HARRISON SUB-RESIDENCY FIELD INSPECTION

Name of Inspector: Chris Kappeller

Date: 4/22/10

Semi-Annual

Inspect monitoring wells

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

Findings:

All the wells were inspected. Locks were missing on wells LMW-2, MW-11, and MW-12 (possibly resulting from the monitoring well water sampling that took place in January 2010 by a NYSDOT consultant) (Photos 5, 9 & 10).

A downed tree blocks the path to access PC-2 (Photos 8 & 23). The tree should be cut up and cast to the side of the path.

<u>Inspect landfill cap</u> (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

Findings:

found

The grass height was good at the time of inspection. It may have to be mowed in June or July (Photo 14).

The soil slump on west slope of landfill (Photos 21-22) was repaired in May 2009 by NYSDOT Residency 8-9 (Valhalla) personnel. The area of the repair is still in good condition (Photos 19 & 20).

There is some naturally-occurring orange iron bacteria staining near the area just east of PC-2 and downslope of the slump repair (Photo 22). No questionable odors were noted on the stained soil (marsh-like odor). The area of staining tends to fluctuate with the change in seasons; it is less pronounced in winter and is more pronounced during the spring and summer months and when increased disturbance from deer foot traffic through this area is observed.

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 generally found in good condition (visually unblocked, neither cracks nor movement was observed) (Photos 1-4). V-2 shows a slight lean to the north. V-1 revealed a BB sized hole through the side of the vent. This appears to be insect damage based on other markings on the vent. The hole needs to be patched (with epoxy putty). NYSDOT Maintenance will repair this in June 2010.

Inspect perimeter fence, gates, and signs

*check for damage - restore damaged fencing and illegible signs

Findings:

A downed tree on the northwestern portion of landfill cap from the March 2010 storm needs to be removed. (Photo 24)

The fence was damaged by a fallen tree (near stream inlet – northeast of landfill cap). The rotten tree needs to be removed and the fence needs to be repaired.

Possible fence damage on west fence due to the March 2010 storm. I could not walk the fence area to inspect due to dense vegetation cover.

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 should be mowed in June or July.

Comments/Follow-up Work Required

Carryover from last inspection

- 1. The door to the gate on the south side of the landfill was supplied with a lock, but the 2 gate doors are too far apart from one another to latch the lock. A short chain needs to be placed around the gate doors and a lock needs to be attached to the chain to secure the doors. The gate is currently held shut with a bungee cord. The lock was left on the gate and a key was given to on-site personnel (kept in the office desk with the well lock keys) and a spare will be given to the NYSDOT Residency 8-9 (Valhalla). The main gate to the facility is currently locked by on-site personnel at the end of the day. NYSDOT Maintenance will obtain a chain and secure the gate in June 2010.
- 2. Along with landfill mowing, the areas around the landfill vents and some of the paths leading to the monitoring wells that become overgrown during the spring and summer months need to be weed whacked. The tree blocking the access path to PC-2 needs to be cut up and removed.

Additional Comments

- 1. Well cap keys and the new gate key are located in the left drawer of the facility office desk.
- 2. Fence gate chain install and V-1 repair will be performed in June 2010 by NYSDOT Maintenance.
- 3. New locks have to be installed on wells LMW-2, MW-11, and MW-12.
- 4. Inspections have been changed from quarterly to semi-annually with permission from DEC (letter dated February 2010).



Photo 1: Vent V-1



Photo 2: Vent V-2



Photo 3: Vent V-3



Photo 4: Vent V-4





Photo 6: Well LMW-4



Photo 7: Well PC-1



Photo 8: Well PC-2 (covered with downed tree limbs)





Photo 10: Well MW-12 (lock missing)





Photo 12: Well GP-1



Photo 13: Well GP-2



Photo 14: Grass on landfill cap



Photo 15: Stream inlet



Photo 16: Fence damage by fallen tree (near stream inlet – northeast of landfill cap)



Photo 17: Another view of fence damage by large, rotten tree near stream inlet



Photo 18: South fence (looking east)



Photo 19: West slope erosion area repair (looking south)



Photo 20: West slope erosion area repair (looking north)



Photo 21: Pinhole in V-1 from suspected insect boring



Photo 22: Orange staining near PC-2



Photo 23: Downed tree from March 2010 storm over PC-2



Photo 24: Downed tree from March 2010 storm on northwestern portion of landfill cap