HARRISON SUB-RESIDENCY SEMI-ANNUAL FIELD INSPECTION

Name of Inspector(s): Christopher Kappeller

Date: 4/30/19

<u>Inspect monitoring wells</u>

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

Findings:

All wells were inspected and found to be in good condition. Paths to these wells were weed-wacked prior to inspection.

<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 found

Findings:

Grass height was satisfactory at the time of inspection (Photo 10). Grass should be cut in June and September.

The soil slump on west slope of landfill was repaired in May 2009 by NYSDOT Maintenance Residency 8-9 personnel. The repaired area should be weed-wacked during the next mowing event in June 2019 (see Photos 13).

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 near the gas vent

Findings:

Four vents (V-1 to V-4) were inspected (Photos 1-4). V-1 and V-2 had their plastic casing holes repaired with fiberglass epoxy in August 2015. A hole presumed to be from a boring insect or woodpecker was made through the previous fiberglass repair in V-2. The hole will be repaired by Summer 2019. V-3 and V-4 were in good condition (neither cracks nor movement was observed). V-2 leans slightly to the north.

Inspect perimeter fence, gates, and signs

*check for damage - restore damaged fencing and illegible signs

Findings:

The south fence near the landfill gate appeared to be in fair condition. A new lock and chain were placed on the gate to the landfill by the NYSDOT landfill monitoring consultant. A new key is in the left drawer of the office desk (Key A389).

Porcelain Berry vines were overgrown on the fence in this area during this inspection (Photo 13). This is a very invasive plant. Herbicide should be applied on the vegetation in May/June before fruit begins to form. Another application may be needed in July if there is any re-growth.

Semi-annual mowing

*check grass height - mow cap grass to a height of no lower than 15 cm twice a year during the growing season.

Findings:

The grass length appeared to be satisfactory. The cap should be mowed every June and September.

Comments/Follow-up Work Required

- 1. On April 2, 2018, Maurcio Roma from the NYS Office of the Attorney General and Steve Parisio from the NYS Department of Environmental Conservation performed an informal inspection of the landfill cap at the Harrison Facility. They suggested that all saplings and small shrubs should be removed to about 5' past the toe of the landfill cap slope to ensure that no root systems compromise the clay liner and geotextile that make up the cap. NYSDOT will have its tree removal crew cut down any shrubs and small trees that are above the toe of slope of the west, north and east sides of the landfill. Work is proposed to take place in Summer 2019.
- 2. The main gate to the facility is locked at the end of the day by the Town of Harrison personnel. The well keys and landfill gate key are in the site office desk.
- 3. Weed whack the west slope repair area and possibly spray with herbicide to prevent future weed growth through the stone repair. Weed whack porcelain berry vines on the south landfill fence and apply herbicide as needed. Herbicide will be applied by a NYSDEC licensed applicator.



Photo 1: Vent V-1



Photo 2: Vent V-2 (hole in repair patch shown)



Photo 3: Vent V-3



Photo 4: Vent V-4



Photo 5: Well LMW-2



Photo 6: Well LMW-4 area



Photo 7: Well PC-1



Photo 8: Well PC-2



Photo 9: Well MW-11



Photo 10: Grass on landfill cap



Photo 11: Stream inlet



Photo 12: South fence (looking east)



Photo 13: A portion of the west slope erosion area repair that needs clearing (looking north)



Photo 14: Presumed orange iron bacteria and iridescent biofilm sheen on water (near LMW4)