an approximate 3-in.-dia. circular hole in the secondary geomembrane on the NW/shoulder of the sump. The cut was made during the first sump repair on Friday, August 6, 2010, to evaluate the admix underneath the secondary geomembrane.

After the investigation revealed that the cut hole in the secondary geomembrane was not logged into the CQA Cell 9 secondary geomembrane repair log, ENVIROTECH initiated Non-Conformance Report NCR-01 (located in Appendix A) which, in turn, prompted preparation of this Corrective Action Plan (CAP). This Corrective Action Plan shall describe the origin and extent of the non-conforming condition as well as the actions implemented to correct the condition.

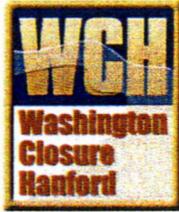
The documents affected by this Corrective Action Plan include the Cell 9 secondary geomembrane liner log and ENVIROTECH'S In-house geomembrane testing procedures.

2. BACKGROUND

On July 31, 2010, the Cell 9 secondary sump was flooded due to an exposed section of admix near the Cell 9 sump. On Friday (August 6TH), Washington Closure Hanford (WCH), TradeWind Services (TWS), and ENVIROTECH (CQA) jointly investigated the admix beneath the Cell 9 sump. During this investigation, the geomembrane was cut to expose the underlying admix in several locations. The general procedure was to begin at a known, unacceptable location and make progressive cuts in the secondary geomembrane until acceptable admix was exposed. After encountering acceptable admix, the punctured secondary geomembrane was removed, and replaced with new secondary geomembrane. The geomembrane was tested and secondary geocomposite deployed over the secondary geomembrane.

During one admix evaluation, the liner cuts started at good admix and progressed to unacceptable admix, which differed from the other evaluations. The repair that produced stormwater infiltration resulted from the first cut to expose the acceptable admix. As such, the liner was not removed and replaced at this repair location. Tyler Williams, the CQA liner lead, was present when the inspection hole in question was cut in the secondary geomembrane, and he failed to log the repair location.

In addition, geocomposite was removed in some locations and peeled-back in others. The peeled-back locations provided the opportunity for portions of the geomembrane to be covered with geocomposite prior to CQA approval. In this location, the peeled-back geocomposite was intentionally flipped back over unaccepted secondary geomembrane. See the photograph log, Appendix B for additional background information and repair procedures.



3. CORRECTIVE ACTION

3.1 Defining the Non-Conforming Condition. The August 6TH repair represented a deviation from the daily work routine which includes (1) deployment, (2) repair, (3) testing, (4) survey, and (5) final inspection. All of these tasks fall within structured working parameters and have distinctive hold points. No problems have been identified with normal daily work, and all tasks conducted in connection with normal daily work are considered acceptable. Additional inspections of the secondary geomembrane by TWS and CQA staff have identified no problems with geomembrane reporting.

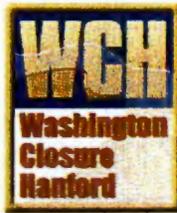
The non-conforming work occurred in conjunction with several successive cuts that were made in the secondary geomembrane to determine the extent of acceptable admix in the Cell 9 sump during the August 6TH repair. CQA did not log the cuts to the liner because CQA expected those cuts to be removed during replacement of the secondary geomembrane. The non-conforming condition of the secondary geomembrane paperwork is isolated to those repairs that CQA and TWS expected to be replaced by new secondary geomembrane.

In addition, a second non-conforming condition occurred with peeling-back the secondary geocomposite. During the August 6TH investigation, the geocomposite should have been either completely removed or secured as to not allow the geomembrane to become covered. The geocomposite should not have been replaced until the geomembrane met all CQA testing requirements. This would allow for the daily work routine to be implemented and appropriate evaluations made at all CQA hold points.

3.2 Fact Finding. On Friday, September 3, 2010, two (2) internal CQA corrective action meetings were held. The initial fact-finding meeting between Tyler Williams (CQA Liner Lead) and Joseph Voss (Senior CQA Engineer) was held to discuss the root cause of the non-conforming paperwork and possible solutions.

A second meeting was held on Friday, September 3, 2010, via conference call with Robert Stallings (CQA Officer), Joseph Voss (Senior CQA Engineer), Jimmy Stalling (CQA Engineer), and Tyler Williams (CQA Liner Lead) to assess the situation and evaluate CQA performance. Rob Stalling conducted the meeting during which Tyler Williams identified the mistake and the fact that composite had covered the repair prior to either CQC or CQA logging the repair location.

WCH held a meeting on Wednesday, September 8, 2010, where they discussed the non-conforming condition of the Cell 9 sump and TWS/CQA paperwork. Corrective actions and procedural flow-down of the non-conformance reporting activities were discussed.



3.3 Corrective Actions. The corrective action is to modify the procedure associated with repair documentation. During the sump investigation, not all repairs were documented since CQA and TWS expected to remove most of the cuts in the secondary geomembrane when the original secondary geomembrane was removed. The CQA procedure shall be updated to reflect that **ALL** cuts to the geomembrane shall be recorded. Those cuts that are removed, re-patched, or capped shall be recorded in the repair log. All retests shall be numbered with an alpha numeric suffix and the "Retest Pass Date" column shall reference the retest number.

In addition, when repairing geomembrane that has been previously covered with an overlying material, CQA shall ensure that the overlying material secured or removed prior to beginning the geomembrane repair. This action shall keep the overlying material from accidentally covering the underlying geomembrane.

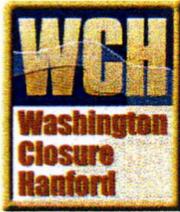
3.4 Training. The CQA Engineer, Joseph Voss, conducted a quality control briefing on September 8th, 2010 with the Envirotech staff on-site. During the meeting, the CQA staff were briefed on the corrective actions from the September 2nd event and trained to the new Envirotech procedures resulting from the corrective actions. The briefing sign-off sheet is attached as Appendix C.

4. CELL 9 SUMP REPAIR

The quality of the final product is ENVIROTECH'S primary concern. In terms of geomembrane installation, the quality of the product is assessed by the ability of the geomembrane to successfully retain leachate water. Based on ENVIROTECH'S review of repair logs, "As-Built" drawings, and photographs, it was determined that no additional holes remained in the liner during the August 6TH Cell 9 sump repair. In addition, two (2) subsequent rain events have occurred since the September 3RD sump repair. Following an extensive investigation, no stormwater infiltration under the secondary geomembrane was observed.

5. SUMMARY

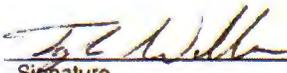
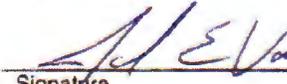
ENVIROTECH'S has completed a review, analysis, and corrective action associated with the September 2, 2010, Cell 9 sump incident. Procedural changes have been initiated to enhance the quality of the final product. Because the overall quality of the project is subject to the human element, ENVIROTECH has counseled members of the project staff as part of the corrective action. These conversations have focused on mandating a higher level of performance and dedicating themselves to diligently record and maintain field documentation. The project staff will continue conducting the routine daily work in the same manner employed to-date. However, in situations where non-standard work conditions exist, ENVIROTECH staff will remain focused on the immediate task and provide the same level of diligence in inspecting, documenting, and observing proper hold points as that afforded during normal work conditions.



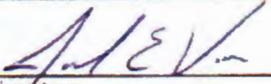
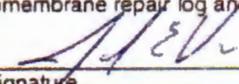
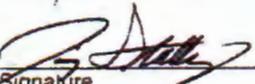
APPENDIX A.

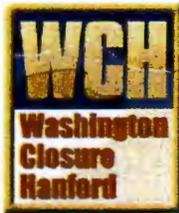
NCR-01

Envirotech Nonconformance Report Form

NCR No. NCR-ERDF 9/10 - 01	Project: Hanford	Date: 9/3/10
Item/Part: CQA secondary geomembrane logs	Serial/Lot No N/A	Supplier: N/A
<p>Nonconforming Condition: CQA missed identifying and logging a repair in the Cell 9 sump. The hole left in the secondary geomembrane allowed for storm water to be introduced under the secondary geomembrane in the Cell 9 sump. The hole occurred during the first repair of the Cell 9 sump. The secondary geocomposite was folded back and a hole was cut in the secondary geomembrane to inspect the subgrade for moisture. After finding no evidence of moisture, secondary geocomposite was replaced over the secondary geomembrane. The original repair location was not logged by the CQA liner lead.</p>		
<p>Referenced Inspection/Calibration Reports: The CQA secondary geomembrane repair log, The CQA geomembrane installation procedure</p>		
<p>Reported By: Tyler Williams</p>		
_____		9-14-2010
Name	Signature	Date
<p>Validated By/Reported to: Joseph E Voss</p>		
_____		9/14/10
Name	Signature	Date
<p>Disposition: <input type="checkbox"/> Rework <input type="checkbox"/> Repair <input type="checkbox"/> Reject <input type="checkbox"/> Use As-Is</p>		
<p>Affected Documents:</p>		
_____	_____	_____
Name	Signature	Date
<p>Concurrence:</p>		
_____	_____	_____
Name	Signature	Date
<p>Re-work / Repair:</p>		
<p>_____</p>		
<p>Rejected Materials Disposition:</p>		
<p>Re-inspection Results</p>		<input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory
<p>Verification of Disposition:</p>		
_____	_____	_____
Name	Signature	Date

Envirotech Nonconformance Report Form

NCR No. NCR-ERDF 9/10 - 01	Project: Hanford	Date: 9/3/10
Item/Part: CQA secondary geomembrane logs	Serial/Lot No. N/A	Supplier: N/A
Nonconforming Condition: CQA missed identifying and logging a repair in the Cell 9 sump. The hole left in the secondary geomembrane allowed for storm water to be introduced under the secondary geomembrane in the Cell 9 sump. The hole occurred during the first repair of the Cell 9 sump. The secondary geocomposite was folded back and a hole was cut in the secondary geomembrane to inspect the subgrade for moisture. After finding no evidence of moisture, secondary geocomposite was replaced over the secondary geomembrane. The repair location was not logged by the CQA liner lead.		
Referred Inspection/Calibration Reports: The CQA secondary geomembrane repair log, The CQA geomembrane installation procedure		
Reported By: Tyler Williams		
Name	 Signature	9-14-2010 Date
Validated By/Reported to: Joseph E Voss		
Name	 Signature	9/14/10 Date
Disposition: <input type="checkbox"/> Rework <input type="checkbox"/> Repair <input type="checkbox"/> Reject <input checked="" type="checkbox"/> Use As-Is		
The hole in the secondary geomembrane was identified and repaired. A corrective action plan was initiated in response to this NCR. see Corrective Action Report		
Affected Documents: CQA secondary geomembrane repair log and CQA geomembrane inspection procedures		
Joseph E Voss		
Name	 Signature	9/14/10 Date
Concurrence: Jimmy Stallings		
Name	 Signature	9/14/10 Date
Re-work / Repair:		
Rejected Materials Disposition:	Re-inspection Results <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory	
Verification of Disposition:		
Name	Signature	Date



APPENDIX B.

PHOTOGRAPH LOG

**CQA PHOTOGRAPH CELL 9
SEPTEMBER REPAIR**

Cell 9 Sump Investigation



Facing SE – ESI pulled back the geocomposite and cut a hole in the secondary geomembrane to check the admix underneath.



Facing W – Discovery of the trapped water in the Cell 9 sump.



Facing SW – ESI and TWS removing the drainage gravel in the Cell 9 sump to investigate the storm water infiltration.



Facing NW – ESI, TWS, and CQA continuing the investigation the following day.



Facing SW – ESI, TWS, and CQA tracing the source of the stormwater to the northwest corner of the sump.



Facing SW – The source of the stormwater infiltration.

**CQA PHOTOGRAPH CELL 9
SEPTEMBER REPAIR**

Cell 9 Sump Repair



Facing SW – ESI cutting a release hole in the secondary geomembrane in the Cell 9 sump.



Facing W – TWS and ESI “walking” the stormwater out from below the secondary geomembrane.



Facing NE – TWS left the admix to dry under the secondary geomembrane.



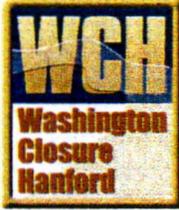
Facing Down – Patch over original investigation hole in the northwest corner of the Cell 9 sump.



Facing S – After CQA investigated and verified that the admix surface met stability requirements, ESI patched the release hole.



Facing NW – ESI joining the geocomposite over the repair area.

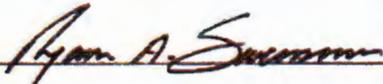


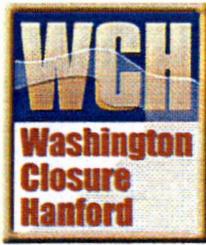
APPENDIX C.

NEW PROCEDURAL BRIEFING SIGN-OFF SHEET

CQA Geomembrane Installation Procedures.

By signing below, you are indicating that you have been briefed and reviewed the geomembrane installation procedures modified on September 13, 2010. In addition, your signature indicates that you have been briefed on the corrective actions regarding the Cell 9 storm water infiltration that took place on September 2nd, 2010.

	Name	Signature	Date
1.			
2.	Jimmy Stallings		9/14/2010
3.	Tyler Williams		9-14-2010
4.	JOSEPH VOSS		9/14/10
5.	James Schut		9-14-10
6.	RYAN SWENSON		9-14-10
7.	Lucas Hew		09-14-10
8.			
9.			
10.			



B.5

CONSTRUCTION CONTRACTOR SUPPLIER DEVIATION DISPOSITION REPORTING DOCUMENTATION

SUPPLIER DEVIATION DISPOSITION REQUEST LOG (SDDR'S)

Subcontract No: S012308A00, ERDF, CELLS 9 & 10
TradeWind Services, LLC

WCH SDDR No. #S012308A00-	TW SDDR #	Description	Date WCH Received	Disposition		
				Date	Drawing Rev/DCN/Spec	Completion Date
001	TW-001	60 Mil Textured Liner Edges	2/10/2010	Accepted 3/30/10	0600X-SP-C0077, Section 2.1.1	4/5/2010
002	TW-002	Crest Pad Building Structural Plans and Sections	2/14/2010	Rejected 3/17/10	Dwg. 0600X-DD-C0475	4/7/2010
003	TW-003	Utilizing crushed aggregate base course	3/9/2010	Accepted 3/30/10	0600-SP-0078, 20103	4/1/2010
004	TW-004	Base course compaction	3/6/2010	Accepted 3/18/10	(CN-001, Rev. 2 Transportation Laydown Expansion.)	3/30/2010
005	TW-005	Crest Pad Building Siding	3/10/2010		VOIDED	
006	TW-006	Subgrade grading tolerance	3/23/2010	Accepted 3/30/10	0600-SP-DD-C0458, Note 4	4/7/2010
007	TW-007	Fills & Embankment Spec's Section	4/28/2010	Rejected 5/18/10	0600-SP-C0075	5/18/2010
008	TW-008	Pipes, Valves & Special Spec. changes	5/2/2010	Accepted 5/4/10	0600-SP-M0032, R.1	5/5/2010
009	TW-009	Slope Subgrade Tolerance +0.00 to -0.40	5/7/2010	Accepted 5/21/10	0600-DD-C0458	6/21/2010
010	TW-010	Trial Seams Spec Change	5/7/2010	Accepted 6/1/10	SP-C0077, 3.5.1	6/1/2010
011	TW-011	CN-016 New Tank Drain Tie-In & Leak Detection Slope	5/24/2010	Accepted 6/1/10	Dwgs. C0468 & C0469	6/1/2010
012	TW-012	Propose utilizing a 2" clearance when using #4 rebar	6/21/2010		VOIDED	
013	TW-013	Butting geocomposite to existing secondary drainage layer	7/7/2010		VOIDED	
014	TW-014	Lined bolted steel liquid storage tank	7/8/2010	Accepted 7/13/10	0600-SP-C0082, Rev. 1	7/13/2010
015	TW-015	Change 3" conduit to 2" conduit	8/3/2010	Accepted 8/10/10	DCN 0600X-DD-E0218-00-02	8/10/2010
016	TW-016	Drainage gravel type A	8/5/2010	Accepted 8/12/10	0600X-SP-C0078, Rev. 0; section 2.2	8/17/2010
017	TW-017	Geotextile handling & Placement	8/24/2010	Accepted 8/30/10	0600X-SP-C0077, R.0, Sect.3.9.2.J	8/30/2010



149841

April 5, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**PROPOSED DISPOSITION FOR SUPPLIER DEVIATION DISPOSITION
REQUEST (SDDR) TW-001/ S012308A00-001
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and accepted TradeWind Services, LLC's proposed disposition for SDDR No. S012308A00-001 regarding the proposed GSE weld edge textured geomembrane.

Please sign line 22 on the attached SDDR No. S012308A00-001 and submit it to WCH if you agree with the WCH disposition.

If you have any questions regarding this disposition, please contact me at (509) 373-9151, or (509) 539-9701.

Sincerely,

A handwritten signature in cursive script that reads 'B. Jack Howard'.

B. Jack Howard
Subcontract Technical Representative

BJH:djt

Attachments: (1) SDDR TW-001/WCH S012308A00-001

DATE

2/10/10

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE																	
Supplier SDDR No. 001	Date Submitted 2-10-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-001 Date Received 2-10-10																
1. Supplier Name GSE Lining Technology		Address 19103 Gundle Road City, State & Zip Houston, Texas 77073																	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 11-1-09																
6. All Previous SDDR (No's & Dates) -0-	7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A																
10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method) 2-2-10	12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Specification C0077; Section 2.1.1 "liner shall be smooth on both sides along the longitudinal edge of each panel."																	
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>																			
14. Cost Impact: None		15. Schedule Impact: None																	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. See attached letter from GSE Lining Technology addressing "lightly textured" VS smooth edge. All welded seams will meet the requirements of Spec C-0077, sections 3.4, 3.5, 3.6 & Spec G-0048, Section 2.11																			
17. Associated Supplier Document Change(s): See attached																			
18. Supplier's Authorized Representative: Name: Dave Sterley Signature: <i>[Signature]</i> Title: CQCSM Date: 2-10-10																			
19. WCH Engineering Action: <table border="0"> <tr> <td><input checked="" type="checkbox"/> Accepted</td> <td>Engineering Action</td> <td><input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)</td> <td><input type="checkbox"/> Licensing Document Change</td> </tr> <tr> <td><input type="checkbox"/> Rejected</td> <td>Follow-Up</td> <td><input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier)</td> <td><input type="checkbox"/> Price Adjustment</td> </tr> <tr> <td></td> <td></td> <td colspan="2">0600X-SP-C0077, Section 2.1.1</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Other Suppliers Affected</td> <td></td> <td><input type="checkbox"/> Other</td> </tr> </table>				<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change	<input type="checkbox"/> Rejected	Follow-Up	<input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment			0600X-SP-C0077, Section 2.1.1			<input type="checkbox"/> Other Suppliers Affected		<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change																
<input type="checkbox"/> Rejected	Follow-Up	<input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment																
		0600X-SP-C0077, Section 2.1.1																	
	<input type="checkbox"/> Other Suppliers Affected		<input type="checkbox"/> Other																
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) THE PROPOSED GSE WELD EDGE TEXTURED GEOMEMBRANE IS ACCEPTABLE. (Textured edges were used on previous ERDF cell projects and used on end seams and repairs). All seams, including textured, shall meet requirements in Table 3.																			
21. WCH Disposition Approval/Signature <table border="0"> <tr> <td>FM: <i>[Signature]</i></td> <td>Date: 3/31/10</td> </tr> <tr> <td>PE/SE: <i>[Signature]</i></td> <td>Date: 3/30/2010</td> </tr> <tr> <td>22. Supplier:</td> <td>Date:</td> </tr> <tr> <td>23. WCH PQAR:</td> <td>Date:</td> </tr> </table>				FM: <i>[Signature]</i>	Date: 3/31/10	PE/SE: <i>[Signature]</i>	Date: 3/30/2010	22. Supplier:	Date:	23. WCH PQAR:	Date:								
FM: <i>[Signature]</i>	Date: 3/31/10																		
PE/SE: <i>[Signature]</i>	Date: 3/30/2010																		
22. Supplier:	Date:																		
23. WCH PQAR:	Date:																		

WCH



GSE Lining Technology, LLC.

19103 Gundie Road
Houston, Texas 77073
800-435-2008

February 10, 2010

Graydon Renshaw
Environmental Specialties Intl, Inc.
7943 Pecue Lane #A
Baton Rouge, LA 70809

RE: ERDF Hanford Cells 9 and 10 – GSE 60 mil Textured HDPE Geomembrane

Mr. Renshaw

Upon receiving and reviewing the specifications for the above mentioned project:

Geomembrane:

Cell Construction – Geosynthetics Environmental Restoration Disposal Facility (ERDF) Cells 9 & 10 Construction, Specification No. 0600X-SP-C0077, Revision 0, 11/13/2009, page 10, part 2.1.1.a

- GSE 60 mil double-sided Textured Weld Edge Geomembrane will be manufactured as follows:
 - GSE Weld Edge Textured HDPE Geomembrane will be utilized in lieu of the specified smooth edge textured geomembrane. GSE's Weld Edge Textured Geomembrane is a geomembrane product with lightly textured edges on both sides along the longitudinal edges of each panel that allow for a quick and easy welding process. The weld edge regions have a typical asperity height of 5 to 10 mils. In addition, GSE Weld Edge Textured Geomembrane has been utilized in numerous projects. Samples of GSE's Weld Edge Textured Geomembrane are available upon request.

Please feel free to contact me with any questions.

Sincerely,

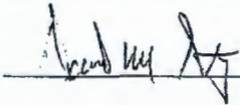
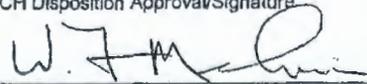
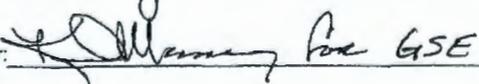
Miguel Garcia
GSE Technical Support

cc: Mary Cruthirds, GSE Lining Technology, LLC.

DATE Acjobal B/C

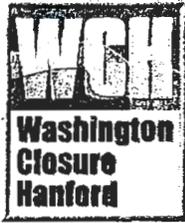
2/10/10

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE		
Supplier SDDR No. 001	Date Submitted 2-10-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-001	Date Received 2-10-10	
1. Supplier Name GSE Lining Technology		Address 19103 Gundle Road		City, State & Zip Houston, Texas 77073	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 11-1-09	6. All Previous SDDR (No's & Dates) -0-	
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method) 2-2-10	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Specification C0077; Section 2.1.1 "liner shall be smooth on both sides along the longitudinal edge of each panel."					
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>					
14. Cost Impact: None			15. Schedule Impact: None		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. See attached letter from GSE Lining Technology addressing "lightly textured" VS smooth edge. All welded seams will meet the requirements of Spec C-0077, sections 3.4, 3.5, 3.6 & Spec 6-0048, Section 2.11					
17. Associated Supplier Document Change(s): See attached					
18. Supplier's Authorized Representative: Name: Dave Sterley Signature:  Title: CQCSM Date: 2-10-10					
19. WCH Engineering Action:		Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input checked="" type="checkbox"/> Accepted <input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <small>0600X-SP-C0077, Section 2.1.1</small> <input type="checkbox"/> Rejected Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) THE PROPOSED GSE WELD EDGE TEXTURED GERMENBRANE IS ACCEPTABLE. (Textured EDGES WERE USED ON PREVIOUS ERDF CEN PROJECTS AND USED ON END SEAMS AND REPAIRS). ALL SEAMS, including textured, shall meet requirements in TABLE 3.					
21. WCH Disposition Approval/Signature FM:  Date: 3/31/10 PE/SE: W.A. Balaz Date: 3/30/2010 22. Supplier:  Date: 4/7/10 23. WCH PQAR: _____ Date: _____					

COMPLETED BY SUPPLIER

WCH



149800

March 17, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**PROPOSED DISPOSITION FOR SUPPLIER DEVIATION DISPOSITION
REQUEST (SDDR) TW-002/ S012308A00-002
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and rejected TradeWind Services, LLC's (TWS's) proposed SDDR No. TW-002 regarding deletion of the curb between the footing and wall in the Crest Pad Buildings.

If you have any questions regarding this SDDR, please contact me at (509) 373-9151, or (509) 539-9701.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Jack Howard', is written below the word 'Sincerely,'.

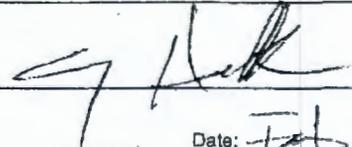
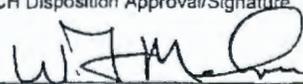
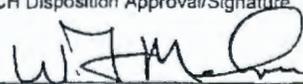
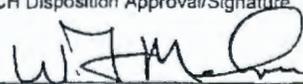
B. Jack Howard
Subcontract Technical Representative

BJH:djt

Attachment: SDDR TW-002/WCH S012308A00-002

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE							
Supplier SDDR No. 002	Date Submitted 2-16-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-002 Date Received 2-16-2010						
1. Supplier Name Delhur Industries, Inc.		Address P.O. Box 116 City, State & Zip Port Angeles WA 98362							
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 2-15-10						
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 2-16-10						
6. All Previous SDDR (No's & Dates)									
11. WCH Eng. Notified (Date/Method) 2-16-10									
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable).									
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>									
14. Cost Impact: N/A		15. Schedule Impact: None							
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Refer to attached deviation description.									
17. Associated Supplier Document Change(s): See attached									
18. Supplier's Authorized Representative: Name: Craig Heckman Signature:  Date: Feb 16 2010									
19. WCH Engineering Action: <table style="width: 100%; border: none;"> <tr> <td style="width: 20%; border: none;"><input type="checkbox"/> Accepted</td> <td style="width: 20%; border: none;">Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change</td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> Rejected</td> <td style="border: none;"><input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment</td> </tr> <tr> <td style="border: none;">Follow-Up <input type="checkbox"/></td> <td style="border: none;">Other Suppliers Affected <input type="checkbox"/> Other <input type="checkbox"/></td> </tr> </table>				<input type="checkbox"/> Accepted	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change	<input checked="" type="checkbox"/> Rejected	<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment	Follow-Up <input type="checkbox"/>	Other Suppliers Affected <input type="checkbox"/> Other <input type="checkbox"/>
<input type="checkbox"/> Accepted	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change								
<input checked="" type="checkbox"/> Rejected	<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment								
Follow-Up <input type="checkbox"/>	Other Suppliers Affected <input type="checkbox"/> Other <input type="checkbox"/>								
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <p style="font-family: cursive;">THE curb shall be part of monolithic slab to provide containment. The PROPOSED DEVIATION ADDS A JOINT AND DOES NOT PROVIDE CONTAINMENT</p>									
21. WCH Disposition Approval/Signature <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">FM: </td> <td style="width: 40%;">Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td>PE/SE: W. A. Polang</td> <td>Date: 3/18/10</td> </tr> <tr> <td>Date: 2 MARCH 2010</td> <td></td> </tr> </table>				FM: 	Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	PE/SE: W. A. Polang	Date: 3/18/10	Date: 2 MARCH 2010	
FM: 	Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								
PE/SE: W. A. Polang	Date: 3/18/10								
Date: 2 MARCH 2010									
22. Supplier: _____ Date: _____									
3. WCH PQAR: _____ Date: _____									

WCH



2 - 16 - 10

Crest Pad Building Structural Plans and Sections

Drawing No. 0600x-DD-C0475

Section D

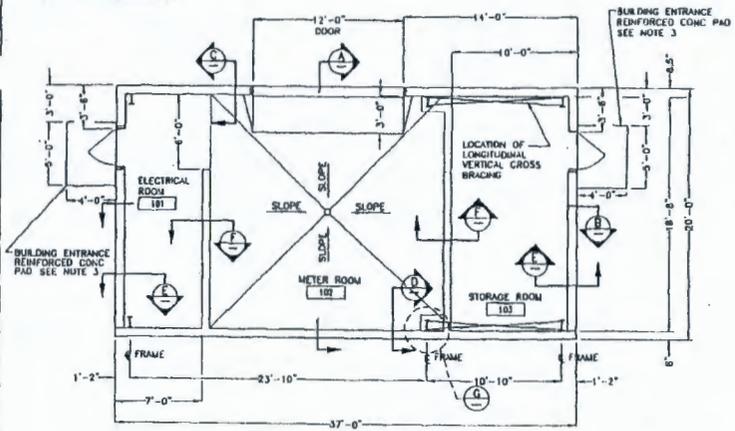
12. Deviation description:

- 1) Add #7 dowels 4'-6" @ 10" O.C.
- 2) Delete curb between footing and wall.

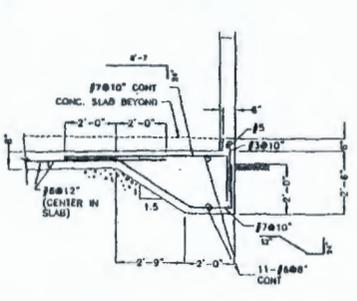
This eliminates two cold joints which could become a potential safety hazard. Also eliminates the need to extend 10' VTS bar out of the footing when the slab is poured. This would become an immediate safety hazard that would be eliminated. Secondary containment would be achieved by the existing 8' wall

16. Proposed Disposition:

Added value to WCH at no cost, no schedule change.

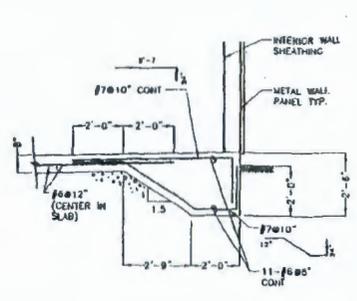


PLAN SCALE 0 5 10 feet



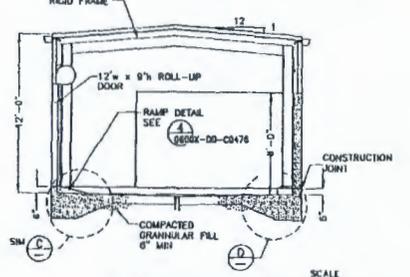
C SECTION

SCALE 0 2.5 5 feet



E SECTION

SCALE 0 2.5 5 feet

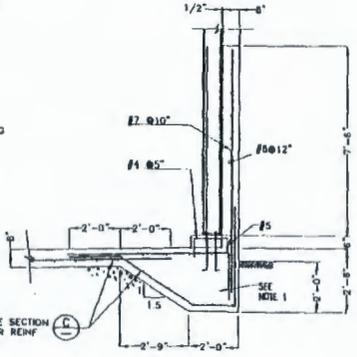


A SECTION

SCALE 0 5 10 feet

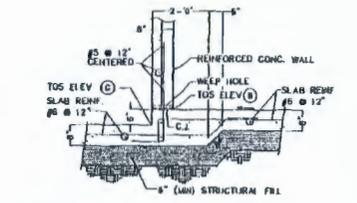
NOTE: BUILDING ORIENTATION VARIES SEE BELOW

CREST PAD BUILDING CELL 9 & 10



D SECTION

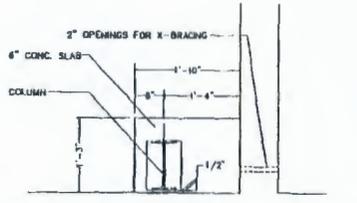
SCALE 0 2.5 5 feet



F SECTION

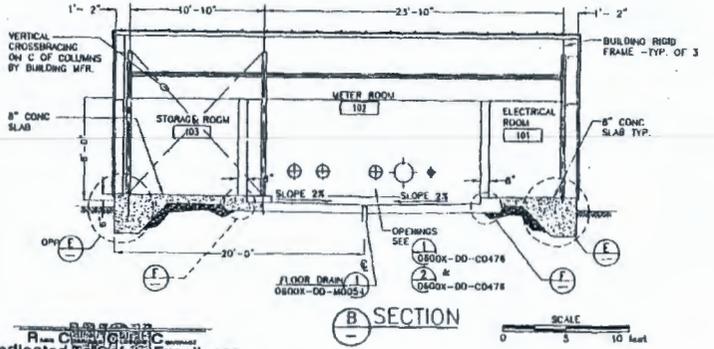
0600X-DD-C0475.00018

SCALE 0 2.5 5 feet



G PLAN

SCALE 0 2.5 5 feet



B SECTION

SCALE 0 5 10 feet

Dedicated to Safety Excellence

NOTES

- BUILDING FRAME ANCHOR BOLTS SHALL BE A MINIMUM OF (4)-3/4\" DIA. W/ 90 OR 180 DEGREE HOOK EMBEDDED 15\". COORDINATE WITH BUILDING SUPPLIER FOR BOLT NUMBER AND LOCATION.
- BUILDING TYPICAL (2 PLANS) FOR CELLS 9 & 10.
- BOTH OUTSIDE BUILDING ENTRANCE PADS SHALL BE 6\" THICKNESS WITH #10\" EW CENTERED IN SLAB THICKNESS. PADS SHALL BE SEPARATE FROM MAIN FOUNDATION SLAB. SLOPE PADS 1/4\" FT AWAY FROM DOOR OPENINGS.
- THE INTERIOR CONCRETE SLABS AT DOORWAYS ARE TO BE FINISHED LEVEL. NO SLOPE.

NO.	DESCRIPTION	DATE
1	Issue for construction	11/21/08
2	Issue for construction	11/21/08
3	Issue for construction	11/21/08
4	Issue for construction	11/21/08

RECEIVED
NOV 24 2008
WCH DOCUMENT CONTROL



DOCUMENT CONTROL *DeVilbiss*

NO.	DATE	BY	DESCRIPTION
1	11/21/08	WCH	ISSUED FOR CONSTRUCTION
2	11/21/08	WCH	ISSUED FOR CONSTRUCTION
3	11/21/08	WCH	ISSUED FOR CONSTRUCTION
4	11/21/08	WCH	ISSUED FOR CONSTRUCTION

U.S. DEPARTMENT OF ENERGY DOE RICHLAND OPERATIONS OFFICE RIVER CORRIDOR CLOSURE CONTRACT			
WASHINGTON CLOSURE HANFORD LLC. RICHLAND, WASHINGTON		WEAVER BOOS CONSULTANTS, LLC. DENVER, COLORADO	
ENVIRONMENTAL RESTORATION DISPOSAL ACTIVITY CELLS 9 - 10 CREST PAD BLDG STRUCTURAL PLANS AND SECTIONS			
WCH JOB NO. 14655	DOE CONTRACT NO. DE-AC06-05RL-14655	CADD FILENAME 6XDC0475.DWG	
TASK CRDF	DRAWING NO. 0600X-DD-C0475	REV. NO. 0	

RECORD NO.	RECORD DATE	RECORD BY	RECORD NO.	RECORD DATE	RECORD BY
H-6	16.367	SH/CD1	800G	0901	

DISTRIBUTION

	NAME	MISN	With Att.
	Ciszak, P.C	T2-10	
X	Howard, B.J.	T2-10	X
	Hanks, B	T2-10	
	Klickovich, B.D.	T2-10	
	Lawrence, H.K.	T2-05	
	Looney, D.	H4-17	
	Melvin, W.F.	T2-10	
✓	Palmersheim, S.M.	H4-17	X
	Schilperoort, D.L.	T2-10	
X	Skiba, C.V.	T2-10	X
X	Wintle, T.E.	T2-03	X
X	DOCUMENT CONTROL	H4-11	X
X	ERDF Project Files	T2-10	X

	NAME	MISN	With Att.
	Bentz, C.A.	T2-02	
X	Borlaug, W.A.	T2-03	X
	Caulfield, R.A.	T2-03	
	Gough, A.S.	T2-03	
	Lamb, F.O.	T2-05	
	Laws, J.R.	T2-05	
	Nixon, B.C.	T2-05	
	Riley, D.A.	T2-05	
	Wimett, J.M.	T2-03	

Subcontract/No.

Change Notice

Document Description

TradeWind, S012308A00

CN- N/A

SDDR-003

DelHur, S010544A00

CN- _____

W.Boos, 0600X-SC-G0524

CN- _____

Envirotech, S66X528A00

CN- _____

Comments: SDDR -003, UTILIZING AGGREGATE BASE COURSE

Distribution Completed: Yes: X No: Initials DJT

TO BE COMPLETED BY R&DC:

RECORD TYPE _____

DATA ENTRY BY _____

SCANNED/# PGS _____

REPRO BY _____

DOCS OPEN # _____



149842

April 1, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**PROPOSED DISPOSITION FOR SUPPLIER DEVIATION DISPOSITION
REQUEST (SDDR) TW-003/ S012308A00-003
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and accepted TradeWind Services, LLC's proposed disposition for SDDR No. **S012308A00-003** regarding the proposed aggregate.

Please sign line 22 on the attached SDDR No. **S012308A00-003** and submit it to WCH if you agree with the WCH disposition.

If you have any questions regarding this disposition, please contact me at (509) 373-9151, or (509) 539-9701.

Sincerely,

A handwritten signature in black ink that reads 'B. Jack Howard'. The signature is written in a cursive style with a large, prominent 'B' and 'H'.

B. Jack Howard
Subcontract Technical Representative

BJH:djt

Attachments: (1) SDDR TW-003/WCH S012308A00-003

DATE Approval
3/8/10

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. 003	Date Submitted 3-9-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-003 Date Received 3-8-10
1. Supplier Name Delhur Industries, Inc.		Address P.O. Box 116 City, State & Zip Port Angeles WA 98362	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 3-8-10
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	6. All Previous SDDR (No's & Dates) 1 & 2
10. WCH Eng. Notified (Date/Method) 11. WCH Eng. Notified (Date/Method)			

12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable).
Specification SP-C007B, Rev. 0, Section 2.4 (Gradation Table) including, requirements that Type C gravel shall be crushed, compacted to 90% and exhibit a permeability of 1x10⁻² or greater.

13. Supplier's Proposed Disposition: Use As-Is Repair Modify WCH Requirement

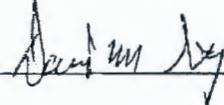
14. Cost Impact: N/A 15. Schedule Impact: None

16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Propose utilizing crushed aggregate base course meeting the requirements of WSDOT specification 9-03.9(3). As proposed material shall exhibit a permeability of 1x10⁻² or greater. Gradation comparison is attached.

17. Associated Supplier Document Change(s): See attached

18. Supplier's Authorized Representative:

Name: Dave Sterley

Signature: 

Title: CQA SSM

Date: 3/9/10

19. WCH Engineering Action:

<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change
<input type="checkbox"/> Rejected	<input checked="" type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment	
	Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other		

0600X-SP-C007B, Section 2.4

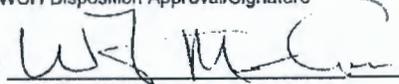
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)

THE PROPOSED AGGREGATE IS ACCEPTABLE IF THE HYDRAULIC CONDUCTIVITY OF 1 X 10⁻² CM/SEC OR GREATER AS REQUIRED BY SPEC. 0600X-SP-C007B, 2.1.3.

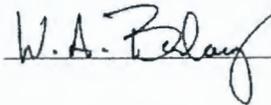
PASSING CQA HYDRAULIC CONDUCTIVITY TESTS SHALL BE OBTAINED PRIOR TO INSTALLATION.

21. WCH Disposition Approval/Signature

Field Support Action Required? Yes No

FM: 

Date: 4/1/10

PE/SE: 

Date: 3/30/2010

22. Supplier:

Date:

23. WCH PQAR:

Date:

WCH

Type C (as specified)

Base Course (as tested)

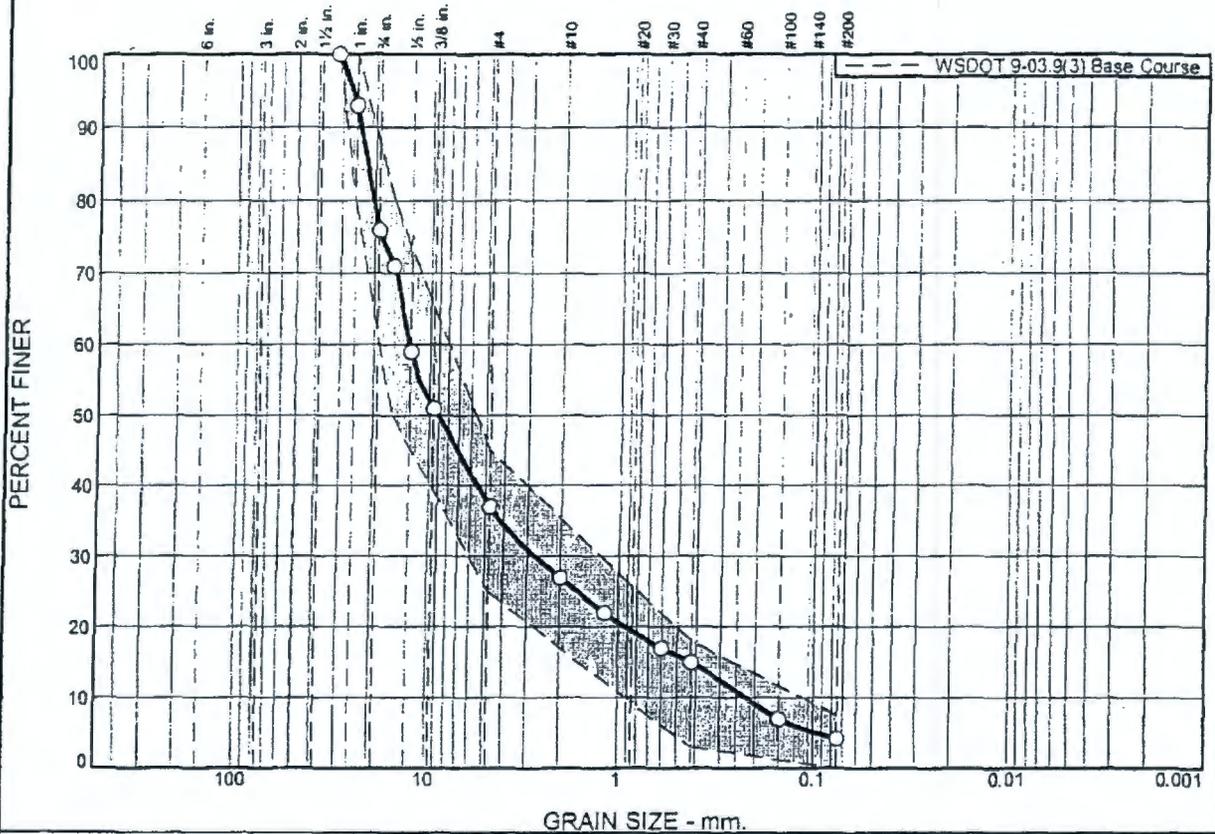
	<u>% passing</u>		<u>% passing</u>
1 1/2"	100		100
1"	70 - 100		93
3/4"	60 - 100		76
5/8"			71
3/8"	35 - 80		51
#4	20 - 60		37
#40	0 - 10		15
#100	0 - 4		7
#200	0 - 4		4

0.0 - 7.5

Permeability 1×10^{-2} or greater

Compaction 90% standard

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	24.0	39.0	10.0	12.0	10.8	4.2	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.25"	100.0	100.0 - 100.0	
1"	93.0	80.0 - 100.0	
3/4"	76.0		
5/8"	71.0	50.0 - 80.0	
1/2"	59.0		
3/8"	51.0		
#4	37.0	25.0 - 45.0	
#10	27.0		
#16	22.0		
#30	17.0		
#40	15.0	3.0 - 18.0	
#100	7.0		
#200	4.2	0.0 - 7.5	

Material Description

WSDOT CSBC

Atterberg Limits

PL= LL= PI=

Coefficients

D₈₅= 22.3123 D₆₀= 12.9505 D₅₀= 9.0339
 D₃₀= 2.7559 D₁₅= 0.4250 D₁₀= 0.2254
 C_u= 57.46 C_c= 2.60

Classification

USCS= AASHTO=

Remarks

Results indicate compliance with project specs.
 Sampled by: IMT

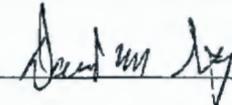
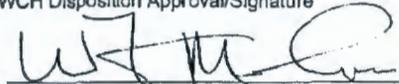
* WSDOT 9-03.9(3) Base Course

Sample Number: 52215-CSBC 1 Source of Sample: American Rock Products CSBC Depth: Stockpile Date: 2/6/08

INTERMOUNTAIN MATERIALS TESTING	Client: Delhur Project: ERDF Cells 7 & 8 QC Project No: M08620-T Reviewed By:
--	--

DATE AcroDat 8.0
3/8/10

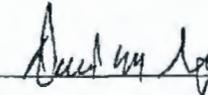
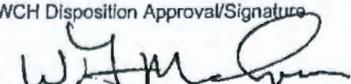
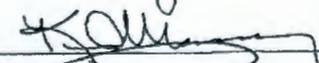
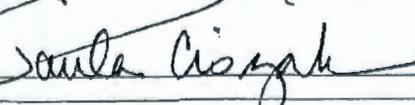
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE																										
Supplier SDDR No. 003	Date Submitted 3-9-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-003	Date Received 3-8-10																									
1. Supplier Name Delhur Industries, Inc.		Address P.O. Box 116		City, State & Zip Port Angeles WA 98362																									
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 3-8-10	6. All Previous SDDR (No's & Dates) 1 & 2																									
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method)																									
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Specification SP-C0078, Rev. 0, Section 2.4 (Gradation Table) including, requirements that Type C gravel shall be crushed, compacted to 90% and exhibit a permeability of 1x10-2 or greater.																													
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>																													
14. Cost Impact: N/A			15. Schedule Impact: None																										
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Propose utilizing crushed aggregate base course meeting the requirements of WSDOT specification 9-03.9(3). As proposed material shall exhibit a permeability of 1x10-2 or greater. Gradation comparison is attached.																													
17. Associated Supplier Document Change(s): See attached																													
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature:  Title: <u>CQCSM</u> Date: <u>3/9/10</u>																													
19. WCH Engineering Action: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"><input checked="" type="checkbox"/> Accepted</td> <td style="width: 15%;">Engineering Action</td> <td style="width: 15%;"><input type="checkbox"/> Drawing Change</td> <td style="width: 15%;">(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)</td> <td style="width: 15%;"><input type="checkbox"/> Licensing Document Change</td> <td style="width: 15%;"></td> </tr> <tr> <td><input type="checkbox"/> Rejected</td> <td></td> <td><input checked="" type="checkbox"/> Spec/Req. Change</td> <td>(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)</td> <td><input type="checkbox"/> Price Adjustment</td> <td></td> </tr> <tr> <td colspan="6" style="text-align: center;"><i>0600X-SP-C0078, Section 2.4</i></td> </tr> <tr> <td></td> <td>Follow-Up</td> <td><input type="checkbox"/> Other Suppliers Affected</td> <td></td> <td><input type="checkbox"/> Other</td> <td></td> </tr> </table>						<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change	(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change		<input type="checkbox"/> Rejected		<input checked="" type="checkbox"/> Spec/Req. Change	(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment		<i>0600X-SP-C0078, Section 2.4</i>							Follow-Up	<input type="checkbox"/> Other Suppliers Affected		<input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Accepted	Engineering Action	<input type="checkbox"/> Drawing Change	(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change																									
<input type="checkbox"/> Rejected		<input checked="" type="checkbox"/> Spec/Req. Change	(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment																									
<i>0600X-SP-C0078, Section 2.4</i>																													
	Follow-Up	<input type="checkbox"/> Other Suppliers Affected		<input type="checkbox"/> Other																									
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <p style="font-size: 1.2em; margin: 0;">THE PROPOSED AGGREGATE IS ACCEPTABLE IF THE HYDRAULIC CONDUCTIVITY OF 1×10^{-2} CM/SEC OR GREATER AS REQUIRED BY SPEC. 0600X-SP-C0078, 2.1.3. PASSING CQA HYDRAULIC CONDUCTIVITY TESTS SHALL BE OBTAINED PRIOR TO INSTALLATION.</p>																													
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No																													
FM: 			Date: <u>4/1/10</u>																										
PE/SE: <u>W.A. Belay</u>			Date: <u>3/30/2010</u>																										
22. Supplier: <u>KOMM</u>			Date: <u>4/7/10</u>																										
23. WCH PQAR:			Date:																										

COMPLETED BY SUPPLIER

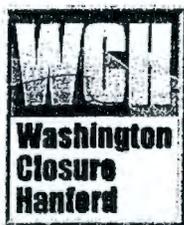
WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-001	Date Submitted 3-17-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00 (CN-001)	WCH SDDR No. S012308A00-004 Date Received 3-16-10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 3-16-10
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 3-16-10
6. All Previous SDDR (No's & Dates)			
11. WCH Eng. Notified (Date/Method) 3-16-10			
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Base course compaction shall be 95% (CN-001 Rev.2) attached.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Subgrade of staging area was compacted to 90%. Subsequent revision to CN-001 reduced the thickness of base course to 3" to be compacted to 95%. After six passes with vibratory roller, it is apparent that the thin lift of base course is being incorporated into the relatively lower density subgrade making 95% unachievable. Recommend modifying the 95% compaction for base course to a specified method of 6 complete passes with a vibratory roller. Base course shall be compacted at a moisture contact within 2% of optimum moisture.			
17. Associated Supplier Document Change(s):			
18. Supplier's Authorized Representative: Name: Dave Sterley Signature:  Title: CQCSM Date: 3-17-2010			
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Rejected <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <input type="checkbox"/> Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) PROJECT ENGINEER AGREES WITH THE PROPOSED DISPOSITION AFTER COMPLETING INSPECTION OF BASE COURSE AFTER 6 PASSES WITH ROLLER			
21. WCH Disposition Approval/Signature FM:  Date: 3/18/10 PE/SE: W.A. Balany Date: 3/18/10 Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
22. Supplier:  Date: 3/18/10			
23. WCH PQAR:  Date: 3.30.10			

COMPLETED BY SUPPLIER

WCH



149799

March 17, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**PROPOSED DISPOSITION FOR SUPPLIER DEVIATION DISPOSITION
REQUEST (SDDR) TW-001/ S012308A00-004
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and accepted TradeWind Services, LLC's (TWS's) proposed disposition for SDDR No. TW-001 regarding Change Notice 001, Rev. 2, Transportation Laydown Expansion.

Please sign line 22 on the attached SDDR No. TW-001 and submit it to WCH after the work described in the SDDR is completed.

If you have any questions regarding this change notice, please contact me at (509) 373-9151, or (509) 539-9701.

Sincerely,

A handwritten signature in black ink that reads 'B. Jack Howard'.

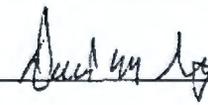
B. Jack Howard
Subcontract Technical Representative

BJH:djt

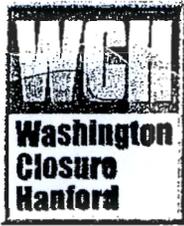
Attachment: SDDR TW-001/WCH S012308A00-004

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No.	Date Submitted	Project: ERDF Cells 9 & 10	WCH SDDR No.
TW-001	3-17-10	Job No.: S012308A00 (CN-001)	502308A00-004
1. Supplier Name		Address	
TradeWind Services LLC		1933 Jadwin Ave Suite 230	
		City, State & Zip	
		Richland, WA 99352	
2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Deviation Detected (Date & Method)
N/A	N/A	N/A	3-16-10
6. All Previous SDDR (No's & Dates)	7. WCH P.O. & Rev. No.		8. WCH MR No. (part, item, leg, etc.)
	N/A		N/A
9. WCH Part Name		10. WCH PQAR Notified (Date & Method)	11. WCH Eng. Notified (Date/Method)
N/A		3-16-10	3-16-10
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Base course compaction shall be 95% (CN-001 Rev.2) attached.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Subgrade of staging area was compacted to 90%. Subsequent revision to CN-001 reduced the thickness of base course to 3" to be compacted to 95%. After six passes with vibratory roller, it is apparent that the thin lift of base course is being incorporated into the relatively lower density subgrade making 95% unachievable. Recommend modifying the 95% compaction for base course to a specified method of 6 complete passes with a vibratory roller. Base course shall be compacted at a moisture contact within 2% of optimum moisture.			
17. Associated Supplier Document Change(s):			
18. Supplier's Authorized Representative:			
Name: Dave Sterley		Signature: 	
Title: <u>C/S/SM</u>		Date: 3-17-2010	
19. WCH Engineering Action:	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change
<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Spec/Req. Change	(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment
<input type="checkbox"/> Rejected	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			
PROJECT ENGINEER AGREES WITH THE PROPOSED DISPOSITION AFTER COMPLETING INSPECTION OF BASE COURSE AFTER 6 PASSES WITH ROLLER			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
FM: 		Date: 3/18/10	
PE/SE: <u>W.A. Balany</u>		Date: 3/18/10	
22. Supplier:		Date:	
23. WCH PQAR:		Date:	

WCH



149799

March 17, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**PROPOSED DISPOSITION FOR SUPPLIER DEVIATION DISPOSITION
REQUEST (SDDR) TW-001/ S012308A00-004
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and accepted TradeWind Services, LLC's (TWS's) proposed disposition for SDDR No. TW-001 regarding Change Notice 001, Rev. 2, Transportation Laydown Expansion.

Please sign line 22 on the attached SDDR No. TW-001 and submit it to WCH after the work described in the SDDR is completed.

If you have any questions regarding this change notice, please contact me at (509) 373-9151, or (509) 539-9701.

Sincerely,

A handwritten signature in black ink that reads "B. Jack Howard".

B. Jack Howard
Subcontract Technical Representative

BJH:djt

Attachment: SDDR TW-001/WCH S012308A00-004

SUPPLIER DEVIATION DISPOSITION REQ

DATE

3-10-10

SDDR NO.

GAG

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: WASHINGTON CLOSURE HANFORD 2620 FERMI AVENUE MSIN H4-11 Richland, WA 99352 Attention: Submittal Coordinator	FROM: GEORGE A GRANT P.O. BOX 789 RICHLAND, WA 99352	AGREEMENT NO. Subcontract No. S012308A00	
---	--	--	--

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. <i>(See instruction No. 8)</i>	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION <i>(See instruction No. 6)</i>	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
1	CREST PAD BUILDING SIDING							

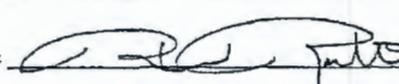
REMARKS

PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: GEORGE A GRANT
 P.O. BOX 789
 RICHLAND, WA 99352

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED <i>(List by Item No.)</i>	NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY	DATE

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		EROF SUPER CELLS		FOR WCH USE	
Supplier SDDR No. GAQ-001	Date Submitted 3/9/10	Project: 9 & 10 CONST.	Job No.:	WCH SDDR No. SD/2308A00-005	Date Received 3-10-10
1. Supplier Name GEORGE A. GRANT, INC		Address PO. BOX 789		City, State & Zip RICHLAND, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name SIDING	5. Deviation Detected (Date & Method) 3-9-10	6. All Previous SDDR (N/A's & Dates) -	
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 3-10-10	11. WCH Eng. Notified (Date/Method) 3-10-10	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). SPECIFICATION 0600X-SP-CO080 2.2 B.3.6 CALLS FOR THE CREST PAD BUILDING SIDING TO HAVE CONCEALED FASTENERS. CREST PAD BLOCKS 7 & 8 ARE EXPOSED FASTENERS					
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>					
14. Cost Impact:			15. Schedule Impact: NONE		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. IS IT ACCEPTABLE TO USE SIDING WITH EXPOSED FASTENERS AT CREST PAD BLOCKS FOR SUPER CELLS 9 AND 10 TO MATCH SIDING AT CREST PAD BUILDINGS FOR CELLS 7 AND 8					
17. Associated Supplier Document Change(s): None					
18. Supplier's Authorized Representative: Name: R. W. RICHTER Signature:  Title: PRESIDENT Date: 3/9/2010					
10. WCH Engineering Action:		Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change			
<input type="checkbox"/> Accepted		<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment			
<input type="checkbox"/> Rejected		Follow-Up <input type="checkbox"/> Other Suppliers Affected		<input type="checkbox"/> Other	
20. WCH Disposition Statement (including justification) (Attach extra sheets, sketches, etc., as necessary)					
VOID					
21. WCH Disposition Approval/Signature		Field Support Action Required?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
FM: _____		Date: _____		Date: _____	
PE/SE: _____		Date: _____		Date: _____	
22. Supplier: _____		Date: _____		Date: _____	
23. WCH PQAR: _____		Date: _____		Date: _____	

DISTRIBUTION

	NAME	MISN	With Att.
	Ciszak, P.C	T2-10	
X	Howard, B.J.	T2-10	X
	Hanks, B	T2-10	
	Klickovich, B.D.	T2-10	
	Lawrence, H.K.	T2-05	
	Looney, D.	H4-17	
	Melvin, W.F.	T2-10	
X	Palmersheim, S.M.	H4-17	X
	Schilperoort, D.L.	T2-10	
X	Skiba, C.V.	T2-10	X
X	Wintle, T.E.	T2-03	X
X	DOCUMENT CONTROL	H4-11	X
X	ERDF Project Files	T2-10	X

	NAME	MISN	With Att.
	Bentz, C.A.	T2-02	
X	Borlaug, W.A.	T2-03	X
	Caulfield, R.A.	T2-03	
	Gough, A.S.	T2-03	
	Lamb, F.O.	T2-05	
	Laws, J.R.	T2-05	
	Nixon, B.C.	T2-05	
	Riley, D.A.	T2-05	
	Wimett, J.M.	T2-03	

Subcontract/No.

Change Notice

Document Description

TradeWind, S012308A00

CN- N/A

SDDR-006

DelHur, S010544A00

CN- _____

W.Boos, 0600X-SC-G0524

CN- _____

Envirotech, S66X528A00

CN- _____

Comments: SDDR -006, SUBGRADE TOLERANCE

Distribution Completed: Yes: X No: Initials DST

TO BE COMPLETED BY R&DC:

RECORD TYPE _____

DATA ENTRY BY _____

REPRO BY _____

SCANNED/# PGS _____

DOCS OPEN # _____



149843

April 5, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**PROPOSED DISPOSITION FOR SUPPLIER DEVIATION DISPOSITION
REQUEST (SDDR) TW-006/ S012308A00-006
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and accepted TradeWind Services, LLC's proposed disposition for SDDR No. S012388A00-006 regarding the proposed subgrade tolerance.

Please sign line 22 on the attached SDDR No. S012388A00-006 and submit it to WCH if you agree with the WCH disposition.

If you have any questions regarding this disposition, please contact me at (509) 373-9151, or (509) 539-9701.

Sincerely,

A handwritten signature in black ink that reads 'B. Jack Howard'. The signature is written in a cursive style with a large initial 'B'.

B. Jack Howard
Subcontract Technical Representative

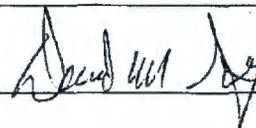
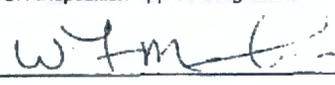
BJH:djt

Attachments: (1) SDDR TW-006/WCH S012308A00-006

DATE
3/23/10

SUPPLIER DEVIATION DISPOSITION REQUEST

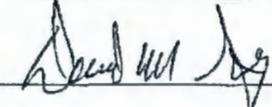
COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-006 TW-005-03 3/23	Date Submitted 3-23-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. 5012308A00-006 -006 Date Received 3/23/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230	
		City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 3-23-10
7. WCH P.O. & Rev. No. N/A		8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A
		10. WCH PQAR Notified (Date & Method) 3-23-10	11. WCH Eng. Notified (Date/Method) 3-23-10
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Sheet 0600X-DD-C045B, Detail 2 (Liner Grading Tolerance) indicates a subgrade grading tolerance of +0.00 to -0.10 FT.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. TradeWind proposes modifying the subgrade grading tolerance to reflect +0.00 to -0.20 FT. This modification will result in a constructed admix thickness in excess of 3 feet (3 ft + 0.50 ft max) - tolerance of 0.00 to +0.30 for top admix elevation.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: Dave Sterley Signature:  Title: CQCSM Date: 3-23-2010			
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Engineering Action	<input checked="" type="checkbox"/> Drawing Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) 0600X-DD-C045B, detail 2	<input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment
	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) THE PROPOSED SUBGRADE TOLERANCE +0.00 TO -0.20 FT IS ACCEPTABLE. SUBCONTRACTOR MAINTAIN MINIMUM SLOPE REQUIREMENTS AS SPECIFIED ON DRAWING No. 0600X-DD-C045B, NOTE 4.			
21. WCH Disposition Approval/Signature FM: 		Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
PE/SE: W.A. Boland		Date: 3/30/2010	
22. Supplier:		Date:	
23. WCH PQAR:		Date:	

WCH

DATE Accepted 3/30
3/23/10

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. <u>TW-000</u> <u>TW-005-03 3/23</u>	Date Submitted 3-23-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. ^{5/11} <u>S012308A00-006</u> -006
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 3-23-10
7. WCH P.O. & Rev. No. N/A		8. WCH MR No. (part, item, leg, etc.) N/A	9. WCH Part Name N/A
10. WCH PQAR Notified (Date & Method) 3-23-10		11. WCH Eng. Notified (Date/Method) 3-23-10	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Sheet 0600X-DD-C045B, Detail 2 (Liner Grading Tolerance) indicates a subgrade grading tolerance of +0.00 to -0.10 FT.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. TradeWind proposes modifying the subgrade grading tolerance to reflect +0.00 to -0.20 FT. This modification will result in a constructed admix thickness in excess of 3 feet (3 ft + 0.50 ft max) - tolerance of 0.00 to +0.30 for top admix elevation.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature:  Title: <u>CCCSM</u> Date: <u>3-23-2010</u>			
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected		Engineering Action <input checked="" type="checkbox"/> Drawing Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <u>0600X-DD-C045B, Detail 2</u> Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>THE PROPOSED SUBGRADE TOLERANCE +0.00 TO -0.20 FT IS ACCEPTABLE. SUBCONTRACTOR MAINTAIN MINIMUM SLOPE REQUIREMENTS AS SPECIFIED ON DRAWING No. 0600X-DD-C045B, NOTE 4.</u>			
21. WCH Disposition Approval/Signature FM: <u>W. J. M. [Signature]</u>		Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date: <u>3/3/10</u>	
PE/SE: <u>W.A. Bolau</u>		Date: <u>3/30/2010</u>	
22. Supplier: <u>[Signature]</u>		Date: <u>4/7/10</u>	
23. WCH PQAR:		Date:	

COMPLETED BY SUPPLIER

WCH

DISTRIBUTION

	NAME	MISN	With Att.
	Day, J.R.	T2-10	
X	Howard, B.J.	T2-10	X
X	Klickovich, B.D.	T2-10	X
	Looney, D.	H4-17	
	Melvin, W.F.	T2-10	
X	Palmersheim, S.M.	H4-17	X
X	Schilperoort, D.L.	T2-10	
X	Skiba, C.V.	T2-10	X
X	Wintle, T.E.	T2-03	X
X	Webb, M.	T2-03	
X	DOCUMENT CONTROL	H4-11	X
X	ERDF Project Files	T2-10	X

	NAME	MISN	With Att.
	Bentz, C.A.	T2-02	
X	Borlaug, W.A.	T2-03	X
	Caulfield, R.A.	T2-03	
	Hanks, B	T2-03	
	Lamb, F.O.	T2-05	
	Laws, J.R.	T2-05	
	Nixon, B.C.	T2-05	
	Riley, D.A.	T2-05	
	Wimett, J.M.	T2-03	
X	Voss, J. (Envirotech)	T2-11	X

Subcontract/No.

Change Notice

Document Description

TradeWind, S012308A00

CN- N/A

SDDR-007 - Backfill Utility Trench (Rejected)

DelHur, S010544A00

CN- _____

W.Boos, 0600X-SC-G0524

CN- _____

Envirotech, S66X528A00

CN- _____

Comments: SDDR TW-007

Distribution Completed: Yes: X No: Initials DJ7

TO BE COMPLETED BY R&DC:

RECORD TYPE _____

DATA ENTRY BY _____

SCANNED/# PGS _____

REPRO BY _____

DOCS OPEN # _____



150640

May 18, 2010

TradeWind Services, LLC
Kurt N. Massey, Project Manager
2620 Fermi Ave. MSIN: T2-12
Richland, WA 99354

Subject: Subcontract No. S012308A00
**SUPPLIER DEVIATION DISPOSITION REQUEST (SDDR)
S012308A00-007, BACKFILLING OF UTILITY TRENCH
FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009 (ARRA)**

Dear Mr. Massey:

Washington Closure Hanford (WCH) has reviewed and rejected TradeWind, LLC's proposed SDDR, No. TW-007, WCH No. S012308A00-007, regarding *Backfilling of Utility Trench*.

If you have any questions regarding this SDDR, please contact me at (509) 373-9476, or (509) 942-9275.

Sincerely,

A handwritten signature in black ink, appearing to read 'Charles V. Skiba', is written over a light blue horizontal line.

Charles V. Skiba
Subcontract Technical Representative

CVS:djt

Attachment: SDDR No. TW-007, (With Attached Justification)

DATE
 4/28/10 *SM*

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-007	Date Submitted 4-28-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. 5012308A00-007 Date Received 4/28/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 4-26-10
6. All Previous SDDR (No's & Dates) TW 1-8	7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A
10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method) 4-26-10	12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Spec section 0600X-SP-C0075, Section 3.9 Backfilling and compaction of utility systems. "8 inch loose lift, 90% density".	
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Propose changing above specification to the following: 0600X-SP-C0075 spec section 3.11 Fills and Embankments. " Top 5 feet, 6" lifts @ 95 %; Below 5 feet, 12" lifts @ 90 %.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <i>[Signature]</i> Title: <u>CQCSM</u> Date: <u>4-28-10</u>			
19. WCH Engineering Action: <input type="checkbox"/> Accepted Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <input checked="" type="checkbox"/> Rejected Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>See attached sheet for justification statement</u>			
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No FM: <u>W. J. [Signature]</u> Date: <u>5/17/10</u> PE/SE: <u>Z. [Signature]</u> Date: <u>5/17/10</u>			
22. Supplier: _____ Date: _____			
23. WCH PQAR: _____ Date: _____			

WCH

No change is required in the specifications.

In general the utility trench will be backfilled in accordance with the following sections of 0600X-SP-C0075:

Section 3.9 Backfilling and Compaction of Utility Systems. Specifically “Backfill shall be placed in layers not exceeding 6 inches loose thickness for compaction by hand operated machine compactors, and 8 inches loose thickness for other than hand operated machines. Each layer shall be compacted to at least 90 percent maximum dry density (ASTM D1557), unless otherwise specified for backfill of roadways and buildings.”

Section 3.9.1.3 Bedding and Initial Backfill that states “... initial backfill material shall be placed and compacted by hand held tampering bars to a height of at least one foot above the top of the utility pipe...”

Section 3.9.1.4 Final Backfill “Backfill material shall be placed and compacted as required for the general area surrounding the utility trench.”

Therefore, once the bedding and initial foot of backfill material are placed and compacted in accordance with section 3.9.1.3, the remainder of the trench can be backfilled using methods defined in section 3.11 Fills and Embankments. Extra attention to materials and compaction must be taken in the area of the truck and pup ramp to ensure continuity with the existing roadway.

DATE
 4/28/10 *CR*

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-007	Date Submitted 4-28-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-007 Date Received 4/28/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 4-26-10
6. All Previous SDDR (No's & Dates) TW 1-6	7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A
10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method) 4-26-10	12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Spec section 0600X-SP-C0075, Section 3.9 Backfilling and compaction of utility systems. "8 inch loose lift, 90% density".	
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Propose changing above specification to the following: 0600X-SP-C0075 spec section 3.11 Fills and Embankments. " Top 5 feet, 6" lifts @ 95 %; Below 5 feet, 12" lifts @ 90 %.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <i>Dave Sterley</i> Title: <u>CRCSM</u> Date: <u>4-28-10</u>			
19. WCH Engineering Action:		<input type="checkbox"/> Accepted Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Rejected <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <input type="checkbox"/> Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM: _____		Date: _____	
PE/SE: _____		Date: _____	
22. Supplier: _____		Date: _____	
23. WCH PQAR: _____		Date: _____	

WCH

3.5.1 General

Provide test equipment and materials, including test pumps, gauges, water, volumetric measuring equipment, and other equipment required. Pressure gauges used shall be graduated in increments not greater than 1 psi and shall have range of approximately twice the test pressure. Use only calibrated gauges and instruments. Provide calibration certificates traceable to NIST. Gauge serial numbers shall be traceable to tests performed.

Pressure tests shall be performed by bringing the system to test pressure and holding for a minimum of 10 minutes before beginning inspection of joints for leakage. Visually inspect all joints for leakage. For pneumatic tests, Soap Bubble test the joints using Snoop or other approved product, to determine the source of any leakage. Maintain test pressure for the entire duration of the tests.

Test duration shall be as described above unless otherwise specified in this document.

The pipeline should be prepared prior to testing by filling it with water, in a manner to remove air (piping sections with elevation changes shall be vented in accordance with a fill and venting procedure prior to testing). The test pressure should be applied to stabilize the system. This should minimize losses due to entrapped air, changes in water temperature, distention of components under pressure, movement of gaskets, and absorption of air by the water and water by the pipe wall.

During testing, remove from systems any equipment that would be damaged by test pressure. Replace removed equipment after testing. Where new pipe connects to existing piping, the joint between the two pipes shall be tested. Correct leaks by remaking joints with new material; makeshift remedies will not be permitted. Welded pipe attachments (hangers, etc.) shall be installed prior to testing.

Systems may be tested in sections as work progresses; however, any previously tested portion shall become a part of any later test of composite system. Test records shall include marked up drawings indicating which piping was tested.

The SUBCONTRACTOR shall be responsible for providing temporary fillings, plugs, pressure relief devices, and thrust blocking for testing at the specified pressure. A pressure relief device shall be provided for each piping section being tested. The device shall have a set pressure not higher than 5 percent of the maximum test pressure.

Tests shall be made by the SUBCONTRACTOR in the presence of the CONTRACTOR. The certificate shown in NFPA 24 Figure 10.10.1 shall be completed by SUBCONTRACTOR.

Additives, corrosive chemicals such as sodium silicate, brine, or other chemicals shall not be used while hydrostatically testing systems or for stopping leaks.

Acceptance Criteria:

Where visual inspection of the joints is possible, the test is considered acceptable if there are no visible signs of leakage. Where visual inspection of the joints is not possible (i.e. the inner pipe of a dual wall pipe), the test is considered acceptable if measured pressure loss is not greater than 5 percent of the test beginning pressure throughout the specified test duration.

3.5.2 Buried Pipe Testing

The trench shall be backfilled between joints before testing to prevent movement of pipe. Tests shall be made before the joints are covered so that any leaks may be readily detected. Where any section of a pipe is provided with concrete thrust blocking, the tests shall not be made until at least 5 days after installation of the concrete thrust blocking, unless otherwise approved by the CONTRACTOR. If the joints are covered with backfill prior to testing, the SUBCONTRACTOR remains responsible for locating and correcting any leakage in excess of that permitted in Section 3.4.1.

3.5.2.1 HDPE Pump Discharge Pipes

Hydrostatically pressure test to 70 psi minimum (+ 5% allowed).

3.5.2.2 PVC Crest Pad Pipe

Test with piping in final location. Hydrostatically pressure test to 70 psi (+ 5% allowed) with gage located in crest pad building.

3.5.2.3 HDPE Double Contained Pipe

Test with piping in final location. The carrier pipe (inner pipe) of double containment piping shall be hydrostatically pressure tested with a beginning test pressure between 30 psi and 40 psi. Once full test pressure is applied, disconnect the pressure source by use of isolation valves, de-energizing the source, or by physically removing the source from the system. Once full test pressure is applied to system, pressure shall be held for 1 hour.

The containment pipe (outer pipe) of double containment piping can be either hydrostatically or pneumatically tested with a beginning test pressure between 10 psi and 15 psi.

Carrier pipe (inner pipe) shall be full of water when containment pipe is pressure tested.

3.5.3 Raw Water Pipe

Permanent raw water lines installed by the SUBCONTRACTOR to support construction activities shall be tested hydrostatically at 175 psi (+ 5% allowed) for two hours. Test time will be accrued only while full test pressure is applied to the system.

Minimum test procedure is as follows: The water pressure is to be increased to 100-psi and held while observations are to be made of the stability of the joints. These observations are to include such items as protrusion or extrusion of the gasket, leakage, or other factors likely to affect the

continued use of a pipe in service. After observations are complete, increase in pressure to the 175 psi (+5%) test pressure and perform 2 hour pressure test.

The amount of leakage in buried piping shall be measured at the specified test pressure by pumping from a graduated container. For new pipe, the amount of leakage at the joints shall not exceed two quarts per hour per 100 gaskets or joints irrespective of pipe diameter. No visible leakage shall be allowed in aboveground piping. The amount of allowable leakage shall be permitted to be increased by one fluid ounce per inch valve diameter per hour for each metal seated valve isolating the test section.

3.6 CLEANING

Clean all piping as required to remove foreign materials including dirt, grease, shavings, and other matter. Debris and surplus materials resulting from work, as a result of this installation effort, shall be removed.

3.7 QUALITY ASSURANCE/QUALITY CONTROL

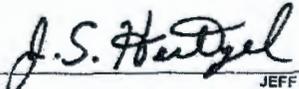
Construction Quality Control and Testing requirements are provided in Construction Quality Requirements, Specification No. 0600X-SP-G0048.

At locations where the field testing conducted by either the SUBCONTRACTOR, CONTRACTOR, or CQA Subcontractor indicates that conditions are outside the acceptable limits of the specifications, the filing area shall be reworked or removed and replaced. These areas shall be retested and the repair process repeated as necessary until passing results are achieved.

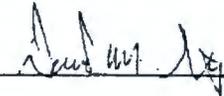
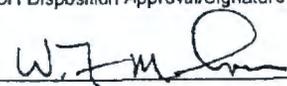
The SUBCONTRACTOR shall maintain and supply to CONTRACTOR records of his quality control for operations including but not limited to the following:

- (1) Delivery, storage, and handling of devices and equipment used.
- (2) Conformance of materials to the requirements of this specification.
- (3) Inspection of devices and equipment installed
- (4) Field testing of devices and equipment.
- (5) Installation of devices and equipment to these requirements and applicable codes and standards.

Copies in duplicate of these records and tests, as well as records of corrective action taken when results are unsatisfactory, shall be furnished to the CONTRACTOR within 1 working day following the inspection or test.

SUPPLIER DEVIATION DISPOSITION REQUEST					DATE 5-06-2010		TRANSMITTAL NO. TW-0L. 009			
SECTION I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be Initiated by the contractor)										
TO: WASHINGTON CLOSURE HANFORD 2620 Femi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmershelm				FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354			AGREEMENT NO. S012308A00			
ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE		
				SPEC. PARA. NO.	DRAWING SHEET NO.					
a.	b.	c.	d.	e.	f.	g.	h.	i.		
1	Slope Subgrade Tolerance									
REMARKS PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com					I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.  JEFF HERTZEL					
SECTION II – APPROVAL ACTION (WASHINGTON CLOSURE HANDFORD LLC)										
ENCLOSURES RETURNED (List by Item No.)				NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY				DATE		
COMMENTS:				COMMENTS:						

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-009	Date Submitted 5-6-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. 609 Date Received 5/10/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 5-4-10
7. WCH P.O. & Rev. No. N/A		6. All Previous SDDR (No's & Dates) TW 1-8	8. WCH MR No. (part, item, tag, etc.) N/A
9. WCH Part Name N/A		10. WCH PQAR Notified (Date & Method) 5-4-10	11. WCH Eng. Notified (Date/Method) 5-4-10
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Drawing 0600X-DD-C0458, Rev. 0, indicates a slope subgrade tolerance of +0.00 to -.020 feet.			
13. Supplier's Proposed Disposition: Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Initial QA survey indicated the south slope & floor subgrade met specified tolerances. After strong winds, subsequent QA survey reflected the top of south slope to be .25 to .40 low. Rather than constructing a sliver fill, TradeWind purposes bringing low subgrade up to acceptable tolerances utilizing admix.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature:  Title: <u>CRCSM</u> Date: <u>5-6-2010</u>			
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected			
Engineering Action		<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment	
Follow-Up		<input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) See attached			
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
FM: 		Date: <u>6/21/10</u>	
PE/SE: 		Date: <u>6/21/10</u>	
22. Supplier: _____		Date: _____	
23. WCH PQAR: _____		Date: _____	

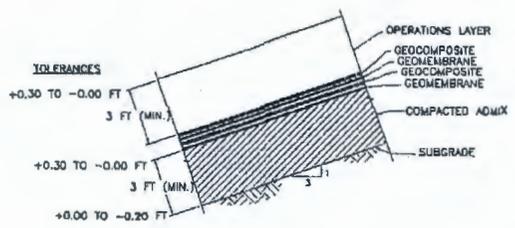
COMPLETED BY SUPPLIER

WCH

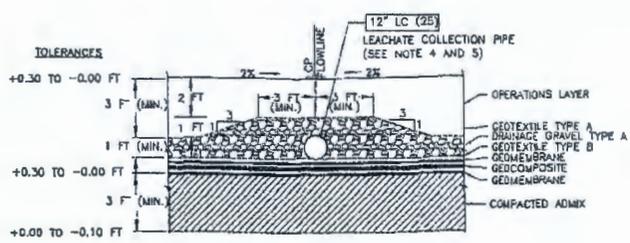
WCH has reviewed the request for deviation form submitted by TWS and has made the following determination:

WCH accepts the deviation and recommends the SUBBCONTRACTOR to "Use As-Is." WCH will allow the SUBCONTRACTOR to correct the deviation per their request by increasing the admix thickness to make up for localized low spots in the subgrade. It is determined that due to the limited size of the deviation and the independent oversight and certification provided by the Construction Quality Assurance (CQA) Subcontractor, that there would be no decrease in performance by placing the additional admix. For future similar occurrences, the CONTRACTOR maintains the right to apply the same logic in the resolution of questions concerning subgrade and admix tolerances.

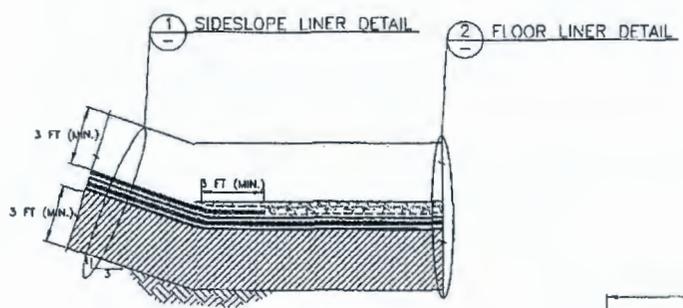
Due to the unique circumstances causing the deviation, no changes to the design or specifications are required. The SUBCONTRACTOR is expected to build the remainder of the cell(s) to the tolerances shown in the design and specifications.



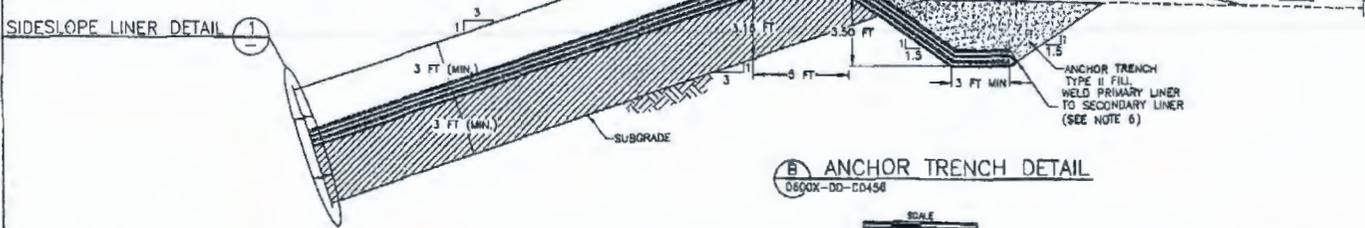
1 SIDESLOPE LINER DETAIL
0600X-DD-C0458, C0459, C0460, C0462, C0463



2 FLOOR LINER DETAIL
0600X-DD-C0458, C0480, C0481, C0482, C0483



A LINER TRANSITION - FLOOR TO SIDESLOPE
0600X-DD-C0458



B ANCHOR TRENCH DETAIL
0600X-DD-C0458



Dedicated to Excellence

RECORD NO.	REV. NO.	DATE	BY
H-6-16350 SH701	600G	0111	

NOTES

1. LINER SYSTEM COMPONENT THICKNESSES ENAGGERATED FOR CLARITY.
2. REFER TO TECHNICAL SPECIFICATIONS FOR CELL CONSTRUCTION FOR MATERIAL, HANDLING, AND INSTALLATION REQUIREMENTS.
3. GRADING TOLERANCES DO NOT RELIEVE CONTRACTOR FROM LINER SYSTEM THICKNESS REQUIREMENTS. LINER SYSTEM THICKNESSES REPRESENT THE MINIMUM ALLOWABLE. AREAS FOUND TO BE LESS THAN THE REQUIRED THICKNESS (EVEN BY MINOR AMOUNTS) WILL REQUIRE RECONSTRUCTION.
4. GRADING TOLERANCES DO NOT RELIEVE CONTRACTOR FROM THE MINIMUM PIPE SLOPE REQUIREMENTS. ALL 12" LC(25) PERFORATED LEACHATE COLLECTION PIPE MUST BE INSTALLED AT A 1% MINIMUM SLOPE.
5. THE LEACHATE COLLECTION PIPE SHALL BE RUN THE ENTIRE LENGTH OF THE CELL FLOOR.
6. 0 TO 5 INCHES TYPE II FILL BETWEEN GEOSYNTHETIC LAYERS ALLOWED WITHIN ANCHOR TRENCH ONLY AND MUST BE MECHANICALLY COMPACTED.

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D
1	11/14/06	ISSUED FOR BIDDING			

RECEIVED
NOV 21 2006
WCH DOCUMENT CONTROL



DOCUMENT CONTROL

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D
1	11/14/06	ISSUED FOR BIDDING			

U.S. DEPARTMENT OF ENERGY
DOE RICHLAND OPERATIONS OFFICE
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC
RICHLAND, WASHINGTON

WEAVER BOOS CONSULTANTS, LLC
DENVER, COLORADO

ENVIRONMENTAL RESTORATION DISPOSAL FACILITY
CELLS 9 - 10
LINER SYSTEM DETAILS - 1

WCH JOB NO.	DOE CONTRACT NO.	CADD FILENAME
14655	DE-AC06-05RI-14655	6XDC0458.DWG

TASK	DRAWING NO.	REV. NO.
ERDF	0600X-DD-C0458	0

SUPPLIER DEVIATION DISPOSITION REQUEST

DATE

5-07-2010

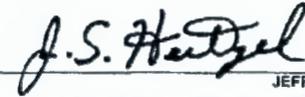
TRANSMITTAL NO.

TW-010

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO: WASHINGTON CLOSURE HANFORD 2620 Fermi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmersheim	FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354	AGREEMENT NO. S012308A00 -010
--	--	---

ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
1	Trial Seams Spec Change							

<p>REMARKS</p> <p>PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com</p>	<p>I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.</p> <p> JEFF HERTZEL</p>
--	--

SECTION II - APPROVAL ACTION (WASHINGTON CLOSURE HANDFORD LLC)

ENCLÓSURES RETURNED (List by Item No.)	NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY	DATE
COMMENTS:	COMMENTS:	

SUPPLIER DEVIATION DISPOSITION REQUEST

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. 100-010	Date Submitted 5-7-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-010 Date Received 5/7/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 5-6-10
6. All Previous SDDR (No's & Dates) TW 1-9		7. WCH P.O. & Rev. No. N/A	
8. WCH MR No. (part, item, tag, etc.) N/A		9. WCH Part Name N/A	
10. WCH PQAR Notified (Date & Method) 5-6-10		11. WCH Eng. Notified (Date/Method) 5-6-10	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). 0600X-SP-C0077, Rev. 0 Section 3.5.1 Trial Seams: "Trial seams shall be made at beginning of each seaming period, and at least once each four hours..."			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Propose modifying above specification to read as follows: "At a minimum, trial seams shall be made at the beginning of each seaming period, and again at mid shift...." (This will eliminate stopping before lunch in order to perform trail welds.)			
17. Associated Supplier Document Change(s): None			
Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <u>[Signature]</u> Title: <u>CCCSM</u> Date: <u>5-7-2010</u>			
19. WCH Engineering Action:		Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input checked="" type="checkbox"/> Accepted <input checked="" type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <input type="checkbox"/> Rejected Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>Specification No 0600X-SP-C0077, Rev 1 section 3.5.1 Trial Seams will be revised to read "... Trial seams shall be made at the Beginning of each seaming period, and again at Midshift for each..."</u>			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM: <u>[Signature]</u>		Date: <u>5/25/10</u>	
PE/SE: <u>W.A. Bolan</u>		Date: <u>5/25/10</u>	
Supplier: <u>[Signature]</u>		Date: <u>6-1-10</u>	
23. WCH PQAR: _____ Date: _____			

WCH

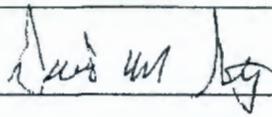
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE		
Supplier SDDR No. TW-011	Date Submitted 5-24-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-011	Date Received 5/24/10	
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230		City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 5-21-10	6. All Previous SDDR (No's & Dates) TW 1-10	
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method) 5-21-10	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). CN-016; DRAWING 0600X-DD-C0468, C0469, REV.1 SHOWS NEW TANK DRAIN TIE-IN AND NEW TANK LEAK DETECTION LINE SLOPED AT 2%.					
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>					
14. Cost Impact: TBD			15. Schedule Impact: None		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. IN ORDER TO MATCH EXISTING PIPING AT MH22, THE DRAIN SHALL BE SLOPED AT 1/2%. IN ORDER TO SET LEAK DETECTION VAULT AT GRADE, THE 2" PIPE SHALL BE SLOPED AT 1/2%.					
17. Associated Supplier Document Change(s): None					
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <u><i>Dave Sterley</i></u> Title: <u>CRC SW</u> Date: <u>5-24-2010</u>					
19. WCH Engineering Action:	Engineering Action <input checked="" type="checkbox"/> Drawing Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment				
	<input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>Drawing Nos 0600X-DD-C0468 and 0600X-DD-C0469 will be revised to reflect the changes described in the "proposed disposition and technical justification"</u>					
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
FM: <u><i>W. J. ...</i></u>			Date: <u>5/26/10</u>		
PE/SE: <u><i>T. E. Will</i></u>			Date: <u>5/26/10</u>		
22. Supplier: <u><i>Dave Sterley</i></u>			Date: <u>6-1-10</u>		
23. WCH PQAR: _____			Date: _____		

COMPLETED BY SUPPLIER

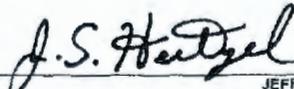
WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-012	Date Submitted 6-21-10	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00-012 Date Received 6/21/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 6-21-10
6. All Previous SDDR (No's & Dates) TW 1-11		7. WCH P.O. & Rev. No. N/A	
8. WCH MR No. (part, item, tag, etc.) N/A		9. WCH Part Name N/A	
10. WCH PQAR Notified (Date & Method) N/A		11. WCH Eng. Notified (Date/Method) 6-21-10	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). DRAWING 0600X-DD-C0477, REV.0, NOTE 2. "CLEARANCE FOR REINFORCEMENT BARS SHALL BE 3" WHEN PLACED ON GROUND." SPECIFICATION 0600X-SP-C0079 REV. 0 SECTION 2.8.3 SUPPORTS. "BAR SUPPORTS SHALL BE 3"X3" WHEN SUPPORTING REINFORCEMENT ON THE GROUND."			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: N/A		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. PROPOSE UTILIZING A 2" CLEARANCE WHEN USING #4 REBAR. THIS IS CONSISTANT WITH ACI 301 AND ACI 318. P.E. STAMPED TANK FOUNDATION IS CONSISTANT WITH ABOVE REFERENCE SPECIFICATIONS.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: 			
Title: <u>CQCSM</u>		Date: <u>5-24-2010</u>	
19. WCH Engineering Action:			
<input type="checkbox"/> Accepted	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change	<input type="checkbox"/> Rejected	<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment
	Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other		
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
FM: _____		Date: _____	
PE/SE: _____		Date: _____	
22. Supplier: _____		Date: _____	
23. WCH PQAR: _____		Date: _____	

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST					DATE	TRANSMITTAL NO.		
					7-07-2010	TW-0~		
SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS <i>(This section will be initiated by the contractor)</i>								
TO: WASHINGTON CLOSURE HANFORD 2620 Fermi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmersheim			FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354		AGREEMENT NO. S012308A00			
ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
1	Butting geocomposite to existing secondary drainage layer							
VOIDED								
REMARKS PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com					I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.  JEFF HERTZEL			
SECTION II - APPROVAL ACTION (WASHINGTON CLOSURE HANFORD LLC)								
ENCLOSURES RETURNED <i>(List by Item No.)</i>				NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY			DATE	
COMMENTS:				COMMENTS:				

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No.	Date Submitted	Project: ERDF CELLS 9 & 10	WCH SDDR No.
SDDR-013	7/6/10	Job No.: S012308A00	013
1. Supplier Name		Address	
TradeWind Services, LLC.		1933 Jadwin Ave Suite 230	
		City, State & Zip	
		Richland, WA 99352	
2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Deviation Detected (Date & Method)
N/A	N/A	N/A	7-6-2010
6. All Previous SDDR (No's & Dates)	11. WCH Eng. Notified (Date/Method)		
1-12	7-6-2010		
7. WCH P.O. & Rev. No.	8. WCH MR No. (part, item, tag, etc.)	9. WCH Part Name	10. WCH PQAR Notified (Date & Method)
N/A	N/A	N/A	N/A
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). As designed, Drawing 0600X-DD-C0463 Section A shows a 2' minimum overlap of drainage gravel at the Cells 7 & 8 tie-in over the geocomposite.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. To expose the amount of geotextile as indicated on the referenced drawing, material would either have to be mucked onto itself (which would create a greater than 1.5:1 slope) or laid out on a rub sheet on top of the secondary liner. Placing the material on a rub sheet on top of the secondary liner has the potential to damage the liner. To maintain the integrity of the secondary liner and to eliminate a safety hazard, TWS proposes butting the geocomposite to the existing secondary drainage layer on the floor tie-in. The gravel layer will still be confined by the geotextile drainage in the secondary layer will still be carried on the secondary liner.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative:			
Name: Nick Clapper		Signature: <i>Nick Clapper</i>	
Title: Project Engineer		Date: 7/6/10	
19. WCH Engineering Action:	Engineering Action	Drawing Change <input type="checkbox"/> (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	Licensing Document Change <input type="checkbox"/>
<input type="checkbox"/> Accepted		Spec/Req. Change <input type="checkbox"/> (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	Price Adjustment <input type="checkbox"/>
<input type="checkbox"/> Rejected	Follow-Up <input type="checkbox"/>	Other Suppliers Affected <input type="checkbox"/>	Other <input type="checkbox"/>
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

21. WCH Disposition Approval/Signature

Field Support Action Required?

Yes

No

FM: _____

Date: _____

PE/SE: _____

Date: _____

22. Supplier: _____

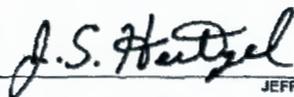
Date: _____

23. WCH PQAR: _____

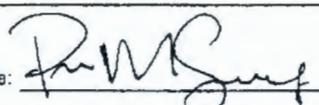
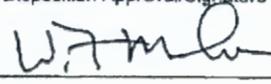
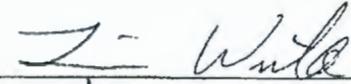
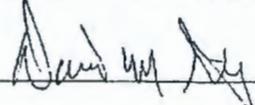
Date: _____

COMPLETED BY SUPPLIER

WCH

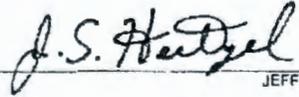
SUPPLIER DEVIATION DISPOSITION REQUEST					DATE 7-08-2010		TRANSMITTAL NO. TW-01	
SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS <i>(This section will be initiated by the contractor)</i>								
TO: WASHINGTON CLOSURE HANFORD 2620 Fermi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmersheim			FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354		AGREEMENT NO. S012308A00		DATE 7/8/10	
ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
1	0600X-SP-C0082, Rev.1- Lined Bolted Steel Liquid Storage Tank Section 1.5.5-Design Assessment Report Paragraphs 1-6							
REMARKS PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com				I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.  JEFF HERTZEL				
SECTION II - APPROVAL ACTION (WASHINGTON CLOSURE HANFORD LLC)								
ENCLOSURES RETURNED <i>(List by Item No.)</i>				NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY			DATE	
COMMENTS:				COMMENTS:				

SUPPLIER DEVIATION DISPOSITION REQUEST

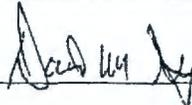
FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-014	Date Submitted 07-08-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. -014
		Date Received 7/8/10	
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230	
		City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 07-07-2010
		6. All Previous SDDR (No's & Dates) TW 1-12	
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 07-07-2010
		11. WCH Eng. Notified (Date/Method) 07-07-2010	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). 0600X-SP-C0082, Rev.1- Lined Bolted Steel Liquid Storage Tank Section 1.5.5-Design Assessment Report Paragraphs 1-6			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: N/A		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. - Delete paragraph 1 (site map) from section 1.5.5 and add to section 1.5.7-Installation Report - Delete paragraph 4 (secondary containment) from section 1.5.5 and add to section 1.5.7- Installation Report			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: 			
Title: <u>CQCSM</u>		Date: <u>07-08-2010</u>	
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Rejected <input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <input type="checkbox"/> Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH Accepts the changes to specification 0600X-SP-C0082, Rev 1 as described in section 16.</u>			
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
FM: 		Date: <u>7/13/10</u>	
PE/SE: 		Date: <u>7/13/10</u>	
22. Supplier: 		Date: <u>7/13/10</u>	
23. WCH PQAR:		Date:	

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST					DATE 8-03-2010		TRANSMITTAL NO. TW-											
SECTION I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)																		
TO: WASHINGTON CLOSURE HANFORD 2620 Fermi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmersheim			FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354			AGREEMENT NO. S012308A00		WCH SDDR # S012308A00-015										
ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		<table border="1" style="width:100%; text-align: center;"> <tr> <td colspan="2">DATE</td> <td>FOR CONTRACTOR USE CODE</td> <td>FOR VARIATION</td> <td>FOR USE CODE</td> </tr> <tr> <td colspan="2">5/8/10</td> <td></td> <td></td> <td></td> </tr> </table>			DATE		FOR CONTRACTOR USE CODE	FOR VARIATION	FOR USE CODE	5/8/10				
				DATE					FOR CONTRACTOR USE CODE	FOR VARIATION	FOR USE CODE							
5/8/10																		
a	b	c	d	SPEC. PARA. NO.	DRAWING SHEET NO	e	f	g										
1	Change 3" conduit to a 2" conduit																	
REMARKS PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com					I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated  JEFF HERTZEL													
SECTION II – APPROVAL ACTION (WASHINGTON CLOSURE HANFORD LLC)																		
ENCLOSURES RETURNED (List by Item No.)			NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY				DATE											
COMMENTS:			COMMENTS:															

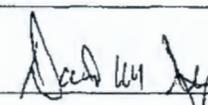
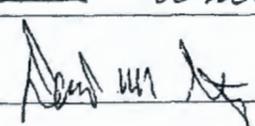
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-015	Date Submitted 08-02-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. Date Received
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230	
		City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 08-02-2010
6. All Previous SDDR (No's & Dates) TW 1-14			
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) N/A
11. WCH Eng. Notified (Date/Method) 08-02-2010			
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). DCN 0600X-DD-E0218-00-02 (CN#28) Shows a SG-3K (3" Conduit) from MDP-2 to PB-PTNX.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: N/A		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Change 3" conduit to a 2" conduit. Existing configuration in panel does <u>not</u> allow room for a 3" conduit. A 2" conduit will still meet code requirements.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature:  Title: <u>CQCSM</u> Date: <u>08-02-2010</u>			
19. WCH Engineering Action:			
<input type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment	<input type="checkbox"/> Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)			
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
FM: _____		Date: _____	
PE/SE _____		Date: _____	
22. Supplier: _____		Date: _____	
23. WCH PQAR _____		Date: _____	

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE		
Supplier SDDR No.	Date Submitted	Project: ERDF Cells 9 & 10	WCH SDDR No.	Date Received	
TW-015	08-02-2010	Job No.: S012308A00		8/3/10	
1. Supplier Name		Address		City, State & Zip	
TradeWind Services LLC		1933 Jadwin Ave Suite 230		Richland, WA 99352	
2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Deviation Detected (Date & Method)	6. All Previous SDDR (No's & Dates)	
N/A	N/A	N/A	08-02-2010	TW 1-14	
7. WCH P.O. & Rev. No.	8. WCH MR No. (part, item, tag, etc.)	9. WCH Part Name	10. WCH PQAR Notified (Date & Method)	11. WCH Eng. Notified (Date/Method)	
N/A	N/A	N/A	N/A	08-02-2010	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). DCN 0600X-DD-E0218-00-02 (CN#28) Shows a SG-3K (3" Conduit) from MDP-2 to PB-PTNX.					
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>					
14. Cost Impact: N/A			15. Schedule Impact: None		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Change 3" conduit to a 2" conduit. Existing configuration in panel does <u>not</u> allow room for a 3" conduit. A 2" conduit will still meet code requirements.					
17. Associated Supplier Document Change(s): None					
18. Supplier's Authorized Representative:					
Name: <u>Dave Sterley</u>		Signature: 			
Title: <u>CQCSM</u>		Date: <u>08-02-2010</u>			
19. WCH Engineering Action:					
<input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Engineering Action	<input checked="" type="checkbox"/> Drawing Change	(<input type="checkbox"/> WCH <input checked="" type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change	
		<input type="checkbox"/> Spec/Req. Change	(<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Price Adjustment	
	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other		
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH accepts the change from 3" to 2" conduit as explained in section 16. TWS will make redline changes to construction set of plans.</u>					
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No					
FM: <u>W. J. M. L.</u>		Date: <u>8/11/10</u>			
PE/SE: <u>I. W. L.</u>		Date: <u>8/9/10</u>			
22. Supplier: 		Date: <u>8-11-10</u>			
23. WCH POAR		Date:			

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-016	Date Submitted 08-05-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. - 016 Date Received 8/05/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 07-28-2010
6. All Previous SDDR (No's & Dates) TW 1-15	7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A
10. WCH PQAR Notified (Date & Method) N/A	11. WCH Eng. Notified (Date/Method) N/A	12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Specification 0600X-SP-C0078, Rev.0; Section 2.2 Drainage Gravel Type A. Variability of specific lenses of sands and gravels in Pit 30 make it difficult to control the product to meet the specified grading. Meeting the 3/8" grading requirement makes the product a gravelly sand instead of a sandy gravel.	
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: N/A		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Change 3/8" grading spec from 35-80 to 25-80. This minor change would "clean-up" the product and facilitate permeability in the drainage layer. It would also allow for more liquid storage in the drainage layer if the need were to arise.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <u><i>Dave Sterley</i></u> Title: <u>CQCSM</u> Date: <u>08-05-2010</u>			
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected			
Engineering Action		<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment	
Follow-Up		<input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH accepts the proposed disposition and will make the necessary changes to the design documents.</u>			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM: <u><i>WFM</i></u>		Date: <u>8/12/10</u>	
PE/SE: <u><i>J. W. White</i></u>		Date: <u>8/11/10</u>	
22. Supplier: <u><i>Dave Sterley</i></u>		Date: <u>8/17/10</u>	
23. WCH PQAR:		Date:	

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

DATE

8-05-2010

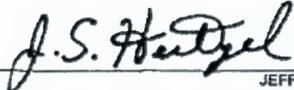
TRANSMITTAL NO.

TW-01

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be Initiated by the contractor)

TO: WASHINGTON CLOSURE HANFORD 2620 Femi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmershelm	FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354	AGREEMENT NO. S012308A00
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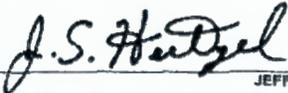
ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
1	Change 3/8" grading spec from 35-80 to 25-80							

<p>REMARKS</p> <p>PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeff@tradewindllc.com</p>	<p>I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.</p> <p> JEFF HERTZEL</p>
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SECTION II - APPROVAL ACTION (WASHINGTON CLOSURE HANDFORD LLC)

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY	DATE

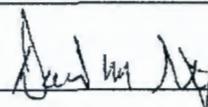
COMMENTS:	COMMENTS:

SUPPLIER DEVIATION DISPOSITION REQUEST					DATE 8-24-2010		TRANSMITTAL NO. TW-01			
SECTION I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS <i>(This section will be initiated by the contractor)</i>										
TO: WASHINGTON CLOSURE HANFORD 2620 Fermi Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmersheim				FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354			AGREEMENT NO. S012308A00			
ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE		
				SPEC. PARA. NO.	DRAWING SHEET NO.					
a.	b.	c.	d.	e.	f.	g.	h.	i.		
1	Change section 3.9.2.J of spec 0600X-SP-C0077 to 30 calendar days									
REMARKS PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com				I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.  JEFF HERTZEL						
SECTION II – APPROVAL ACTION (WASHINGTON CLOSURE HANDFORD LLC)										
ENCLOSURES RETURNED <i>(List by Item No.)</i>				NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY				DATE		
COMMENTS:				COMMENTS:						

SUPPLIER DEVIATION DISPOSITION REQUEST

DATE
8/24/10

COMPLETED BY SUPPLIER

FOR SUPPLIER USE		FOR WCH USE											
Supplier SDDR No. TW-017	Date Submitted 08-24-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. S012308A00 -017										
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 Richland, WA 99352											
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 08-23-2010										
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 08-24-2010										
6. All Previous SDDR (No's & Dates) TW 1-16													
11. WCH Eng. Notified (Date/Method) 08-24-2010													
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Specification 0600X-SP-C0077, Rev.0 Section 3.9.2.J, Geotextile handling and placement. "Textile shall be covered within 14 calendar days."													
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>													
14. Cost Impact: None		15. Schedule Impact: None											
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. The geotextile supplied meets or exceeds the specified greater than 70% at 500 hours of u.v. exposure. 500 hours of u.v. exposure equates to a minimum of 30-35 calendar days. Given the size of cells 9 & 10 (36 acres) and the necessary construction sequencing, it is impractical to cover every geotextile component after 14 calendar days. Recommend changing section 3.9.2.J from 14 calendar days to 30 calendar days given the material property spec of greater than 70% strength after 500 hours of u.v. exposure.													
17. Associated Supplier Document Change(s): None													
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature:  Title: <u>CQCSM</u> Date: <u>08-24-2010</u>													
19. WCH Engineering Action: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"><input checked="" type="checkbox"/> Accepted</td> <td style="width: 15%;"><input type="checkbox"/> Rejected</td> <td style="width: 15%;">Engineering Action</td> <td style="width: 15%;"> <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier) </td> <td style="width: 15%;"> <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment </td> </tr> <tr> <td colspan="2"></td> <td>Follow-Up</td> <td> <input checked="" type="checkbox"/> Other Suppliers Affected <u>Envirotech</u> <input type="checkbox"/> Other </td> <td></td> </tr> </table>				<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Rejected	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment			Follow-Up	<input checked="" type="checkbox"/> Other Suppliers Affected <u>Envirotech</u> <input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Rejected	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input checked="" type="checkbox"/> Spec/Req. Change (<input checked="" type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment									
		Follow-Up	<input checked="" type="checkbox"/> Other Suppliers Affected <u>Envirotech</u> <input type="checkbox"/> Other										
20. WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH will revise the geotextile spec. as shown on the attached sheet.</u>													
21. WCH Disposition Approval/Signature <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">FM: <u>W. J. Miller</u></td> <td style="width: 40%;">Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>PE/SE: <u>J. White</u></td> <td>Date: <u>8/30/10</u></td> </tr> <tr> <td>22. Supplier: <u>Dave Sterley</u></td> <td>Date: _____</td> </tr> <tr> <td>23. WCH PQAR: _____</td> <td>Date: _____</td> </tr> </table>				FM: <u>W. J. Miller</u>	Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	PE/SE: <u>J. White</u>	Date: <u>8/30/10</u>	22. Supplier: <u>Dave Sterley</u>	Date: _____	23. WCH PQAR: _____	Date: _____		
FM: <u>W. J. Miller</u>	Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No												
PE/SE: <u>J. White</u>	Date: <u>8/30/10</u>												
22. Supplier: <u>Dave Sterley</u>	Date: _____												
23. WCH PQAR: _____	Date: _____												

WCH will revise Section 3.9.2.J of Specification 0600X-SP-C0077 to read:

“After Deployment, geotextile shall be covered to prevent exposure to ultraviolet (UV) radiation (sunlight) within a maximum period of 28 calendar days.”

The revision to the specification is based on several factors. The strength testing specification requires the geotextile material to maintain 70% of its strength after being exposed to UV radiation for 500 hours. At latitude 46.5° N (The approximate latitude of ERDF) the maximum hours of sunlight during the year is 15.6, which occurs between June 12 and June 30. If the test hours are divided by the hours of sunlight the result is approximately 32 days. The months that the geotextile is being deployed have lower daily sunlight hours but the peak rate was used as a conservative measure. 28 days was selected which doubles the existing duration.

The area where the strength of the material becomes the largest concern is on the side slopes. The geotextile is an integral part of the stability of the side slopes and special care should be given to the exposure duration in these locations.

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE		
Supplier SDDR No. TW-018	Date Submitted 09-13-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. - 018	Date Received 9/13/10	
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230		City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 09-13-2010	6. All Previous SDDR (No's & Dates) TW 1-17	
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, tag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 09-13-2010	11. WCH Eng. Notified (Date/Method) 09-13-2010	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). DeHur proposes deleting the destructive testing of primary + secondary liners for the new leachate storage tanks. 0600X-SP-C0082-3.3.2 Rev. 1					
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>					
14. Cost Impact: None			15. Schedule Impact: None		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. The electronic leak test 0600X-SP-C0082-3.3.2 Rev. 1 will achieve the same results without compromising the integrity of the liner.					
17. Associated Supplier Document Change(s): None					
18. Supplier's Authorized Representative: Name: <u>Jake Williams</u> Signature: <u><i>Jake Williams</i></u> Title: <u>Quality Control</u> Date: <u>09-13-2010</u>					
19. WCH Engineering Action:		Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Accepted <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment <input checked="" type="checkbox"/> Rejected Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>See Attached</u>					
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No					
FM: <u><i>W. J. Williams</i></u>		Date: <u>9/27/10</u>			
PE/SE: <u><i>J. Williams</i></u>		Date: <u>9/27/10</u>			
22. Supplier: <u><i>Jake Williams</i></u>		Date: <u>9-28-10</u>			
23. WCH PQAR: _____ Date: _____					

COMPLETED BY SUPPLIER

WCH

Response to SDDR 018

Request to delete the destructive testing of the primary and secondary liners for the new leachate storage tanks and perform an electronic leak test instead.

It is the position of WCH that SDDR-018 be rejected based on the following requirements in the specifications: Section 3.2 Tank Installation and 3.3.2 Tank Liner Inspection of Specification No. 0600X-SP-C0082 state "The geomembrane liners shall be tested and installed in accordance with Specification No. 0600X-SP-C0077."

Specification No. 0600X-SP-C0077 discusses two types of testing: 3.5.2 Nondestructive Seam Continuity Testing and 3.5.3 Destructive Seam Strength Testing. Section 3.5.3 specifically states that "The purpose of these tests is to evaluate seam strength." and "The samples shall meet the requirements of the table titled 'Required Seam Properties'."

While the electronic leak test will satisfy the requirements for the seam continuity testing (leak test) it will not give any information as to the strength of the seam. The properties for the seam can be found at the bottom of the table in section 2.5.3 Tank Secondary and Primary Liners of Specification No. 0600X-SP-C0082.

Additionally, the CQA subcontractor will endeavor to locate the destructive test so as avoid having a repair in critical locations within the liner system.

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE	
Supplier SDDR No. TW-019	Date Submitted 10-04-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. 019 Date Received 10/4/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352	
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 10-01-2010
6. All Previous SDDR (No's & Dates) TW 1-18		11. WCH Eng. Notified (Date/Method) 10-1-2010	
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, lag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) N/A
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). 0600X-SP-C0075, Rev. 0, Section 3.11.3. Fill shall be compacted by a hand help mechanical or rubber tired compaction equipment.			
13. Supplier's Proposed Disposition: Use As-Is <input type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input checked="" type="checkbox"/>			
14. Cost Impact: None		15. Schedule Impact: None	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Propose utilizing a hoe-pak mounted on small excavator. Trench is too small for rubber tired roller and not practical to utilize hand held plate whacker. 6" lifts shall be maintained.			
17. Associated Supplier Document Change(s): None			
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <u><i>Dave Sterley</i></u> Title: <u>CQCSM</u> Date: <u>10-04-2010</u>			
19. WCH Engineering Action: <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change		
	<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment		
Follow-Up <input type="checkbox"/> Other Suppliers Affected		<input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH accepts the disposition proposed By TWS and will allow the use of a hoe-pak mounted on a small excavator for the compaction of the Anchor Trench.</u>			
21. WCH Disposition Approval/Signature		Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
FM: <u><i>Wymel</i></u>		Date: <u>10/7/10</u>	
PE/SE: <u><i>Jay Wulla</i></u>		Date: <u>10/4/10</u>	
22. Supplier: <u><i>Dave Sterley</i></u>		Date: <u>10/1/10</u>	
23. WCH PQAR:		Date:	

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

DATE

10-04-2010

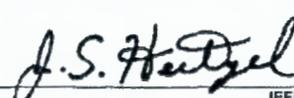
TRANSMITTAL NO.

TW-0

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO: WASHINGTON CLOSURE HANFORD 2620 Ferni Avenue MSIN: H4-17 Richland, WA 99354 ATTENTION: Sue Palmersheim	FROM: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354	AGREEMENT NO. S012308A00	
--	--	--	--

ITEM NO.	DESCRIPTION OF SDDR	MFG OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
1	Fill to be compacted by hand held compaction							

<p>REMARKS</p> <p>PLEASE SEND ALL COMMENTS TO SUBMITTALS TO: TradeWind Services LLC 1933 Jadwin Avenue, Ste. 230 Richland, WA 99354 ATTENTION: JEFF HERTZEL jeffh@tradewindllc.com</p>	<p>I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.</p> <p style="text-align: center;"> JEFF HERTZEL</p>
--	--

SECTION II - APPROVAL ACTION (WASHINGTON CLOSURE HANDFORD LLC)

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY	DATE

COMMENTS:	COMMENTS:

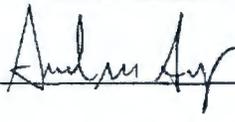
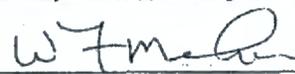
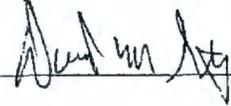
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE	
Supplier SDDR No. TW-020	Date Submitted 10-20-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. 020	Date Received 10/20/10
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230		City, State & Zip Richland, WA 99352
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 10-12-2010	6. All Previous SDDR (No's & Dates) TW 1-19
7. WCH P.O. & Rev. No. N/A	8. WCH MR No. (part, item, lag, etc.) N/A	9. WCH Part Name N/A	10. WCH PQAR Notified (Date & Method) 10-12-10	11. WCH Eng. Notified (Date/Method) 10-12-2010
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Approved submittal (5-32-001A) geomembrane installation plan shows proposed deployment direction and proposed sequential numbering system.				
13. Supplier's Proposed Disposition: Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>				
14. Cost Impact: None		15. Schedule Impact: None		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. In order to optimize geomembrane deployment and reduce wasting liner, many partial rolls were incorporated into the secondary geomembrane placement. The panel placement plan does not reflect partial rolls as it is essentially a directional plan.				
17. Associated Supplier Document Change(s): None				
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature: <u><i>Dave Sterley</i></u> Date: <u>10-20-2010</u>				
COPY				
19. WCH Engineering Action:		<input type="checkbox"/> Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment		
<input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected		<input type="checkbox"/> Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other		
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <i>WCH accepts the proposed disposition and will allow the use of partial rolls as described above.</i>				
21. WCH Disposition Approval/Signature Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No				
FM: <u><i>WFM</i></u>		Date: <u>10/26/10</u>		
PE/SE: <u><i>J. White</i></u>		Date: <u>10/25/10</u>		
22. Supplier: <u><i>Dave Sterley</i></u>		Date: <u>10/26/10</u>		
23. WCH PQAR: _____ Date: _____				

COMPLETED BY SUPPLIER

WCH

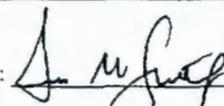
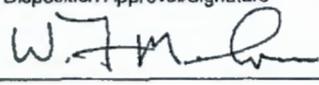
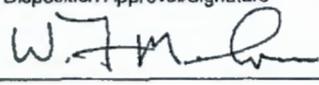
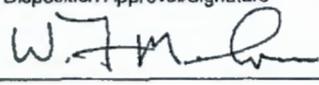
SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE		
Supplier SDDR No.	Date Submitted	Project: ERDF Cells 9 & 10	WCH SDDR No.	Date Received	
TW-021	10-20-2010	Job No.: S012308A00	021	10/20/10	
1. Supplier Name		Address		City, State & Zip	
TradeWind Services LLC		1933 Jadwin Ave Suite 230		Richland, WA 99352	
2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Deviation Detected (Date & Method)	6. Alt Previous SDDR (No's & Dates)	
N/A	N/A	N/A	10-19-2010	TW 1-20	
7. WCH P.O. & Rev. No.	8. WCH MR No. (part, item, tag, etc.)	9. WCH Part Name	10. WCH PQAR Notified (Date & Method)	11. WCH Eng. Notified (Date/Method)	
N/A	N/A	N/A	10-19-10	10-19-2010	
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Specification 0600X-SP-C0078, Rev. 0; Section 3.4.1 "Place and compact operations material in one lift."					
13. Supplier's Proposed Disposition: Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>					
14. Cost Impact: None			15. Schedule Impact: None		
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Specification 0600X-SP-C0078; Section 3.2-2 "A minimum thickness of 1 foot or material shall be maintained...." A minimum of 1 foot is being spread utilizing an LGP (wide track D-6) dozer.					
17. Associated Supplier Document Change(s): None					
18. Supplier's Authorized Representative:					
Name: <u>Dave Sterley</u>		Signature: 		COPY	
Title: <u>CQCSM</u>		Date: <u>10-20-2010</u>			
19. WCH Engineering Action:		Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change			
<input checked="" type="checkbox"/> Accepted		<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment			
<input type="checkbox"/> Rejected		Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other			
20. WCH Disposition Statement including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH will allow the deviation from the following specifications 0600X-SP-C0078 Sections 3.4.1 a and d and apply the less stringent requirements of section 3.2.2.</u>					
21. WCH Disposition Approval/Signature			Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No		
FM: 		Date: <u>10/26/10</u>			
PE/SE: 		Date: <u>10/25/10</u>			
22. Supplier: 		Date: <u>10/26/10</u>			
23. WCH PQAR:			Date:		

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE		FOR WCH USE									
Supplier SDDR No. TW-022	Date Submitted 11-10-2010	Project: ERDF Cells 9 & 10 Job No.: S012308A00	WCH SDDR No. <u>022</u> Date Received <u>11/10/10</u>								
1. Supplier Name TradeWind Services LLC		Address 1933 Jadwin Ave Suite 230 City, State & Zip Richland, WA 99352									
2. Supplier's Order No. N/A	3. Supplier's Part No. N/A	4. Supplier's Part Name N/A	5. Deviation Detected (Date & Method) 11-10-2010								
6. All Previous SDDR (No's & Dates) TW 1-21		7. WCH P.O. & Rev. No. N/A									
8. WCH MR No. (part, item, tag, etc.) N/A		9. WCH Part Name N/A									
10. WCH PQAR Notified (Date & Method) 11-10-2010		11. WCH Eng. Notified (Date/Method) 11-10-2010									
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable). Request deviation from subgrade point #2024. Subgrade point #2024 was redesigned by DCN and relocated to the new location. As a result, the as-built subgrade elevation exceeded the specified tolerance by .3 feet. However, the as-built survey of the admix layer indicated the admix was placed 3 feet thick in that location											
13. Supplier's Proposed Disposition: Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>											
14. Cost Impact: None		15. Schedule Impact: None									
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary. Leave as is											
17. Associated Supplier Document Change(s): None											
18. Supplier's Authorized Representative: Name: <u>Dave Sterley</u> Signature:  Title: <u>CQCSM</u> Date: <u>11-10-2010</u>											
19. WCH Engineering Action: <table style="width: 100%; border: none;"> <tr> <td style="width: 20%; border: none;"><input checked="" type="checkbox"/> Accepted</td> <td style="border: none;">Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Rejected</td> <td style="border: none;"><input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other</td> </tr> </table>				<input checked="" type="checkbox"/> Accepted	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change	<input type="checkbox"/> Rejected	<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment		Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other		
<input checked="" type="checkbox"/> Accepted	Engineering Action <input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Licensing Document Change										
<input type="checkbox"/> Rejected	<input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Price Adjustment										
	Follow-Up <input type="checkbox"/> Other Suppliers Affected <input type="checkbox"/> Other										
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary) <u>WCH accepts the deviation from the subgrade tolerance for Point #2024. Survey has confirmed the minimum 3' of admix coverage at this location.</u>											
21. WCH Disposition Approval/Signature <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">FM: </td> <td>Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>PE/SE: <u>Z. White</u></td> <td>Date: <u>11/10/10</u></td> </tr> <tr> <td>22. Supplier: <u>Dave Sterley</u></td> <td>Date: <u>11/15/10</u></td> </tr> <tr> <td>23. WCH PQAR:</td> <td>Date:</td> </tr> </table>				FM: 	Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	PE/SE: <u>Z. White</u>	Date: <u>11/10/10</u>	22. Supplier: <u>Dave Sterley</u>	Date: <u>11/15/10</u>	23. WCH PQAR:	Date:
FM: 	Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No										
PE/SE: <u>Z. White</u>	Date: <u>11/10/10</u>										
22. Supplier: <u>Dave Sterley</u>	Date: <u>11/15/10</u>										
23. WCH PQAR:	Date:										

COMPLETED BY SUPPLIER

WCH

SUPPLIER DEVIATION DISPOSITION REQUEST

FOR SUPPLIER USE			FOR WCH USE	
Supplier SDDR No.	Date Submitted	Project: ERDF CELLS 9 & 10	WCH SDDR No.	Date Received
023	12/2/2010	Job No.: S012308A00		
1. Supplier Name		Address		City, State & Zip
TradeWind Services, LLC		1933 Jadwin Ave Suite 230		Richland, WA 99352
2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Deviation Detected (Date & Method)	6. All Previous SDDR (No's & Dates)
N/A	N/A	N/A	12-1-2010	0-022
7. WCH P.O. & Rev. No.	8. WCH MR No. (part, item, tag, etc.)	9. WCH Part Name	10. WCH PQAR Notified (Date & Method)	11. WCH Eng. Notified (Date/Method)
N/A	N/A	N/A	12-1-2010	12-1-2010
12. Deviation Description (Attach extra sheets, photographs, sketches, etc., as necessary and identify quantity and serial No.'s as applicable).				
CQA field density testing on backfill lifts 1 & 2 between manholes 37 and 38 failed to meet the minimum requirements of 90% relative density.				
13. Supplier's Proposed Disposition: Use As-Is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Modify WCH Requirement <input type="checkbox"/>				
14. Cost Impact: N/A			15. Schedule Impact: N/A	
16. Proposed Disposition and Technical (plus Cost/Schedule, if applicable). Justification: Attach extra sheets, sketches, etc., as necessary.				
The attached QC testing report represents lifts 1 & 2 between manholes 37 and 38 indicate that adequate density was achieved.				
17. Associated Supplier Document Change(s):				
18. Supplier's Authorized Representative:				
Name: <u>Dave Sterley</u>		Signature: <u><i>Dave Sterley</i></u>		
Title: <u>CQCSM</u>		Date: <u>12/2/2010</u>		
19. WCH Engineering Action:				
<input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Engineering Action	<input type="checkbox"/> Drawing Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier) <input type="checkbox"/> Spec/Req. Change (<input type="checkbox"/> WCH <input type="checkbox"/> Supplier)	<input type="checkbox"/> Licensing Document Change <input type="checkbox"/> Price Adjustment	
	Follow-Up	<input type="checkbox"/> Other Suppliers Affected	<input type="checkbox"/> Other	
20. WCH Disposition Statement Including Justification (Attach extra sheets, sketches, etc., as necessary)				
WCH accepts TW/DHI disposition.				
21. WCH Disposition Approval/Signature				
FM: _____			Field Support Action Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
PE/SE: <u><i>L. Wille</i></u>			Date: <u>12/2/10</u>	
22. Supplier: <u><i>Dave Sterley</i></u>			Date: <u>12/2/10</u>	
23. WCH PQAR: _____			Date: _____	

COMPLETED BY SUPPLIER

WCH



INTERMOUNTAIN MATERIALS TESTING & GEOTECHNICAL

PO Box 2801
Pasco, WA 99302
(509) 545-9217 • (509) 545-9243 FAX

Page 1 of 2

DeHur Industries, Inc.
Mr. Dave Sterley
P.O. Box 883
Hermiston, OR 97838

June 30, 2010

Project Number M10014

PROJECT: ERDF Cells 9 & 10 Construction
Hanford, WA

SUBJECT: Results of Field and Laboratory Testing
Report #20
June 21 through 25, 2010

At your request, we have provided field and laboratory testing services for the subject project. Services were limited to the examination and testing of specific construction components, selected at your discretion.

For this period our involvement has been limited to laboratory testing of one soil sample collected by us on June 22, 2010 and compaction testing of backfill and base course. Results were verbally reported in the field to your representative. Laboratory tests were conducted in accordance with methods listed on the attached *Laboratory Summary*.

Field densities were determined at random locations according to Nuclear Methods. We believe that results are representative of the lift or course exposed in the immediate area of our test during our site visit. Results should not be considered representative of other lifts, courses, or areas, if any.

Compaction results are presented on the attached *Results of Compaction Tests* form. Daily activities are summarized in the following paragraphs:

Monday, June 21, 2010
Weather: Clear, 70°

Technician: Leo Perales
3 hrs portal to portal/20 miles mobilization

TRANSMISSION LINE /DUCT BANK BACKFILL

COMPACTION

The contractor completed compaction of backfill between manholes #35 and #36 and duct bank prior to our site visit. Tests were conducted at the surfaces of lifts 1, 2, and 12 with results indicating compaction ranging from 95% to 99+%, meeting or exceeding the specified minimum (95%).

Tuesday, June 22, 2010
Weather: Clear, 70°

Technician: Leo Perales
3 hrs portal to portal/11 miles mobilization

TRANSMISSION LINE /DUCT BANK BACKFILL

COMPACTION/SAMPLE

The contractor completed compaction of backfill between manholes #37 and #38 and duct bank prior to our site visit. Tests were conducted at the surfaces of lifts 1 and 2 with results indicating compaction ranging from 90% to 99+%, meeting or exceeding the specified minimums (90%, 95%).

We collected one soil sample and transported it to the laboratory for testing.

Wednesday, June 23, 2010
Weather: Clear, 70°

Technician: Leo Perales
3.5 hrs portal to portal/16 miles mobilization

TRANSMISSION LINE BACKFILL/LYSIMETER SUMP PAD CSBC

COMPACTION

The contractor completed compaction of backfill between manholes #37 and #38 and base course for the lysimeter sump pad prior to our site visits. Tests were conducted at the surfaces of lifts 2 and 3 and the 15" fill with results indicating compaction ranging from 90% to 99+%, meeting or exceeding the specified minimum (90%).

Thursday, June 24, 2010

Weather: Clear, 70°

Technician: Leo Perales

4 hrs portal to portal/16 miles mobilization

TRANSMISSION LINE BACKFILL

COMPACTION

The contractor completed compaction of backfill between manholes #37 and #38 prior to our site visits. Tests were conducted at the surfaces of lifts 4, 5 and 6 with results indicating compaction ranging from 91% to 96%, exceeding the specified minimum (90%).

Friday, June 25, 2010

Weather: Clear, 85°

Technician: Leo Perales

3 hrs portal to portal/40 miles mobilization

TRANSMISSION LINE BACKFILL

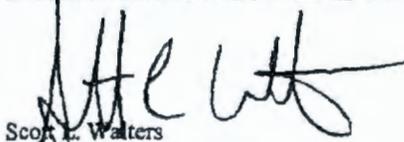
COMPACTION

The contractor completed compaction of backfill between manholes #37 and #38 prior to our site visit. Tests were conducted at the surfaces of lifts 7 and 8 with results indicating compaction ranging from 90% to 95%, meeting or exceeding the specified minimum (90%).

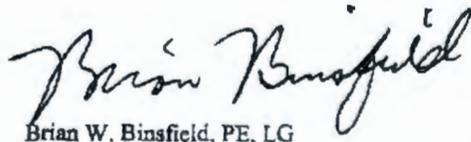
If you have any questions regarding this report, please call.

Respectfully Submitted:

INTERMOUNTAIN MATERIALS TESTING



Scott L. Walters
Mgr. Construction Services



Brian W. Binsfield, PE, LG
Mgr. Engineering Services

SLW/saf

Addressee -- jmsterie@wch-rcg.com

Attachments:

- Results of Compaction Tests (2 pages)
- Laboratory Summary (1 page)
- Particle Size Distribution Report (1 page)
- Moisture/Density Report (1 page)

RESULTS OF COMPACTION TESTS

TEST #	DATE	LOCATION	DEPTH BELOW FSG	THICKNESS OF FILL	MOISTURE		DENSITY		COMPACTION	
					FIELD (5)	OPT. (2)	FIELD (5)	MAX. (2)	(%)	SPEC
		<u>TRANSMISSION LINE BACKFILL</u> <u>BETWEEN MANHOLES #35 & #36</u> <u>Leo Perales/Gauge 5576</u>								
525	6/21/10	East side	Lift 12	-	5.9	9.5	123.9	124.0	99+	95
526	"	West side	Lift 12	-	5.8	9.5	121.1	124.0	98	95
		<u>DUCT BANK BACKFILL</u>								
527	"	West side	Lift 1	-	6.3	12.0	111.3	115.5	96	95
528	"	West side	Lift 2	-	7.0	12.0	110.9	115.5	96	95
529	"	West center	Lift 1	-	10.0	12.0	111.0	115.5	96	95
530	"	East center	Lift 1	-	11.7	12.0	109.5	155.5	95	95
		<u>DUCT BANK BACKFILL</u> <u>Leo Perales/Gauge 5576</u>								
531	6/22/10	West center	Lift 2	-	9.5	12.0	111.4	115.5	96	95
532	"	East center	Lift 2	-	11.3	12.0	116.5	115.5	99+	95
533	"	East side	Lift 1	-	8.7	12.0	111.5	115.5	97	95
534	"	East side	Lift 2	-	13.5	12.0	110.5	115.5	96	95
		<u>TRANSMISSION LINE BACKFILL</u> <u>BETWEEN MANHOLES #37 & #38</u>								
535	"	West side	Lift 1	-	14.8	12.0	107.7	115.5	93	90
536	"	East side	Lift 1	-	14.5	12.0	105.0	115.5	90	90
		<u>TRANSMISSION LINE BACKFILL</u> <u>BETWEEN MANHOLES #37 & #38</u> <u>Leo Perales/Gauge 5576</u>								
537	6/23/10	West side	Lift 2	-	7.3	12.0	106.1	115.5	92	90
538	"	East side	Lift 2	-	11.8	12.0	103.8	115.5	90	90
539	"	West side	Lift 3	-	12.0	12.0	105.1	115.5	91	90
540	"	East side	Lift 3	-	5.8	12.0	106.9	115.5	93	90
		<u>LYSIMETER SUMP PAD/CSBC</u>								
541	"	Center of pad	0"	15"	5.4	5.0	141.9	141.5	99+	90

(1) ASTM D-698 (2) ASTM D-1557
 (3) AASHTO T-99 (4) AASHTO T-180
 (5) ASTM D-4938 (6) WSDOT 606

RESULTS OF COMPACTION TESTS

TEST #	DATE	LOCATION	DEPTH BELOW FSG	THICKNESS OF FILL	MOISTURE		DENSITY		COMPACTION	
					FIELD (5)	OPT. (2)	FIELD (5)	MAX. (2)	(%)	SPEC
<u>TRANSMISSION LINE BACKFILL</u>										
<u>BETWEEN MANHOLES #37 & #38</u>										
<u>Leo Perales/Gauge 5576</u>										
542	6/24/10	West side	Lift 4	-	11.1	12.0	105.0	115.5	91	90
543	"	East side	Lift 4	-	12.8	12.0	106.0	115.5	92	90
544	"	East side	Lift 5	-	13.5	12.0	107.0	115.5	93	90
545	"	West side	Lift 5	-	13.9	12.0	104.8	115.5	91	90
546	"	West side	Lift 6	-	14.3	12.0	107.5	115.5	93	90
547	"	East side	Lift 6	-	11.8	12.0	110.5	115.5	96	90
<u>TRANSMISSION LINE BACKFILL</u>										
<u>BETWEEN MANHOLES #37 & #38</u>										
<u>Leo Perales/Gauge 5576</u>										
548	6/25/10	West side	Lift 7	-	9.7	12.0	104.0	115.5	90	90
549	"	East side	Lift 7	-	12.7	12.0	104.4	115.5	91	90
550	"	West side	Lift 8	-	14.0	12.0	109.9	115.5	95	90
551	"	East side	Lift 8	-	8.1	12.0	105.4	115.5	91	90

(1) ASTM D-698 (2) ASTM D-1557
 (3) AASHTO T-99 (4) AASHTO T-180
 (5) ASTM D-4938 (6) WSDOT 606

**PROCTOR
LABORATORY SUMMARY**

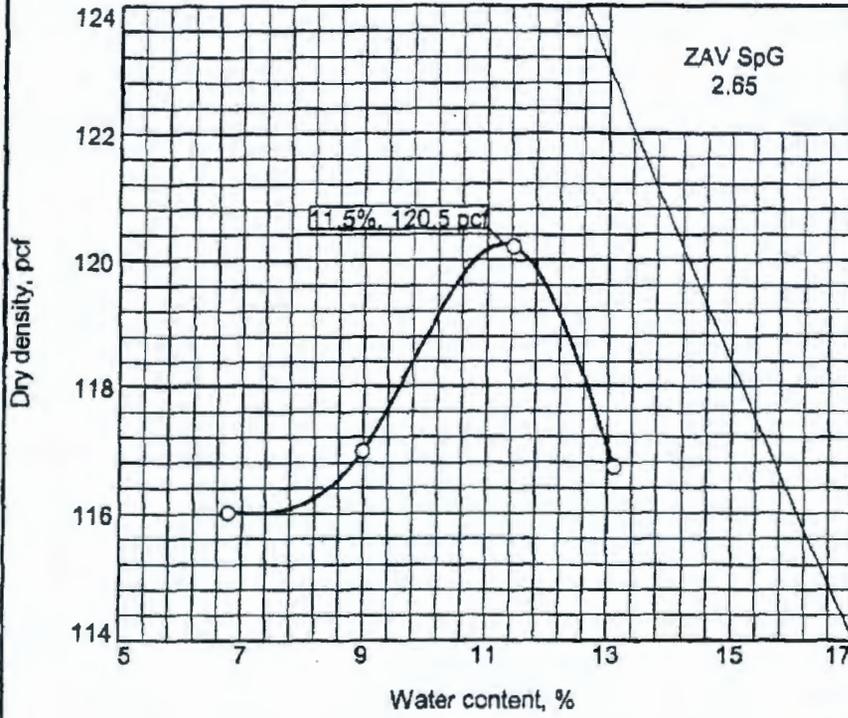
LABORATORY NUMBER			55159	55204	55334
SAMPLE NUMBER			7	8	9
SAMPLE DATE			5/5/10	5/24/10	6/22/10
SAMPLE TYPE			Bulk	Bulk	Bulk
SAMPLED BY			IMT	IMT	IMT
DATE RECEIVED			5/5/10	5/24/10	6/22/10
SAMPLE LOCATION			On-site Cell 10	Manhole #21	Manhole #37 - #38
	<u>UNITS</u>	<u>Test Methods</u>	Berm	Tank SG	Backfill
PROCTOR		ASTM D-1557			
Maximum Density	pcf		110.0	119.0	120.5
Optimum Moisture	%		14.0	12.0	11.5
Sample Moisture	%	ASTM D-2216	7.6	9.4	7.9
SIEVE ANALYSIS		ASTM D-422			
	3"				
	2 1/2"				
	2"				
S	1 1/2"	%	100		100
I	1"		100-		99
E	3/4"	P	100-	100	99-
V	1/2"	A	100-	99	99-
E	3/8"	S	100-	98	98
	#4	S	100-	97	98-
S	#10	I	98	95	97
I	#16	N	93	94	93
Z	#30	G	69	91	76
E	#40		47	71	61
	#100		11	36	31
	#200		6.0	16.9	13.0

Intermountain Materials Testing & Geotechnical

Construction Materials Testing & Inspection

Moisture-Density Test Results

Curve No.
6191.0



Test Specification:
ASTM D 1557-07 Method B Modified

Preparation Method Moist
 Hammer Wt. 10 lb.
 Hammer Drop 18 in.
 Number of Layers five
 Blows per Layer 25
 Mold Size 0.03333 cu. ft.
 Test Performed on Material
 Passing 3/8 in. Sieve
 NM 7.9 LL NV PI NP
 Sp.G. (ASTM D 854) _____
 %>3/8 in. 2.0 %<No.200 13.0
 USCS SM AASHTO A-2-4(0)
 Date Sampled 6/22/10
 Date Tested 6/22/10
 Tested By MW

TESTING DATA

	1	2	3	4	5	6
WM + WS	6067.8	6122.5	6220.1	6191.0	6186.0	
WM	4196.8	4196.8	4196.8	4196.8	4196.8	
WW + T #1	514.1	504.7	548.8	521.2	519.8	
WD + T #1	481.5	463.1	492.5	460.8	451.9	
TARE #1	0.0	0.0	0.0	0.0	0.0	
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	6.8	9.0	11.4	13.1	15.0	
DRY DENSITY	116.0	117.0	120.2	116.7	114.5	

TEST RESULTS

Maximum dry density = 120.5 pcf
 Optimum moisture = 11.5 %

Project No. M10014 Client: DelHur Industries, Inc.
 Project: ERDF Cells 9 & 10 Construction

o Sample Source: Manhole #37 to #38 Backfill Sample No.: 55334

INTERMOUNTAIN MATERIALS TESTING

Material Description

silty sand

Remarks:
 Sampled by: IMT

Checked by: BWB
 Title: GSM

Reviewed By: