GOVERNMENT OF THE U.S. VIRGIN ISLANDS DEPARTMENT OF PLANNING & NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION



INSPECTION LIST FOR LANDFILL

Pursuant to Title 19, Chapter 56 §1560 of the Virgin Islands Code, rules and regulations and 40 CFR Part 258, etc. The owner or operator of a municipal solid waste landfill unit must comply with any other applicable Federal and Local Rules, Laws and Regulations, or other requirements.

Inspection form for the operation of a Sanitary Landfill in Accordance with Title 19 VIR&R §1560, 40 CFR Part 258.

DATE: July 16, 2013

TO: Leslie Leonard

Program Manager

FROM: Jason Henry, Environmental Specialist

RE: Anguilla Landfill Inspection Report

INTRODUCTION

The landfill was inspected once for the month of July, 2013. The purpose of the inspection is to determine the level of compliance with all applicable laws and regulations.

THE INSPECTION

The inspection was conducted by Jason Henry, Environmental Specialist. The site was evaluated by the following criteria and yielded the respective results from, Section-301.10 General Operation Requirement under the following criteria evaluated the landfill. The inspection revealed a state of continued non-compliance. The Landfill continues to operate without a permit.

THE FINDINGS

§1560-301.10. General Operation Requirement

- A. 1. Fencing: Complete preventing entry into the landfill after working hour. Status: Compliance. Title 19 VIR&R § 1560-301.10.(a)
 - 2. Gate: The gate is adequate. Status: Compliance. Title 19 VIR&R § 1560-301.10.(a)
 - 3. Operating Hour Posted: The operating hours were posted at the entrance. Status: compliance. Title 19 VIR&R § 1560-301.10.(a)
- B. Operating Personnel: The shelter is adequate for personnel, The toilet, wash-up facility, is operating, drinking water, and emergency telephones are in operating condition. Status: Compliance, for the following Title 19 VIR&R § 1560-301.10.(c)
 - 1. Adequate Shelter: 🗸
 - 2. Toilet: 🗸
 - 3. Wash-up Facility: ✓
 - 4. Drinking Water: 🗸
 - 5. Emergency telephone:
- C. <u>Firefighting:</u> Title 19 VIR&R § 1560-301.10.(c)
 - 1. Water=adequate & suitable: Water is not available on site for Firefighting. **Status:** Non-compliance.
 - 2. Dust control: There is water on site for dust control. **Status:** Compliance.
- D. Animals on Site: There were animal (dogs) on site. Status: Non-compliance.

 Title 19 VIR&R § 1560-301.10.(d)
- E. <u>Unloading:</u> There were clearly marked areas and attendant on the site to direct unloading. Status: Compliance. Title 19 VIR&R § 1560-301.10.(e)
 - 1. Clearly marked areas: 🗸
 - 2. Attendant to direct unloading: ✓
- F. <u>Sewage Sludge, Liquids & Hazardous Waste:</u> There were no procedures in place to insure that sewage, sludge, liquids, and hazardous wastes, as defined in Part 258, are not disposed

of at a Municipal Solid Waste Landfill are to be instituted by the landfill operator. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(f) and 40 CFR Part 258.20 & 258.28

- 1. Evidence: X
- 2. Written Permission?X
- G. <u>Separate Unloading Area for Bulky Items:</u> There are areas for separating and unloading of bulky item. Status: Compliance Title 19 VIR&R § 1560-301.10.(g)
- H. Open Burning: Because of the rapid oxidation that products being discharged into the open air without passing through a properly designed stack, duct chimney, flue or other control device or process. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(h)
- I. <u>Waste Deposits:</u> Wastes shall be deposited in two-foot layers or lifts and compacted. Daily cover of at least six inches of compacted earth or alternative material as described in § 1560-301.21 (b), shall be placed over compacted waste. Title 19 VIR&R § 1560-301.10.(i)
 - 1. Two foot layer/lifts: X
 - Compaction: ✓
 - 3. Daily cover of six or more inches: X
- J. <u>Dust & Paper/Debris:</u> Dust, paper, and other debris are not under control and no evidence of a weekly cleanup of loose paper and plastic shopping bags. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(j)
 - 1. Litter Control Fence: X
 - 2. Plastics and objects are protruding from the landfill after the daily cover is applied:X
- K. Paper Loose Clean Up Weekly: Paper, plastic bags and other loose material shall be controlled. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(k)
- L. <u>Salvaging and Sorting of Waste:</u> Salvaging or sorting of wastes shall be organized so as not to hamper orderly and prompt waste disposal or create nuisances or hazards. Status: Non-compliance. **Title 19 VIR& § 1560-301.10.(I)**
 - 1. Hamper Orderly/Prompt Waste Disposal:
 - 2. Create Nuisance Or Hazardous situation: ✓
- M. Record Keeping: There were no record of inspections. Status: Non-compliance. Title 19 VIR&R § 1560-301.20. (3) and 40 CFR 258.29

40 CFR Part 258-- Criteria For Municipal Solid Waste Landfill:

Subpart B

- 1. <u>Airport Safety:</u> The dump is less than 10,000 feet from the nearest airport runway. Status: Non-compliance. 40 CFR Part 258.10
- Wetlands: The wetland has been subjected to past lateral expansion of the dump with deposits of fill auto parts, scrap metal, tires etc. Status: Non-compliance. 40 CFR Part 258.12

Subpart C

- 1. Procedures For Excluding The Receipt of Hazardous Waste: There is no program in place for detecting and preventing the receipt of hazardous waste and PCB. Status: Non-compliance. 40 CFR Part 258.20. & Title 19 VIR&R § 1560-301.20
- 2. <u>Disease Vector Control:</u> There were no procedures in placed to control the on-site populations of disease vectors. Flies, rodents, mosquitoes, birds, or other animals, including insects capable of transmitting disease to human were rampant Status: Noncompliance. 40 CFR Part 258.22. & Title 19 VIR&R § 1560-301.22.
- 3. Explosive Gas Control: There is a constant release of methane gas from the landfill on site. Status: Non-compliance. 40 CFR Part 258.23. & Title 19 VIR&R § 1560-301.23.
- 4. Air Criteria: There is no procedures in place to ensure that the landfill is in compliance with section 110 of Clean Air Act. Status: Non-compliance. 40 CFR Part 258.24. & Title 19 VIR&R § 1560-301.24.
- 5. Access Requirements: The operators have no control over public access and the prevention of unauthorized vehicular traffic, scavengers and illegal dumping. Status: Non-compliance. 40 CFR Part 258.25. & Title 19 VIR&R §1560-301.25
- 7. Surface Water Requirements: Causes a discharge of pollutant into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National and Territorial Pollutant Discharge Elimination System (NPDES) & (TPDES) requirements, pursuant to section 402. Status: Non-compliance. 40 CFR Part 258.27. & Title 19 VIR&R §1560-301.27.
- N. <u>Coastal Zone Management/Earth Change:</u> The Anguilla disposal site continues to impact the Coastal Zone including but not limited to excavation, mining of fill, filling of wetlands erection of structures and expansion of the disposal site without a permit. Status: Non-compliance 15 CFR Part 930. & Title 12 VIR&R § 904-906.

- O. <u>Waste Oil:</u> used oil at the junk & abandon vehicle site (no longer in existence):40 CFR 279: Status,
 - 1. SPCC: 40 CFR Part 112.5.=
 - 2. Condition of Units
 - Rust or defects=
 - Leaks =
 - Labels=
 - Response to release=
- P. <u>Unstable Areas:</u> The location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions areas susceptible to mass movements. The liner leachate collection systems, final covers, run-on/ run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment are not in place at the land fill. Therefore the following: **Status:** Noncompliance: **40 CFR §258.15.**
 - Earth Change Plan submitted: X
 - Earth Change Permit Granted:X
- Q. Operation In Accordance With: "The Anguilla landfill is operating without a site permit. The conduct or cause to conducted open dumping or the operation of open dumps. Status: Non-Compliance. Title 19 VIR&R 1563.
 - Permitting landfills:X
 - Open Dumping:X

Note: In the report are the following:

✓= Compliance

X = Non-Compliance

SUMMARY:

The Anguilla Landfill was inspected once for the month of July 2013. The inspection reveals a state of continuous non-compliance. The landfill must comply with the federal rules, laws, regulations or other requirements.

CONCLUSION:

The landfill continues to be in violation of The Territorial and Federal Laws and Regulation. Federal rules, laws and regulations or other requirements have not effected any changes in the operation of the Anguilla Landfill.

Summary of violations:

- The number of birds flying in and around the dumping and compacting area is declining.
- Debris along the fence line.
- The daily cover is insufficient, less than 6 inches of compact earth.
- No gas monitoring program.
- Run-off from the landfill that settles in a flood zone next to the oil abattoir.
- The slope of operation on the south side is greater than 3:1 slope. The slopes on the southwestern and on north are being re-engineered to reflect the proper sloping.
- There is evidence of soil erosion down the slopes of the landfill.
- Lateral expansion of scrap metal into the wetland and seashore. The scrap metal removal operation is still in operation.
- There is water on site for fire fighting.
- Plastics and other objects protruding from the landfill after the daily cover is applied
- An accumulation of tires along next to the old abattoir in a CZM zone (flood area)
- The tires are collecting water, a breeding ground for mosquitoes.
- With the transfer station in place, the scale house is relocated closer to the entrance. The scale is working and there are surveillance camera that are used to inspection the trucks as they pass over the scale.
- The operator of the transfer Facility has submitted a used oil application for the used oil that is being generated as a result of the operation of the transfer station machinery.
- The bales of waste generated from the transfer station are taken into the landfill for disposal.

Any questions you may have concerning this report and the findings, please contact Leslie Leonard at DPNR-DEP 340-774-3320.

Jason Henry	<u>July 2013</u>
Written by	Date
Solid Waste Supervisor	Date
Director of DEP	Date

GOVERNMENT OF THE U.S. VIRGIN ISLANDS DEPARTMENT OF PLANNING & NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION



INSPECTION LIST FOR LANDFILL

Pursuant to Title 19, Chapter 56 §1560 of the Virgin Islands Code, rules and regulations and 40 CFR Part 258, etc. The owner or operator of a municipal solid waste landfill unit must comply with any other applicable Federal and Local Rules, Laws and Regulations, or other requirements.

Inspection form for the operation of a Sanitary Landfill in Accordance with Title 19 VIR&R §1560, 40 CFR Part 258.

DATE: March 04, 2014

TO: Leslie Leonard

Supervisor of Solid Waste

FROM: Jason Henry, Environmental Specialist

RE: Anguilla Landfill Inspection Report

INTRODUCTION

The landfill was inspected once for the month of March, 2014. The purpose of the inspection is to determine the level of compliance with all applicable laws and regulations.

THE INSPECTION

The inspection was conducted by Jason Henry, Environmental Specialist. The site was evaluated by the following criteria and yielded the respective results from, Section-301.10 General Operation Requirement under the following criteria evaluated the landfill. The inspection revealed a state of continued non-compliance. The Landfill continues to operate without a permit.

THE FINDINGS

§1560-301.10. General Operation Requirement

- A. 1. Fencing: Complete preventing entry into the landfill after working hour. Status: Compliance. Title 19 VIR&R § 1560-301.10.(a)
 - 2. Gate: The gate is adequate. Status: Compliance. Title 19 VIR&R § 1560-301.10.(a)
 - 3. Operating Hour Posted: The operating hours were posted at the entrance. Status: compliance. Title 19 VIR&R § 1560-301.10.(a)
- B. Operating Personnel: The shelter is adequate for personnel, The toilet, wash-up facility, is operating, drinking water, and emergency telephones are in operating condition. Status: Compliance, for the following Title 19 VIR&R § 1560-301.10.(c)
 - 1. Adequate Shelter: 🗸
 - 2. Toilet: ✓
 - 3. Wash-up Facility: ✓
 - 4. Drinking Water: X
 - 5. Emergency telephone:
- C. <u>Firefighting:</u> Title 19 VIR&R § 1560-301.10.(c)
 - 1. Water=adequate & suitable: Water is not available on site for Firefighting. Status: Compliance.
 - 2. Dust control: There is water on site for dust control. Status: Compliance.
- D. Animals on Site: There were animal on site. Status: Non-compliance.

 Title 19 VIR&R § 1560-301.10.(d)
- E. <u>Unloading:</u> There were clearly marked areas and attendant on the site to direct unloading. Status: Compliance. Title 19 VIR&R § 1560-301.10.(e)
 - 1. Clearly marked areas: X
 - 2. Attendant to direct unloading: X
- F. <u>Sewage Sludge, Liquids & Hazardous Waste:</u> There were no procedures in place to insure that sewage, sludge, liquids, and hazardous wastes, as defined in Part 258, are not disposed

of at a Municipal Solid Waste Landfill are to be instituted by the landfill operator. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(f) and 40 CFR Part 258.20 & 258.28

- 1. Evidence:
- 2. Written Permission?
- G. Separate Unloading Area for Bulky Items: There are areas for separating and unloading of bulky item. Status: Compliance Title 19 VIR&R § 1560-301.10.(g)
- H. Open Burning: Because of the rapid oxidation that products being discharged into the open air without passing through a properly designed stack, duct chimney, flue or other control device or process. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(h)
- I. Waste Deposits: Wastes shall be deposited in two-foot layers or lifts and compacted. Daily cover of at least six inches of compacted earth or alternative material as described in § 1560-301.21 (b), shall be placed over compacted waste. Title 19 VIR&R § 1560-301.10.(i)
 - 1. Two foot layer/lifts: ✓
 - 2. Compaction: ✓
 - 3. Daily cover of six or more inches: ✓
- J. <u>Dust & Paper/Debris:</u> Dust, paper, and other debris are not under control and no evidence of a weekly cleanup of loose paper and plastic shopping bags. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(j)
 - Litter Control Fence:
 - 2. Plastics and objects are protruding from the landfill after the daily cover is applied:X
- K. Paper Loose Clean Up Weekly: Paper, plastic bags and other loose material shall be controlled. Status: Compliance. Title 19 VIR&R § 1560-301.10.(k)
- L. Salvaging and Sorting of Waste: Salvaging or sorting of wastes shall be organized so as not to hamper orderly and prompt waste disposal or create nuisances or hazards. Status: Compliance. Title 19 VIR& § 1560-301.10.(1)
 - 1. Hamper Orderly/Prompt Waste Disposal: ✓
 - 2. Create Nuisance Or Hazardous situation:
- M. Record Keeping: There were no record of inspections. Status: Non-compliance. Title 19 VIR&R § 1560-301.20. (3) and 40 CFR 258.29

40 CFR Part 258-- Criteria For Municipal Solid Waste Landfill:

Subpart B

- 1. <u>Airport Safety:</u> The dump is less than 10,000 feet from the nearest airport runway. Status: Non-compliance. 40 CFR Part 258.10
- 2. <u>Wetlands:</u> The wetland has been subjected to past lateral expansion of the dump with deposits of fill auto parts, scrap metal, tires etc. Status: Compliance. 40 CFR Part 258.12

Subpart C

- 1. Procedures For Excluding The Receipt of Hazardous Waste: There is no program in place for detecting and preventing the receipt of hazardous waste and PCB. Status: Compliance. 40 CFR Part 258.20. & Title 19 VIR&R § 1560-301.20
- 2. <u>Disease Vector Control:</u> There were no procedures in placed to control the on-site populations of disease vectors. Flies, rodents, mosquitoes, birds, or other animals, including insects capable of transmitting disease to human were rampant Status: Compliance. 40 CFR Part 258.22. & Title 19 VIR&R § 1560-301.22.
- 3. Explosive Gas Control: There is a constant release of methane gas from the landfill on site. Status: Non-compliance. 40 CFR Part 258.23. & Title 19 VIR&R § 1560-301.23.
- 4. <u>Air Criteria:</u> There is no procedures in place to ensure that the landfill is in compliance with section 110 of Clean Air Act. Status: Non-compliance. 40 CFR Part 258.24. & Title 19 VIR&R § 1560-301.24.
- 5. Access Requirements: The operators have no control over public access and the prevention unauthorized vehicular traffic, scavengers and illegal dumping. Status: Compliance. 40 CFR Part 258.25. & Title 19 VIR&R §1560-301.25
- 7. Surface Water Requirements: Causes a discharge of pollutant into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to section 402. Status: Non-compliance. 40 CFR Part 258.27. & Title 19 VIR&R §1560-301.27.
- N. <u>Coastal Zone Management/Earth Change:</u> The Anguilla disposal site continues to impact the Coastal Zone including but not limited to excavation, mining of fill, filling of wetlands erection of structures and expansion of the disposal site without a permit. Status: Compliance 15 CFR Part 930. & Title 12 VIR&R § 904-906.

- O. <u>Waste Oil:</u> used oil at the junk & abandon vehicle site :40 CFR 279: Status, Non-compliance
 - 1. SPCC: 40 CFR Part 112.5.=
 - 2. Condition of Units
 - Rust or defects=✓
 - Leaks =✓
 - Labels=X
 - Response to release=X
- P. <u>Unstable Areas:</u> The location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions areas susceptible to mass movements. The liner leachate collection systems, final covers, run-on/ run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment are not in place at the land fill. Therefore the following: **Status: Non-compliance:** 40 CFR §258.15.
 - Earth Change Plan submitted:?
 - Earth Change Permit Granted:?
- Q. Operation In Accordance With: "The Anguilla landfill is operating without a site permit. The conduct or cause to conducted open dumping or the operation of open dumps. Status: Non-Compliance. Title 19 VIR&R 1563.
 - Permitting landfills:X
 - Open Dumping:X

Note: In the report are the following:

✓= Compliance

X = Non-Compliance

SUMMARY:

The Anguilla Landfill was inspected once for the month of March 2014. The inspection reveals a state of continuous non-compliance. The landfill must comply with the federal rules, laws, regulations or other requirements.

CONCLUSION:

The Anguilla Landfill continues to operates without the required permit. The landfill continues to be in violation of The Territorial and Federal Laws and Regulation. Federal rules, laws and regulations or other requirements have not effected any changes in the operation of the Anguilla Landfill.

Summary of violations:

- There are flocks of birds flying around the dumping and on top of the landfill.
- The unloading areas are not clearly marked.
- No gas monitoring or collection program system in place.
- The slope of operation at the eastern side is greater than 3:1 slope
- There is evidence of soil erosion down the north side slopes of the landfill
- Plastics and other objects protruding from the landfill at areas considered covered.
- The landfill is less than 10,000 feet from the Henry E. Rohlsen Airport.
- There is no leachate collection pond, water freely flows off the landfill and into the surrounding ocean and mangrove lagoon.
- The facility currently does not have a plan for the used oil & junk and abandon vehicle operation. The landfill continues to operate without a solid waste permit.
- There are waste tires onsite that have collected water, a breeding ground for mosquitoes.

Any questions you may have concerning this report and the findings, please contact Jason Henry at DPNR-DEP 340-773-1082.

Jason Henry	July 22, 2015
Written by	Date
Solid Waste Supervisor	
Director of DEP	Date

GOVERNMENT OF THE U.S. VIRGIN ISLANDS DEPARTMENT OF PLANNING & NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION



INSPECTION LIST FOR LANDFILL

Pursuant to Title 19, Chapter 56 §1560 of the Virgin Islands Code, rules and regulations and 40 CFR Part 258, etc. The owner or operator of a municipal solid waste landfill unit must comply with any other applicable Federal and Local Rules, Laws and Regulations, or other requirements.

Inspection form for the operation of a Sanitary Landfill in Accordance with Title 19 VIR&R §1560, 40 CFR Part 258.

DATE: July 22, 2015

TO: Leslie Leonard

Supervisor of Solid Waste

FROM: Jason Henry, Environmental Specialist

RE: Anguilla Landfill Inspection Report

INTRODUCTION

The landfill was inspected once for the month of July, 2015. The purpose of the inspection is to determine the level of compliance with all applicable laws and regulations.

THE INSPECTION

The inspection was conducted by Jason Henry, Environmental Specialist. The site was evaluated by the following criteria and yielded the respective results from, Section-301.10 General Operation Requirement under the following criteria evaluated the landfill. The inspection revealed a state of continued non-compliance. The Landfill continues to operate without a permit.

THE FINDINGS

§1560-301.10. General Operation Requirement

- A. 1. Fencing: Complete preventing entry into the landfill after working hour. Status: Compliance. Title 19 VIR&R § 1560-301.10.(a)
 - 2. Gate: The gate is adequate. Status: Compliance. Title 19 VIR&R § 1560-301.10.(a)
 - 3. Operating Hour Posted: The operating hours were posted at the entrance. Status: compliance. Title 19 VIR&R § 1560-301.10.(a)
- B. Operating Personnel: The shelter is adequate for personnel, The toilet, wash-up facility, is operating, drinking water, and emergency telephones are in operating condition. Status: Compliance, for the following Title 19 VIR&R § 1560-301.10.(c)
 - 1. Adequate Shelter: 🗸
 - 2. Toilet: 🗸
 - 3. Wash-up Facility: 🗸
 - 4. Drinking Water: X
 - 5. Emergency telephone:
- C. <u>Firefighting:</u> Title 19 VIR&R § 1560-301.10.(c)
 - 1. Water=adequate & suitable: Water is not available on site for Firefighting. Status: Compliance.
 - 2. Dust control: There is water on site for dust control. Status: Compliance.
- D. Animals on Site: There were animal on site. Status: Non-compliance.
 Title 19 VIR&R § 1560-301.10.(d)
- E. <u>Unloading:</u> There were clearly marked areas and attendant on the site to direct unloading. Status: Compliance. Title 19 VIR&R § 1560-301.10.(e)
 - 1. Clearly marked areas: X
 - 2. Attendant to direct unloading: X
- F. <u>Sewage Sludge, Liquids & Hazardous Waste:</u> There were no procedures in place to insure that sewage, sludge, liquids, and hazardous wastes, as defined in Part 258, are not disposed

of at a Municipal Solid Waste Landfill are to be instituted by the landfill operator. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(f) and 40 CFR Part 258.20 & 258.28

- 1. Evidence:
- 2. Written Permission?X
- G. Separate Unloading Area for Bulky Items: There are areas for separating and unloading of bulky item. Status: Compliance Title 19 VIR&R § 1560-301.10.(g)
- H. Open Burning: Because of the rapid oxidation that products being discharged into the open air without passing through a properly designed stack, duct chimney, flue or other control device or process. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(h)
- I. Waste Deposits: Wastes shall be deposited in two-foot layers or lifts and compacted. Daily cover of at least six inches of compacted earth or alternative material as described in § 1560-301.21 (b), shall be placed over compacted waste. Title 19 VIR&R § 1560-301.10.(i)
 - 1. Two foot layer/lifts: ✓
 - 2. Compaction: ✓
 - 3. Daily cover of six or more inches: ✓
- J. <u>Dust & Paper/Debris:</u> Dust, paper, and other debris are not under control and no evidence of a weekly cleanup of loose paper and plastic shopping bags. Status: Non-compliance. Title 19 VIR&R § 1560-301.10.(j)
 - 1. Litter Control Fence: ✓
 - 2. Plastics and objects are protruding from the landfill after the daily cover is applied: X
- K. Paper Loose Clean Up Weekly: Paper, plastic bags and other loose material shall be controlled. Status: Compliance. Title 19 VIR&R § 1560-301.10.(k)
- L. <u>Salvaging and Sorting of Waste:</u> Salvaging or sorting of wastes shall be organized so as not to hamper orderly and prompt waste disposal or create nuisances or hazards. Status: Compliance. Title 19 VIR& § 1560-301.10.(1)
 - 1. Hamper Orderly/Prompt Waste Disposal:✔
 - Create Nuisance Or Hazardous situation: X
- M. Record Keeping: There were no record of inspections. Status: Non-compliance. Title 19 VIR&R § 1560-301.20. (3) and 40 CFR 258.29

40 CFR Part 258 -- Criteria For Municipal Solid Waste Landfill:

Subpart B

- 1. <u>Airport Safety:</u> The dump is less than 10,000 feet from the nearest airport runway. Status: Non-compliance. 40 CFR Part 258.10
- 2. <u>Wetlands:</u> The wetland has been subjected to past lateral expansion of the dump with deposits of fill auto parts, scrap metal, tires etc. Status: Compliance. 40 CFR Part 258.12

Subpart C

- 1. Procedures For Excluding The Receipt of Hazardous Waste: There is no program in place for detecting and preventing the receipt of hazardous waste and PCB. Status: Compliance. 40 CFR Part 258.20. & Title 19 VIR&R § 1560-301.20
- 2. <u>Disease Vector Control:</u> There were no procedures in placed to control the on-site populations of disease vectors. Flies, rodents, mosquitoes, birds, or other animals, including insects capable of transmitting disease to human were rampant Status: Compliance. 40 CFR Part 258.22. & Title 19 VIR&R § 1560-301.22.
- 3. Explosive Gas Control: There is a constant release of methane gas from the landfill on site. Status: Non-compliance. 40 CFR Part 258.23. & Title 19 VIR&R § 1560-301.23.
- 4. <u>Air Criteria:</u> There is no procedures in place to ensure that the landfill is in compliance with section 110 of Clean Air Act. Status: Non-compliance. 40 CFR Part 258.24. & Title 19 VIR&R § 1560-301.24.
- 5. Access Requirements: The operators have no control over public access and the prevention unauthorized vehicular traffic, scavengers and illegal dumping. Status: Compliance. 40 CFR Part 258,25. & Title 19 VIR&R \$1560-301.25
- 7. Surface Water Requirements: Causes a discharge of pollutant into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to section 402. Status: Non-compliance. 40 CFR Part 258.27. & Title 19 VIR&R §1560-301.27.
- N. <u>Coastal Zone Management/Earth Change:</u> The Anguilla disposal site continues to impact the Coastal Zone including but not limited to excavation, mining of fill, filling of wetlands erection of structures and expansion of the disposal site without a permit. Status: Compliance 15 CFR Part 930. & Title 12 VIR&R § 904-906.

- O. Waste Oil: used oil at the junk & abandon vehicle site :40 CFR 279: Status, Non-compliance
 - 1. SPCC: 40 CFR Part 112.5.=
 - 2. Condition of Units
 - Rust or defects=✓
 - Leaks =✓
 - Labels=X
 - Response to release=X
- P. <u>Unstable Areas:</u> The location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions areas susceptible to mass movements. The liner leachate collection systems, final covers, run-on/ run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment are not in place at the land fill. Therefore the following: **Status: Non-compliance:** 40 CFR §258.15.
 - Earth Change Plan submitted:?
 - Earth Change Permit Granted:?
- Q. Operation In Accordance With: "The Anguilla landfill is operating without a site permit. The conduct or cause to conducted open dumping or the operation of open dumps. Status: Non-Compliance. Title 19 VIR&R 1563.
 - Permitting landfills:X
 - Open Dumping:X

Note: In the report are the following:

✓= Compliance

X = Non-Compliance

SUMMARY:

The Anguilla Landfill was inspected once for the month of July 2015. The inspection reveals a state of continuous non-compliance. The landfill must comply with the federal rules, laws, regulations or other requirements.

CONCLUSION:

The Anguilla Landfill continues to operates without the required permit. The landfill continues to be in violation of The Territorial and Federal Laws and Regulation. Federal rules, laws and regulations or other requirements have not effected any changes in the operation of the Anguilla Landfill.

Summary of violations:

- The operating hours is posted at the entrance of the landfill but was difficult to read.
- The female rest room at the scale house is out of service.
- There is no drinking water at the scale house for the employees.
- There are flocks of birds flying around the dumping and on top of the landfill. Birds made their way inside of the separation/sorting area of the transfer station.
- The unloading areas are not clearly marked and attendant is not onsite to direct unloading.
- No gas monitoring or collection program system in place.
- The slope of operation at the eastern side is greater than 3:1 slope
- There is evidence of soil erosion down the north side slopes of the landfill
- Plastics and other objects protruding from the landfill at areas considered covered.
- The landfill is less than 10,000 feet from the Henry E. Rohlsen Airport.
- There is no leachate collection pond, water freely flows off the landfill and into the surrounding ocean and mangrove lagoon.
- The facility currently does not have a plan for the used oil & junk and abandon vehicle operation. However, according to Mr. Ebberson there is a plan to construct a concrete pad for vehicle detoxification.
- The landfill continues to operate without a solid waste permit.
- The landfill exceeded the maximum height and is working to correct such.
- There are waste tires onsite that have collected water, a breeding ground for mosquitoes.

Any questions you may have concerning this report and the findings, please contact Jason Henry at DPNR-DEP 340-773-0565.

Jason Henry	uu el	July 22, 2015
Written by		Date
Solid Waste Supervisor	-	Date
Director of DEP		Date



Government of the Virgin Islands of the United States Department of Planning & Natural Resources Division of Environmental Protection

INSPECTION REPORT

Report Date: July 18, 2017

Facility:

Anguilla Landfill

Date:

July 7, 2010

Site Inspector:

Jason Henry, Environmental Specialist

Location:

Estate Anguilla

Site Contacts:

Mr. Jacobs, Landfill Attendant

Attendees:

Kelvin Vidale, Legal Counsel,

Purpose:

The Department of Planning & Natural Resources (DPNR)- Division of Environmental Protection (DEP) Solid and Hazardous Waste Program is charged with the protection of human health and the environment under the Solid and Hazardous Waste Management Act (SHWMA), Title 19 § 1560.

This inspection was conducted pursuant to SHWMA of 2000, DPNR-DEP Promulgate rules, regulations, and standards governing the handling and management of Special Waste as set forth in SHWMA Title 19, §1560-2(j) and 501 of the VI Rules and Regulations.

On or about July 7 2010, an inspection was conducted of Anguilla Landfill Tire Storage Area located at Estate Anguilla. The storage site for the tires is located in the section of the landfill that is in close proximity to the Old Abattoir. This storage site is located in a CZM. When it rains water is collected in this area hence, creating swam like conditions.

Entrance Interview

During this visit to the site, Jason Henry met with Mr. Jacob, the landfill attendant. It was noted that the landfill manager was not present at the time. In the interview, it was stated by Mr. Jacobs that during the early mornings and early evenings there are swarms of mosquito, especially after rainy days.

Files Review

- The facility does not have a permit for the storage of waste tires.
- The facility did not have a tire management plan onsite.

FINDINGS

Waste Tire Storage Area

- A large stockpile of tires that extends approximately twenty to thirty feet (20-30ft) west, east and around the old abattoir. The tires created a berm-like structure around the abattoir. At the tallest point, the berm is approximately twelve feet (12ft) tall.
- The tires are exposed to the elements (rain).
- The majority of the tires are without rims, for this reason they have collected water.
- Some of the tires that were inspected contained mosquito larvae.
- Some of the tires are overgrown by vegetation.

Again, according to the landfill attendant, during the early hours in the morning and evening there are swarms of mosquito in the area. It was also stated that in the past the tires were sprayed by Terminix Pesticide Company. However, the tires have not been sprayed since over a year.

Recommendations

- 1. Procure a permit for the storage of waste tires onsite.
- 2. Store tires in a manner that will not invite the breeding or collection of mosquitoes, flies, ferile animals or rodents, which may prejudice the public health.
- 3. Provide a tire management plan.



Site: Anguilla Landfill Date: July 7, 2010
Photo by: Jason Henry
Description: Stockpile of waste tires.



Site: Anguilla Landfill
Date: July 7, 2010
Photo by: Jason Henry
Description: Berm of tires surrounding the old abattoir.



Site: Anguilla Landfill
Date: July 7, 2010
Photo by: Jason Henry
Description: Tires overgrown by vegetation.

Written by <u>Jason Henry</u>	Date _7-16-2010_
Company is an	D
Supervisor	Date



Government of the Virgin Islands of the United States Department of Planning & Natural Resources Division of Environmental Protection

INSPECTION REPORT Report Date: July 18, 2017

Facility:

VI Waste Management

Date:

July 26, 2011

Site Inspector:

Jason Henry, Environmental Specialist

Location:

Estate Anguilla, Anguilla Landfill Tire Storage Area

Purpose:

The Department of Planning & Natural Resources (DPNR)- Division of Environmental Protection (DEP) Solid and Hazardous Waste Program is charged with the protection of human health and the environment under the Solid and Hazardous Waste Management Act (SHWMA), Title 19 § 1560.

This inspection is conducted pursuant to Notice of Noncompliance Order for Corrective Action #STX-SW-10-10.

On or about July 25, 2011 at approximately 2:30 PM, Jason Henry, Environmental Specialist from DPNR-DEP, conducted an inspection of the above referenced facility.

Based on this follow-up inspection, the facility has failed to comply with the Order.

- The facility has failed to provide DPNR with a written response as to action(s) taken to come into compliance.
- The facility has failed to store tires in a manner that will not invite the breeding or collection of mosquitoes, ferile animals, flies, and rodents.
- The facility failed to provide an official waste characterization of all waste generated and stored at the facility.
- The facility failed to provide DPNR with a copy of their tire management plan that is signed and approved by management.
- The facility has failed to procure a permit for the storage of waste tires.

July 25, 2011 VIWMA NONC Re-inspection Page 2 of 2

The facility provided DPNR with a Service Inspection Report from Terminix of
pesticides which were used to fumigate/treat the mosquito problem. However, the
service reports dates back to May of 2009 and was documented as a one-time service
agreement. VIWMA will need to provide DPNR with up-to-date fumigation/treatment
records.

Written by	Jason Henry	Date	
Supervisor		Date	

Virgin Islands Landfill Teleconference Wednesday, August 22, 2007

Attendees: DOJ, DPNR, VIWMA, VIPA, EPA, Mcqire Group

The meeting started prompt at 10:00 AM. Jason Henry, Environmental Specialist and Leslie Leonard represented the Department. The following topics were discussed:

Financial Discussions

According to May Adams Cornwall, WMA has no update(s) to the breakdown of anticipated expenses.

The landfills are required to have the GCCS system. Final Plans for GCCS plan and groundwater monitoring was sent to EPA electronically August 16th. WMA are awaiting EPA response to these plans and the incorporation of legal language and appendices before sending it out for bid. The primary concern is to get the contract out to have the monitory wells installed. GCCS Plans are about 80 % completed and 30 % completion of the RCRA Plan both submitted by A-9 and Earth Group company. The plans will be faxed to EPA and Federal DOJ as soon as possible via FedEx. The entire GCCS system structure must be installed at simultaneously at the landfill. Calculation of maximum gas flow rate was submitted. The system designed is capable of handling the load.

Storm Water Control plan revision is generally acceptable, there are no major issues except for a little refinement.

Sampling of C&D area

Currently a map is being put together that locates the areas that were tested, to include the number of each sample, the depth of penetration, and a description of that was removed from the area. The map will be forwarded to Lenny Grossman of EPA to coordinate with previous photos sent to EPA. A study will be conducted of the area using the energy grant.

There is lateral expansion of the Anguilla Landfill in the C& D area towards the water and toward the area entering the landfill. The road will be relocated. Gas monitoring device will only be installed after the road is relocated. Prior plans submitted by Mcquire group shows three different main lines for gas collection. It is a concern that the most recent drawing that was submitted to EPA and DOJ only has two lines for gas collection. All lines must be constructed in the initial phase. The rules indicate there is no option for installing the third line later in that area. C202 drawing shows 3 lines, drawing M2 shows 2 lines. The intent is to install all three lines. The final drawing must be submitted to the contractor before bid.

MSW may extend into the C& D area.

Anguilla

Status on fire suppressant: According to May Adams Cornwall, the negotiation team was selected and notified. The team will return to the VI in the coming weeks and will

give an estimate of cost that will be forwarded on to the governor's office. The company (A-9 trucking) that puts out the fire at the landfill currently does not have a contract with WMA to do so. However, A-9 company contract will be amended to do earth movement so that the fire extinguishing can take place. Funding is currently available for that portion of the work. But for the actual fire extinguishing cost on a day rate, the company William Fire Hazard will provide that to WMA later on. In the meantime, WMA has requested the scope of work from the company. There is no specific date for the work to begin and there is no specific funding.

Construction of Transfer Station: The construction of the transfer station will be moving forward outside of the RFP that is currently out. The proposed site is adjacent to the landfill. An RFP will be out hopefully by the end of this year for the design. The transfer Station is some what schedule to be online by 2009.

Bovoni Landfill

The entire GCCS system structure must be installed at simultaneously at the landfill.

Next Meeting Sept 18, 10:00 AM.



DIVISION OF ENVIRONMENTAL PROTECTION

WATER POLLUTION CONTROL PROGRAM

TPDES INSPECTION REPORT FY 2017 – 3RD QUARTER

Bovoni Landfill - Scrap Metal Pile

Permittee Name:	VI Waste Management Authority	(VIWMA)
I CI IIIIIIICC I Vallic.	VI Waste Management Authority	(A T AA TATY F)

TPDES Tracking No.: N/A

Location: 1 ESTATE BOVONI, FRENCHMAN BAY QTR

St. Thomas, VI 00802

Inspection Date: April 7, 2017

Participating

Personnel: DPNR, DEP

Benjamin Keularts, TPDES Program

Akil Jacobs, TPDES Program

DPNR, F&W

Daniel Nellis, Wildlife Biologist III

VIWMA

Roger E. Merrit, Jr, Executive Director

Dr. Nadine Noorhasan, Environmental Compliance Manager

Alex Bruney, Site Engineer

A9

Jimez Ashby, Sr., Contractor

Report prepared by:

Benjamin Keularts, Environmental Program Manager

Water Pollution Control Program

Approved by:

Norman Williams, Jr., Director

Division of Environmental Protection

Objective

On April 7, 2017, the Virgin Islands Department of Planning and Natural Resources, Division of Environmental Protection (DPNR-DEP) and the Division of Fish & Wildlife (F&W) performed an inspection at the Bovoni Municipal Solid Waste Landfill ("Bovoni") at 1 ESTATE BOVONI, FRENCHMAN BAY QTR, St. Thomas. The purpose of the inspection was to gather information on the existing scrap metal at the site and the proposed plan to remove and manage this waste going forward.

Weather Information

At the time of inspection, it was sunny with little cloud cover.

Facility Description

The Bovoni Municipal Solid Waste Landfill ("Bovoni"), located at 1 ESTATE BOVONI, FRENCHMAN BAY QTR, St. Thomas, serves as the municipal landfill for the STT/STJ district. The site is under a Consent Decree (Civil No. 3:10-cv-00048) to clean and close operations.

Records Review

Records were not reviewed for this inspection.

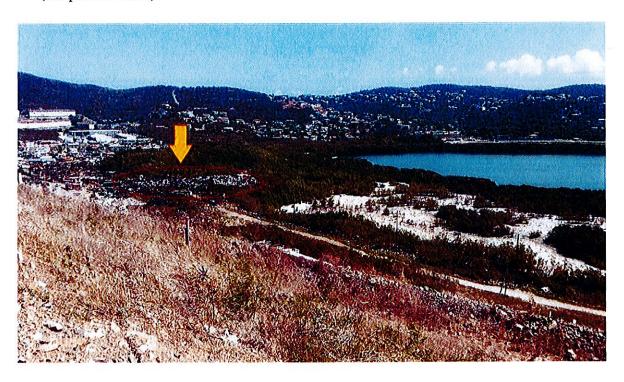
Site Inspection

The VI Waste Management Authority (VIWMA) were notified of the inspection and the following staff were present for the inspection: Dr. Nadine Noorhasan, Environmental Compliance Manager; Alex Bruney, Site Engineer; Roger E. Merrit, Jr, Executive Director, Jimez Ashby, Sr., A9 Contractor

The findings and/or concerns are as follows.

Findings and Concerns

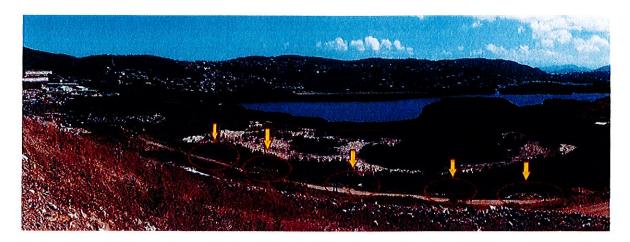
1. The scrap metal areas of concern lie to the east of the main section of the landfill, and abuts the mangroves adjacent to Mangrove Lagoon. The largest pile of scrap metal, by far is situated to the Northeast of the main landfill, in close proximity to the weigh station (see picture below).



A field survey of the scrap metal area done by Oasis Consulting Services in December of 2016 showed this area to be the largest area of concern at a volume of approximately 44,400 cubic yards (CY).

A9 contractor representative Jimez Ashby indicated that the current plan was to remove this material by the end of July 2017 and send it off-island.

2. Along the lower access road on the east side, more piles of scrap metal, tires and other debris can be found in smaller piles (see picture below).



The aforementioned field survey done by Oasis Consulting Services in December of 2016 showed these small piles to add up to a volume of approximately 300 cubic yards (CY).

These small piles are of course a far smaller volume of waste, but still need to be addressed due to their proximity to the mangroves.

As noted by Mr. Bruney, the material was not directly in the mangroves, and was close enough to the access road that machinery would be able to reach and remove the material without having to access the brush or mangrove area.

3. In the case where the main pile of scrap metal and the auxiliary, smaller piles are removed, the issue of new scrap metal handling remains at the forefront. While the current scrap metal may not be impacting mangrove or tree boa habitat, or spill over into the wetland area, there is high potential for harm to these sensitive areas, and a revised plan for accommodating future scrap metal will be essential to meeting the Consent Decree and all DPNR environmental regulations.

Conclusions and Recommendations

Based on the findings and discussions during this inspection, DPNR-DEP-WPC requires the following to be submitted to DPNR within **fifteen (15) days** of receipt of this report:

- 1. Provide a Corrective Action Plan (CAP) or Scope of Work (SOW) that addresses the main scrap metal pile, including the time frame in which it will be removed;
- 2. Provide a Corrective Action Plan (CAP) or Scope of Work (SOW) that addresses the smaller scrap metal piles, including the time frame in which they will be removed;
- 3. Provide a request of any additional assistance essential to remove all the material, to include any permitting assistance, labor or equipment needs;
- 4. Provide a projected plan to address the continued influx of scrap metal and prevent future encroachment on the mangroves and tree boa habitat.

Provided VIWMA submits the above documents to DPNR within the timeframe given, DPNR can work to coordinate with other local agencies to ensure VIWMA can address all the standing issues in this area.

You may contact Benjamin Keularts, WPC Program Manager, at (340) 773-1082 xtn. 2279 or benjamin.keularts@dpnr.vi.gov should you have any questions or concerns.

ANGUILLA LANDFILL

REPORTING PERIOD: JANUARY 1, 2015 THROUGH DECEMBER 31, 2016

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. I	Facility Information		N/A	Informational Purpose Only
Sec. II	Regulatory Requirements	VI Rules and Regulations 40 CFR Part 60, A Prov. 40 CFR Part 60, WWW 40 CFR Part 63, AAAA		The landfill is subject to federal and local regulations. A Consent Decree was filed for failure to comply.
Sec. III, A.1	VIWMA shall submit timely and complete application for the construction of the GCCS. This permit must be issued prior to installation/construction of the GCCS.	Consent Decree, Line 52		Based on Mr. Roger Merritt's statement, the new Executive Director, VIWMA will propose to USEPA that the facility not install a GCCS if the NMOC emission rate is below the 50 Mg/yr. He believes there is a significant reduction in the quantity of gases on site.
Sec. III, A.2	VIWMA shall install the GCCS (a) in phases in accordance with Appendix A; (b) by the deadline specified in Appendix A; (c) in accordance with the approved GCCS design plan	Consent Decree, Line 11(b)	Not in compliance	Based on Consent Decree, Appendix A, VIWMA has failed to install the GCCS in the South by 6/30/14; the West by 6/30/15; and North by 6/30/16

SECTION P I	ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, A.3 VI co Go pr ex	iwmA shall operate each impleted phase of the CCS with negative ressure at each wellhead cept under the following inditions: a) A fire or increased well temperature is identified. VIWMA shall record instances when positive pressure is measured in an effort to avoid fires. These records shall be submitted in quarterly reports as specified in 40 CFR §60.757(f)(1). b) A geomembrane or synthetic cover is utilized, in which case, VIWMA shall develop acceptable pressure limits to be submitted as part of the GCCS O&M plan.	40CFR§60.763(b) Consent Decree, Line 14(a)	Not in compliance	Since a GCCS has not been installed, VIWMA cannot comply with this condition.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
	c) A well has been decommissioned. A well may experience a static positive pressure after shut down to accommodate declining flows. Note that decommissioning of any wells is subject to approval by the VIDPNR and USEPA.			
Sec. III, A.4	VIWMA shall operate and monitor each interior wellhead of the GCCS with a LFG temperature of less than 55°C and with either a nitrogen level less than 20% or an oxygen level less than 5%.	40CFR§60.753(c); 40CFR§60.758(a)(2-3) Consent Decree, Line 14(b)	Not in compliance	This condition is contingent upon having a GCCS in place and operational.
Sec. III, A.5	VIWMA shall operate and monitor the GCCS in such a manner that the methane concentration is less than 500 parts per million above the background at the surface.	40CFR§60.753(d); 40CFR§60.755(c)-(d) 40CFR§60.756(f) Consent Decree, Line 14(c)		VIWMA has been conducting surface methane monitoring around the perimeter and along the landfill surface. Please see attached Quarterly Reports.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, A.6	VIWMA shall operate and monitor the GCCS such that all collected LFG is vented to the control system, or to a temporary control system until the permanent control system is operational.	40CFR§60.752(b)(2)(iii) 40CFR§60.753(e) Consent Decree, Line 14(d)	Not in compliance	This condition is contingent upon having a GCCS in place and operational.
Sec. III, A.7	VIWMA shall operate and monitor the GCCS at all times when the collected LFG is routed to the control system.	40CFR§60.752(b)(2)(iii); 40CFR§60.753(f); 40CFR§60.756(b); Consent Decree, Line 14(e)	Not in compliance	This condition is contingent upon having a GCCS in place and operational.
Sec. III, A.8	If monitoring demonstrates that the GCCS operational requirements are not being met, corrective actions must be taken including, repairing and maintaining the landfill cover, making adjustments to the vacuum at adjacent wells, installing new wells and/or upgrading the GCCS equipment.	40CFR§60.753(g); Consent Decree, Line 14(f)	Not in compliance	This condition is contingent upon having a GCCS in place and operational.
Sec. III, B.1	VIWMA shall notify DPNR at least 30 days prior to commencement of operation and completion of construction of the GCCS.	40CFR§70.6(c)(6)	N/A	VIWMA has not provided any notifications concerning the commencement or completion of any construction of a GCCS.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, B.2	VIWMA shall notify USEPA and DPNR in writing of: (a) any physical or operational change to the GCCS that may increase the emission rate of any air pollutant to which the standard applies.	40CFR §60.7(a)	N/A	This condition is contingent upon having a GCCS in place and operational, therefore no notification would be provided.
Sec. III, B.3	VIWMA shall notify USEPA and DPNR in writing, not less than 30 days prior to any required or proposed stack test of the time and date of such test.	VIR&R, T.12, Ch. 9, §206- 25(b)	N/A	VIWMA has not notified USEPA or DPNR of any stack testing. A GCCS has not been constructed.
Sec. III, B.4	VIWMA shall maintain a copy of the current Startup, Shutdown, Malfunction Plan at the landfill and shall make the plan available to USEPA and DPNR personnel upon request.	Consent Decree, Line 40(a)	N/A	In accordance with the Consent Decree, the GCCS SSM Plan is scheduled to be submitted on August 30, 2017.
Sec. 111, B.5	VIWMA must maintain records of all SSM events for at least five years from the date of each event, as specified in Table 1 of 40 CFR Part 63, Subpart AAAA.	40 CFR §60.10(b); Consent Decree, Line 40 (b)	N/A	A SSM Plan is not in place.

SECTION	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, B.6	If an action performed by VIWMA at the Landfill during a SSM event is not consistent with the SSM plan VIWMA shall record the actions taken regarding the SSM event.	40 CFR §63.10(d)(5); Consent Decree, Line 40(c)	N/A	This condition is contingent upon having a SSM Plan.
Sec. III, B.7	VIWMA shall maintain copies of the GCCS Design Plan, O&M Plan and the SSM Plan including any modifications at the landfill and shall make these documents available to USEPA and DPNR upon request.	Consent Decree, Line 41	N/A	VIWMA have copies of the GCCS Design Plan, which was revised and conditional approved by USEPA on August 27, 2014. There is no O&M Plan and SSM Plan.
Sec. III, B.8	VIWMA shall maintain up- to-date, readily accessible records of the following items at the landfill for at least five years: a) The design capacity report, the current amount of solid waste in place, and the year-to-year acceptance rate b) The equipment operating parameters specified to	40CFR§60.758(a),(c),(e); Consent Decree, Line 43	N/A	VIWMA has readily accessible records of the design capacity report, the current amount of solid waste in place and the year-to-year acceptance rate. However items b. and c. cannot be addressed for lack of an operational GCCS.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
OT TEMOTIT	monitored per 40 CFR 60.756 c) All records of exceedances of the GCCS operational standards			
Sec. III, B.9	VIWMA shall maintain up- to-date readily accessible records of the following information: a) Vendor specification of control device equipment b) Maximum expected LFG generation flow rate c) The density of wells, horizontal collectors, surface collectors or other gas extraction devices d) The average combustion temperature measured at least every 15 minutes and average over the same time period of the performance test	40 CFR §60.758(b)(1)-(4); Consent Decree, Line 43(b)	N/A	This condition is contingent upon having a GCCS in place and operational.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
	e) The percent reduction of NMOC achieved by the control device.			
Sec. III, B.10	VIWMA shall maintain up- to-date readily accessible plot map showing each existing and planned collector associated with the GCCS	40 CFR§60.755(b); 40 CFR §60.759(a)(3)(i)-(ii); Consent Decree, Line 43(c)	N/A	This condition is contingent upon having a GCCS in place and operational
Sec. III, B.11	VIWMA shall keep records and reports including file of all measurements. (gauge pressure, temperature, nitrogen or oxygen surface conc. of methane	40CFR§60.756 Consent Decree, Line 44	N/A	This condition is contingent upon having a GCCS in place and operational.
Sec. III, B.12	Information above must be recorded in permanent form.	Consent Decree, Line 44	N/A	This condition is contingent upon having a GCCS in place and operational.
Sec. III, B.13	VIWMA shall notify DPNR and EPA by telephone and confirm by email of any noncompliance or violation of the Consent Decree, which pose immediate threat to public health, welfare and the environment	Consent Decree, Line 46		DPNR receive several incident reports pertaining to landfill fires. See attached reports.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, C.1	VIWMA shall submit a proposed GCCS O&M Plan for DPNR and USEPA review and comment by August 30, 2017.	Consent Decree, Line15(a)	N/A	The GCCS has not be installed and the deadline date of August 30, 2017 is approaching.
Sec. III, C.2	VIWMA shall revise the proposed GCCS O&M Plan, taking into consideration USEPA's and/or DPNR's comments. VIWMA shall notify DPNR and USEPA of the revised GCCS O&M Plan.	Consent Decree, Line 15(b)	N/A	This condition is contingent upon having a GCCS O&M Plan in place
Sec. III, C. 3	VIWMA shall submit a proposed SSM Plan for DPNR and USEPA review and comment by August 30, 2017	Consent Decree, Line 16(a)	N/A	This condition is contingent upon having a GCCS in place and operational.
Sec. III, C.4	DPNR and USEPA may periodically request that VIWMA modify the SSM Plan to comply with 40 CFR 63.6.	Consent Decree, Line 15(b)	N/A	This condition is contingent upon having a SSM Plan.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, C.5	VIWMA may revise the SSM Plan as necessary to satisfy the requirements of the Consent Decree and this Title V Operating Permit or to reflect changes in equipment or procedures regarding operation of the GCCS.	Consent Decree, Line 16(c)	N/A	This condition is contingent upon having a SSM Plan.
Sec. III, C.6	If the SSM Plan fails to address or inadequately address an event that meets the characteristics of a malfunction but was not previously included in the plan, VIWMA must revise the plan within 45 days after the event occurs	Consent Decree, Line 16(d)	N/A	This condition is contingent upon having a SSM Plan.
Sec. III, C.7	Upon notification to USEPA and DPNR of a revised SSM Plan, that revised SSM Plan shall become effective and shall supersede any prior SSM plan that was in effect.	Consent Decree, Line 16(e)	N/A	This condition is contingent upon having a SSM Plan.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, C.8	VIWMA shall submit quarterly reports to DPNR and USEPA regarding the Landfill's compliance with the requirements of the Clean Air Act regulations, the applicable provisions of the Consent Decree, and all applicable conditions of this Title V Permit.	Consent Decree, Line 39(a) and (b)	In compliance	VIWMA has been submitting Quarterly Reports to USEPA. These reports were provided to DPNR only upon request. Now with the Title V Operating Permit, VIWMA should be submitting these reports to DPNR.
Sec. III, C.9	For the period during which the quarterly reporting is required, two consecutive quarterly reports shall constitute one semi-annual report for the purposes of compliance.	Consent Decree, Line 39(c)	In compliance	VIWMA is aware of this condition.
Sec. III, C.10	The submittal dates of the semi-annual reports will be March 1 and August 30 of each year. The initial semi-annual report shall be submitted within 180 days of installation and startup of the GCCS	40 CFR 63.1980		VIWMA is aware of this condition.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III, C.11	The semi-annual reports shall contain all of the information required under 40 CFR Part 60, Subpart WWW.	40 CFR 9757(f)(1)-(6)		VIWMA is aware of this condition.
Sec. III, C. 12	VIWMA shall submit Annual Compliance Certification Reports with terms and conditions contained in this permit.	VIR&R, Title 12, Ch. 9, 206-71(b)(5)(C)	N/A	The first Annual Compliance Certification Report will be due on January 29, 2018.
Sec. III.C.13	At least 30 days prior to the removal or cessation of any control equipment, an equipment removal report must be submitted to DPNR and USEPA and shall contain information required by 40 CFR 60.757(e)(1)(i)-(iii).	40 CFR 60.757(e)	N/A	VIWMA is aware of this condition.
Sec. III.C.14	Each report submitted by VIWMA shall be signed by an official of VIWMA and shall include a statement of certification	Consent Decree, Line 47; VIR&R, Title 12, CH. 9, 206-64(a)		VIWMA is aware of this condition in the permit.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Sec. III. C.15	VIWMA shall submit all emission reports, testing reports, start-up notification, quarterly reports, semi-annual reports, annual compliance certification reports and any other documents required under this permit to Director, CEPD, USEPA-PR and Director, DPNR-DEP			VIWMA received its Title V (Part 70) Operating Permit in March 2017. VIWMA is aware of this condition in the permit.
Sec. III. D	Testing Requirements	Consent Decree 13; 40 CFR §60.752(b). (d), (e) VIR&R, Title 12, Ch. 9, 206-25(d)	Testing should be completed by August 30, 2017	This condition is contingent upon having a GCCS in place and operational.
Section IV.	Specific Conditions for Flare	40 CFR §60.18;	N/A	These conditions are contingent upon having an open flare in place and operational.
Section V.	Upset Conditions, Breakdowns or Scheduled Maintenance	VI Rules and Regs, Title12, Ch. 9, §204-29	N/A	This condition is contingent upon having a GCCS and flare in place and operational.
Section VI. 1 General Provisions	This Title V Operating Permit shall be valid for a period of five years beginning on the date this Permit becomes effective and ending five years later.	VI Rules and Regs., Title 12, Ch. 9, §206- 71(a)(2)		The Anguilla Landfill Title V (Part 70) Operating Permit has an effective date of December 29, 2016 and signed by Commissioner on 3.2.17.

SECTION OF PERMIT	P ERMIT CONDITION	LEGAL CITATION	COMPLIANCE STATUS	COMMENTS
Section VI.2	A Title V Operating Permit renewal application shall be submitted to DPNR at least six months prior to the date of permit expiration, and not more than 18 months prior to expiration	VI Rules and Regs, Title 12, Ch. 9, §206-74(a)	N/A	VIWMA is aware of this condition in the permit.
Section V1.3	VIWMA shall comply with the Federal Plan and with 40 CFR Part 63, Subpart AAAA, which require compliance in accordance with 40 CFR Part 60, Subpart WWW.	Consent Decree, Paragraph 10	Not In compliance	See FCE Inspection Report.

TOPICS OF DISCUSSION

1. CURRENT OPERATIONS OF THE FACILITY

- A. Changes in Procedures (Scale Operation/Waste Baling/Tire Baling)
- B. Explanation of Fire Incidents
- C. Quantity of Waste Received Yesterday
- D. Annual Waste Acceptance for 2015 and 2016

2. WHAT IS THE STATUS OF THE WASTE STREAM AREAS

- A. YARD WASTE (SANITAS PARTNERS)
- B. TIRES
- C. SCRAP METALS
- D. APPLIANCES/WHITE GOODS

3. LANDFILL CLOSURE

- A. What phase are you currently in?
- B. Installation of GCCS (2 phases have been missed South and West 2014 and 2015
- C. What is the current elevation of the landfill?
- D. Timetable of Consent Decree
- 4. Title V Permit Conditions and Reporting Requirements

DEPARTMENT OF PLANNING AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION AIR POLLUTION CONTROL PROGRAM

FULL COMPLIANCE EVALUATION <u>Inspection Report</u>

Facility Name:

Bovoni Landfill

Facility Address:

#1A Estate Bovoni, St. Thomas, VI 00802

Facility Owner:

Government of the VI-Dept. of Property and Procurement

Facility Operator:

VI Waste Management Authority (VIWMA)

SIC Code:

4953

NAICS Code:

562212

ICIS-AIR ID#:

78-005-00033

Type of Facility:

Municipal Solid Waste Landfill (as defined 40 CFR

60.1990)

Permit Number:

STT-TV-005-17 (Proposed)

Facility Status:

Operating – Title V Facility

Contact Information:

Vincent Ebbesen, Territorial Director of Solid Waste

VI Waste Management Authority

I A&B Demarara

Charlotte Amalie, VI 00802

(340) 715-9100

Cordell Jacobs, Supervisor,

Bovoni Landfill

VI Waste Management Authority

(340) 775-3665

Date of Inspection:

March 30, 2017

Reason for Inspection:

Planned Air Compliance Inspection, which satisfies the

requirement in accordance with the Fiscal Year 2017 CMS

inspection frequency plan.

Purpose: To perform an inspection at the Bovoni Landfill, a

municipal solid waste facility in St. Thomas, which is subject to the Title V Operating program as a NSPS source of NMOC (40 CFR Part 60, Subpart WWW) and 40 CFR Part 63 (Landfill MACT). To determine if the facility is complying with the conditions of the Consent Decree.

Attendees:

DPNR-DEP Angela Arnold, Environmental Engineer III

Charles Claussen, Jr., Environmental Specialist

VIWMA Vincent Ebbesen, Territorial Director

Cordell Jacobs, Supervisor

Type of Evaluation:

Y Full Compliance Evaluation (FCE)
Partial Compliance Evaluation (PCE)

Investigation

Application Review

Background Information:

The Government of the Virgin Islands through the Department of Property and Procurement is the legal owner of the Bovoni Landfill. While the Virgin Islands Waste Management Authority is the authorized operator of the Bovoni Landfill, both agencies were issued a Compliance Order for Violation of the Clean Air Act, Docket # CAA-02-2006-1002 on August 25, 2006.

In the Compliance Order, the Virgin Islands Waste Management Authority (VIWMA) was ordered to generate an Initial Design Capacity Evaluation and a Tier 1 NMOC Gas Emission Calculation Report. Based on these reports, the Bovoni Landfill's design capacity was calculated to be 3.1 million cubic meters, which is greater than the 2.5 million cubic meter criteria. The reports also indicated that the landfill generates more than 50 mega-grams per year of NMOC, which is an applicability requirement subjecting the facility to 40 CFR Part 60, Subpart WWW (NSPS for Landfills), 40 CFR Part 63, Subpart AAAA (Landfill MACT) and is also subject to the Title V (Part 70) Operating Program. Thus, the VIWMA is required by these federal regulations to install a Gas Collection and Control System (GCCS).

Permitting Issues and Compliance History:

The Virgin Islands Waste Management Authority submitted their Initial Title V Application for the Bovoni Landfill on August 15, 2007. This Title V Application was deemed administratively **incomplete**. The Initial Title V application was revised and resubmitted on February 16, 2010 and was deemed **administratively complete** on April

16, 2010. The Department of Planning and Natural Resources-Division of Environmental Protection (DPNR-DEP) hired a contractor to expedite the Bovoni Landfill Title V permit. Environ International Corporation was selected to write the Title V Operating Permit. While the Title V Operating Permit was being drafted and prepared for the public participation process, several events occurred. A preliminary site investigation was conducted on April 14, 2011 at the Bovoni Landfill. Based on this site visit, VIWMA had installed 98% of the gas collection system and flare without an 'Authority to Construct' permit. The construction of gas collection and control system along with the flare began in November 2010. The facility was in non-compliance with VI Rules and Regulations.

During that time, the United States Environmental Protection Agency mailed the Preliminary Acceptance of Environmental Compliance Improvements plans for the Bovoni Landfill, postmarked March 30, 2011 to DPNR. This correspondence set forth provisions and conditions that must be adhered to for the installation and operation of the GCCS and Flare system. On April 29, 2011, the Virgin Islands Waste Management Authority submitted the application for the construction (Authority to Construct) of the Bovoni Landfill Flare System. This construction permit is for the installation of GCCS and Enclosed Flare System, which was issued on June 22, 2011.

On June 24, 2011, DPNR granted conditional approval for the operation of the Bovoni Landfill Flare System for 180 days for troubleshooting and testing purposes. VIWMA submitted another application for the construction of the LFG Power Generation Project on October 25, 2011. This application includes the installation of two Caterpillar gas engines. Also included was the Performance Test Protocol for the entire system. The Authority to Construct Permit for the LFG Power Generation Project was issued on May 8, 2012.

On December 21, 2012, the Partial Consent Decree Civil No. 3:10-cv-00048 was entered in US District Court. The APC program received this email from Region 2 on January 29, 2013. On March 12, 2013, DPNR received correspondence from VIWMA withdrawing their Title V Permit application.

On April 29, 2015, VI Waste Management Authority submitted a revised Title V Permit application for the operation of the Bovoni Landfill. The application was deemed administratively complete on June 26, 2015. The Department once again sent out a request for proposals for professional services to draft the Title V Operating Permit. Only one contractor submitted their proposal. As such, Alliance Environmental Group was selected to write the Title V Permit through a professional service contract. The Statement of Basis and the draft Title V Operating Permit was advertised and made available to the public during the 30-day comment period. This period began July 11, 2016 and ended on August 11, 2016. During the public comment period, VIWMA requested a modification to the enclosed flare. The Public Hearing was held in DPNR's conference room on August 30, 2016. All comments and request were taken into consideration; the draft Title V permit had to be revised. The proposed permit will be sent to USEPA, Region II for its 45-day review period.

During the last inspection, September 28, 2015, Mr. Grum, Chief Engineer at VIWMA stated that the subsurface fire was discovered in September of 2014. However, upon further investigation, the official verification date of the subsurface fire was October 31, 2014. The fire began around the northeastern portion of the landfill. At the time of the inspection, the fire was spreading, covering a larger footprint to include additional wells. The gas collection and control system had a breach in header near the flare. The breach, resulting in excess air infiltration, prevented combustion from occurring in the flare. Therefore, the flare was offline and not in operation.

Oasis Consulting Services, the environmental contractor hired by VIWMA, were monitoring the active wells. The gauge pressure readings, surface methane concentration and the oxygen readings exceeded the permitted limits. The reason for these incidents of exceedance were due to breach in header and the subsurface fire.

Overview of Permitted Units:

Emission Unit	Description of	Control	Regulatory	Construction
	Permitted Unit		Requirement	Permit Issued
Gas	48 monitoring	Landfill gas	40 CFR Part	STT-TV-005-
Collection	wells installed	routed to	60, Subpart	AC-11 issued
System		enclosed flare	WWW, sec.	May 22, 2011
		or LFG	752, 753, 755,	
		generators	757,	
			40 CFR Part	
			63, Subpart	
			AAAA	
Enclosed	40 MMBtu/hr	Air pollution	40 CFR 60,	STT-TV-005-
Flare	Perrenial Energy,	control device	Subpart WWW,	AC-11 issued
	Model #FL-108-		sec. 752, 753,	May 22, 2011
	32-E		755, 757,	
			40 CFR Part	
			63, Subpart	
			AAAA	
Two Gas	Caterpillar Spark	Air pollution	40 CFR Part	STT-TV-005-
Engine	Ignition CAT-	control device	60, Subpart JJJJ	AC(2)-11
Generators	G3516 LE			issued May 8,
ļ	Landfill Gas	<u> </u>		2012

Inspection Walkthrough/Facility Tour:

Opening Interview:

On March 30, 2017 at approximately 1:00 pm, the Department of Planning and Natural Resources, Division of Environmental Protection, Air Pollution Control (DPNR-DEP-APC) officials arrived at the Boyoni Landfill adjacent to the scale house. APC staff was

greeted by Mr. Ebbesen and Mr. Jacobs. The group proceeded to the Office area. APC staff introduced themselves and provided an explanation of what this full compliance evaluation will entail. Topics that were discussed included landfill daily operations, present construction activities, the status of the landfill fire, Consent Decree milestones, landfill closure, recordkeeping and reporting.

Mr. Ebbesen and Mr. Jacobs stated that Mr. Steve Aubin, the former Interim Chief Executive Officer and Mr. James Grum, Chief Engineer are no longer employed with the VI Waste Management Agency. The gas collection and control system is still not in operation. There is still some question as to whether the subsurface fire is present. Mr. Ebbesen believes that most of the methane has been depleted due to this fire. The flare is offline and still not in operation. The IC Caterpillar Engine has never been used, only for testing purposes. The monitoring and reporting requirements as specified in the Consent Decree are being handled by Oasis Consulting Services. Meridian Engineering is responsible for the operation and maintenance of the gas collection and control system along with the flare and the IC Caterpillar Engine. Mr. Ebbesen began the tour at the scale house.

Observations:

The Bovoni landfill's hours of operation remain the same, Monday through Saturday from 6:00 am through 4:00 pm and on Sundays from 6:00 to 2:00 pm. All waste streams are still accepted at the landfill. Currently the trucks are still being weighed but the scale is not calibrated. VIWMA will replace the scale with a new one. Next to the scale house are three designated bins to place metals, white goods and other materials. The public is restricted from going onto the landfill surface.

Photograph 1: Public accessible bins adjacent to scale house.



Photograph 2: Additional Air space- Begins 15 ft. in from line of poles toward the left. The new access road will be routed within the 15 feet delineation.

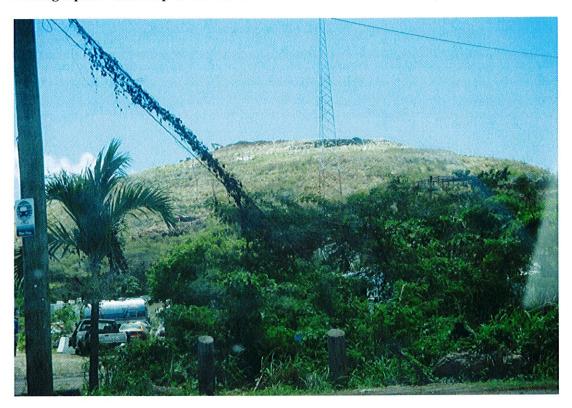


While on the tour, the group was introduced to Mr. Ashby, owner and operator of A-9 Trucking Enterprises, who is responsible for landfill management, operations and closure. Mr. Ashby guided the group several yards upwind from the scale house location. He explained that the VIWMA will utilize additional acreage by relocating the access road to the Treatment plant. This additional land space would begin 15 feet away (toward the left) from the new poles as shown in picture above. A wall will be constructed on this demarcation so that traffic will not go through the weighing station area. Thereby giving the VIWMA three (3) additional years in air space before closure.

The group proceeded onto the top of the landfill surface. Mr. Ebbesen explained that the current landfill subsurface fire subsided over the years. Since there are no high temperature readings, the fire could have subdued. The elevation of the landfill is now 230 feet above sea level. Mr. Ashby stated that his company is working around the

construction activities. Wells have been taken up and replaced. His job is to ensure the safety of his employees, especially those on the heavy equipment. The gas collection and control system has not been in operation for approximately two years. The known breach in the header is in the section close to the flare. As a result of the breach, air is infiltrating the system thereby diluting the collected landfill gas routed to the flare preventing combustion. The gas collection and control system is presently inoperable.



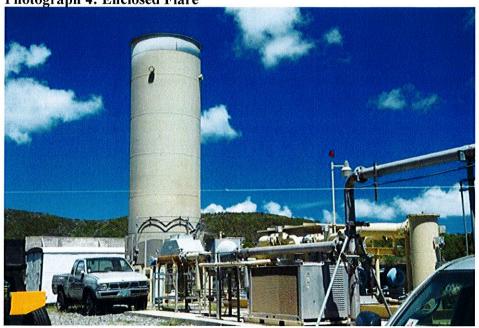


Mr. Ebbesen stated that VIWMA has seek out additional funding from the Legislature but to no avail. Therefore, several critical issues have not been addressed. This include the interim cover and repairs to the GCCS activities. Furthermore, the plan to retain Dr. Tony Sperling, who is an expert in specific methodologies to control and extinguish subsurface fires is at a standstill. Also, Without the funding, the subsurface conditions have made working on the landfill surface risky. Safety for personnel is VIWMA's first concern.

VIWMA's Caterpillar LFG engine has never operated. The gas flow rate has never been sufficient to initiate operation of the unit. If the flow rate ever increases above 300 sfcm, then the gases can be routed to the Caterpillar LFG engine. VIWMA has not performed the required performance tests for the GCCS and flare system nor the Caterpillar engine. The landfill has never generated enough gases.

At the time of the inspection, the flare was offline due to a breach in the header. VIWMA submitted a supplemental attachment to Title V Operating permit to use a candlestick flare, which require minor changes within the existing enclosed flare. VIWMA stated the change is necessary since the gas flow rate is now below the required 300 sfcm for the existing enclosed flare. This existing enclosed flare is shown below in the following photograph:

Photograph 4: Enclosed Flare



All monitoring activities of the GCCS and flare system as well as the surface methane monitoring are performed by Oasis Consulting Services, Inc. Oasis, on behalf of VIWMA, has been preparing the CAA Quarterly Reports and the Surface Emission Monitoring Reports, which complies with reporting requirements of the Partial Consent Decree (Case No. 3:10-cv-00048) section XI, #36 (a-b). The CAA Quarterly Reports from July 1, 2015 through September 30, 2016 are included with report.

Landfill Surface Information and Observations:

Throughout the inspection, the skies were clear and sunny. The temperature was in the high 80's. The winds were blowing out of the southeast. DPNR-DEP-APC officials observed the operation on the landfill surface.

VIWMA is proposing to use a temporary cover, a geochemical membrane, to restrict the oxygen from entering through the landfill surface. With this, VIWMA is hoping to achieve a higher gas collection flow rate.

VIWMA has employed several contractors and consultants to handle specific activities at the landfill. A-9 Trucking Enterprises has been contracted with the responsibilities of

maintaining and covering the landfill on a daily basis. A minimum of six (6) inches of cover is applied daily at the daily lift intervals of ten (10) feet. At the close of day, the contractor covers the waste with at least twelve (12) inches of soil (fill). The cover prevents high population of vectors, birds, etc. at the site. Dust mitigation measures are usually performed by a water truck with a sprinkler attachment covering the transport roads and surface of the landfill.

Meridian Engineering is responsible for the installation of the monitoring wells (GCCS) and flare with its appurtenances. Repairs to the main header and certain wells impacted by the high temperatures will be carried out by Meridian Engineering. VI Recycling Inc. is responsible for baling and reconfiguring of scrap metals into a square to be shipped off to a recycling center.

Photograph 6: Top of the landfill surface area



Photograph 7: Monitoring Well that has been capped – Not in use



Document Review:

The CAA Quarterly Reports and the Surface Emission Monitoring Quarterly Reports for the period of January 1, 2015 through December 31, 2016 have been provided by Ms. Nadine Noorhasan, Director of Compliance Management and Environmental Enforcement. A summary of these reports clearly indicates three issues from 2015 are still ongoing at the time of the inspection: (1) the subsurface fire, which is approximately sixty (60) feet below the surface; (2) the GCCS has not been operating due to a breach in the header and (3) the flare is offline as result of the intrusion of air due to the breach.

The Quarterly Reports for 2016 prepared and submitted by Oasis Consulting Services confirms that the gas extraction wells were continuously monitored once a month. During the first three quarters in 2016, the results indicate that there were 122 incidents where the gauge pressure exceeded the limit. having a zero or positive pressure. There were 32 exceedances of oxygen concentration greater than 5%. There were no incidents of the temperature exceeding the limit. There were two surface monitoring exceedances recorded on December 10, 2015. The location of the exceedance was near well EW09. The surface methane concentration was 1,600 ppm, which is high above the permitted limit of 500 ppm. Additionally, there was a second exceedance near well EW02 of 1,200

ppm. The corrective actions for both cases were cover maintenance. Each quarter certain gas extraction wells (i.e. Bov South) were not monitored because conditions were dangerous. Construction activities made it difficult to access. The GCCS and the flare system was down for the entire calendar years for 2015 and 2016.

A Visual Emission Observation. Method 9, was not conducted because the GCCS is not in operation.

Conclusion:

In summary, a subsurface fire is still present at the Bovoni Landfill. It will be approaching the four years without any attempts to extinguish the fire. There is a breach in the main header, which is still undergoing repairs. The gas collection and control system did not operate for the entire period during 2015 and 2016. The enclosed flare is offline due to excess air infiltration. Currently, most of the wells are monitored on a monthly-basis for pressure, oxygen concentration and temperature. However, there will continue to have incidents of exceedances until the repairs and the fire is addressed. VIWMA intends to address these issues once the funding has been approved.

Potential Non-Compliance and Concerns

After review of documents and findings, the VI Waste Management Authority has failed to comply with the requirements of the Partial Consent Decree, Civil No. 3:10-cv-00048.

Since the Bovoni Landfill has a subsurface fire and a breach in the header, the VIWMA has an inoperable GCCS system whereby the following deficiencies are noted:

- Failed to operate each wellhead with negative pressure (exceeded the permitted limit)
- Failed to maintain an oxygen concentration of 5% or less (exceeded the permitted limit)
- The surface methane concentration exceeded the permitted limit.
- Some wells were not monitored during the required period.

VI WMA has not made any significant attempts to extinguish the subsurface fire.

The VI Waste Management Authority failed to timely repair and operate the gas collection and control system as required by the Consent Decree. Since the GCCS and flare are inoperable, VIWMA is unable to conduct any performance test.

Recommendations:

DPNR-DEP recommends that further enforcement actions be taken against VI Waste Management Authority. US EPA is the lead agency on this Consent Decree. Mr. Victor Tu of Region 2 Compliance and Enforcement Branch is the contact for enforcement initiatives regarding the landfills. The agency will proceed with the next step in the enforcement level.

Report Written by: <u>Angela Y. Arnold</u>
Title: <u>Environmental Engineer III</u>