ATTACHMENT 2

INSPECTION CHECKLIST

A. INSPECTION PLAN

A.1. Structures and Facilities to be inspected

A.1.a Run-On Diversion Ditches: The diversion ditches shall be visually inspected to assure that they can remain operable during storm events as designed. The inspection team shall look for erosion, lack of vegetative cover, and sedimentation.

A.1.b Cover Integrity: The cover shall be examined visually to check for sliding, subsidence, settlement, tension cracking, lack of vegetation, ponding of surface water, and condition of vegetation.

A.1.c Survey Bench Mark Settlement Plates and Monuments: The survey benchmarks, settlement plates, and monuments shall be located and visually inspected for damage or movement. If damage or movement is detected, they shall be repaired or replaced. The settlement plates shall be read in order to detect any settlement of the final cover.

A.1.d Monitoring Wells: Monitoring wells shall be inspected during the regular sampling program.

A.1.e Groundwater Withdrawal Wells: The groundwater withdrawal wells shall be inspected whenever the wells are sampled.

A.2. Frequency of Inspections

A.2.a. Inspections shall be conducted quarterly. Inspections may coincide with sampling of the monitoring wells.

A.2.b The monitoring well inspections and groundwater withdrawal well inspections shall coincide with the monitoring program.

A.2.c The Permittee shall document the inspections on the Observation and Inspection Checklists included in this attachment and maintain copies on site.

B MAINTENANCE PLAN

B.1. Cover Maintenance Activities and Schedule: The surface and slopes of the final cover shall be inspected for damage as outlined in I.A.2 of Attachment 1. Soil shall be replaced as required., based on needs determined from regular inspections. The repair of all surface subsidence, soil erosion problems, or slope damage shall be completed as soon as possible but no later than three days after the problem was first noticed.

B.2. Reseeding Schedule: The cover shall be reseeded as required.

B.3. Fertilizing Schedule: Fertilizer shall be applied as necessary.

B.4. Rodent and Insect Control: During the routine inspections, the cap and final cover shall be carefully scrutinized for animal burrows or insect mounds and repaired as required.

B.5. Erosion Control: The activities for erosion control shall include excavation of sediment deposits, replacement of eroded soil, replacement of eroded slag and other compaction, installing of energy dissipation structure as required and reseeding as applicable. Any repair will be completed as soon as possible but no later than three days after the problem is first observed.

B.6 Maintenance of Groundwater Monitoring System: The Permittee shall inspect and maintain the groundwater monitoring system to meet the rerquirements of Module III.

B.7 Hazard Signs: If it is observed during the periodic inspections that the identification or hazard signs are damaged or in need of maintenance, the damaged portion will be repaired or replaced.

Observation And Inspection Checklist

ITEM	General Condition	Change From Previous Inspection	Action Taken By Inspector
General Condition Of The Site Cap			
Signs of Sloughing or Sliding at out Slopes Signs of Subsidence Evidence of Sheet Erosion Evidence of Gully Erosion Evidence of Boggy Area Extent of Vegetation Cover Condition of Vegetation Cover Changes in Vegetation Evidence of Rodent Damage			
Conditions Of Ditches			
Evidence of Erosion Obstruction of Flow Conditions of Structures and Appurtenances Condition of Vegetative Lining			
Decant Inlet and Pipes			
Clogging at Inlet Clogging at pipes Characteristic of Discharge Signs of Corrosion Signs of Cracking or Crushing Erosion Condition at Inlet Erosion Condition at Discharge			
Concrete Structures			

Cracking Spalling Areas of Seepage Vertical, Horizontal or Tilting Movements			
Instrumentation			
Settlements Monuments and Bench Marks Vent Stacks Monitoring Wells and Pump Wells Hazard Signs			

Discussion

LEGEND REPORTING CODE

General Conditions Column	**Changes Column**	**Action Taken Column**
NA - Not Applicable	NA - Not Applicable	RM - Routine Maintenance
NU - Nothing Unusual	NC - No Changes	ND - Notified Designer
AR - Action Required	I - Improved from Previous Inspection	RC - Repair Completed
D - See Discussion	D - See Discussion	D - See Discussion

Inspector Signature

EXPLANATION OF INSPECTION OBSERVATIONS

GENERAL CONDITION OF THE SITE CAP AT OUT SLOPES

ITEMS INSPECTED	DESCRIPTION OF ITEMS TO BE OBSERVED	CORRECTION METHOD
Signs of Sloughing or Sliding at the Out slopes	Check for bulging along or at the base of the slopes and the formation of vertical displacement and cracking at or along the top of the distressed area. Special care	Repair slide area by replacement with suitable material. Use straw bales as necessary to control erosion
Signs of Subsidence	Check for settlements due to consolidation of soft foundation material. Evidenced by bowl-shaped depressions, possibly impounding water. Care shall be exercised in areas of heavy vegetation to avoid overlooking such areas.	Clear vegetation in the area. Repair low spots by filling to grade with off-site borrow material. Fertilize, seed and mulch as necessary to re-establish vegetation. Use straw bales as necessary to control erosion.
Evidence of Sheet Erosion	Check areas, which lack ground cover. Sheet erosion is evidenced by surficial loss of soil in a somewhat	Regrade as necessary. Fertilize, seed, and mulch to establish vegetation. Use straw bales to control erosion if necessary.
Evidence of Gully	Check areas which lack ground cover. Gully erosion is due to the effects of the concentration of overland flow and results in the creation of narrow and deep channels.	Regrade as necessary. Replace eroded material with suitable off-site borrow. Fertilize, seed, and mulch to establish vegetation. Use straw bales as necessary to further check erosion.

Evidence of Boggy Area	Check for evidence of wet or boggy area. Evidenced by areas where vegetation may be thriving due to moist conditions or ponded water may be present.	Clear vegetation in the area. Repair low spots by filling off-site borrow. Fertilize, seed, and mulch. Use bales as necessary.
Extent, Condition, and Changes in Vegetation Cover	All areas that were seeded shall have a well-developed vegetation cover, which is uniform and continuous. Irregularities such as difference in color. Density, rate of growth, type of growth, or a difference in the character of the vegetation will be noted.	Sample soils to determine nutrient deficiencies. Apply fertilizer amounts as specified by soil analysis, followed by seed and mulch application
Evidence of Rodent Damage	Check for the presence of animal burrows or insect mounds.	Notify local exterminating and pest control company. After application of pesticide or rodenticide, backfill and regrade areas involved. Apply fertilizer, seed, and mulch.

DECANT INLETS AND PIPES

ITEM INSPECTED	**DESCRIPTION OF ITEMS TO BE OBSERVED**	**CORRECTION METHOD**
Spalling	Concrete structures (inlets and walls) shall be inspected for spalling as evidenced by the removal of the concrete matrix at the surface. The remaining surface will be rough, and the aggregate will be exposed	If spalling is severe causing inlet or end wall to not function as desired, then structure replacement is necessary.

Areas of Seepage	Concrete catch basins Inlet 1 and 2. Shall be inspected to verify that the weep holes are free from debris and functioning.	Remove debris from weep hole, and clean as necessary
Vertical, Horizontal or Tilting Movements	Check to verify that vertical and horizontal elements of end walls and inlets are plumb	If movement or tilting is causing the inlet or end wall not to function as designed, then structure replacement is necessary
Clogging	Check for debris or accumulation of other material at the inlets 1. and 2. Check the riser in Ponds 1 and 2 for accumulation of debris. Siltation in the inlets may clog Discharge Pipes 1 and 2.	Remove accumulated debris from all inlets and risers. Clear out catch basins. Unplug pipelines by rodding out or flushing.
Characteristic of Discharge	Evaluate the character and quantity of water flowing into and out of all pipes. If inflow differs from the outflow, it is possible that cracks or open joints are allowing flow to escape or providing additional flow to the pipe	Where open joints or cracks in the pipes are suspected, the pipes should be inspected. Damaged pipes or joints should be excavated and repaired.
Corrosion, Cracking, or Crushing	Check for corrosion, cracking, or crushing at all visible portions of pipes. Settlement above the pipelines may indicate that the pipe has been crushed. Tilted riser pipes in the sedimentation ponds indicate that corrosion may have occurred. Loss of pond	Replace damaged pipe as necessary.

	volume may also indicate corrosion of the riser has occurred.	
Erosion at Inlet and Outlet	Check for erosion at inlet to pipes which can result in solids being carried into the pipelines. Erosion at the discharge of pipes is evidenced by undercutting the discharge point or undercutting the toe of adjacent slopes	Regrade as necessary. Replace eroded material. Fertilize, seed, and mulch as appropriate. Provide energy dissipators at discharge points

CONDITIONS OF DITCHES

ITEM INSPECTED	**DESCRIPTION OF ITEMS TO BE OBSERVED**	**CORRECTION METHOD**
Evidence of Erosion	The banks and beds of all ditches (A,B,C, and D) shall be examined to determine if erosion or siltation has occurred. Erosion is evidenced by sides that are steeper than shown on the plans or by localized irregularities in configuration.	Re-establish proper ditch configuration. Reseed to establish vegetative cover.
Obstruction to Flow	Check for sloughed-in soil, other foreign objects, excessive vegetative growth, or siltation due to erosion.	Remove all obstructions and repair ditch to original configuration. Revegetate as necessary.
Condition of Structures	The condition of all structures and appurtenances that are a part of the ditches should be noted, including culverts, inlets, endwall,	Repair or replace structure. Remove obstructions to inlets and pipes. Regrade and revegetate as necessary.

	risers, etc. Check for accumulation of debris, settlement or movement, cracks, rust, scour, and erosion	
Condition of Vegetative Lining	Check that vegetation covers all ditches, is uniform and continuous. Note differences in vegetation colour, density, type of growth, and character of vegetation	Sample soils in areas of bare spots to determine nutrient requirements. Remove unsuitable materials if necessary. Replace with suitable material and revegetate.

INSTRUMENTATION

ITEM INSPECTED	**DESCRIPTION OF ITEMS TO BE OBSERVED**	**CORRECTION METHOD**
Settlement Monuments and Bench Marks	Inspect settlement monuments and bench marks to see that they are still in existence and in good condition. Obvious tilt of the settlement monument shall be noted.	Relocate and re-establish bench marks and settlement monuments as necessary.
Vent Stacks	Check that the PVC vent stacks are not cracked or damaged and that the pipe is not obstructed.	Repair or replace pipe if damaged. Remove obstructions in pipe as necessary.
Monitoring Wells and Pump Wells	Check that covers and locks are secure and operable.	Repair or replace cover if damaged. Severe damage to a well may necessitate well redrilling.
Hazard Signs	Check to see that the hazard signs are still in existence.	Repair damaged, illegible signs or replace if necessary.

CONCRETE STRUCTURES

ITEM INSPECTED	DESCRIPTION OF ITEMS TO BE OBSERVED	CORRECTION METHOD
Cracking	Inspect concrete structures (Inlet and end Walls) for cracks. If cracks are noticed on a particular structure, other similar structures shall be checked for evidence of cracks.	If cracking is severe causing inlet or end wall to not function as designed, then structure replacement is necessary.