# STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

July 13, 2017

Twin Enviro Services / Phantom Landfill
Attn: Mr. Chris Brochu
2500 County Road 67
Penrose, CO 81240

CERTIFIED MAIL # 7014 1200 0001 1451 1680
Return Receipt Requested

Re: Compliance Advisory for Phantom Landfill
2500 County Road 67, Penrose, CO 81240
Fremont County
SW/FRM/PH3 1.6

Dear Mr. Brochu,

This Compliance Advisory provides notice related to information gained during an inspection of the Phantom Landfill (the Facility) conducted at the above-referenced location by the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Department) on June 8, 2017. The purpose of the inspection was to determine the Facility's compliance status with respect to the Solid Wastes Disposal Sites and Facilities Act, CRS 30-20-100.5 *et. seq.*, and the Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-2, Part 1; the Regulations). The Department advises you that the information gained during the inspection indicates that you may have violated Colorado's solid waste laws. Department personnel will review the facts established and this notice may be revised to include additions or clarifications as a result of that review.

Please be aware that you are responsible for complying with the State Solid Waste Regulations and that there are civil penalties for failing to do so. The issuance of this Compliance Advisory does not limit or preclude the Department from pursuing its enforcement options concerning this inspection including issuance of a Compliance Order and/or seeking an assessment of civil penalties. Also, this Compliance Advisory does not constitute a bar to enforcement action for conditions that are not addressed in this Compliance Advisory, or conditions found during future file reviews or inspections of your property. The Department will take into consideration your response to the requested actions listed below for each cited deficiency in its consideration of enforcement options.

**Deficiency 1**: Failure to comply with the Facility's approved Engineering Design and Operations Plan (EDOP), Solidification Basin Design and Operations Plan (SBD&O Plan), and the approved Ash Recovery Plan Design, Operations and Closure Plan Amendment (Ash Mining Plan) conditions. Several conditions were not met, including, but not limited to, failure to properly characterize waste for disposal,

failure to conduct required training for employees operating the solidification basin, not applying adequate cover, failure to control nuisance conditions, failure to document leachate measurements, and failure to conduct required inspections. This is a violation of Sections 1.3.9, and 3.3.2 of the Regulations.

**Requested Action 1:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, submit a proposed schedule to the Department for complying with the approved EDOP, SBD&O Plan, and Ash Mining Plan requirements.

**Deficiency 2:** Lack of employee training for operations and recognition of hazardous waste related to the solidification basin. Training for prohibited waste recognition has not been provided to employees responsible for solidification basin oversight and operations and the recognition of hazardous and prohibited wastes. This is a violation of Section 2.1.2(B) (3) of the Regulations and Section 2.5 and Appendix C of the approved SBD&O Plan.

**Requested Action 2:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, the Facility should train landfill operation staff responsible for solidification basin oversight, operations, and waste characterization and any employee serving in a backup role in the recognition of hazardous and prohibited wastes and SBD&O Plan and Ash Mining Plan requirements. Employee training records should be maintained.

**Deficiency 3:** Failure to maintain the Operational Record with all required elements. Missing documentation, included, but was not limited to, training records for employees working at the solidification basin, records of winds speed measurements and Facility shut down due to high winds, weekly above ground storage tank inspections, weekly analytical test results associated with leachate in the solidification basin collection system when leachate depth was 6 inches or more, surveys required to control the ash excavation proximity to the edge and top of the liner, and leachate measurements associated with the solid waste disposal cell. This is a violation of Sections 2.4 and 3.4 of the Regulations; Section 4.3 of the SBD&O Plan; Section 5.4 of the EDOP; and Sections 5.1 and 5.2 of the Ash Mining Plan.

**Requested Action 3:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, the Facility shall maintain all required Facility operating records.

**Deficiency 4:** Failure to exclude hazardous waste. Waste characterization was inadequate for sand trap waste accepted from Dent Brothers (Profile # P-20160829-A) for treatment in the solidification basin in 2016. Analytical results for the subject waste dated August 12, 2016 identified tetrachloroethene at a concentration of 38 mg/kg in the characterization sample. The Facility should have either conducted an additional test for PCE using the toxicity characteristic leaching procedure, or utilized the "rule of twenty" alternative method accepted by the U.S. Environmental Protection Agency and Division for hazardous waste determination. Based on the results of the rule of twenty evaluation, a PCE concentration of 14 mg/kg can be considered the limit for hazardous waste/non-hazardous waste determination. Since the identified PCE concentration exceeded that limit, the subject waste should have been excluded for acceptance at the Facility. This is a violation of Sections 2.1.2(B) of the Regulations, Section 2.0 of the SBD&O Plan, and Section 4.1 of the EDOP.

**Requested Action 4:** Effective immediately, the Facility shall stop accepting prohibited waste and comply with all required waste characterization and waste exclusion procedures in accordance with the Regulations, EDOP, SBD&O Plan, and Ash Mining Plan.

**Deficiency 5:** Failure to update the Waste Characterization Plan for required disposal prohibitions (including the e-waste prohibition). This is a violation of Section 16.6 of the Regulations.

**Requested Action 5:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, the Facility shall add an amendment to the Waste Characterization Plan indicating that accepting e-waste is prohibited.

**Deficiency 6:** Failure to apply sufficient daily and intermediate cover in several areas along the south slope of the waste disposal cell, near the working face, and at the fly ash removal area. This is a violation of Sections 2.1.10 and 3.3.4(A) of the Regulations; Section 4.4.8 of the approved EDOP; and Section 2.8 of the Ash Mining Plan.

**Requested Action 6:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, apply either six (6) inches of earthen material or other alternative materials that have been approved by the Department for use as daily cover to exposed solid waste at the Facility. For areas left temporarily unused for at least one, month, apply at least one (1) foot of earthen material for use as intermediate cover over solid waste at the Facility.

**Deficiency 7:** Storage of uncovered fly ash materials mixed with municipal waste was observed at the solidification basin. Uncovered stockpiles/berms of fly ash with mixed municipal waste extended several feet above ground level at the solidification basin. This is a violation of Section 5.5 of the SBD&O Plan; and Section 2.8 of the Ash Mining Plan.

**Requested Action 7:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, properly stockpile and cover stockpiled fly ash materials at the solidification basin area.

**Deficiency 8:** Failure to properly manage fly ash for use in the solidification basin. Berms of fly ash mixed with municipal waste were present at three sides of the solidification basins. This material was being handled as a product and not as a solid waste. It did not have adequate daily cover to limit nuisance conditions or contact with surface water. This is a violation of the Regulations pursuant to Section 1.2 (reference the definition of a solid waste); Section 2.1.10 (requirements for adequate cover, distribution of solid wastes in the smallest area consistent with handling traffic, and solid wastes are to be placed in the most dense volume practicable); Section 2.1.11 (sites and facilities shall have minimum wind-blown debris); and Section 3.3.4 (requirements for cover materials). In addition, the use of this solid waste as a berm material is inconsistent with Section 5.5 of the SBD&O Plan, and Sections 2.1, 2.6, 2.8, 2.9, and 3.1 of the approved Ash Mining Plan.

**Requested Action 8:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, properly manage fly ash at the Facility, including in the fly ash removal area, along roadways and ditches within the Facility, and at the solidification basin area in accordance with the Regulations, SBD&O Plan, and Ash Mining Plan.

**Deficiency 9:** Failure to limit the size of the active working face and the fly ash removal face. This is a violation of Section 2.1.10 of the Regulations.

**Requested Action 9:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, compact and apply appropriate adequate cover to portions of the working face and fly ash removal area so that the exposed waste surface conforms to specifications identified in the Regulations, EDOP and Ash Mining Plan.

**Deficiency 10:** The fly ash mixed with municipal waste in the solidification basin exceeded the height of the surrounding earthen berm. Per the SBD&O Plan, the ash height is supposed to be maintained below

that of the earthen berm to provide protection against the wind. This is a violation of Section 1.3.9 of the Regulations and Sections 4.1 and 5.5 of the SBD&O Plan.

**Requested Action 10:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, modify the berms surrounding the solidification basin pits to comply with requirements of the SBD&O. In accordance with that Plan, the berms are to be constructed of earthen materials to provide protection from wind during mixing operations and prevent surface water run-on from entering the basin and contain liquids in the basin.

**Deficiency 11:** Failure to maintain complete records for operation of the solidification basin. The SBD&O Plan requires, among other things, that the Facility maintain an operation log for the solidification basin operations. The Facility has failed to perform the required leachate sampling and analytical testing of the leachate that was measured to be 6 inches or more above the base of the solidification basin. In addition, records for May 2017 omitted leachate riser pipe and adjacent wet/dry well measurements, the volume of leachate removed, and the wet/dry status of the wet/dry wells for the last week of that month. This is a violation of Sections 4.3, 5.5.2, and 5.9 of the SBD&O Plan.

**Requested Action 11:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, comply with documentation and analytical sampling requirements specified in the approved SBD&O Plan. These requirements include, but are not limited to, maintaining an accurate log documenting required leachate measurements, inspections associated with the solidification basin, waste characterization, and leachate analytical tests required by that Plan.

**Deficiency 12:** Leachate measurements associated with the solid waste disposal cell were missing after August 2016. In addition, the procedure for measuring leachate is inadequate since the levels cannot be accurately determined. This is a violation of Section 3.2.5(D) of the Regulations and Section 4.4.6.2 of the EDOP.

**Requested Action 12:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, submit a proposed leachate measurement procedure to the Department for review. The procedure should provide adequate detail to show that the proposed method is capable of producing accurate, repeatable measurements of leachate levels. Following Department approval of the subject procedure, the Facility is to conduct and document required leachate measurements and analysis in accordance the approved EDOP.

**Deficiency 13:** Windblown solid waste has created a nuisance condition along the Facility's eastern and northern fence lines and beyond the Facility boundary. Fly ash solid waste has created a nuisance condition in the run-on ditch and on the roadway along the north boundary. In addition, strong chemical odors were present in the vicinity of the working face, fly ash removal area, and solidification basin areas. This is a violation of Sections 2.1.3, 2.1.7, and 2.1.11 of the Regulations, and Section 3.0 of the approved Ash Mining Plan.

**Requested Action 13:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, employ reasonable measures to collect, properly contain, and dispose of scattered litter along and beyond the Facility boundary fences to limit nuisance conditions. In addition, fly ash covering portions of the roadway and run-on ditch along the Facility's north boundary and in the vicinity of the solidification basin should be removed and properly disposed of in accordance with the Regulations, EDOP, SBD&O Plan and Ash Mining Plan. To help control odors at the Facility, apply adequate daily and intermediate cover where required.

**Deficiency 14:** Failure to manage e-waste in a manner that prevents the release of waste or waste constituents to the environment. A portion of e-waste at the Facility was exposed to the elements and placed directly on the ground surface. This has the potential to impact the underlying soils with heavy metals. This is a violation of Sections 16.5.1 and 16.5.5 of the Regulations.

**Requested Action 14:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, e-waste is to be managed and stored in a manner that prevents the release of waste or waste constituents the environment.

**Deficiency 15:** Failure to construct and maintain a vehicle tracking pad to control fly ash on tires of vehicles exiting the fly ash removal area as required by the approved Ash Mining Plan. This is a violation of Section 3.1 of approved Ash Mining Plan.

**Requested Action 15:** Within thirty (30) calendar days of your receipt of this Compliance Advisory, construct and maintain a vehicle tracking pad to control fly ash on tires of vehicles exiting the fly ash removal area in accordance with the approved Ash Mining Plan.

**Requested Action 16:** Within sixty (60) calendar days of your receipt of this Compliance Advisory, submit correspondence to the Department documenting compliance with the above Requested Actions.

To facilitate resolution of the issues identified in this Compliance Advisory, we encourage you complete the requested actions in the specified timeframes. If desired, you may contact this office at the number listed below and, where necessary, schedule a meeting at the Department offices or a teleconference meeting:

A. To discuss the Compliance Advisory and answer any questions that you may have;
B. To develop an alternative schedule for correcting the deficiencies noted above; or
C. To submit information necessary to show that the deficiencies are not a violation of Colorado's solid waste laws.

A copy of the associated Inspection Report which includes the Notice of Inspection and Solid Waste Disposal Inspection Checklist is attached to this Compliance Advisory.

You may contact Joe Pieterick at (303) 692-3355 or Ed Smith (303) 692-3386 concerning the deficiencies detailed above and/or to set a meeting to discuss this Compliance Advisory.

Sincerely,

Joseph D. Pieterick

Joseph D. Pieterick, P.G.
Environmental Protection Specialist
Solid Waste Compliance Assurance Unit
Solid Waste and Materials Management Program

Edward Smith

Ed Smith
Unit Leader
Solid Waste Compliance Assurance Unit
Solid Waste and Materials Management Program

Attachment

CC: Matt Koch, Fremont County
Eric Jacobs, HMWMD
Jerry Henderson, HMWMD
Randy Perila, HMWMD

# SOLID WASTE INSPECTION REPORT

| | |
|---|---|
| Agency: | Colorado Department of Public Health and Environment<br>Hazardous Materials and Waste Management Division |
| Date: | June 8, 2017 Times: 9:35 AM – 2:35 PM |
| Site: | Phantom Landfill<br>2500 Road 67<br>Penrose, CO 81240<br>Fremont County |
| Operator: | Twin Enviro Services |
| Inspectors: | Joseph Pieterick, HMWMD<br>Ed Smith, HMWMD<br>Eric Jacobs, HMWMD |
| Inspection: | Routine Compliance, Unannounced |
| Site Representatives: | Chris Brochu, Landfill Manager<br>Ted Riesburg, Environmental Compliance Manger |
| Other Participants: | Gary Fuselier, Former Phantom Landfill Manager and Consultant for Twin Enviro |
| Weather Conditions: | Mostly sunny and hot. |

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## Introduction

On June 8, 2017, staff from the Colorado Department of Public Health and Environment ("the Department") conducted an unannounced inspection of the Phantom Landfill ("the Facility") located near Penrose, Colorado. The purpose of the inspection was to evaluate compliance of the Facility with the requirements set forth in the Solid Wastes Disposal Sites and Facilities Act ("the Act"), CRS 30-20-100.5 *et seq.,* the Regulations Pertaining to Solid Waste Sites and Facilities, 6 CCR 1007-2 ("the Regulations"), and the Facility's approved Engineering Design and Operations Plan (EDOP), Solidification Basin Design and Operations Plan (SBD&O Plan), and the approved Ash Recovery Plan Design, Operations and Closure Plan Amendment (Ash Mining Plan).

Department Inspectors Joe Pieterick, Ed Smith, and Eric Jacobs conducted the inspection activities. Mr. Chris Brochu, Phantom Landfill Manager, granted access to the Facility and was the primary Facility representative present during the inspection. Mr. Ted Riesburg, Environmental Manger for the Facility, was also present during the inspection. Twin Enviro's consultant and former Facility Manger, Mr. Gary Fuselier, participated in some of the afternoon records review activities.

Records review activities were conducted first at the on-site Facility office, followed by the Facility field inspection. Additional records review and closeout discussions were conducted at the Facility office in the afternoon.

## Site Background

The Phantom Landfill is a municipal solid waste landfill operating under a Certificate of Designation (CD) issued by Fremont County on March 11, 1997 and amended in 1999. It is owned and operated by Mr. Les Liman-Twin Landfill Corporation of Fremont County which has its corporate office in Steamboat Springs, Colorado. Waste disposal at the Facility is conducted on approximately 40 acres of a 77 acre property situated between two hogback ridges, adjacent to Road 67 (Phantom Canyon Road).

Solid waste is disposed of at the Facility in one large fill area cell, constructed in phases with a compacted clay liner and leachate collection system. The leachate collection sump area has a composite liner in addition to the compacted clay liner. The latest phase of cell development is currently underway at the east portion of the property.

A liquid waste solidification basin with leachate collection system is located at the northwest portion of the Facility. Non-hazardous liquid wastes are mixed at the solidification basin with fly ash or other materials to solidify the waste and remove free liquids so that it can be subsequently transferred to the active working face for disposal. Recyclable paper, plastics, waste tires, metals, and electronics are collected at the west portion of the property. All buildings at the Facility are also located at the west portion of the property and include the office with an adjacent vehicle scale, a recycling materials building, and an equipment maintenance garage.

Currently, there are seven groundwater monitoring wells at the Facility which are sampled two times per year. There are twelve gas probe locations, in addition to the office and maintenance garage buildings, which are measured for potential explosive gas levels on a quarterly basis.

The latest approved EDOP for the Facility is dated June 24, 1996. A separately approved SBD&O Plan for the liquid waste solidification basin at the Facility is dated January 7, 2013. In addition, an approved Ash Mining Plan for the Facility is dated July 14, 2014.

## Records Review

On the morning of June 8, 2017, following introductions, there was a general discussion regarding the Facility's operations, staff, equipment, types of waste accepted, materials collected for recycling, current waste haulers, waste volumes, and long-term plans. This was followed by a more detailed review of the Facility's records. Due to the complexity of the Facility's records, the records review was conducted in two phases which concluded with the second phase in the afternoon following the field inspection and a lunch break.

According to Mr. Brochu and Mr. Riesburg, the Facility has a staff of twenty-two full-time employees, which includes drivers for the Facility-owned waste hauling trucks. The Facility serves Fremont County which has a population of approximately 46,502 according to 2014 records. Based on Department records, the Facility accepted 78,717 cubic yards of solid waste in 2016. The number of annual visits to the Facility for disposal was not known.

The estimated life of the landfill was initially 30 years from acceptance of first waste. However, this estimate was recently updated in an unapproved EDOP modification document to 37 years. If planned expansions are approved, that could be extended an additional 54 years. Expansion would primarily be vertically, with some lateral expansion anticipated.

Equipment at the Facility includes a front-end loader, compactor, dozer, two excavators, and a water truck. The equipment is mostly serviced at the on-site maintenance garage.

The hours of operation for the Facility are from 7:30 AM to 4:00 PM on Monday through Saturday.

In addition to waste being hauled to the Facility by their own trucks, trucks from Lone Wolf Disposal and the City of Florence also haul waste to the Facility. No transfer stations supply waste to the Facility.

Materials collected at the Facility for recycling include paper, cardboard, metals, appliances (with freon removal certificates), electronic waste (e-waste), and waste tires. The Facility is a Department registered waste tire collection facility. E-waste collected at the Facility is recycled by Southern Colorado Recyclers; metals and freon-free appliances are recycled by Dionisio Metal; and waste tires are recycled by Geocycle. Used oil is also collected for recycling.

Mr. Brochu and Mr. Riesburg indicated that In addition to a variety of household and other municipal waste, the Facility accepts non-hazardous sludge from Fremont Sanitation and Leadville Sanitation, fly ash, kiln dust, construction and demolition (C&D) waste, non-friable asbestos, petroleum-contaminated soils, large animal carcasses, and branches and brush. Non-hazardous liquids and semi-liquids are accepted for treatment at the solidification basin at the northwest portion of the Facility where they are mixed with fly ash or other relatively dry waste materials as approved by the SBD&O Plan until free liquids are absorbed so that the solidified waste can be transported to the active working face for disposal.

No burning is conducted at the Facility.

Random loads of incoming waste are inspected two times per month.

During the records review activities, special attention was paid to the Facility's CD, EDOP, SBD&O Plan, Ash Mining Plan, waste characterization documents, supporting analytical reports, leachate measurements and volumes, random load inspections, groundwater monitoring reports, explosive gas monitoring reports, documents related to the solidification basin, financial assurance, wind speed measurements, required periodic inspections, materials accepted for recycling, prohibited wastes, training records, and other documentation required by the approved EDOP, SBD&O Plan, and Ash Recovery Plan.

Some records related to financial assurance, gas monitoring, groundwater monitoring, random load inspections, and employee training for hazardous waste recognition were adequate and in good order.

However, records related to characterization of liquid waste accepted for treatment at the solidification basin, required employee training for solidification basin operations, 2016 wind speed measurements, leachate measurements, analytical records for leachate testing, documents of surveys required by the Ash Mining Plan to assure a minimum 10-foot separation from the liner, and records documenting required inspections of the water storage tank and other features were inadequate or missing.

Based on the SBD&O Plan, analytical testing of leachate from the solidification basin sump is to be conducted when weekly measurements identify 6 inches or more of leachate in the subject pipe. The May 2017 daily solidification basin operation log provided by the Facility indicated that there were four weekly measurements where the leachate level reached 6 inches. Therefore, analytical sampling and testing of the leachate should have been conducted. However, the required sampling and analysis was not conducted, so none of those required records were available.

Of particular concern was the waste characterization profile for sand trap waste supplied by Dent Brothers in 2016 (Profile # P-20160829-A). The subject waste was accepted by the Facility for treatment in the solidification basin. Based on analytical results for the subject sand trap waste dated August 12, 2016, tetrachloroethene (also called tetrachloroethylene, perchloroethene, perc, or PCE) was identified at a concentration of 38 milligrams per kilogram (mg/kg, or parts per million). Pursuant to Table 1 in Section 261.24 of the Colorado Hazardous Waste Regulations, Part 261, the Identification and Listing of Hazardous Waste, this sand trap waste may exhibit the characteristic of toxicity based on the associated analytical result. The subject regulations indicate a PCE concentration of 0.7 mg/L (milligrams per liter, or parts per million) results in a toxicity characterization.

During the records review activities, it was determined that the sand trap waste was approved by the Facility for acceptance and that the sand trap waste was not segregated for analysis using the toxicity characteristic leaching procedure (TCLP) prior to being placed in the solidification basin and then the landfill's working face for final disposal. Facility management and operation staff should understand that such materials identified as characteristically toxic should have the TCLP analyses completed to determine the material's leachability when the hazardous waste maximum concentration of contaminants for toxicity characteristics is exceeded. The existing evidence demonstrates that the sand trap waste may have been a hazardous waste.

Based on procedures established for identifying the potential leachability for hazardous materials such as the Environmental Protection Agency's "rule of twenty", the associated limit for PCE may have been exceeded demonstrating the material accepted may have been a hazardous waste. The rule of twenty, when applied to the 0.7 mg/L maximum allowable concentration, identifies PCE as leachable above 14 mg/L. Based on the finding that sand trap waste accepted from the Dent Brothers profile may meet the criteria for a hazardous waste, and the lack of TCLP analyses to demonstrate the leachability of these wastes, it appears as though Phantom Landfill and Twin Enviro accepted hazardous wastes at the Facility.

## Site Inspection

Following initial records review activities in the morning, the physical inspection of the Facility was conducted. Photos were taken during the inspection by Department staff. Participants included Department Inspectors Pieterick, Smith, and Jacobs; and Mr. Brochu and Mr. Riesburg from the Facility. The field inspection began at the office and entrance gate area. It then proceeded in a generally counter-clockwise direction past the recycled materials building, around the south edge of the solid waste disposal cell, to the new disposal cell construction area at the east portion of the property, to the northeast corner, the working face, and then to an area where fly ash was being removed near the north-central portion of the Facility for use at the solidification basin. From there, the inspection group proceeded back to the north boundary, to the solidification basin area at the northwest portion of the Facility, past the maintenance garage and recycling building, and then back to the office area.

Signage near the Facility's entrance gate and at the Facility office indicate the hours of operation, disposal fees, the prohibition for disposal of e-waste, an emergency contact phone number, and a sign indicating that no toxic or hazardous waste is allowed. The Facility's hours of operation are Monday through Friday from 7:30 AM to 4:00 PM Monday through Saturday. A vehicle scale is located along the southeast side of the office building. Please see Photos 1 through 3 in Attachment A.

Two buildings are located north of the office area, including the recycling building which is used to store recyclable materials, and the equipment maintenance building. An area for collecting e-waste is located outside and to the east of the recycling building. Much of the e-waste was contained in plastic bins; however, several waste televisions were sitting directly on the ground surface, a violation of Section 16.5.5 of the Regulations. See Photos 4, 5 and 6.

From the recycling building and e-waste collection area, the group proceeded to the south edge of the waste disposal cell where the leachate collection system access pipe was present. Department Inspectors requested a check of the leachate level and a demonstration of how the leachate levels in the pipe are measured. The procedure conducted by Mr. Brochu included assembling sections of narrow PVC pipe and sliding them down the sloped leachate pipe to the sump at the base of the disposal cell. The PVC pipe did not have discernable calibration markings and it was unclear how accurate leachate levels could be measured. During the inspection, Mr. Brochu indicated that there was a very high level of leachate in the sump as indicated by wetness on the extracted PVC measuring pipe. However, the exact level of leachate in the sump could not be determined.

Determining accurate leachate levels using this method with an uncalibrated measuring pipe appeared ineffective and confusing. This apparently results in inaccurate operating records related to leachate levels. In addition, determining where the base of the leachate sump was for maximum pipe insertion seemed to be subjective based on the presence of the pump near the base and other potential obstructions. The protective cover at the top of the leachate pipe casing was not locked and was pried open by another PVC pipe used for leachate extraction pumping. This could allow wind-blown waste into the leachate access pipe or provide access by animals which could compromise system by allowing debris to accumulate at the base of the sump. Leachate from the collection system is periodically pumped and temporarily stored in two nearby tanks west of the leachate pipe casing. See Photos 7 and 8.

The waste disposal cell slope located east of the leachate extraction pipe exhibited some areas where windblown waste and previously buried waste were exposed. This indicates inadequate nuisance control methods and a lack of intermediate soil cover in those areas. See Photo 9.

Near the southeast portion of the Facility, several piles of waste tire shreds were present. These are to be used for a leachate drainage layer in the area at the east portion of the Facility where cell expansion construction is underway. See Photos 10 and 11.

While driving along the east boundary of the Facility, significant wind-blown trash was observed along the fence line. The wind-blown waste was also present and more pronounced at the northeast corner of the Facility and along the east portion of the north fence line. Some wind-blown waste was observed beyond the east and north fence lines on adjacent property. Please see Photos 12 and 13.

During the inspection, groundwater monitoring wells and gas probe wells were observed. They appeared to be in good condition; however, they were not locked. See Photos 14 and 15. The main entrance gate, another gate at the east portion of the Facility, and fences surrounding the Facility appeared to be in generally good condition.

Storm water run-on and run-off ditches appeared to be in generally good condition. However, gray fly ash was present on portions of the run-on ditch near the north boundary as seen on Photo 16. The fly ash in this ditch may impact surface water flowing through the ditch during storm events and these ditches are located in areas not underlain by the landfill's liner system.

From the northeast corner of the property, the inspection proceeded to the active working face near the north-central portion of the Facility. A movable wind fence was located east of the working face to help control wind-blown waste as seen on Photo 17. A compactor and dozer were operating at the working face which occupied the east portion of a relatively large depression. At the west side of this large depression, the fly ash removal wall was present. A high percentage of mixed municipal waste materials were combined with the fly ash at the removal area. Mr. Riesburg stated that the fly ash is removed and hauled to the solidification basin for use there.

The size of the combined working face area and fly ash removal area was relatively large, estimated to be at least 200 feet across from east to west, and over 100 feet from north to south. This exceeds the 16,000 to 17,000 square feet of open recovery area defined by the approved 2014 Ash Mining Plan intended to limit exposed solid wastes and provide for a manageable area where daily cover could be reasonably applied by Twin Enviro to control nuisance conditions in accordance with both the SBD&O and 2014 Ash Mining Plan. See Photos 18 through 21.

The Inspectors observed where fly ash was excavated within 20 feet of the liner's edge which violates the requirements of the 2014 Ash Mining Plan. Based on information provided by the April 5, 2000 Phase 2 Construction Quality Assurance Report, the current fly ash mining further violates the 2014 Ash Mining Plan that specifies no ash recovery will be conducted within 10 feet of the top of a liner. Inspectors were not provided evidence of surveys that were required to be conducted in accordance with the 2014 Ash Mining Plan to assure this 10-foot excavation above the liner limitation is being monitored and maintained.

The size of the working face was relatively large. Odors in the vicinity of the working face and fly ash removal areas were very noticeable. This is related to the fact that a wide area of exposed solid waste between the working face wall and fly ash removal wall is not covered.

Very few birds were observed at the Facility. No other obvious vectors were observed during the inspection.

The dirt road connecting the working face and fly ash removal areas to the waste solidification basin at the northwest portion of the Facility was mostly covered with fly ash residue which violates requirements in the 2014 Ash Mining Plan. In addition, the Inspectors did not observe required track-out pads which are required to be installed at the ash mining area to control this condition. The fly ash residue was also present on the storm water run-on trench that parallels the north boundary fence as previously stated. See Photos 22 through 24. Inspectors did not observe any silt fencing or sediment control logs required by the 2014 Ash Mining Plan to assist in

controlling ash from entering the storm water control system. During the inspection, a water truck was spraying water on the dirt road to help control fly ash/dust.

The waste solidification basin at the northwest portion of the Facility has three mixing basins where the fly ash mixed with municipal waste is combined with waste liquids for solidification. Chemical odors in this area were relatively strong. The volume of municipal solid wastes mixed with fly ash appeared to exceed the approved 5% maximum municipal solid waste as defined by the SBD&O. Berms consisting of fly ash with mixed waste extended approximately 5 feet above grade and surrounded each of the mixing basins on three sides. These solid waste berms were not covered with daily cover as required by the 2014 Ash Mining Plan. Page 17 of the approved SBD&O Plan for the solidification basin indicates "The mixing basin will be surrounded on three sides by an earthen berm that serves to provide protection from wind during mixing operations, prevention of surface water run-on from entering the basin and containment of liquids in the Basin". The earthen berm described in the SBD&O Plan was not visible, except for a small area on the southern edge. Consequently, the fly ash mixed with municipal waste that is functioning as a berm surrounding three sides of each basin can be contacted by run-on storm water. This could result in the storm water being impacted by the bermed waste in violation of the SBD&O Plan, EDOP, and Regulations. The strong chemical odors noted in the solidification basin area are apparently due to the presence of fly ash mixed with municipal waste being used as uncovered berm material adjacent to the mixing basins. See Photos 25 through 27.

The solidification basin has a separate leachate collection system with the leachate system access pipe exposed west of the solid waste berms. A variety of surface waste, including sealed paint cans and a mattress was present in the vicinity of the leachate access pipe cover in areas without a liner system. See Photo 28.

There are several deficiencies related to the removal, handling, and application of fly ash and mixed municipal waste at the Facility and solidification basin. Some of these include the presence of berms with exposed municipal waste with the fly ash, the widespread fly ash residue observed on the road that connects the working face area to the solidification basin and in the storm water run-on ditch, a large area of uncovered fly ash with a high percentage of mixed waste at the fly ash removal area (per the approved Ash Mining Plan, the percentage of waste mixed with fly ash is not to exceed 5%), and the strong chemical odors that result from this material not being covered.

Deficiencies related to operation of the solidification basin also include the inadequate characterization of sand trap waste and other materials being accepted for solidification (such as identified PCE under Profile # P-20160829-A discussed in the records review section of this report), the use of fly ash with mixed waste instead of earthen materials for berms surrounding three sides of the mixing basins, missing analytical data for leachate measured weekly that extended 6 inches or more from the base of the solidification basin in the leachate pipe, the presence of assorted waste west of the solidification basin (a mattress and paint cans, etc.), poor operating records, and the lack of annual training of staff conducting the solidification basin operations.

From the solidification basin area, the inspection proceeded south past a waste collection roll-off storage area and the equipment maintenance garage, then back to the recyclable materials storage building and office area where the field inspection was concluded.

Following the field inspection activities and a lunch break, the group reconvened in the afternoon at the Facility office to complete the second phase of the record review activities, discuss the findings, and close out the inspection.

## Inspection Findings

Based on the records review and field inspection activities, several deficiencies were identified. Many were repeat violations that were documented in previous Department Inspection Reports, especially violations related the handling of fly ash.

The Facility was in apparent violation of the Act and the Regulations on the day of inspection and will be receiving a Compliance Advisory. The following violations were found:

**Deficiency 1:** Failure to comply with the approved EDOP; SBD&O Plan; and Ash Mining Plan conditions. Several conditions were not met, including, but not limited to, failure to properly characterize waste for disposal, failure to conduct required training for employees operating the solidification basin, not applying adequate intermediate cover, failure to control nuisance conditions, failure to document leachate measurements, and failure to conduct required inspections. This is a violation of Sections 1.3.9, and 3.3.2 of the Regulations.

**Deficiency 2:** Lack of employee training for operations and recognition of hazardous waste related to the solidification basin. Training for prohibited waste recognition has not been provided to employees responsible for solidification basin oversight and operations and the recognition of hazardous and prohibited wastes. This is a violation of Section 2.1.2(B) (3) of the Regulations and Section 2.5 and Appendix C of the approved SBD&O Plan.

**Deficiency 3:** Failure to maintain the Operational Record with all required elements. Missing documentation, included, but was not limited to, training records for employees working at the solidification basin, records of winds speed measurements and Facility shut down due to high winds, weekly above ground storage tank inspections, weekly analytical test results associated with leachate in the solidification basin collection system when leachate depth was 6 inches or more, surveys required to control the ash excavation proximity to the edge and top of the liner, and leachate measurements associated with the solid waste disposal cell. This is a violation of Sections 2.4 and 3.4 of the Regulations; Section 4.3 of the SBD&O Plan; Section 5.4 of the EDOP; and Sections 5.1 and 5.2 of the Ash Mining Plan.

**Deficiency 4:** Failure to exclude hazardous waste. Waste characterization was inadequate for sand trap sludge accepted from Dent Brothers (Profile # P-20160829-A) for treatment in the solidification basin in 2016. Analytical results for the subject waste dated August 12, 2016 identified tetrachloroethene at a concentration of 38 mg/kg in the characterization sample. The Facility should have either conducted an additional test for PCE using the toxicity characteristic leaching procedure, or utilized the "rule of twenty" alternative method accepted by the U.S. Environmental Protection Agency and Division for hazardous waste determination. Based on the results of the rule of twenty evaluation, a PCE concentration of 14 mg/kg can be considered the limit for hazardous waste/non-hazardous waste determination. Since the identified PCE concentration exceeded that limit, the subject sludge should have been excluded for acceptance at the Facility. This is a violation of Sections 2.1.2(B) of the Regulations, Section 2.0 of the SBD&O Plan, and Section 4.1 of the EDOP.

**Deficiency 5:** Failure to update the Waste Characterization Plan for required disposal prohibitions (including the e-waste prohibition). This is a violation of Section 16.6 of the Regulations.

**Deficiency 6:** Failure to apply sufficient daily and intermediate cover in several areas along the south slope of the waste disposal cell, near the working face, and at the fly ash removal area. This is a violation of Sections 2.1.10 and 3.3.4(A) of the Regulations; Section 4.4.8 of the approved EDOP; and Section 2.8 of the Ash Mining Plan.

**Deficiency 7:** Storage of uncovered fly ash materials mixed with municipal waste was observed at the solidification basin. Uncovered stockpiles/berms of fly ash with mixed municipal waste extended several feet above ground level at the solidification basin. This is a violation of Section 5.5 of the SBD&O Plan; and Section 2.8 of the Ash Mining Plan.

**Deficiency 8:** Failure to properly manage fly ash for use in the solidification basin. Berms of fly ash mixed with municipal waste were present at three sides of the solidification basins. This material was being handled as a product and not as a solid waste. It did not have adequate daily cover to limit nuisance conditions or contact with surface water. This is a violation of the Regulations pursuant to Section 1.2 (reference the definition of a solid waste); Section 2.1.10 (requirements for adequate cover, distribution of solid wastes in the smallest area consistent with handling traffic, and solid wastes are to be placed in the most dense volume practicable); Section

2.1.11 (sites and facilities shall have minimum wind-blown debris); and Section 3.3.4 (requirements for cover materials). In addition, the use of this solid waste as a berm material is inconsistent with Section 5.5 of the SBD&O Plan, and Sections 2.1, 2.6, 2.8, 2.9, and 3.1 of the approved Ash Mining Plan.

**Deficiency 9**: Failure to limit the size of the active working face and the fly ash removal face. This is a violation of Section 2.1.10 of the Regulations.

**Deficiency 10:** The fly ash mixed with municipal waste in the solidification basin exceeded the height of the surrounding earthen berm. Per the SBD&O Plan, the ash height is supposed to be maintained below that of the earthen berm to provide protection against the wind. This is a violation of Section 1.3.9 of the Regulations and Sections 4.1 and 5.5 of the SBD&O Plan.

**Deficiency 11:** Failure to maintain complete records for operation of the solidification basin. The SBD&O Plan requires, among other things, that the Facility maintain an operation log for the solidification basin operations. The Facility has failed to perform the required leachate sampling and analytical testing of the leachate that was measured to be 6 inches or more above the base of the solidification basin. In addition, records for May 2017 omitted leachate riser pipe and adjacent wet/dry well measurements, the volume of leachate removed, and the wet/dry status of the wet/dry wells for the last week of that month. This is a violation of Sections 4.3, 5.5.2, and 5.9 of the SBD&O Plan.

**Deficiency 12:** Leachate measurements associated with the solid waste disposal cell were missing after August 2016. In addition, the procedure for measuring leachate is inadequate since the levels cannot be accurately determined. This is a violation of Section 3.2.5(D) of the Regulations and Section 4.4.6.2 of the EDOP.

**Deficiency 13:** Windblown solid waste has created a nuisance condition along the Facility's eastern and northern fence lines and beyond the Facility boundary. Fly ash solid waste has created a nuisance condition in the run-on ditch and on the roadway along the north boundary. In addition, strong chemical odors were present in the vicinity of the working face, fly ash removal area, and solidification basin areas. This is a violation of Sections 2.1.3, 2.1.7, and 2.1.11 of the Regulations, and Section 3.0 of the approved Ash Mining Plan.

**Deficiency 14:** Failure to manage e-waste in a manner that prevents the release of waste or waste constituents to the environment. A portion of e-waste at the Facility was exposed to the elements and placed directly on the ground surface. This has the potential to impact the underlying soils with heavy metals. This is a violation of Sections 16.5.1 and 16.5.5 of the Regulations.

**Deficiency 15:** Failure to construct and maintain a vehicle tracking pad to control fly ash on tires of vehicles exiting the fly ash removal area as required by the approved Ash Mining Plan. This is a violation of Section 3.1 of approved Ash Mining Plan.

## Compliance Assistance

At the conclusion of the records review, Inspector Pieterick discussed using the Department's Solid Waste Disposal Site and Facility Inspection Checklist as a tool for conducting periodic compliance audits by the Facility. A copy of the Checklist was provided to Mr. Riesburg.

## Inspection Closeout

Following completion of the Facility inspection and records review, Inspector Pieterick reviewed the results with Mr. Brochu and Mr. Riesburg and indicated that a Compliance Advisory would be issued. Inspector Pieterick completed a Notice of Inspection form and Solid Waste Disposal Site Inspection Checklist and provided copies to Mr. Brochu. Copies of these documents are included in Attachments B and C.

Prepared by: Joseph D. Pieterick Date: 7-13-17
Joseph D. Pieterick

Environmental Protection Specialist
Compliance Assurance Unit
Solid Waste and Materials Management Program
Colorado Department of Public Health and Environment

**Attachments**

| | |
|---|---|
| Attachment 1 | Photo Log – Photos Taken by the Department |
| Attachment 2 | Notice of Inspection |
| Attachment 3 | Solid Waste Disposal Site and Facility Inspection Checklist |

File: SW/FRM/PH3 1.2

# Attachment A - Photo Log
## Phantom Landfill, June 8, 2017 Inspection


Photo 1: Looking northeast at signage adjacent to the Facility entrance gate.


Photo 2: The Facility office and scale at the west portion of the site. Looking northeast.

Photo 3: Signs on the Facility office indicating prohibitions, fees, and regulations. Looking north.

Photo 4: Looking southwest at the recycled materials storage building at the west portion of the Facility.


Photo 5: The equipment maintenance building with some Facility equipment. Looking southwest.


Photo 6: Looking southwest at the e-waste collection area. Some e-waste is stored directly on the ground.

Photo 7: Looking north at the leachate access pipe and casing as the PVC measuring pipe is assembled.

Photo 8: The leachate collection tanks south of the disposal cell. Looking east-northeast.

Photo 9: Looking north at the south slope of the disposal cell. Exposed solid waste is visible.

Photo 10: Looking east at stockpiled tire shreds for a leachate drainage layer in the cell under construction.

Photo 11: Looking northeast at the cell construction area at the east portion of the Facility.

Photo 12: Wind-blown trash at the northeast corner of the Facility. Looking northeast.

Photo 13: Looking north at wind-blown trash along and beyond the Facility's north fence line.

Photo 14: A groundwater monitoring well adjacent to the east boundary fence. Looking east.

Photo 15: Looking north at a gas monitoring point adjacent to the north boundary fence.

Photo 16: Looking northeast at the stormwater run-on ditch partially covered with gray fly ash.

Photo 17: Looking southeast at a movable fence near the waste disposal working face.

Photo 18: The large working face area at the north-central portion of the Facility. Looking northeast.


Photo 19: Looking northwest. Fly ash mixed with municipal waste is removed from this area for use at the solidification basin.


Photo 20: Water being applied north of the combined working face and fly ash removal area. Looking north.

Photo 21: Looking southwest at the area where fly ash mixed with municipal waste is removed.

Photo 22: The road covered with fly ash between the working face and solidification basin. Looking north.

Photo 23: Looking east at the Facility's north boundary road covered with fly ash residue.

Photo 24: The fly ash-covered road near the Facility's solidification basin. Looking north.


Photo 25: Looking west at the solidification basin pits with berms of fly ash mixed with municipal waste.


Photo 26: The Facility's southern solidification basin pit and solid waste berms. Looking west.

Photo 27: Standing water and waste in a pit at the solidification basin area. Looking west-northwest.

Photo 28: Looking north at the solidification basin leachate removal pipe and uncovered solid waste berms.

# Attachment B

## Notice of Inspection Form

Colorado Department of Public Health and Environment

# Colorado Department of Public Health and Environment
## Hazardous Materials and Waste Management Division

4300 Cherry Creek Drive South, Mail Code HMWMD-B2, Denver, CO 80246-1530
(303) 692-3320 http://www.colorado.gov/cdphe/solidwaste

## Solid Waste and Materials Management Program
## Notice of Inspection

| | | |
|---|---|---|
| Facility Name PHANTOM LANDFILL<br>File Code SW / FRM / PH 3 | Facility ID — | Date 6-8-17 |
| Street 2500 CR-67 | Inspection Announced? ( ) Yes (X) No | Time In: 9:35 AM |
| City PENROSE County FREMONT Zip 81240 | Enter by: (X) Consent ( ) Warrant ( ) Open Fields | Time Out: 2:35 PM |
| Facility Representatives: CHRIS BROCHU, L.F. MANAGER<br>TED RIESBURG | Phone 719-372-6671 | Email CBROCHU@TWINENVIRO.COM |
| Local Government Representatives N/A | Phone — | Email — |

Inspection Result:

___ No Violations Observed
___ Minor Violations Noted Below
___ Minor Violations, Compliance Advisory Issued
_X_ Major Violations Identified

Compliance Assistance Delivered During the Inspection:

_X_ Yes ___ No; If yes, describe: EXTRA CHECKLIST PROVIDED FOR SELF AUDITS.

Apparent Violations and requested corrective actions:

PLEASE SEE INSPECTION CHECKLIST. COMPLIANCE ADVISORY TO BE ISSUED. ADDITIONAL RECORD REVIEW TO BE COMPLETED.

Inspection Type:

___ Complaint
_X_ Routine Compliance Inspection
___ Compliance Assistance Visit
__ Enforcement Follow-up
__ Environmental Covenant
__ File/Records Review
__ Sampling

| | |
|---|---|
| Signature of Facility Representative Receiving Form: | Lead CDPHE Inspector: JOE PIETERICK |
| Name of Facility Official Receiving Form: CHRIS BROCHU | Assisting Inspectors: ED SMITH, ERIC JACOBS |

# Attachment C

## Solid Waste Disposal Site and Facility Inspection Checklist

# COLORADO DEPARTMENT of PUBLIC HEALTH ENVIRONMENT
## Hazardous Materials and Waste Management Division
## SOLID WASTE DISPOSAL SITE AND FACILITY INSPECTION

Time In: 9:35 AM

Time Out: 2:35 PM

Facility: PHANTOM LANDFILL

Inspection Date: 6-8-17



Landfill

Inspector(s): JOE PIETERICK ED SMITH, ERIC JACOBS

| Functional Category | Requirement Description | Not Insp | N/A | Citation | Violation Y/N/P | Note Reference |
|---|---|---|---|---|---|---|
| **Record Review** | | | | | | |
| Certificate of Designation | Have a Certificate of Designation (CD) (or Approved EDOP for One's Own Waste Facility) | | | 1.3.3 | N | |
| D and O Plan | Closure Plan Submission and Content | | | 2.5.8; 3.5.1;3.5.2;3.5.3;3.5.4 | N | |
| | Developed Closure Plan for Approval | | | 3.5 | N | |
| | Operating in Accordance with Approved Design and Operation Plan | | | 1.3.9, 3.3.2 | Y | |
| | Post-closure Plan Submission and Content | | | 2.6.1; 3.6 | N | |
| Duty to Comply | Compliance with CD Conditions | | | 1.3.5 | | TBD. |
| Fees | Solid Waste User or Annual Fees | | | 1.7.3,1.7.4 | N | |
| Financial Assurance | Annually Update Financial Assurance for Inflation | | | 1.8.3(C) | N | |
| | Establish Adequate Financial Assurance or Provide 5 year Update to Financial Assurance | | | 1.8.1; 1.8.3(D) | N | |
| | Provide Revised Cost Estimate for Financial Assurance | | | 1.8.3(D) | N | |
| General Provisions | Compliance with Department-issued compliance order | | X | 1.9.2 | | |
| | Compliance with other Department rules or local ordinances | | | 2.1.1 | N | |
| Operating Requirements | Compliance with Approved Waiver conditions | | X | 1.5 | | |
| | Knowing Receipt of Hazardous Waste | | | 2.1.2 | N | |
| Personnel Training | Conduct Personnel Training for Prohibited Waste Recognition | | | 2.1.2(B)(3) | Y | 1 |
| Recordkeeping | Maintain Operating Record with all Required Elements | | | 2.4; 3.4; 2.1.18(B) | Y | 3 |
| Reporting | Notify the Dept of a Release | | | 2.1.18(A) | N | |
| | Submit Construction / Quality Assurance Report for Approval | | | 3.2.7, 3.3.3 | N/A | |
| Waste Characterization,Acceptan | Exclude Hazardous Waste | | | 2.1.2(A) | Y | 5 |
| | Have and Follow Waste Characterization Plan | | | 2.1.2(C)(2) | N | |
| | Update Waste Characterization Plans for Required Disposal Prohibitions | | | 16.6.6 | Y | 2 |
| **Site Review** | | | | | | |
| Certificate of Designation | Illegal Disposal | | | 1.3.3, 30-20-102 | N | |
| Cover | Ensure Adequate Cover is Available Throughout Site Life | | | 3.3.5 | N | |
| | Place Adequate Cover | | | 2.1.10; 3.3.4;3.3.5 | Y | 6 |
| Monitoring - Explosive Gas | Conduct Explosive Gas Monitoring | | | 2.3.1; 2.3.2 ; 2.3.4; 3.4(C) | N | |
| | Properly Respond to an Explosive Gas Exceedance | | | 2.3.3 | N | |
| Monitoring - Ground Water | Compliance With Ground Water Protection Standards | | | 2.1.15 | N | |
| | Implement and Maintain a Groundwater Monitoring Program | | | 2.2 | N | |

Facility: PHANTOM LANDFILL Inspection Date: 6-8-17

Landfill Inspector(s): JOE PETERICK, ED SMITH, ERIC JACOBS

| Functional Category | Requirement Description | Not Insp | N/A | Citation | Violation Y/N/P | Note Reference |
|---|---|---|---|---|---|---|
| Nuisance Conditions Control | Adequately Fence Site and Prevent Debris From Escaping and Accumulating | | | 2.1.7; 2.1.11 | Y | |
| | Control Nuisance Conditions: | | | 2.1.3, 2.1.7; 2.1.11 | Y | |
| | No Unauthorized Burning | | X | 2.1.9 | | |
| Operating Requirements | Adequate amounts of water | | | 3.3.6 | N | |
| | Co-Disposal of Sludge at the Working Face | | | 2.1.13 | N | |
| | Ensure Adequate Water is Available for Construction and to Minimize Nuisance Conditions | | | 3.3.6 | N | |
| | Operate Leachate Collection and Removal System, Including Monitoring for Leachate Depth on Liner | | | 3.2.5(D) | Y | |
| | Place Waste in Most Dense Volume via Compaction or Other Approved Method | | | 2.1.10 | N | |
| | Restricted Unloading Area,Waste in Smallest Area, Working Face Size | | | 2.1.10 | N | |
| | Wind Speed Monitoring to Cease Operation During High Wind Warning | | | 2.1.11 | Y | |
| Security | Control Access and Provide Site Security | | | 2.1.8 | N | |
| Surface Water Control | Maintain Stormwater Run-on and Run-off Control System | | | 2.1.6; 3.2.6 | N | |
| | Prevent Ponding of Water | | | 2.1.10 | N | |
| Waste Characterization,Acceptan | Disposal of Liquid Waste | | X JDP | 2.1.14 | N | |
| | Motorized and Electronic Equipment Disposal Prohibition | | | 16 | N | |
| | No Acceptance of Wastewater Treatment Plants Sludge, Septic Tank Pumpings or Chemical Toilet Waste Without Approval | | | 2.1.12 | N | |
| Water Protection | No Disposal of Waste Below or Into Surface Water or Groundwater | | | 2.1.17 | N | |
| | Prevent Water Pollution at or Beyond the Point of Compliance | | | 2.1.4; 2.1.5 | N | |

**~~Site-Specific Engineering Design and Operation Plan Requirements:~~** COMMENTS.

① NO EMP. TRAINING DOCUMENTED

② E-WASTE PROHIB. NOT UPDATED / APPROVED. YET

③ OPER. RECORD MISSING. TRAFFIC, WIND, LAB RESULTS, ETC.

④ ~~NO APPROVAL LETTER IN RECORDS FOR CONSTR/QA RPT.~~ JDP.

Landfill

| Note/Regulation Reference # | Comments and Deficiency Requests | Request Date | RTC Date |
|---|---|---|---|
| | - LEACHATE MEASUREMENT RECORDS. MISSING (DONE YEARLY, NOT QTRLY). | | |
| | - TRAINING FOR SOLIDIFICATION MISSING. | | |
| | ~~- PAINT FILT. TESTS MISSING FOR SOLIDIFICATION LOADS.~~ | | |
| | - PER SOLID. PLAN, IF 6" OR MORE IN RISER, SHOULD HAVE BEEN ANALYZED. FOR EACH WEEK. | | |
| ⑤ | INADEQUATE ANALYTICAL ON IMPACTED SOLIDIFICATION WASTE. | | |
| ⑥ | INADEQUATE COVER ON ASH + SLOPES | | |

* NOTE ADDITIONAL RECORDS REVIEW TO BE COMPLETED. COMPLIANCE ADVISORY TO BE ISSUED