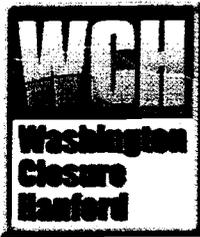


0094054

TANK 4 AND LEACHATE TRANSMISSION SYSTEM REPORT
CONSTRUCTION QUALITY ASSURANCE (CQA)

SECTION

5 OF 9



H.3

PHOTOLOG



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 1 (2/08/10 TO 2/12/10)

Base Soil Excavation



Facing E (2/10/10) – TWS excavating base soil from the Cell 10 footprint.



Facing NW (2/10/10) – TWS excavating base soil from the Cell 10 footprint.



Facing NW (2/10/10) – TWS stockpiling base soil south of Cell 10.



Facing NW (2/11/10) – TWS excavating base soil from the Cell 10 footprint.



Facing NE (2/12/10) – TWS excavating base soil from the Cell 10 footprint.

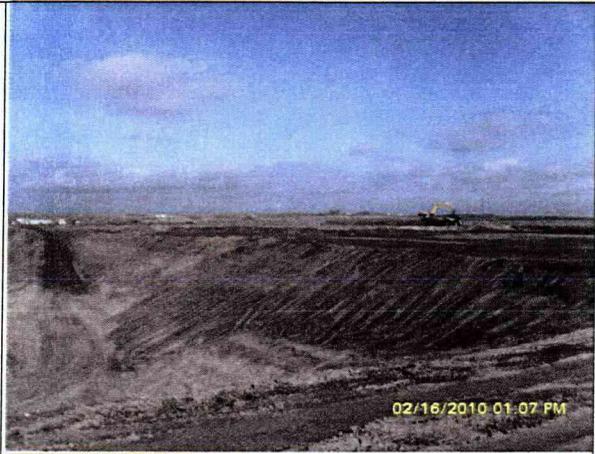
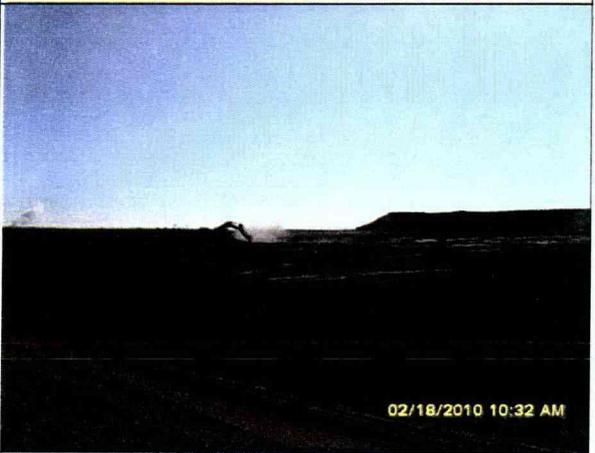
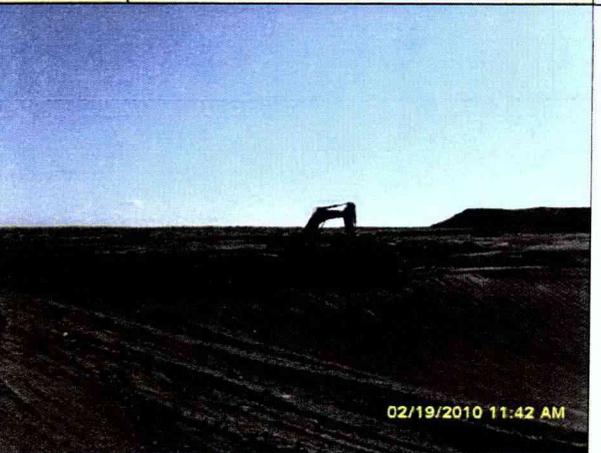


Facing NE (2/12/10) – TWS excavating base soil from the Cell 10 footprint.

Note: Dates are incorrect on photographs. Correct dates appear in annotation below photographs.

ERDF CONSTRUCTION CELLS 9-10

**CQA PHOTOGRAPH LOG WEEK 2
(2/15/10 TO 2/19/10)**

Base Soil Excavation	
 <p>14/02/2010 03:14 PM</p>	 <p>02/16/2010 01:07 PM</p>
<p>Facing SE – TWS excavating the base soil from the Cell 10 footprint.</p>	<p>Facing NE – TWS excavating the base soil from the Cell 10 footprint.</p>
 <p>02/16/2010 02:52 PM</p>	 <p>02/18/2010 10:32 AM</p>
<p>Facing SE – TWS excavating the base soil with the CAT 5110 from the Cell 10 footprint.</p>	<p>Facing E – TWS excavating the base soil from the Cell 10 footprint.</p>
 <p>02/19/2010 11:42 AM</p>	
<p>Facing E – The CAT 5110 excavating base soil from the Cell 10 footprint.</p>	
<p>Note: Dates are incorrect on some photographs. Corrected dates appear in the annotation below the incorrectly labeled photographs.</p>	



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 2 (2/15/10 TO 2/19/10)

North Berm Construction



Facing S (2/15/10) – TWS scarifying the subgrade on the north berm with a CAT D6R.



Facing E (2/16/10) – TWS recompacting the subgrade on the north berm with the payhauler water truck.



Facing E – TWS placing lift 1 of the Cell 10 north embankment.



Facing E – TWS compacting the first lift on the north embankment with the payhauler water truck.



Facing E – TWS moisture conditioning and placing lift 2 on the north embankment.



Facing S – TWS moisture conditioning and compacting lift 2 on the north berm.

Note: Dates are incorrect on some photographs. Corrected dates appear in the annotation below the incorrectly labeled photographs.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 3 (2/22/10 TO 2/26/10)

Cell 10 Excavation



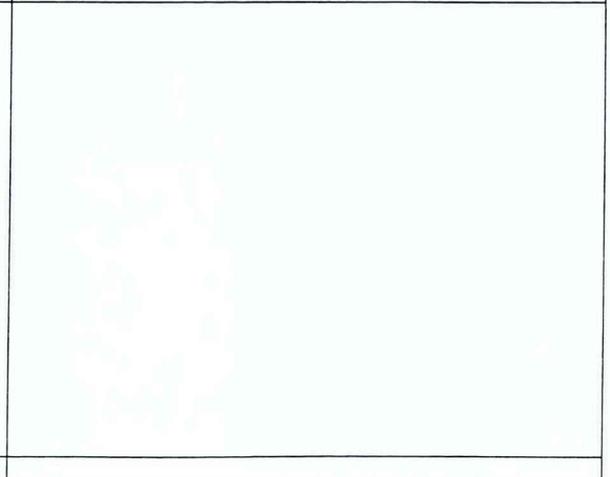
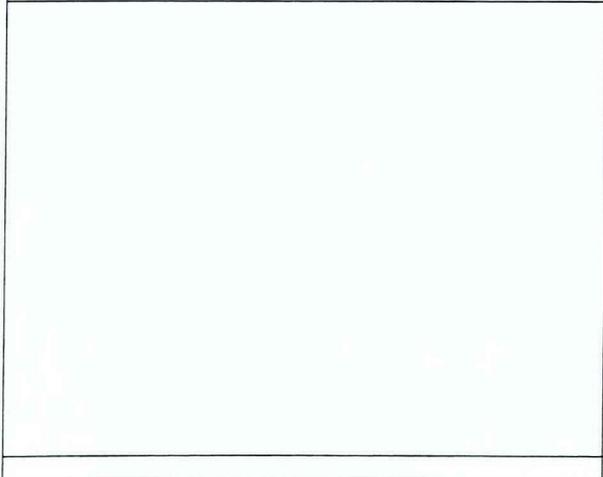
Facing SE – TWS excavating operations layer soil from Cell 10 with the CAT 5110

Facing SE – TWS excavating operations layer soil from Cell 10 with the CAT 5110



Facing N (2/24/2010) – TWS excavating operations layer soil from Cell 10 with the CAT 5110

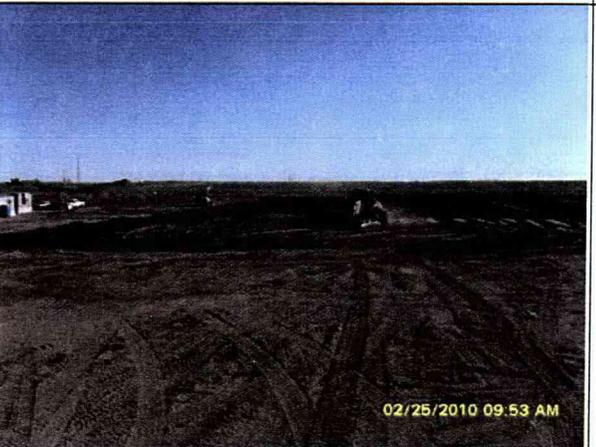
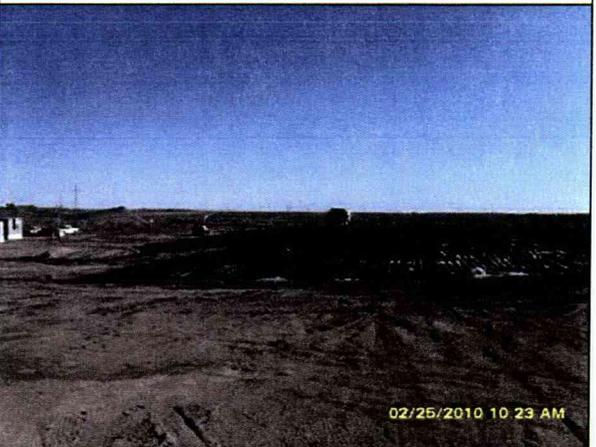
Facing NE – TWS excavating operations layer soil from Cell 10 with the CAT 5110





ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 3 (2/22/10 TO 2/26/10)

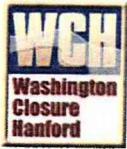
North Embankment Construction	
 <p>02/22/2010 08:21 AM</p>	 <p>02/22/2010 09:16 AM</p>
Facing E – TWS placing the third lift on the north embankment.	Facing E – TWS watering the third lift on the north embankment.
 <p>02/22/2010 10:16 AM</p>	
Facing E – TWS compacting the third lift on the north embankment.	Facing S – TWS excavating old utility trench across N. embankment.
 <p>02/25/2010 09:53 AM</p>	 <p>02/25/2010 10:23 AM</p>
Facing E – TWS placing the fifth lift on the north embankment.	Facing E – TWS watering and compacting the fifth lift on the north embankment.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 3 (2/22/10 TO 2/26/10)

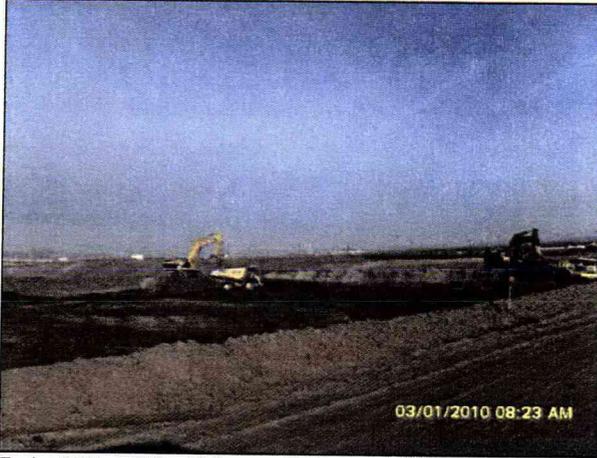
South Embankment Construction	
	
Facing E - TWS placing the third lift on the north embankment.	Facing E - TWS watering the third lift on the north embankment.
	
Facing E - TWS compacting the third lift on the north embankment.	



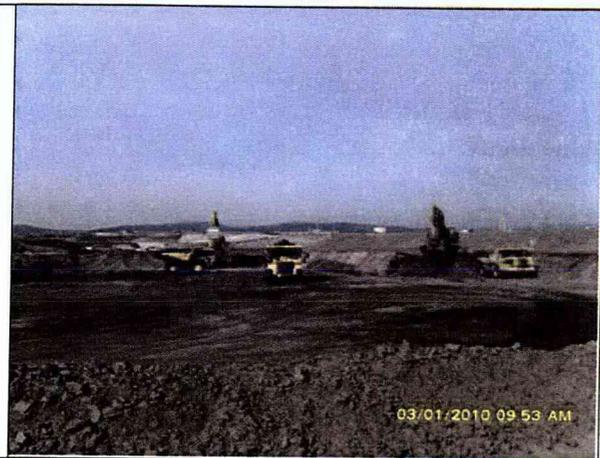
ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 4 (3/1/10 TO 3/5/10)

Cell 10 Excavation



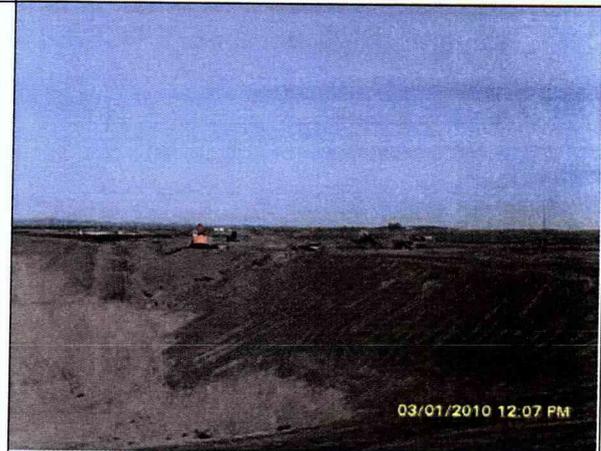
Facing NW – TWS utilizing two CAT excavators to excavate from Cell 10.



Facing W – TWS utilizing two CAT excavators to excavate from Cell 10.



Facing NW – TWS utilizing the CAT 5110 and the Hitachi 1800 to excavate from Cell 10.



Facing NE – TWS utilizing the CAT 5110 and the Hitachi 1800 to excavate from Cell 10.



Facing NW – TWS utilizing a Hitachi 200 to build the Run on Control Berm along the east side of Cell 10



Facing NE – TWS replacing the bucket on the CAT 5110 with a 13-cy bucket.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 4 (3/1/10 TO 3/5/10)

North Embankment Construction	
 <p>03/02/2010 07:19 AM</p>	 <p>03/02/2010 12:30 PM</p>
Facing E – TWS watering seventh lift on the north embankment prior to placing the eighth lift.	Facing E – TWS placing the eighth lift on the north embankment
 <p>03/03/2010 09:08 AM</p>	 <p>03/04/2010 01:35 PM</p>
Facing E – TWS watering and compacting the ninth lift on the north embankment.	Facing E – TWS placing the tenth lift on the north embankment.
 <p>03/05/2010 08:41 AM</p>	
Facing E – TWS watering and compacting the eleventh lift on the north embankment.	



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 4 (3/1/10 TO 3/5/10)

South Embankment Construction



Facing E – TWS placing the third lift on the south embankment.



Facing E – TWS placing and watering the fourth lift on the south embankment.



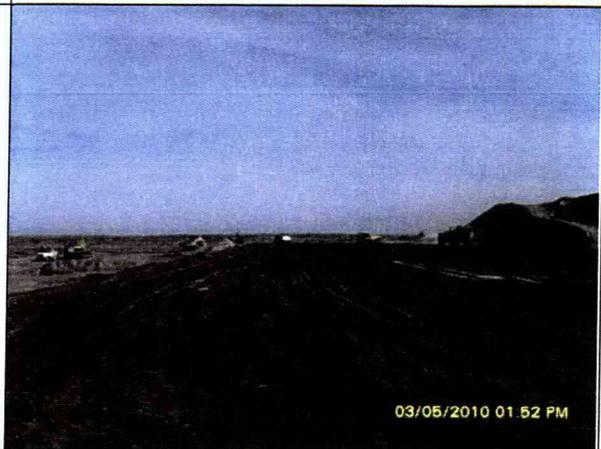
Facing E – TWS utilizing the weight of the “Ladybug” water truck to compact the sixth lift on south embankment.



Facing E – TWS compacting the sixth lift on the south embankment.



Facing E – TWS placing the ninth lift on the south embankment.



Facing E – TWS watering and compacting the ninth lift on the south embankment.

CQA PHOTOGRAPH LOG WEEK 4
(3/1/10 TO 3/5/10)

Cell 9 Liner Tie-In



Facing S (Correct Time - 12:20) - TWS utilizing the CAT 312 excavator and a spotter to expose the Cell 9 Liner tie in.



Facing S (Correct Time 12:38) - TWS utilizing the CAT 312 excavator and a spotter to expose the Cell 9 Liner tie in.



Facing N (Correct Time 8:33) - TWS exposing the Cell 9 Liner tie in with the excavator and hand digging.



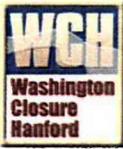
Facing S (Correct Time 8:41) - TWS utilizing hand digging to remove the last few inches of overburden from the line tie in.



Facing S (Correct Time 8:28) - TWS utilizing the CAT 312 excavator to expose the Cell 9 liner tie in.



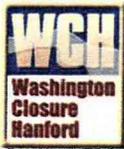
(Correct Time 8:31) TWS utilizing hand digging to remove soil close to liner and geotextile.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 5 (3/8/10 TO 3/12/10)

Cell 10 Excavation	
 <p>03/08/2010 12:08 PM</p>	 <p>03/08/2010 12:08 PM</p>
Facing NE – TWS Excavating out of Cell 10	Facing N – TWS Excavating out of Cell 10
 <p>03/10/2010 09:13 AM</p>	 <p>03/11/2010 01:18 PM</p>
Facing SE – TWS Excavating out of Cell 10	Facing N – TWS Excavating out of Cell 10
 <p>03/11/2010 01:10 PM</p>	 <p>03/11/2010 01:10 PM</p>
Facing NE – TWS Excavating out of Cell 10	Facing NE – TWS Excavating out of Cell 10



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 5 (3/8/10 TO 3/12/10)

North Embankment Construction	
<p>Facing E – TWS watering and compacting the twelfth lift on the north embankment.</p>	<p>Facing E – TWS grading the exterior slope of the north embankment.</p>
<p>Facing E – TWS placing and moisture conditioning the thirteenth and final lift on the north embankment.</p>	<p>Facing E – TWS watering and compacting the thirteenth and final lift on the north embankment.</p>



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 5 (3/8/10 TO 3/12/10)

South Embankment Construction	
	
Facing E – TWS Placing the final lift on the south embankment.	Facing E – TWS moisture conditioning and compacting the final lift on the south embankment.
	
Facing E – The completed south embankment	

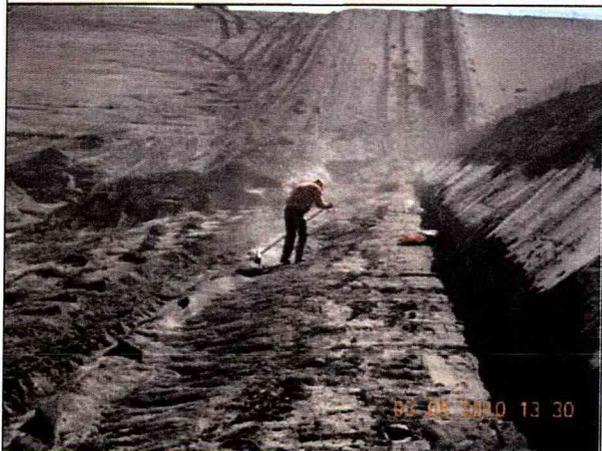
**CQA PHOTOGRAPH LOG WEEK 5
(3/8/10 TO 3/12/10)**

Cell 9 Liner Tie In



Facing NW – TWS exposing the Cell 9 liner tie in with the CAT 312.

Facing S – TWS using the CAT 312 excavator and a spotter to expose the Cell 9 liner tie in.



Facing S – TWS using hand shovels and brooms to remaining soil off of the Cell 9 liner tie in.

Facing S – TWS has exposed the liner tie in up the south embankment.



Facing N – TWS beginning to expose the liner tie in working north.

Facing N – TWS exposing the liner tie in near the north toe.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 5 (3/8/10 TO 3/12/10)

Cell 9 Subgrade



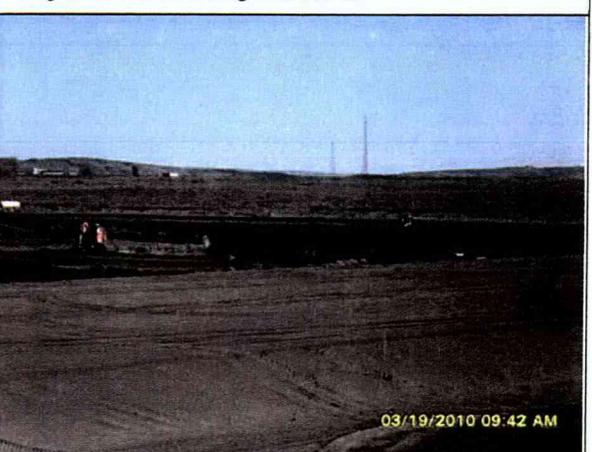
Facing N – TWS using the D6 dozer with GPS to grade the south embankment.

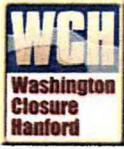
Facing N – TWS using the D6 dozer with GPS to grade the south embankment.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 6 (3/15/10 TO 3/19/10)

Cell 10 Excavation	
 <p>03/15/2010 01:11 PM</p>	 <p>03/16/2010 08:35 AM</p>
Facing NE - TWS excavating from Cell 10.	Facing NE - TWS excavating from Cell 10.
 <p>03/16/2010 08:35 AM</p>	 <p>03/17/2010 09:00 AM</p>
Facing NE - TWS excavating from Cell 10.	Facing SE - TWS excavating from Cell 10.
 <p>03/19/2010 07:28 AM</p>	 <p>03/19/2010 09:42 AM</p>
Facing SE - TWS excavating from Cell 10.	Facing NE - TWS excavating from Cell 10.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 6 (3/15/10 TO 3/19/10)

Cell 9 Subgrade



Facing SW – TWS cutting the Cell 9 south embankment to grade.



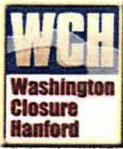
Facing N – TWS cutting the Cell 9 north embankment to grade.



Facing S – A portion of the Cell 9 south embankment has been cut to grade.



Facing S – Overview of Cell 9.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 6 (3/15/10 TO 3/19/10)

Cell 9 Liner Tie-In



Facing SSW – TWS exposing the Cell 9/8 liner tie-in.

Facing SE – TWS exposing the Cell 9/8 liner tie-in.



Facing S – TWS exposing the Cell 9/8 liner tie-in.

Facing S – TWS exposing the Cell 9/8 liner tie-in.



Facing S – TWS exposing the Cell 9/8 liner tie-in.

Facing S – TWS exposing the Cell 9/8 liner tie-in.



ERDF CONSTRUCTION CELLS 9-10



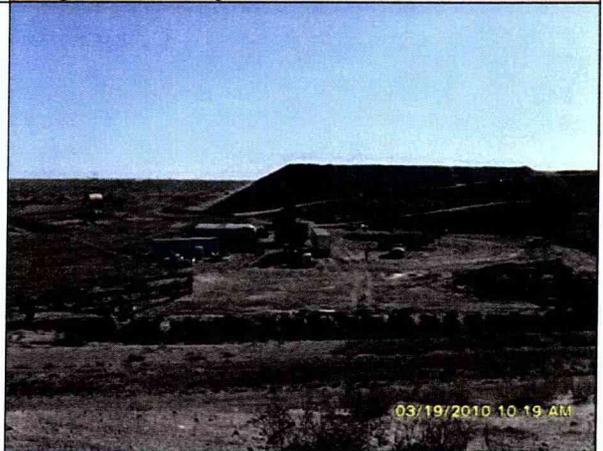
CQA PHOTOGRAPH LOG WEEK 6 (3/15/10 TO 3/19/10)

Pugmill Assembly



Facing E – TWS erecting the first bentonite silo.

Facing E – TWS erecting the first bentonite silo.



Facing E – TWS setting the pug.

Facing E – TWS erecting the second bentonite silo.



Facing E – TWS setting the pugmill hopper.

Facing E – TWS setting the base soil conveyor belt.

**CQA PHOTOGRAPH LOG WEEK 6
(3/15/10 TO 3/19/10)**

Admix Test Pad	
<p>Facing SW – TWS using the CAT D6 GPS dozer to cut the Cell 9 floor to the subgrade elevation in and around the test pad area.</p>	<p>Facing NW – TWS moisture conditioning the area for the test pad.</p>
<p>Facing S – TWS has utilized the vibratory drum compactor to compact the test pad area.</p>	



ERDF CONSTRUCTION CELLS 9-10

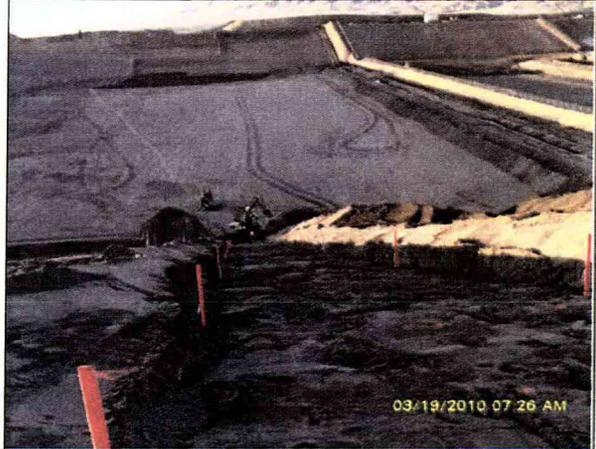


CQA PHOTOGRAPH LOG WEEK 6 (3/15/10 TO 3/19/10)

Lysimeter



Facing S – TWS excavating the Lysimeter riser trench with the aid of GPS.



Facing S – TWS excavating the Lysimeter riser trench with the aid of GPS.



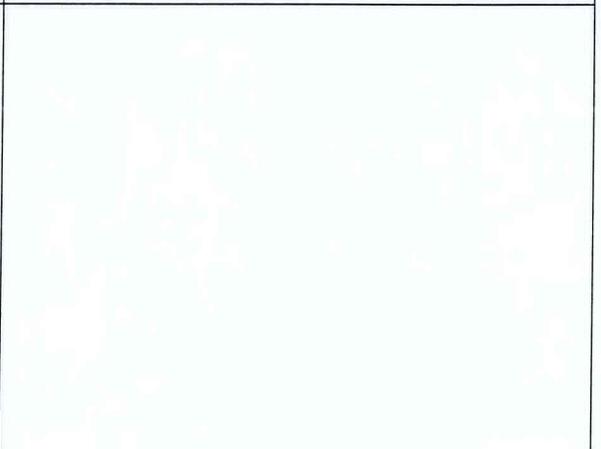
Facing S – TWS excavating the Lysimeter riser trench with the aid of GPS.



Facing S – TWS excavating the Lysimeter riser trench with the aid of GPS.



Facing S – TWS excavating the Lysimeter riser trench with the aid of GPS.





ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 6 (3/15/10 TO 3/19/10)

Leachate Transmission Line



Facing SE - CQA inspecting the excavation for MH-21



Facing SE - CQA inspecting the excavation for MH-21



Facing SE - CQA inspecting the excavation for MH-39



Facing SE - CQA inspecting the excavation for MH-39



ERDF CONSTRUCTION CELLS 9-10

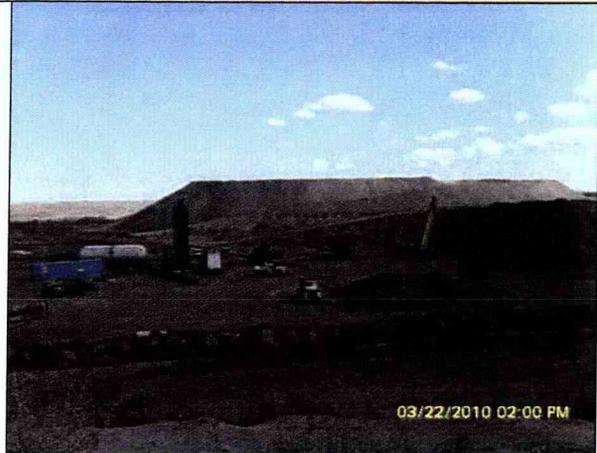
CQA PHOTOGRAPH LOG WEEK 7 (3/22/10 TO 3/26/10)

Cell 10 Excavation	
	
Facing SE – Cell 10 Excavation	Facing NW – Cell 10 Excavation
	
Facing N – Cell 10 Excavation	Facing SE – Cell 10 Excavation

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 7
(3/22/10 TO 3/26/10)

Admix



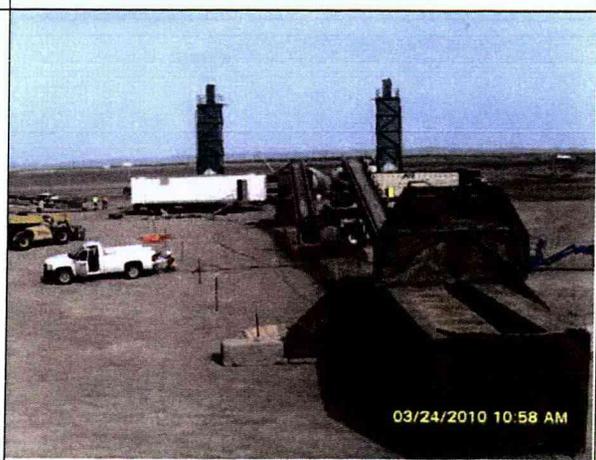
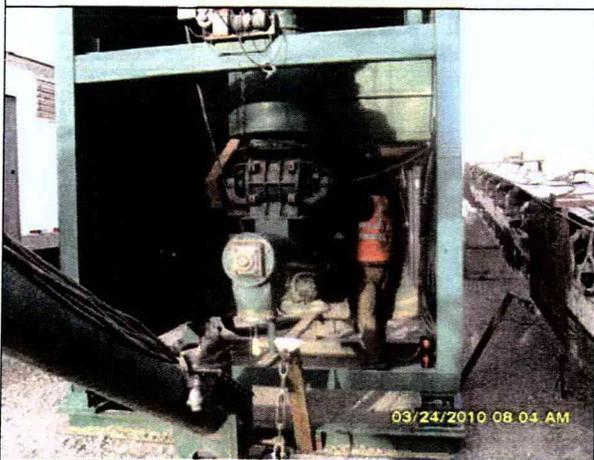
Facing E – Pugmill setup.

Facing E – Pugmill setup.



Facing N – TWS keeping the Cell 9 subgrade moisture conditioned.

Facing W – Pugmill setup.



TWS connecting readout panel in the P9 (west) bentonite silo.

Facing N – Pugmill setup.

CQA PHOTOGRAPH LOG WEEK 7
(3/22/10 TO 3/26/10)

Admix



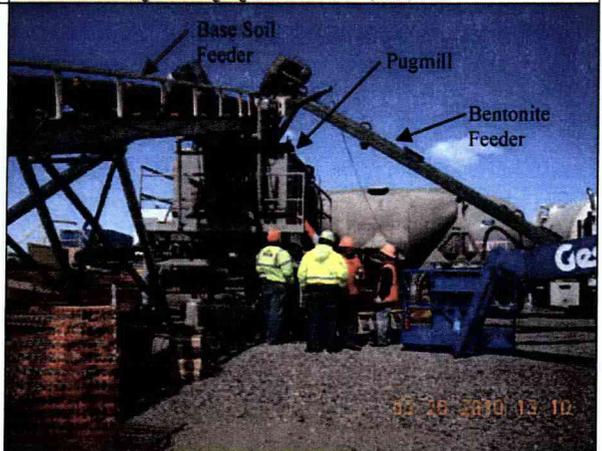
Powell Scale Co. calibrating the P19 (east) bentonite silo.



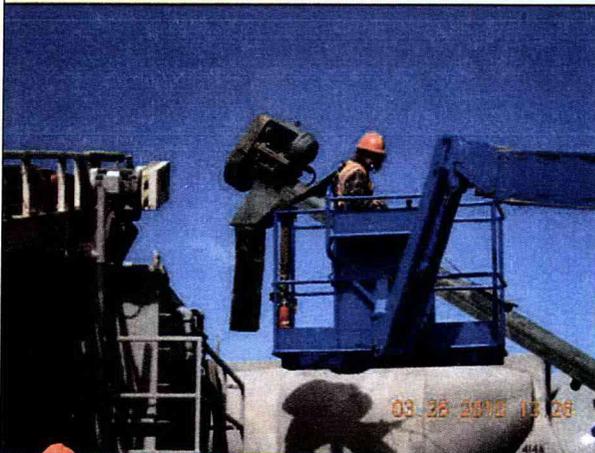
Calibration weights hanging from the P19 (east) silo



Bentonite silo P19 (east) scale calibration readout..



Pugmill set up



Unloading P19(east) silo.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 7 (3/22/10 TO 3/26/10)

Leachate Transmission Line



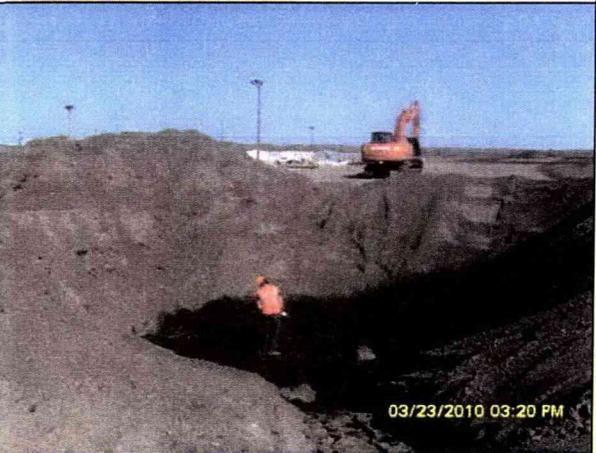
Facing NW – TWS preparing to set MH-21.

Facing NW – TWS placing MH-21.



Facing E – TWS excavating MH-33

Facing E – TWS preparing the subgrade for MH-32



Facing E – TWS moisture conditioning the subgrade for MH-32



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 8 (3/29/10 TO 4/2/10)

Cell 10 Excavation



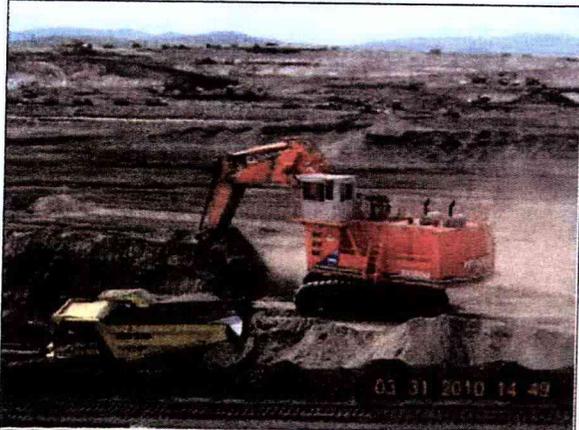
Facing NE - Excavation from Cell 10.

Facing NE - Excavation from Cell 10.



Facing S - The CAT 5110 excavating from Cell 10

Facing SE - The Hitachi 1800 excavating from Cell 10.



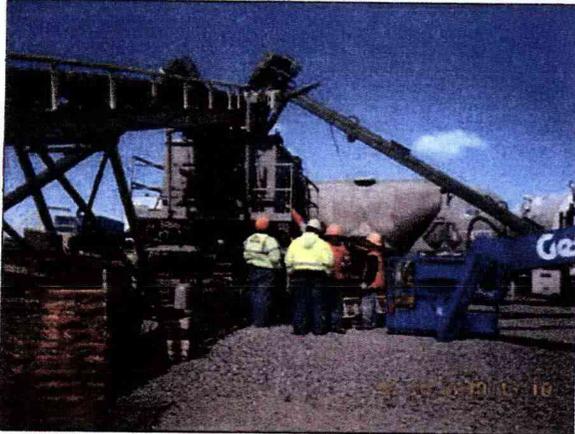
Facing W - The Hitachi 1800 excavating from Cell 10.

Facing W - The CAT 5110 excavating from Cell 10.

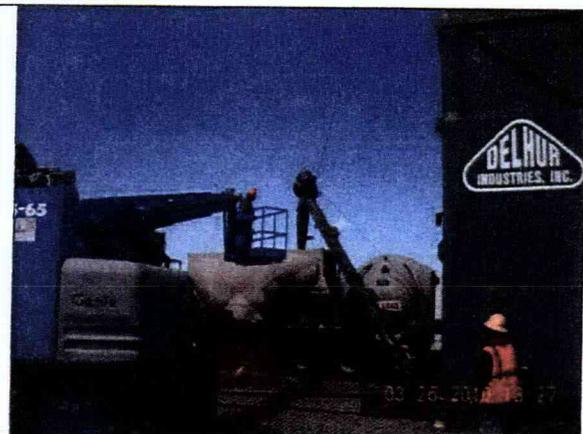
ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 8
(3/29/10 TO 4/2/10)

Admix



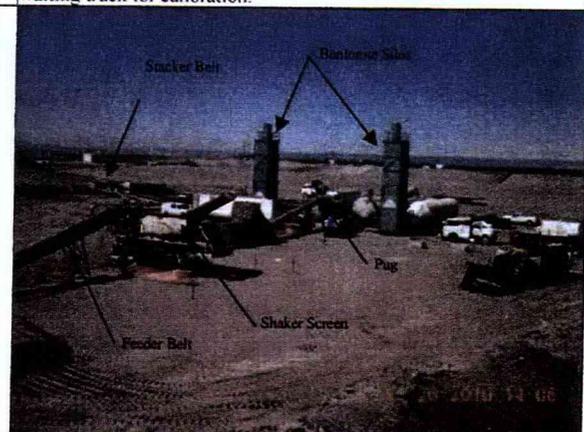
Facing N - Preparing for bentonite calibration at the pugmill.



Facing N - Transferring bentonite from the P19 east silo into a waiting truck for calibration.



Facing N - Pugmill Setup



Facing NW - Belt scale calibration test.



Facing S - TWS sampling the base soil for moisture content verification.



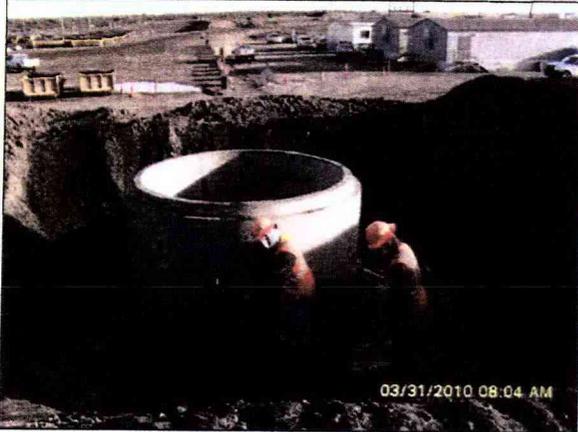
Facing E - TWS beginning admix production.



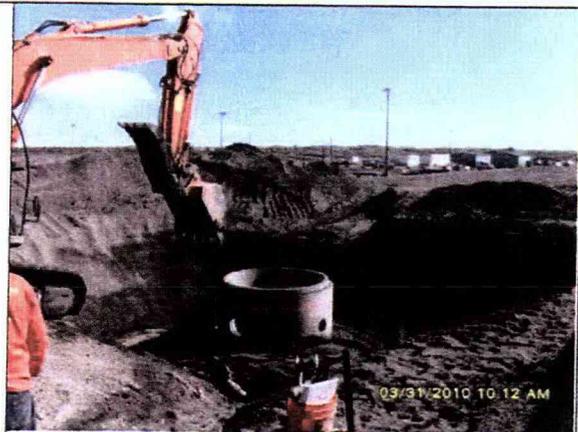
ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 8 (3/29/10 TO 4/2/10)

Leachate Transmission Line



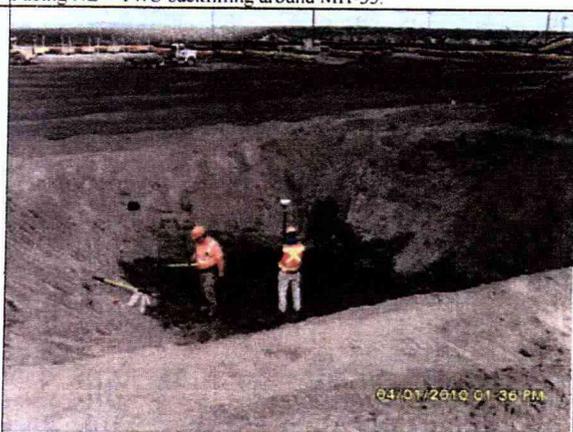
Facing N - TWS backfilling around MH-32.



Facing NE - TWS backfilling around MH-33.



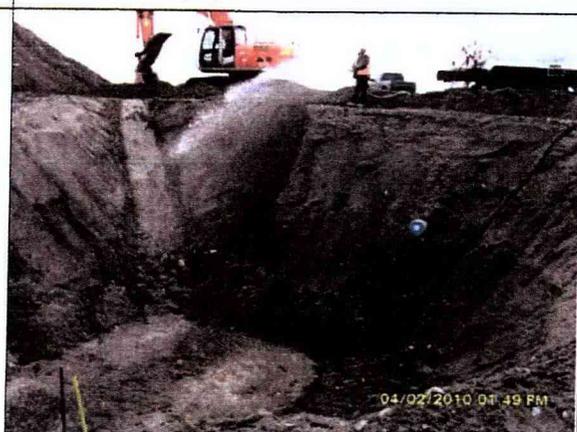
Facing E - TWS excavating for MH-34.



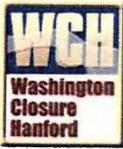
Facing NE - TWS laying out the location of MH-34



Excavation of MH-34. The fresh water discharge line from Cell 7 has been cut and capped.



Excavation of MH-34. The fresh water discharge line from Cell 7 has been cut and capped.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 9 (4/5/10 TO 4/9/10)

Cell 10 Excavation



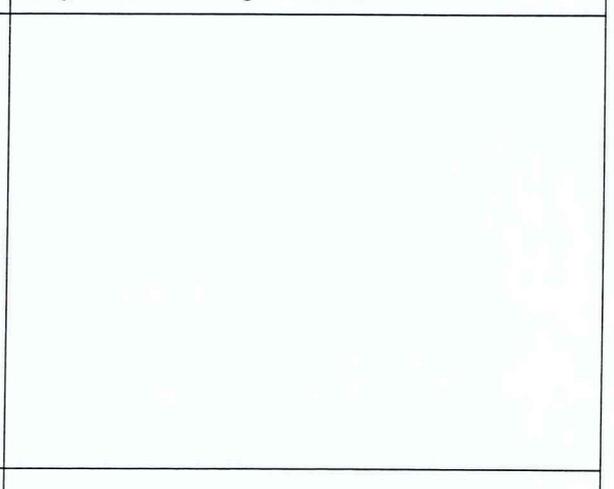
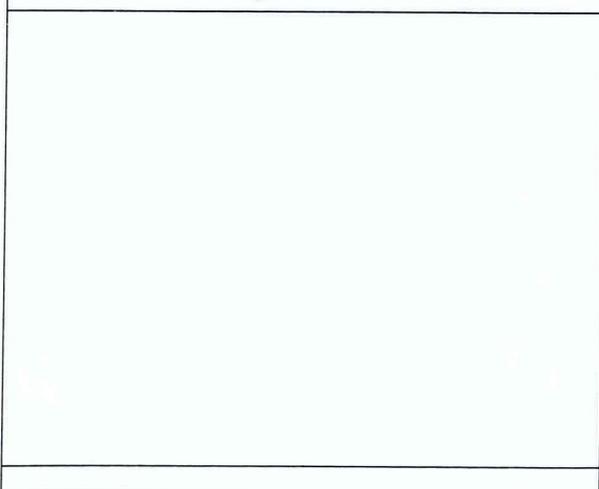
Facing E – TWS utilizing the CAT 5110 to excavate from Cell 10.

Facing SE – TWS excavating from Cell 10



Facing NE – TWS excavating from Cell 10

Facing N – TWS excavating from Cell 10





ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 9 (4/5/10 TO 4/9/10)

Cell 9 Subgrade



Facing S – TWS using the CAT D6 GPS dozer to cut the south interior slope of Cell 9 to grade.



Facing SE – TWS using the CAT D6 GPS dozer to cut the south interior slope of Cell 9 to grade.



Facing S – TWS mucking out the clippings from Cell 9.



Facing N – TWS mucking out the clippings from Cell 9.

CQA PHOTOGRAPH LOG WEEK 9
(4/5/10 TO 4/9/10)

Admix Placement - Admix Test Pad



Facing W – TWS and CQA surveyors checking the GPS on the CAT D6 GPS dozer.



Facing NW – TWS placing the first of the admix for the testpad.



Facing NW – TWS using the CAT D6 GPS dozer to spread the first lift of admix for the test pad.



Facing NW – TWS using the CAT 825 compactor to compact the first lift of the test pad..



TWS measuring the thickness of the first lift.



Facing W – CQA testing the density and moisture of the first lift..

**CQA PHOTOGRAPH LOG WEEK 9
(4/5/10 TO 4/9/10)**

Admix Placement - Admix Test Pad



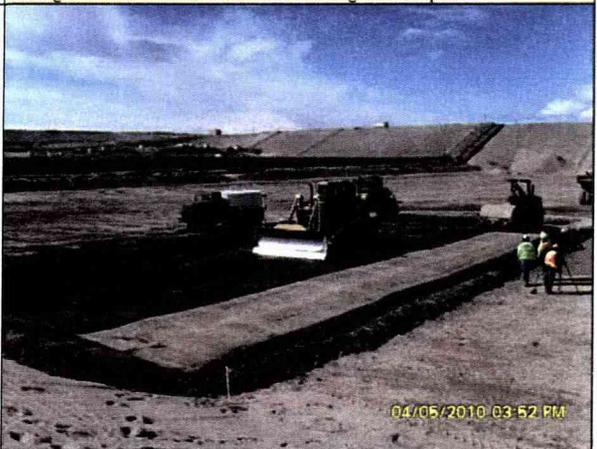
CQA measuring the pegs on the CAT 825 compactor.



Facing NW - TWS moisture conditioning the test pad.



CQA collecting a Shelby tube sample for permeability testing.



Facing NW - TWS static rolling the test pad at the end of the first day to seal the surface.



Facing NW - TWS scarifying the test pad in preparation for placing the 4th lift.



Facing NW - TWS placing the 4th lift on the test pad using the Payhauler trucks.

ERDF CONSTRUCTION CELLS 9-10

**CQA PHOTOGRAPH LOG WEEK 9
(4/5/10 TO 4/9/10)**

Admix Placement - Admix Test Pad



Facing NW – TWS static rolling the final lift of the test pad to demonstrate finishing of the admix liner layer.

Facing E – TWS excavating one of two test pits to demonstrate that all six lifts are bonded together seamlessly.



Facing NE – CQA digging the Boutwell boreholes

Facing NE – CQA preparing each hole for Boutwell installation.

CQA PHOTOGRAPH LOG WEEK 9
(4/5/10 TO 4/9/10)



04 07 2010 09 51



04 07 2010 12 54

Facing NE – CQA preparing Boutwell testing boreholes using a Shop-Vac to clean excess debris from the bottom of the hole.

The bottom of the borehole with casing installed. Great care was taken to ensure each borehole was smooth and clean from all debris.



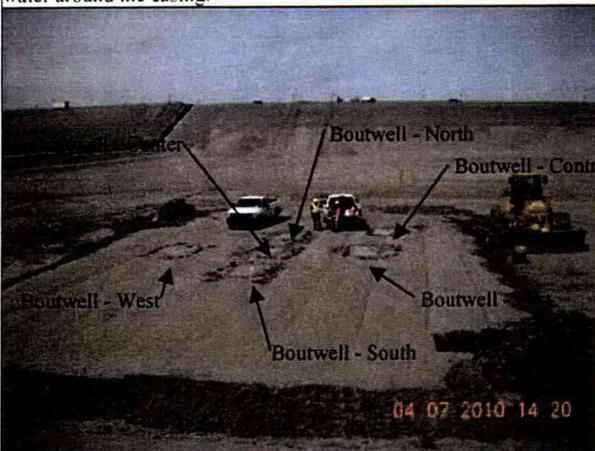
04 07 2010 13 37



04 07 2010 13 37

Facing S – CQA setting the East Boutwell by tamping bentonite and water around the casing.

CQA placing bentonite around Boutwell casings and tamping into place to seal the Boutwell.



04 07 2010 14 20



04 07 2010 14 20

Facing N – Boutwell casing installation complete.

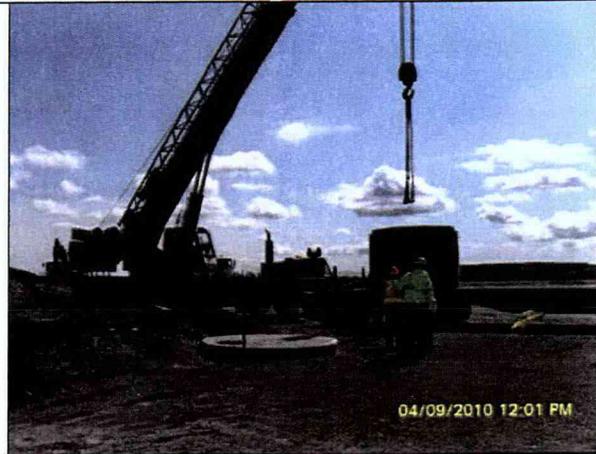
Facing NW – Boutwell casing installation complete.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 9 (4/5/10 TO 4/9/10)

Leachate Transmission Line



Facing NE – Manhole MH-34 arriving on-site.

Facing E – TWS utilizing Hooks Crane service to set MH-34.



Facing E – TWS utilizing Hooks Crane service to set MH-34.

Facing E – TWS utilizing Hooks Crane service to set MH-34.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 9 (4/5/10 TO 4/9/10)

Cell 9 Crest Pad



Facing W - TWS placing structural fill on Cell 9 Crest pad.



Facing E - TWS moisture conditioning the lifts placed on the Cell 9 Crest Pad.



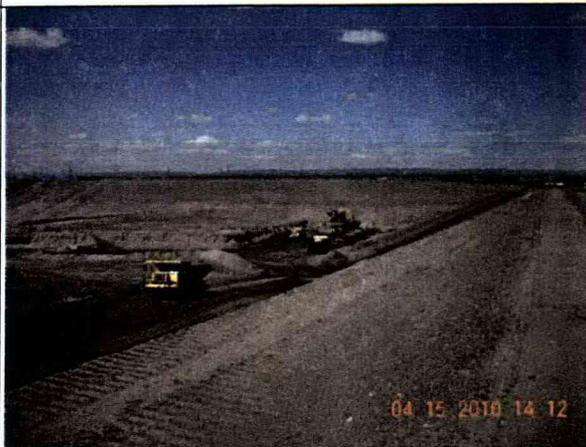
Facing E - TWS using the CAT CS 563 smooth drum roller to compact the lifts placed on the Cell 9 Crest Pad.



Facing W - The completed Cell 9 Crest Pad.



Facing W - TWS has begun to place wooden form along the south and west side of the Crest Pad.

Cell 10 Excavation	
	
Facing SE – TWS continuing Cell 10 excavation	Facing SE – TWS continuing Cell 10 excavation
	
Facing SE – TWS continuing Cell 10 excavation	Facing SW – TWS continuing Cell 10 excavation
	
Facing W – TWS continuing Cell 10 excavation	Facing NW – TWS continuing Cell 10 excavation

Cell 9 Subgrade



Facing SW - TWS mucking out Cell 9.

Facing N - TWS mucking out Cell 9.



Facing SW - TWS moisture conditioning the subgrade for Cell9.

Facing N - Rogers Surveying shooting the elevation of the Cell9 subgrade for TWS.



Facing N - Rogers Surveying shooting the elevation of the Cell 9.

Test Pad



Facing N - Test pad Boutwell locations.



Facing N - Test Pad location in Cell 9.

Cell 9 Crest Pad



Facing E – TWS building concrete forms for Cell 9 Crest Pad.



Facing W – TWS preparing the subgrade for Cell 9 Crest Pad.



Facing W – TWS building concrete forms for Cell 9 Crest Pad.



Facing W – TWS building concrete forms for Cell 9 Crest Pad.



Facing SW – TWS preparing the subgrade for Cell 9 Crest Pad.



Facing W – TWS building concrete forms for Cell 9 Crest Pad.

Leachate Transmission Line



04/12/2010 07:56 AM

Facing N – TWS compacting the backfill around MH-34.



04/14/2010 08:23 AM

Facing E – TWS and BMWC training on the HDPE pipe welder.



04 15 2010 10:52

Facing S – The HDPE Fusion pipe welder.



04 15 2010 10 55

Facing E – The first load of 16-in double encased HDPE pipe.



04.15.2010 11:42

Facing N – BMWC offloading the 16-in double encased HDPE pipe.

**CQA PHOTOGRAPH LOG WEEK 11
(4/19/10 TO 4/23/10)**

Cell 10 Excavation



Facing S – TWS excavating from Cell 10.



Facing N – TWS excavating from Cell 10.



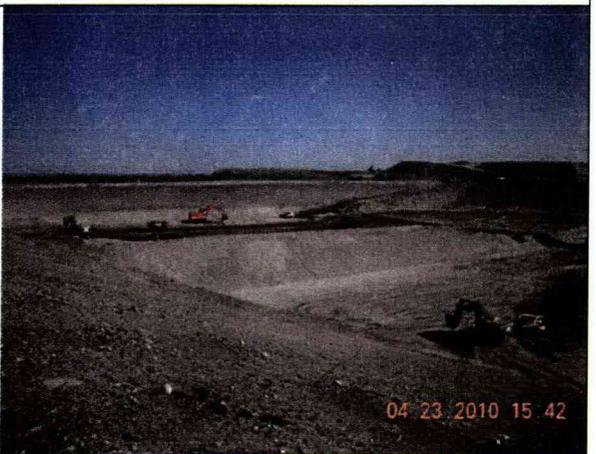
Facing SE – TWS excavating from Cell 10.



Facing SE – TWS excavating from Cell 10.



Facing SE – TWS excavating from Cell 10.



Facing SE – TWS excavating from Cell 10 and removing grade trimmings from the floor of Cell 9.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 11 (4/19/10 TO 4/23/10)

Cell 9 Subgrade Preparation



Facing S – TWS trimming the subgrade of Cell 9 with the CAT D6 GPS dozer.



Facing SW – Roger's Surveying conducting a subgrade survey of Cell 9.



Facing S – TWS trimming the subgrade of Cell 9 with the CAT D6 GPS dozer.



Facing SW – TradeWind Services removing subgrade trimmings from the floor of Cell 9.

**CQA PHOTOGRAPH LOG WEEK 11
(4/19/10 TO 4/23/10)**

Cell 9 Crest Pad



Facing E – CQA inspecting the HDPE double containment pipe.



Facing W – TWS excavating the crest pad discharge trench.



Facing NE – BMWC welding the 4x8 in. double containment discharge pipe.



Facing SW – BMWC installing the 4x8 in. discharge riser in the Cell 9 crest pad building.



Facing S – Installation of the 4x8 in. double containment discharge pipe in the Cell 9 crest pad.



Facing NE – BMWC installing the 2x6 in. Cell 9 crest pad drain line in the Cell 9 crest pad building.

CQA PHOTOGRAPH LOG WEEK 11
(4/19/10 TO 4/23/10)

Cell 9 Crest Pad



Facing S – BMWC installing the 2x6 in. Cell 9 crest pad drain line in the Cell 9 crest pad building.



Facing N – BMWC preparing to pressure test the 2x6 in drainage line in the Cell 9 crest pad building.



Facing W – After hydrostatic testing failed, BMWC discovered a faulty O-ring, which was replaced.



Facing NW – DHI excavating unaccepted backfill from over the 4x8 in. discharge pipe in the Cell 9 crest pad building.



Facing down – TWS hydrostatically testing the 2 in. inner containment drainage line in the Cell 9 crest pad.



Facing SE – TWS excavating the Cell 9 discharge trench.

**CQA PHOTOGRAPH LOG WEEK 11
(4/19/10 TO 4/23/10)**

Cell 10 Crest Pad



Facing S – TWS excavating the discharge trench between MH-33 and the Cell 10 crest pad building.



Facing N – BMWC welding the 4x8 in. discharge pipe for the Cell 10 crest pad.



Facing N – BMWC installing the 4x8 in Cell 10 discharge pipe and riser.



Facing NE – DHI compacting backfill over the 4x8 in. Cell 10 discharge pipe.



Facing NE – DHI placing the metallic locator tape for the Cell 10 discharge pipe.

CQA PHOTOGRAPH LOG WEEK 11
(4/19/10 TO 4/23/10)

Leachate Transmission Line



Facing W – TWS setting grade for MH-36.



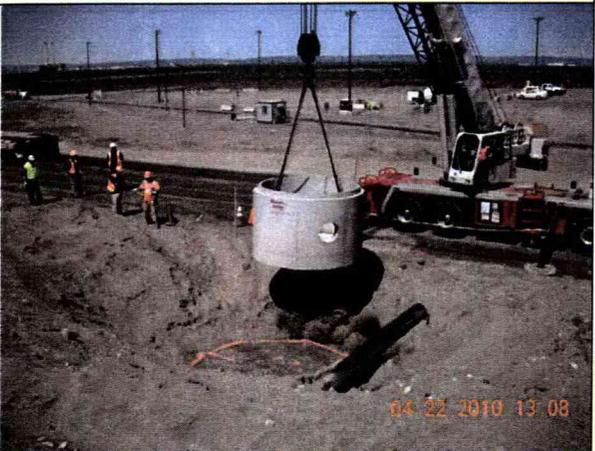
Facing W – TWS compacting drainage gravel for the subgrade of MH-36.



Facing W – TWS placing gravel for the subgrade of MH-37.



Facing NW – TWS placing MH-36.



Facing NW – TWS placing MH-36.



Facing S – TWS placing MH-37.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 11 (4/19/10 TO 4/23/10)

Leachate Transmission Line



Facing S – TWS installing the MH-37 rubber seal.



Facing N – TWS excavating MH-38.



Facing E – TWS setting subgrade elevation on MH-38.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 12 (4/26/10 TO 4/30/10)

Cell 10 Excavation



Facing S – TWS excavating operations soil from Cell 10

Facing S – TWS excavating operations soil from Cell 10



Facing S – TWS excavating operations soil from Cell 10

Facing SW – TWS excavating operations soil from Cell 10



Facing E – TWS excavating the final lift from Cell 10.

Facing E – TWS excavating the final lift from Cell 10.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 12 (4/26/10 TO 4/30/10)

Cell 9 Subgrade	
	
Facing S – Cell 9 Subgrade.	Facing SW – Cell 9 Subgrade.
	
Facing S – Cell 9 Subgrade.	Facing SW – Cell 9 Subgrade.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 12 (4/26/10 TO 4/30/10)

Cell 9 Crest Pad



Facing N – TWS and BMWC placing the Cell9 Crest Pad discharge line.



Facing N – TWS digging under the Cell9 discharge line to obtain the correct alignment with in place portion of piping installed in the Crest Pad.



Facing S – CQA surveyor (Stratton Surveying) conducting an As-Built survey of the Cell9 discharge piping.

CQA PHOTOGRAPH LOG WEEK 12
(4/26/10 TO 4/30/10)

Cell 10 Crest Pad



Facing N – TWS backfilling around the Cell 10 Discharge line.



Facing N – TWS using the CAT "hoepack" to compact around the Cell 10 discharge line.



Facing N – TWS Placing lifts to backfill around the Cell 10 discharge line.



Facing E – TWS using the a Payhauler and the Hitachi 200 excavator to place lifts for the Cell 10 Crest Pad.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 12 (4/26/10 TO 4/30/10)

Leachate Transmission Line



04/27/2010 12:51



04/27/2010 07:48 AM

Facing N – BMWC welding the 8-in lysimeter piping.

Facing W – TWS backfilling around MH-37.



04/27/2010 10:01 AM



04/26/2010 09:04

Facing W – TWS backfilling around MH-36.

Facing NE – 4x8-in HDPE discharge line for Cell 10.



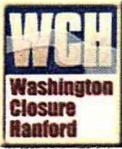
04/29/2010 08:11 AM



04/29/2010 08:15 AM

Facing N – TWS utilizing "Jumping Jack" hand compactors to compact lifts over the Cell 10 discharge line.

Facing N – TWS utilizing the pneumatic compactor on the CAT 314 excavator with to compact lifts over the Cell 10 discharge line.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 13 (5/3/10 TO 5/7/10)

Cell 10 Excavation



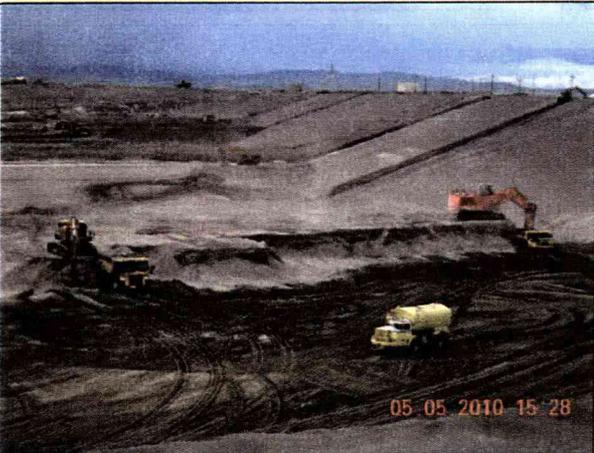
Facing S – TWS excavating operations soil from Cell 10

Facing N – TWS excavating operations soil from Cell 10



Facing N – TWS excavating operations soil from Cell 10

Facing NE – TWS excavating operations soil from Cell 10



Facing NW – TWS excavating the final lift from Cell 10.

Facing NE – Completed bulk excavation of ERDF Cell 10..

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 13
(5/3/10 TO 5/7/10)

Cell 9 Subgrade



05.04.2010 08.19



05.04.2010 08.36

Facing S – TWS Re-grading Cell 9 after the wind storm on 5-3-2010

Facing NE – CQA Surveyors (Stratton Surveying) on site to survey the subgrade for Cell 9.



05.04.2010 08.37



05.05.2010 08.50

Facing N – TWS Re-grading Cell 9 after the wind storm on 5-3-2010

Facing N – TWS using hand shovels to remove windblown sand from the south toe of Cell 9.



05.05.2010 14.07



05.08.2010 12.43

Facing W – TWS moisture conditioning the interior south slope of Cell 9 with the "Ladybug" water truck and a hand held water hose.

Facing SW – TWS pushing the clippings from the Cell 9 subgrade to the NW corner of Cell 9 to be loaded into Payhaulers by the CAT 385 Excavator.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 13 (5/3/10 TO 5/7/10)

Admix Production	
	
Facing E – TWS using the CAT D8 dozer to create more area for Admix storage..	Facing E – TWS using the CAT D8 dozer to create more area for Admix storage..
	
Facing NE – Pug mil set up and stockpiled Admix.	

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 13
(5/3/10 TO 5/7/10)

Cell 9 – Admix Placement



05.07.2010 06:53



05.07.2010 07:33

Facing NW – TWS beginning the placement of admix in Cell 9.

Facing N – TWS moisture conditioning the admix as it is placed.



05.07.2010 07:55



05.07.2010 09:50

Facing NW – CQA inspecting the first lift of the admix during placement.

Facing NE – TWS compacting the admix with the CAT 825, while the CAT D6 GPS dozer continues to place admix..



05.07.2010 14:25



05.07.2010 15:47

Facing S – Cell 9/ Cell 8 Admix tie in.

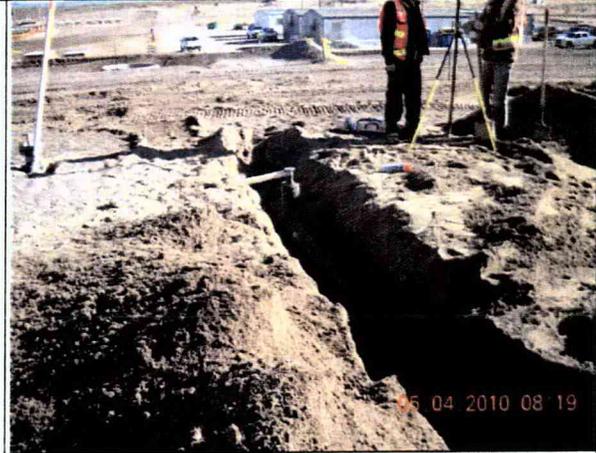
Facing S – TWS using the CAT 563 smooth drum vibratory roller to seal the admix to prevent moisture loss at the end of the day.

CQA PHOTOGRAPH LOG WEEK 13
(5/3/10 TO 5/7/10)

Leachate Transmission



Facing N – A truckload of 12-in HDPE pipe arriving on-site..



Facing N – The 4x8-in drain line for Crest Pad 10 installed.



Facing E – A truckload of 10x16-in HDPE and 12-in HDPE piping arriving on-site.



Facing E – TWS has staked the limits of excavation for the leachate transmission line from MH-33 to MH-32.



Facing N – BMWC welding 10x16-in HDPE pipe to be placed between MH-32 and MH-33



Facing Down – BMWC pneumatically testing the outer containment for the 4x8-in HDPE drain line in the Cell 10 Crest Pad.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 14
(5/10/10 TO 5/14/10)

Cell 9 Admix Placement (Continued)



Facing Down – Subgrade acceptance test. Subgrade contains moisture 4-in below the surface.



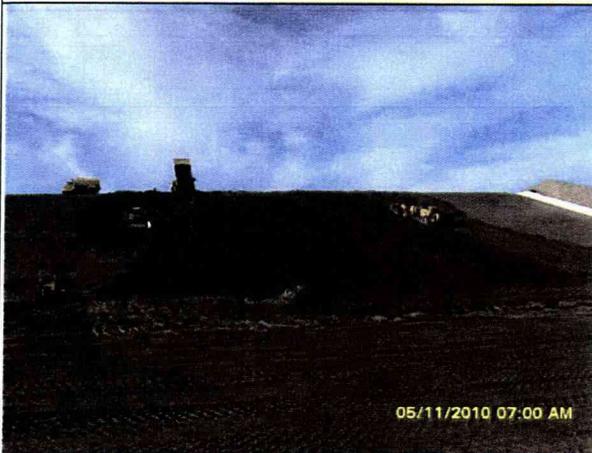
Facing NW – TWS using the CAT D6 GPS dozer to push admix up the south embankment of Cell 9.



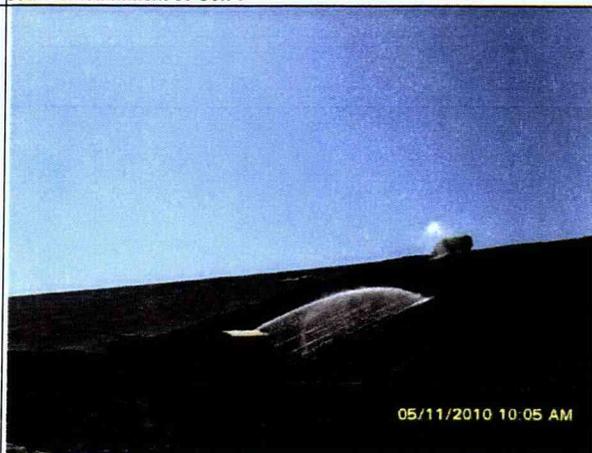
Facing S – TWS using the CAT 988 to load the Payhauler trucks with admix.



Facing S - TWS using the CAT D6 GPS dozer to push admix up the south embankment of Cell 9



Facing S – TWS placing admix along the south slope of Cell 9



Facing SE – TWS using both Payhauler water trucks to moisture condition the admix.

**CQA PHOTOGRAPH LOG WEEK 14
(5/10/10 TO 5/14/10)**

Cell 9 Admix Placement (Continued)



Facing Down – Subgrade acceptance test. Subgrade contains moisture 4-in below the surface.



Facing S – CQA collecting a Shelby tube sample.



Facing S – TWS using the two CAT D6 dozers to push admix down the south embankment near the Cell9/Cell8 tie in.



Facing N – TWS using the CAT 825 compactor to compact the admix near the Cell 9/Cell 8 tie in.



Facing SW – TWS placing admix along the south embankment of Cell 9.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 14 (5/10/10 TO 5/14/10)

Cell 9 Subgrade



Facing S – Cell 9 subgrade partially complete.



Facing S – Cell 9 riser trench needs to be re-excavated after the wind storm on May 3, 2010.



Facing N – Cell 9 subgrade.

CQA PHOTOGRAPH LOG WEEK 14
(5/10/10 TO 5/14/10)

Leachate Transmission Line



Facing SE – BMWC welding HDPE pipe.



Facing W – 10x16-in HDPE between MH-33 and MH-32.



Facing W – 10x16-in HDPE between MH-33 and MH-32 partially cover to control temperature.



Facing Down – 10x16-in pipe penetration into MH-32.



Facing Down – 10x16-in transmission line between MH-33 and MH-32 covered with soil with the joints exposed for inspection.



Facing W – BMWC welding 8x12-in HDPE for the tank penetration from MH-21.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 15
(5/17/10 TO 5/21/10)

Cell 9 Admix Placement



Facing SW – TWS watering and compacting the admix soil placed on the south slope of Cell 9.



Facing N – TWS placing and compacting the admix soil near the southwest corner of Cell 9.



Facing S – TWS placing admix soil on the eastern edge of the south slope in Cell 9.



Facing S – TWS placing and compacting admix on the south slope of Cell 9.



Facing SW – TWS using two CAT D6 dozers to “clip” the 6th lift to grade on the south slope of Cell 9.



Facing N – TWS static rolling the 6th and final lift on the south slope of Cell 9.

CQA PHOTOGRAPH LOG WEEK 15
(5/17/10 TO 5/21/10)

Cell 9 Subgrade



Facing W – TWS preparing the subgrade for admix placement.



Facing S – TWS excavating the lysimeter sump in Cell 9 with the CAT 312 excavator.



Facing N – Cell 9 floor subgrade cut to grade and static rolled in preparation for admix placement.



Facing Down – CQA verifying moisture 4-in into the subgrade of Cell 9.



Facing W – Cell 9 subgrade cut to grade and static rolled in preparation for admix placement.



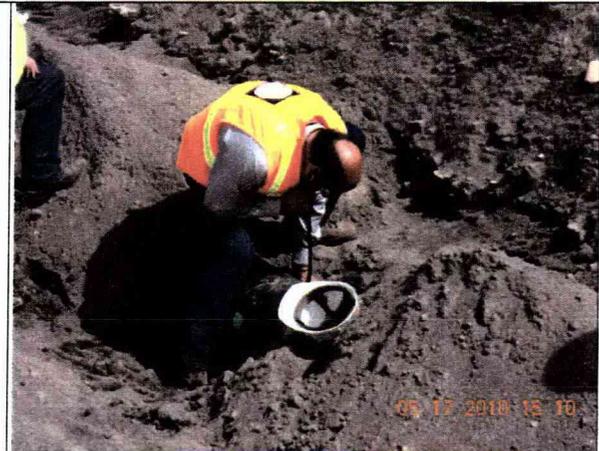
Facing N – TWS using the CAT D6 GPS dozer to cut the north embankment of Cell 9 to grade..

CQA PHOTOGRAPH LOG WEEK 15
(5/17/10 TO 5/21/10)

Leachate Transmission Line



Facing Down – BMWC releasing water from the outer containment of the 10x16-in pipe between MH-32 and MH-33 after a failed weld.



Facing Down – BMWC attempting to locate the failed weld in th 10x16-in HDPE between MH-32 and MH-33.



Facing W – BMWC repairing the failed portion of piping between MH-32 and MH-33.



Facing Down – 10x16-in HDPE tank penetration coming from MH-39.



Facing W – 4x8-in HDPE from tank to pump station.



Facing W – TWS backfilling and compacting the trench between MH-32 and MH-33.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 16 (5/24/10 TO 5/28/10)

Cell 9 Admix Placement



Facing SW – TWS using the CAT D6 dozer to place admix on the south slope of Cell 9.



Facing NW – TWS using the CAT D6 dozer to place admix on the south slope of Cell 9.



Facing NW – TWS using the CAT D6 dozer to place admix on the floor of Cell 9.



Facing NW – Finished admix surface on the south embankment of Cell 9.



Facing N – TWS using the water truck to moisture condition the admix on the floor of Cell 9.



Facing S – Rainwater running off the admix through the center of Cell 9. TWS built dams to keep the water from reaching the sump.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 16
(5/24/10 TO 5/28/10)

Subgrade	
 <p>05.25.2010 09:07</p>	 <p>05.27.2010 07:26</p>
<p>Facing N - TWS using the water truck to moisten the subgrade on the north embankment of Cell 9.</p>	<p>Facing S - TWS using the CAT 385 excavator and Payhauler trucks to remove the subgrade slipping from the floor of Cell 10.</p>
 <p>05.27.2010 07:26</p>	
<p>Facing SW - GSE placing sand bags around the sump of Cell 9 in preparation for deploying the tertiary liner in the Cell 9 sump.</p>	

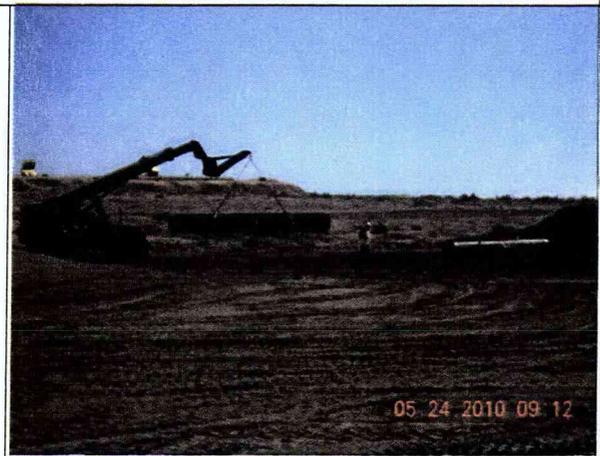
ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 16
(5/24/10 TO 5/28/10)

Geomembrane Delivery



05.24.2010 09:10



05.24.2010 09:12

Facing N – TWS beginning to unload the first delivery of geomembrane.

Facing N – TWS beginning to unload the first delivery of geomembrane in the lay down yard east NE of Cell 10.



05.25.2010 08:34



05.25.2010 09:03

Facing NE – Thirty rolls of 60-mil geomembrane have been delivered and accepted by CQA.

Facing E – TWS excavating the liner anchor trench along the south embankment of Cell 9.



05.27.2010 12:19



05.27.2010 14:20

Facing SW – GSE moving the 60-mil liner to the south embankment in preparation for liner deployment.

Facing SW – GSE has relocated the 60-mil geomembrane from the unloading area to the south embankment in preparation for liner deployment.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 16
(5/24/10 TO 5/28/10)

Leachate Transmission Line



Facing Down – BMWC soap testing the welds on the 4x8-in HDPE discharge line from Tank #3 to MH-22.



Facing Down – Pipe connections, riser and isolation valve inside of MH-21.



Facing W – TWS backfilling around the 4x8-in HDPE discharge line from Tank #3 to MH-22



Facing N – BMWC welding 10x16-in HDPE double containment piping for leachate transmission from MH-34 to MH-35.



Facing W – TWS using hand compactors (Jumping Jacks) to compact backfill between MH-32 and MH-34.



Facing W – TWS using the CAT 312 with the hoe pack to compact backfill between MH-32 and MH-34.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 17 (6/1/10 TO 6/04/10)

Subgrade



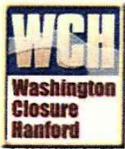
Facing W – TWS trimming the subgrade of the north slope and floor of Cell 10 to grade.

Facing S – Cell 10 following the rain shower from 6/2/10.



Facing S – Cell 9 following the rain shower from 6/2/10.

Facing NW – TWS trimming the subgrade of Cell 10 from the center of the cell to the tie-in.



ERDF CONSTRUCTION CELLS 9-10



CQA PHOTOGRAPH LOG WEEK 17 (6/1/10 TO 6/04/10)

Admix



Facing S – Cell 10 morning of 6/1/10, TWS preparing the south slope of Cell 9 for admix placement.



Facing S – Cell 9 morning of 6/1/10, TWS preparing to pump the water out of the Cell 9 sump.



Facing S – TWS utilizing the double smooth drum roller to prepare the admix surface for geomembrane placement.



Facing S – Admix surface prepared for secondary geomembrane placement.



Facing N – ESI exposing the secondary geomembrane tie-in. Subgrade requires additional preparation.



Facing N – Rain showers on 6/2/10 halted admix placement.

CQA PHOTOGRAPH LOG WEEK 17
(6/1/10 TO 6/04/10)

Cell 9 Admix Placement



Facing SW – Rain showers on 6/2/10 eroded the admix surface.



Facing W – TWS continuing to produce admix material.



Facing S – TWS placing admix on the south half of the Cell 9 floor and along the west tie-in.



Facing N – TWS placing admix on the south half of the Cell 9 floor and along the west tie-in.



Facing N – TWS exposing geomembrane on the tie-in to allow ESI enough room to tie-in.



Facing S – TWS removing the non-conforming admix material produced on 6/4/10.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 17 (6/1/10 TO 6/04/10)

Leachate Transmission Line



Facing SE – BMWC welding the 12-in leachate riser pipe.



Facing W – TWS backfilling and compacting the leachate transmission line between MH-32 and MH-34.



Facing NE – BMWC cutting the weld bead out from inside the 12-in leachate riser pipe.



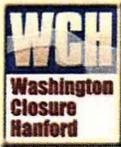
Facing E – TWS excavating the leachate transmission trench between MH-35 and MH-36.



Facing W – TWS excavating the Cell 9 electrical trench in the north embankment.



Facing W – TWS excavating the Cell 9 electrical trench in the north embankment.



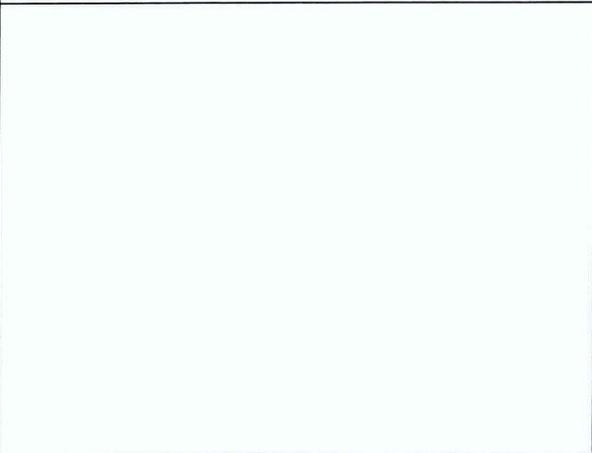
ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 17 (6/1/10 TO 6/04/10)

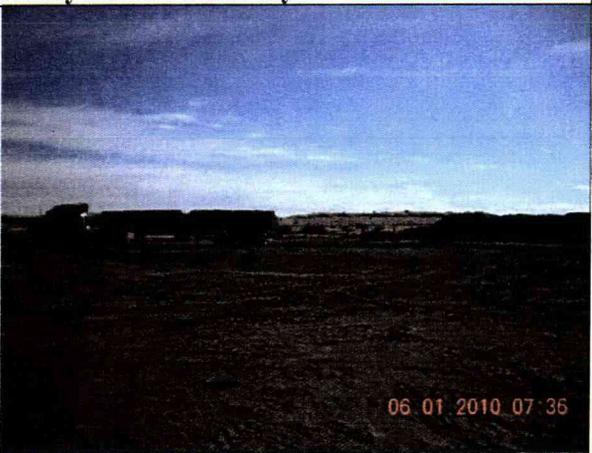
Leachate Transmission Line



Facing Down – TWS placing the 10-in x 16-in leachate transmission line between MH-35 and MH-36.



Geosynthetic Delivery



Facing W – ESI preparing to unload geomembrane in the staging area.



Facing W – ESI stockpiling geotextile in the staging area.

CQA PHOTOGRAPH LOG WEEK 18
(6/7/10 TO 6/11/10)

Subgrade



Facing SW – TWS repairing the lysimeter sump in Cell 9



Facing W – TWS surveyor setting cut-fills for the re-grading of the Cell 9 sump.



Facing NW – The re-graded Cell 9 sump.



Facing SW – On Tuesday, a water truck backed into a port-a-john, resulting in a Stop Work for earthwork and admix activities.



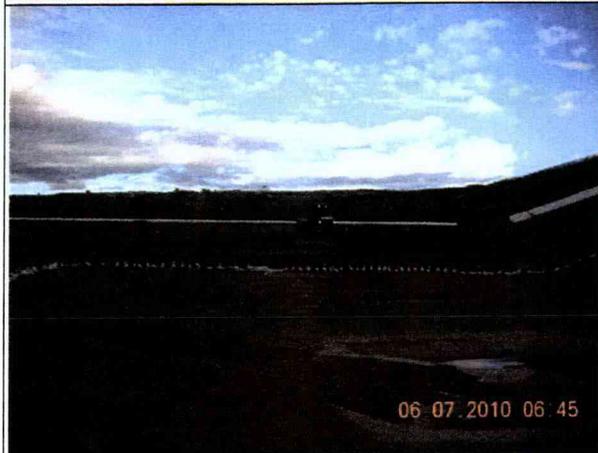
Facing W – TWS trimming the subgrade of Cell 10 to grade.



Facing NW – TWS trimming the subgrade of Cell 10 to grade and removing grade trimmings with the excavator.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 18
(6/7/10 TO 6/11/10)

Admix Placement	
 <p>06 07 2010 06 45</p>	 <p>06 07 2010 07 54</p>
<p>Facing W – TWS preparing to place admix material on the Cell 9 floor.</p>	<p>Facing down – Storm water drainage runnels in the Cell 9 south slope admix subgrade.</p>
 <p>06 07 2010 08 38</p>	 <p>06 07 2010 11 49</p>
<p>Facing S – TWS roughing up the admix subgrade with the CAT D6 dozer in order to remove unacceptable run-off runnels.</p>	<p>Facing SW – TWS removed non-conforming admix in the southwest corner and replaced with fresh admix and additional bentonite.</p>
 <p>06 07 2010 14 01</p>	 <p>06 07 2010 14 01</p>
<p>Facing N – The subgrade of Cell 9 prior to geomembrane placement. Admix placement on-going in Cell 9.</p>	<p>Facing SE – Admix placement on-going in Cell 9.</p>

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 18
(6/7/10 TO 6/11/10)

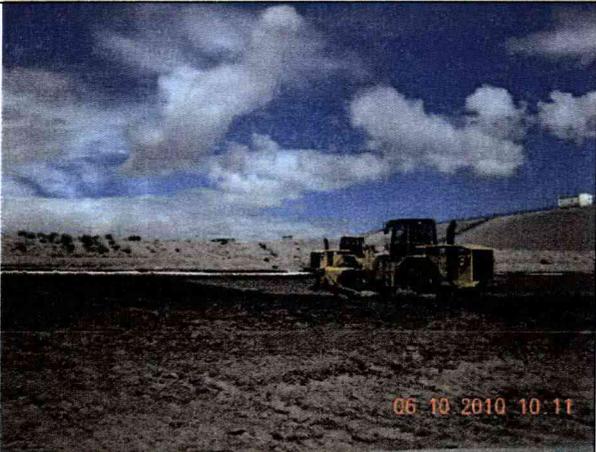
Admix Placement



Facing SE – TWS placing admix at the top of the south slope of Cell 9.



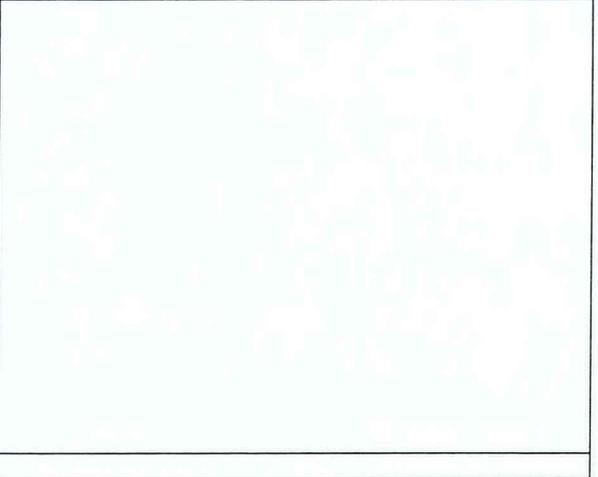
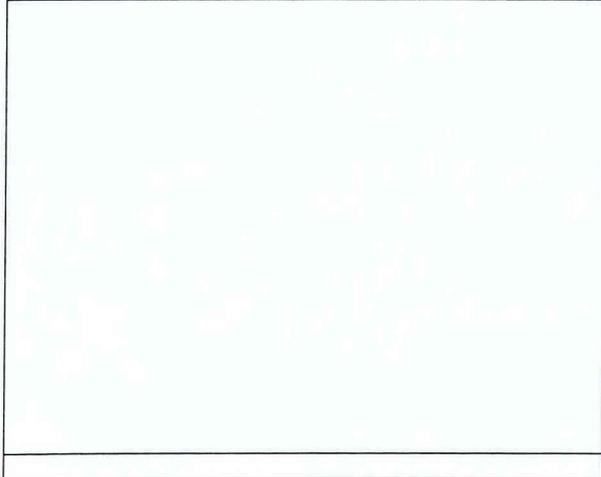
Facing E – TWS removing runnels and other irregularities with hand tools prior to secondary geomembrane deployment.



Facing NW – TWS compacting admix on the floor of Cell 9 with the CAT 825 compactor.



Facing S – Admix placement in Cell 9.



CQA PHOTOGRAPH LOG WEEK 18
(6/7/10 TO 6/11/10)

Geosynthetics



Facing SW – ESI preparing to deploy secondary geomembrane in Cell 9.



Facing E – The forklift began to tip over during deployment of the secondary geomembrane. The roll was set in the anchor trench.



Facing W – All liner activities were halted until the picking incident could be assessed.



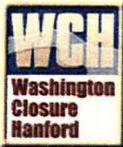
Facing NW – ESI preparing the geomembrane tie-in along Cell 7.



Facing S – ESI deploying secondary geomembrane down the Cell 9 south embankment.



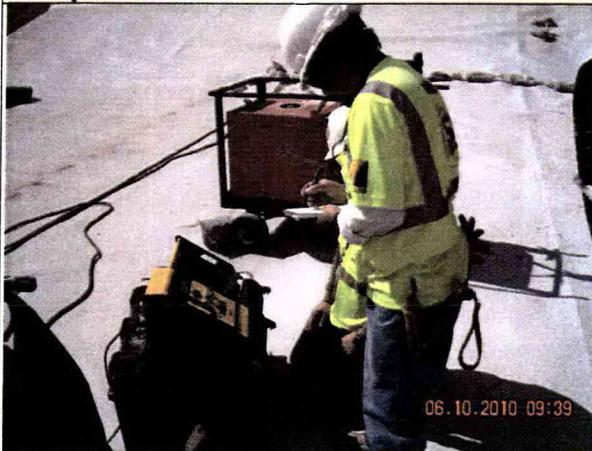
Facing S – ESI attaching the secondary geomembrane to the Kubota ATV. The Kubota ATV pulled the liner out over the floor.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 18 (6/7/10 TO 6/11/10)

Geosynthetics



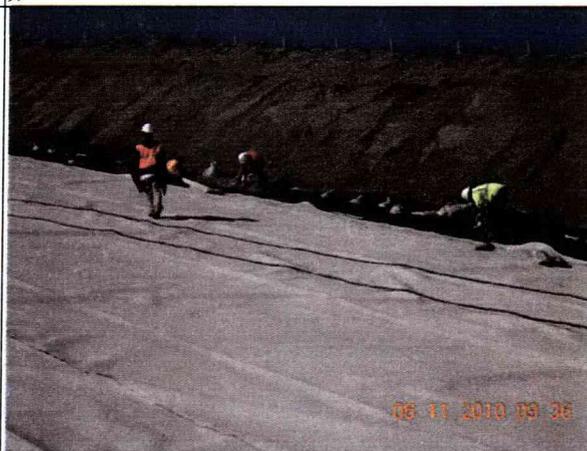
ESI completing trial welds for welding the secondary geomembrane.



Facing NW – ESI fusion welding the secondary geomembrane in Cell 9.



Facing S – ESI pulling back the secondary geomembrane tie-in on the south slope of Cell 9.



Facing SW – ESI cleaning the secondary geomembrane tie-in on the south slope of Cell 9.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 18 (6/7/10 TO 6/11/10)

Leachate Transmission Line



Facing E – Electrical conduit placement between Crest Pads 9 and 10.



Facing W – Electrical conduit placement from Crest Pad 9 to Crest Pad 8.



Facing E – TWS compacting the backfill over the leachate transmission line between MH-35 and MH-36.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 19 (6/14/10 TO 6/18/10)

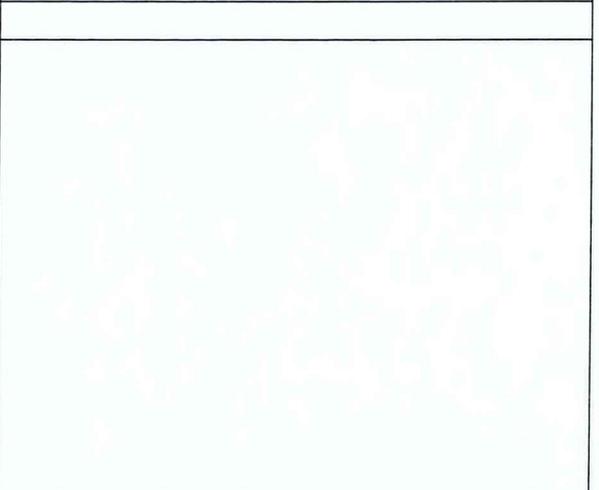
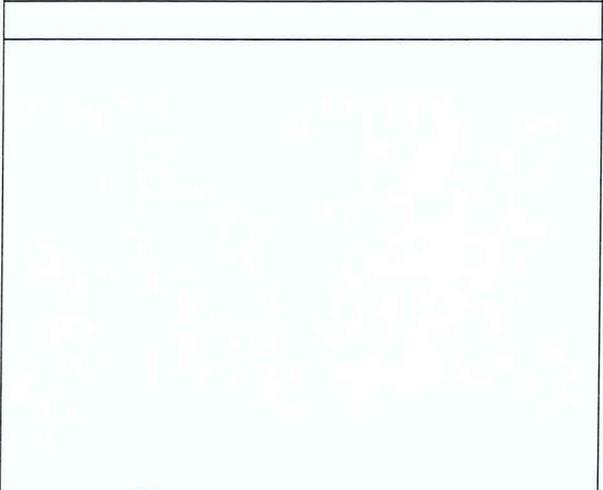
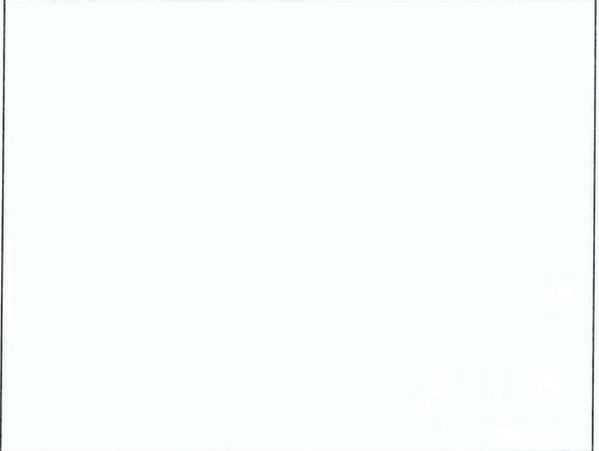
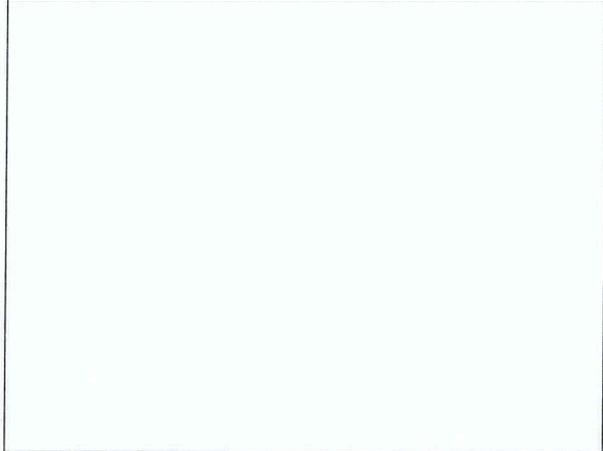
Subgrade



Facing SW – TWS using the CAT D6 to cut the Cell 10 Lysimeter sump to grade.



Facing NW – TWS moisture conditioning the Cell 9 subgrade on the north embankment prior to admix placement.





ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 19 (6/14/10 TO 6/18/10)

Admix Placement



Facing S – TWS placing admix on the floor of Cell 9.



Facing SW – TWS placing admix on the floor of Cell 9.



Facing N – TWS placing admix on the north slope of Cell 9.



Facing N – TWS preparing to place admix in the Cell 9 Lysimeter sump.

**CQA PHOTOGRAPH LOG WEEK 19
(6/14/10 TO 6/18/10)**

Geosynthetics



Facing S – ESI seaming secondary geomembrane together in Cell 9.



Facing N – ESI using the Kabota RTV to deploy secondary geomembrane on the south half of Cell 9.



Facing N – Secondary geomembrane has been placed and welded on the south half of Cell 9



Facing NE – Secondary geomembrane has been placed and welded on the south half of Cell 9



Facing S – ESI utilizing sand bags to weigh down the secondary geomembrane prior to seaming the panels..



Facing Down – ESI using pressure gauges to perform the non-destructive air test on fusion welded seams.

CQA PHOTOGRAPH LOG WEEK 19
(6/14/10 TO 6/18/10)

Geosynthetics



Facing SW – ESI cleaning the underside of the secondary liner prior to welding.



Facing S – ESI welding secondary geomembrane with a DEMTECH pro-wedge fusion welder.



Facing W – ESI using the Kabota RTV to deploy secondary geomembrane on the south half of Cell 9.



Facing S – ESI preparing to weld the secondary geomembrane to the tie in along the floor of Cell 9.



Facing S – ESI preparing to weld the secondary geomembrane to the tie in along the floor of Cell 9.

CQA PHOTOGRAPH LOG WEEK 19
(6/14/10 TO 6/18/10)

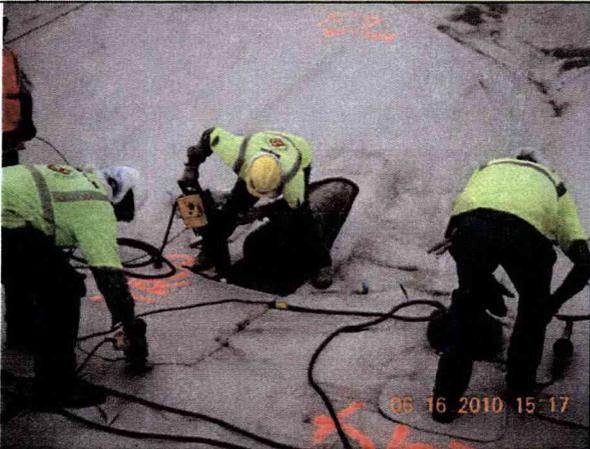
Geosynthetics



Facing SE – ESI deploying tertiary liner in the Cell 9 lysimeter sump.



Facing N – ESI placing tertiary liner in the Cell 9 lysimeter sump.



Facing S – ESI extrusion welding the tertiary liner to the lysimeter riser pipe flange.



Facing S – ESI performing vacuum testing on all extrusion welds in the tertiary liner system.



Facing NW – Tertiary liner in the Cell 9 lysimeter sump is complete.



Facing N – ESI has completed placing the geotextile in the Cell 9 lysimeter sump.

CQA PHOTOGRAPH LOG WEEK 19
(6/14/10 TO 6/18/10)

Geosynthetics



Facing NE – TWS beginning to place drainage gravel in the Cell 9 lysimeter sump.



Facing SE – TWS placing drainage gravel in the Cell 9 lysimeter sump.



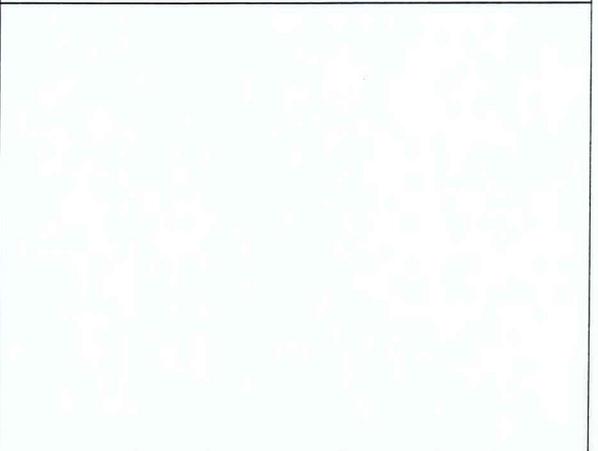
Facing NE – ESI wrapping the Cell 9 lysimeter pipe in geotextile.



Facing NE – ESI wrapping the Cell 9 lysimeter pipe in geotextile.



Facing N – TWS placing drainage gravel in the Cell 9 lysimeter sump.





ERDF CONSTRUCTION CELLS 9-10

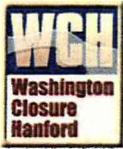
CQA PHOTOGRAPH LOG WEEK 19 (6/14/10 TO 6/18/10)

Leachate Transmission Line



Facing E - TWS placing concrete in the electrical duct bank along the north embankment of Cell 9 and 10.

Facing E - TWS placing concrete in the electrical duct bank along the north embankment of Cell 9 and 10.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 20 (6/21/10 TO 6/25/10)

Subgrade	
<p>06.22.2010 06:42</p>	<p>06.23.2010 06:46</p>
<p>Facing SW – TWS moisture conditioning the Cell 9 subgrade prior to admix placement near the north toe of Cell 9.</p>	<p>Facing N – TWS using the Payhauler water truck to moisture condition the Cell 10 subgrade.</p>
<p>06.23.2010 10:33</p>	<p>06.23.2010 10:34</p>
<p>Facing NE – TWS using the Payhauler water truck to moisture condition the Cell 10 subgrade.</p>	<p>Facing NE – TWS using the Payhauler water truck to moisture condition the Cell 10 subgrade.</p>

CQA PHOTOGRAPH LOG WEEK 20
(6/21/10 TO 6/25/10)

Admix Placement



Facing N – TWS using the international water truck to moisture condition the admix on the north embankment.



Facing N – TWS placing the first lift of admix on the north embankment of Cell 9.



Facing SW – TWS beginning to place admix in the Cell 9 lysimeter sump.



Facing N – TWS re-rolling grid C1 on the north embankment after failing density tests.



Facing W – TWS has partially completed the liner anchor trench along the north embankment on the west side of Cell 9.



Facing N – TWS placing lifts on the north embankment of Cell 9 using two CAT D6 GPS dozers.

CQA PHOTOGRAPH LOG WEEK 20
(6/21/10 TO 6/25/10)

Geosynthetics



Facing S – Secondary liner activities on hold due to unacceptable subgrade in the trough of Cell 9..



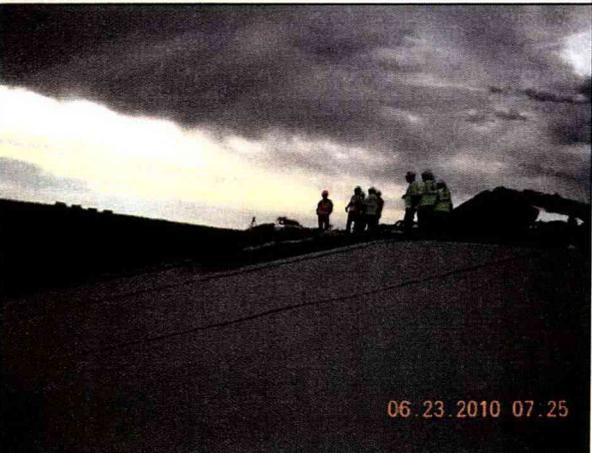
Facing N – Secondary liner placement in Cell 9.



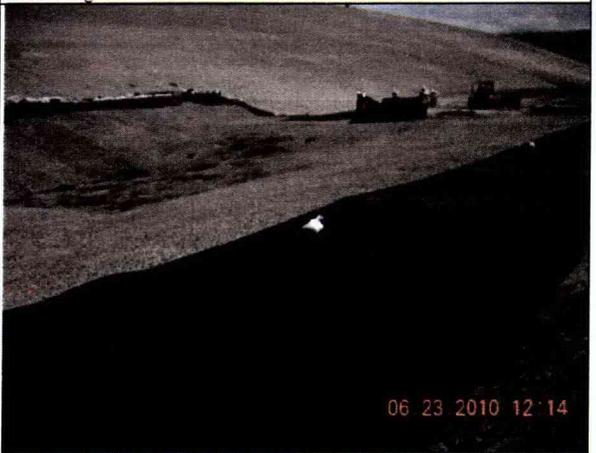
Facing Down – ESI testing trial welds prior to performing seaming activities.



Facing Down – ESI welder performing welder maintenance prior to conducting trail welds.



Facing E – ESI rolling geocomposite down the south embankment of Cell 9.



Facing NE – ESI beginning to place 16-oz. geotextile over the drainage gravel in the Cell 9 lysimeter sump.

CQA PHOTOGRAPH LOG WEEK 20
(6/21/10 TO 6/25/10)

Geosynthetics



Facing SW – ESI employees sewing the 16-on geotextile in the Cell 9 lysimeter sump.



Facing W – ESI employees sewing the 16-on geotextile in the Cell 9 lysimeter sump.



Facing S – Geocomposite deployment on the south embankment of Cell 9.



Facing W – Due to heat a large wrinkle formed near the south toe of Cell 9. ESI was instructed to cut the liner, remove the wrinkle and patch the area.



Facing W – ESI welding a patch in the south toe of Cell 9 that was used to remove a large wrinkle.



Facing N – Geocomposite deployment in Cell 0.

CQA PHOTOGRAPH LOG WEEK 20
(6/21/10 TO 6/25/10)

Lysimeter Sump



Facing W – TWS has completed lining the Cell 9 lysimeter sump with drainage gravel.



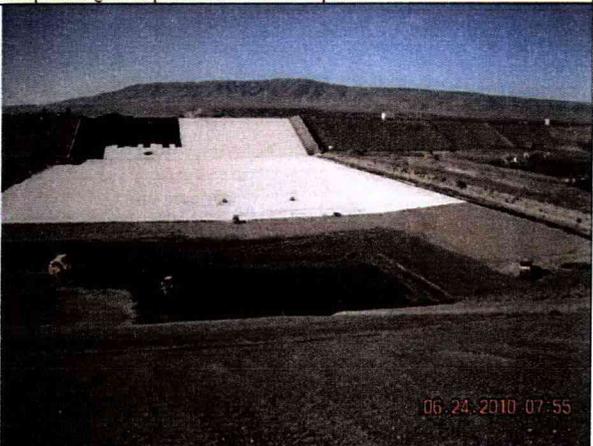
Facing W – TWS is removing excess gravel from the lysimeter sump after gravel placement was complete.



Facing SW – TWS is removing excess gravel from the lysimeter sump after gravel placement was complete.



Facing SW – TWS completing final grading of the Cell 9 lysimeter sump.



Facing S – TWS placing admix over the Cell 9 lysimeter sump.



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 21 (6/28/10 TO 7/2/10)

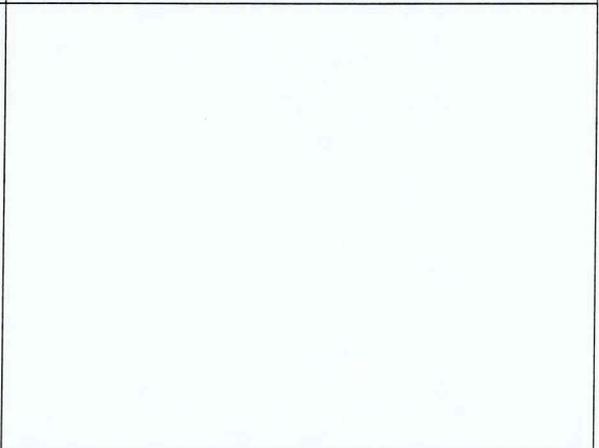
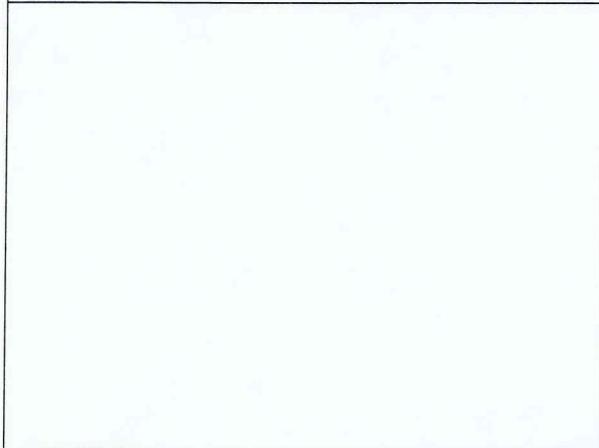
Subgrade

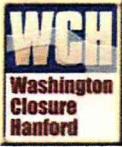


Facing S – TWS using the “Ladybug” water truck to moisture condition the subgrade on the south slope of Cell 10 prior.



Facing SE – TWS laborer moisture conditioning the south interior embankment of Cell 10 using a water hose.





ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 21 (6/28/10 TO 7/2/10)

Admix Placement



Facing NE – TWS placing admix on the north slope of Cell 9 east of the Cell 9 riser trench.



Facing SW – TWS placing and compacting admix on the north slope of Cell 9 east of the Cell 9 riser trench.



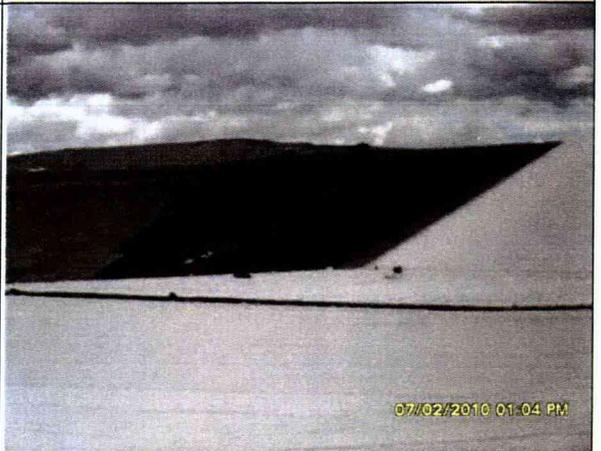
Facing E – TWS moisture conditioning the admix east of the Cell 9 sump.



Facing NE – TWS compacting the admix south of the Cell 9 sump.



Facing NE – TWS moisture conditioning and compacting the admix south of the Cell 9 sump.



Facing SE – TWS compacting the first lift of admix on the south embankment of Cell 10.

CQA PHOTOGRAPH LOG WEEK 21
(6/28/10 TO 7/2/10)

Geosynthetics



Facing W – A large wrinkle has developed at the south toe of Cell 9. ESI will repair the wrinkle prior to covering with geocomposite.



Facing E – ESI repairing a large wrinkle at the south toe of Cell 9.



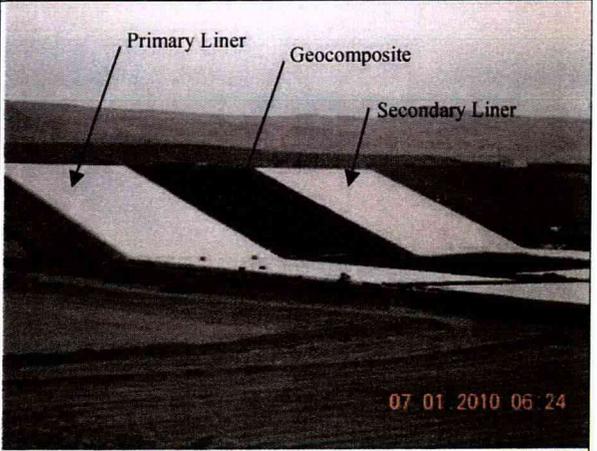
Facing S – ESI preparing to place secondary liner on the north slope of Cell 9 along the existing tie-in.



Facing N – ESI placing secondary liner on the north slope of Cell 9 along the existing tie-in.



Facing S – ESI using a rub sheet to deploy primary liner on the south slope of Cell 9.



Facing SW – Secondary liner, geocomposite and primary liner have been deployed on the south slope.

**CQA PHOTOGRAPH LOG WEEK 21
(6/28/10 TO 7/2/10)**

Geosynthetics



Facing SW – ESI deploying primary liner on the south slope of Cell 9.



Facing N – ESI welding primary liner on the south slope of Cell 9.



Facing Down – End-to-End seams of geocomposite zip tied together.



Facing Down – ESI capping End-to-End seam with geotextile to seal out sand or debris.



Facing N – ESI preparing to weld the Cell 9 tie-in along the north slope and toe.

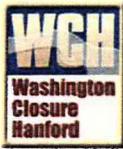


Facing N – ESI making primary repairs on the south half of the floor in Cell 9.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 22
(7/6/10 TO 7/9/10)

Subgrade	
<p>Facing SE – TWS watering the subgrade on the south embankment prior to admix placement.</p>	<p>Facing S – Overview of Cell 10 subgrade and admix placement.</p>
<p>Facing S – TWS watering the subgrade on the south embankment prior to admix placement.</p>	<p>Facing N – TWS loading Cell 10 floor clippings into Payhauler trucks to be transported to the excavation stockpile.</p>



ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 22 (7/6/10 TO 7/9/10)

Admix Placement



Facing SW – Weekend rainstorms caused runoff to accumulate in the Cell 9 sump.



Facing NE – Saturated admix near the Cell 9 sump from weekend storms.



Facing S – TWS watering the admix with the International water truck.



Facing SE – TWS using the CAT D6 GPS dozer to place admix on the south slope of Cell 10.



Facing SW – TWS placing and compacting admix on the south slope of Cell 10.



Facing NW – TWS using a laborer and a water hose to moisture condition the admix on the north slope on Cell 9.

ERDF CONSTRUCTION CELLS 9-10

CQA PHOTOGRAPH LOG WEEK 22
(7/6/10 TO 7/9/10)

Geosynthetics



Facing S – ESI placing secondary geocomposite on the south slope of Cell 9.



Facing N – ESI using a sewing machine to sew the fabric on the secondary geocomposite after all ties have been completed and inspected.



Facing E – ESI welding the secondary liner to the primary liner in the south anchor trench.



Facing E – ESI rolling secondary geocomposite across Cell 9 in preparation for placement.



Facing N – ESI deploying secondary geocomposite on the south half of the floor in Cell 9.



Facing SW – Overall view of liner and geocomposite in Cell 9.