HARRISON SUB-RESIDENCY FIELD INSPECTION

Name of Inspectors: Chris Kappeller
Date: 5/29/09

Every Quarter

Inspect monitoring wells

*check concrete collars, protective casings, caps and locks for damage

Findings:

All wells inspected and found to be in good condition (Photos # 5-15). Several monitoring wells onsite were decommissioned in May and June of 2008 due to low or non-detect petroleum related compounds in water samples obtained from each during the course of the groundwater monitoring program that is still in progress. NYSDEC approved the decommissioning of these wells. The remaining wells left active in the petroleum remediated area for periodic sampling include MW-1, MW-11, GP-1, GP-2 and PC-1.

Wells MW-12 and MW-13 were installed from 6/24 – 6/25/08. GPS data was obtained from both well locations in October 2008 and was plotted on a site overview map in May 2009.

Inspect landfill cap (including cap vegetation)

*check for signs of erosion (rills, channels, ponding)
*check for signs of vector and vermin damage (holes/tunnels)
*check for the presence of woody vegetation (small trees) - remove any that are found

Findings:

Grass on the entire landfill cover needs to be mowed (Photo #16).

The soil slump on west slope of landfill (Photos 21-24) was repaired in May 2009 by NYSDOT Residency 8-9 personnel. Approximately 6" thick mat of #2 crushed stone (NYSDOT Standard Spec. 623.12) was placed on the slump then covered with approximately 12" of fine stone fill (NYSDOT Standard Spec. 620.02). Repair suggestions were provided by the NYSDOT geotechnical department.

Area of orange iron bacteria staining exists near the area just east of PC-2 and down slope of the slump repair. An iridescent film was noted on the standing water of the orange staining, which broke into jagged pieces when disturbed (Photos 25 - 27). No questionable odors were noted on the stained soil or the standing water (marsh-like odor). Area of staining tends to fluctuate with the change in season (less pronounced in winter) and more pronounced when increased disturbance from deer foot traffic through this area is observed and during the spring and summer months.

Some iridescent film was also observed in the area of LMW-4 on a small puddle of water. Orange staining was absent (dark grey to black hydric soil present) and no notable odors were observed in the soil or water at this area.

Inspect gas vents

*check for physical damage (cracks)
*check for soil cracking adjacent to the vents - use additional soil to seal the full depth of the crack
*check for blockages inside the vents - clear vent with a non-metallic probe (snake)

*check for movement of the gas vent riser - repair (by Contractor) any geomembrane damage in the vicinity of the gas vent

Findings:

Four vents (V1 – V4) were inspected and found in good condition (visually unblocked, neither cracks nor movement was observed) (Photos # 1-4). V-2 shows a slight lean to north.

Semi-Annual

Inspect perimeter fence, gates, and signs

*check for damage - restore damaged fencing and illegible signs

Findings:

Tree limbs lying on sections of the north fence were removed and damage to the fence was repaired by NYSDOT Residency 8-9 personnel (Photo 18 & 19).

Twice a year during growing season (end of June to Mid-September)

Mow cap grass to a height of no lower than 15 cm

Findings:

Entire grass cover of the landfill needs to be mowed.

Comments/Follow-up Work Required

Carryover from last inspection

1. The door to the gate on the south side of the landfill should be equipped with a lock. The gate is currently held shut with a bungee cord. A key should be given to on-site personnel and a spare should be kept in the Valhalla residency. The main gate to the facility is currently locked by on-site personnel at the end of the day. A new lock will be placed on this gate during the next quarterly inspection.

Additional Comments

1. Along with landfill mowing, the areas around the landfill vents and some of the paths leading to the monitoring wells that have become overgrown during the spring and summer months need to be weed whacked.

2. Well cap keys are located in the left drawer of the facility office desk.

3. During the next 5th quarter sampling round, a soil and/or water sample from the area of orange iron bacterial staining should be collected and analyzed.

Photo 1: Vent V-1

Photo 2: Vent V-2

Photo 3: Vent V-3


Photo 4: Vent V-4

Photo 5: Well LMW-2


Photo 6: Well LMW-4

Photo 7: Well PC-1

Photo 8: Well PC-2

Photo 9: Well MW-11

Photo 10: Well MW-12

Photo 11: Well MW-13

Photo 14: Well GP-1

Photo 15: Well GP-2

Photo 16: Grass on landfill cap

Photo 17: Stream inlet

Photo 18: Fallen tree repair on north fence (mid section)

Photo 19: North fence (towards the east) top rail repaired

Photo 20: South fence (looking east)

Photo 21: West slope erosion area repair (looking south)

Photo 22: West slope erosion area repair (looking west)

Photo 23: West slope erosion area repair (looking north)

Photo 24: West slope erosion area repair (looking east

Photo 25: Orange staining near PC-2 (view 1)

Photo 26: Orange staining near PC-2 (view 2)

Photo 27: Iridescent film on water where orange staining is located