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**COMMONWEALTH OF PENNSYLVANIA
BEFORE THE ENVIRONMENTAL HEARING BOARD**

SIERRA CLUB,	:	
	:	
Appellant,	:	
	:	EHB Docket No. 2015-093-R
v.	:	(consolidated with
	:	EHB Docket No. 2015-159-R)
COMMONWEALTH OF PENNSYLVANIA	:	
DEPARTMENT OF ENVIRONMENTAL	:	
PROTECTION,	:	
	:	
and	:	
	:	
FIRSTENERGY GENERATION, LLC,	:	
	:	
Permittee.	:	

CONSENT ADJUDICATION

NOW this 11th day of September, 2017, the Commonwealth of Pennsylvania, Department of Environmental Protection (the “Department” or “PADEP”), Sierra Club (“Sierra Club”), and FirstEnergy Generation, LLC (“FirstEnergy”) (each individually a “Party” and all collectively the “Parties”) stipulate to the following findings of facts as true and correct and agree to the following in settlement of the litigation that is between them.

FINDINGS

A. The Department is the executive agency of the Commonwealth of Pennsylvania with the authority and duty to administer and enforce the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, P.L. 380, *as amended*, 35 P.S. §§ 6018.101 – 6018.1003 (“Solid Waste Management Act”); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, *as amended*, 71 P.S. § 510-17 (“Administrative Code”); and the rules and regulations (“rules and regulations”) promulgated thereunder.

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B. Sierra Club is a nonprofit corporation with members throughout the United States, including over 32,500 members in Pennsylvania. The stated purposes of the Sierra Club are to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

C. FirstEnergy owns and operates electricity generating facilities in the United States. FirstEnergy directly employs approximately 340 people at its Bruce Mansfield electricity generating station in Shippingport, Pennsylvania. Bruce Mansfield was the first coal-fired station in the country built with a flue gas desulfurization or "scrubber" technology, and states that more than one out of every three dollars spent to build the \$1.4 billion facility was spent on environmental protection.

D. In the above-captioned consolidated appeals, Sierra Club challenged the Department's issuance to FirstEnergy of a renewal and minor modification of Solid Waste Permit No. 300370 (the "Permit") for the Hatfield's Ferry Landfill (the "Landfill").

E. The renewal of the Permit changed the Permittee from Allegheny Energy Supply Company, LLC to FirstEnergy and extended the expiration date of the Permit. The minor modification of the Permit authorized FirstEnergy to dispose coal combustion byproducts generated at its Bruce Mansfield Power Plant ("Bruce Mansfield") at the Landfill.

F. FirstEnergy is the owner and operator of the Landfill and Bruce Mansfield, and the permittee under the Permit.



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G. The current total financial assurance for the Landfill is Thirty-Two Million, One Hundred Ninety Thousand, Twenty-Four Dollars and No Cents (\$32,190,024), as set forth in the bond and bond approval letter dated June 5, 2015.

H. Sierra Club, FirstEnergy, and the Department wish to amicably resolve all of the issues raised in the above-captioned consolidated appeals without resort to further litigation.

ORDER

NOW, THEREFORE, after full and complete negotiation of all matters set forth in this Consent Adjudication and upon mutual exchange of the covenants contained herein, the Parties desiring to avoid litigation and intending to be legally bound, it is hereby AGREED by the Department, Sierra Club, and FirstEnergy to enter into this Consent Adjudication and submit it to the Board for approval as follows.

1. Definitions:

- a. "Bruce Mansfield" means the coal-fired electricity generating station owned and operated by FirstEnergy and located in Shippingport, Pennsylvania.
- b. "Department" and "PADEP" means the Pennsylvania Department of Environmental Protection.
- c. "Effective Date" shall have the meaning set forth in **Paragraph 20**, below.
- d. "FirstEnergy" shall mean FirstEnergy Generation, LLC.
- e. "Landfill" means the captive residual waste disposal facility owned and operated by FirstEnergy and located in Monongahela Township, Greene County, Pennsylvania.
- f. "Leachate Detection Zone" shall have the meaning ascribed to it in the NOV.

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- g. "Leachate Storage Impoundment" or "LSI" shall mean the impoundment for storage and treatment of Phase 3 leachate at the Landfill.
- h. "Major Permit Modification" shall mean a major permit modification by the Department of the Permit as defined at 25 Pa. Code § 287.154(a).
- i. "Minor Permit Modification" shall mean a modification by the Department of the Permit that is not a Major Permit Modification.
- j. "NOV" shall mean the Notice of Violation issued by the Department to FirstEnergy dated March 18, 2017 and which alleged violations of the Solid Waste Management Act at the Landfill.
- k. "Permit" means Solid Waste Permit No. 300370 issued to FirstEnergy by the Department, as subsequently amended and modified.
- l. "Phase 3" shall have the meaning ascribed to it in the Permit and the associated application materials.
- m. "Sierra Club" means the Appellant in the above-captioned consolidated appeals.
- n. "Surface Improvement Plan" shall have the meaning set forth in **Paragraph 3**, below.

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2. The NOV and Related Issues.

- a. FirstEnergy will continue to implement the Leachate Detection Zone remedy and attendant long-term maintenance as approved by the Department in its letter of June 2, 2017. The Department may require or approve modifications to these actions without a modification of this Consent Adjudication.
- b. No later than sixty (60) days after the Effective Date, FirstEnergy shall submit to the Department a Part II Water Quality Management Permit application for the Leachate Storage Impoundment caustic drip system.

3. The Surface Improvement Plan.

- a. FirstEnergy will implement the written plan for improvements to the existing Landfill surface (the "Surface Improvement Plan") attached hereto as **Exhibit A** and incorporated by reference as if fully set forth herein. The purposes of the Surface Improvement Plan are to, among other things, minimize infiltration, further promote positive drainage, prevent ponding of stormwater, and ensure adequate vegetation on areas of the Landfill which are not subject to active disposal operations or final closure (i.e., which are subject to intermediate cover). FirstEnergy will continue to maintain all Landfill surface improvements made pursuant to this Consent Adjudication and the attached Surface Improvement Plan on areas of the Landfill which are not subject to active disposal operations or final closure.
- b. The Department may require or approve modifications to the matters addressed in the Surface Improvement Plan without a modification of this Consent Adjudication.

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4. Closure.

- a. FirstEnergy shall commence final closure of Phase 3 of the Landfill on a “rolling basis” as benches and slopes reach final permitted grades. As such, FirstEnergy shall commence final closure activities in accordance with 25 Pa. Code § 288.234 for each individual Phase 3 bench and/or slope within one hundred twenty (120) days after it is filled to final permitted grade, and shall continue such activities in a timely fashion until each individual bench and/or slope is capped in accordance with a Department-approved closure plan.
- b. Final closure of Phase 3 of the Landfill shall be conducted in accordance with the provisions of 25 Pa. Code § 288.234, except that FirstEnergy shall not request a waiver of the cap requirements of 25 Pa. Code § 288.234(a)(1) for Phase 3 of the Landfill. Provided, however, that FirstEnergy may seek approval from the Department of alternative design standards and/or Department decisions in accordance with 25 Pa. Code §§ 288.234 (b), (c), (e), (f), (g) and/or (h). The Department’s decision(s) to approve or deny such request(s) shall constitute “final action(s)” for purposes of **Paragraph 7**. For the avoidance of doubt, in pursuing any such alternative design standards and/or Department decisions in accordance with 25 Pa. Code §§ 288.234 (b), (c), (e), (f), (g) and/or (h), FirstEnergy shall not request a waiver of the cap requirements of 25 Pa. Code § 288.234(a)(1) for Phase 3 of the Landfill.
- c. Provided, however, that if an individual Phase 3 bench and/or slope is filled to final permitted grade, and if at such time FirstEnergy has submitted an application within two hundred seventy (270) days of the Effective Date for a

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Major Permit Modification to change the approved closure plan in the Permit but the Department has not yet taken final action on said application, then the one hundred twenty (120) day period to commence final closure activities set forth in **Paragraph 4.a**, above, shall be tolled and not commence until the Department takes final action on said application and any appeals/judicial challenges of said final action are conclusively resolved.

5. Permit Modifications.
 - a. One or more Permit modification applications will be submitted by FirstEnergy to effectuate the intent of this Consent Adjudication, as follows:
 - i. An application for a Minor Permit Modification to conform the Form 17R to reflect the Leachate Storage Impoundment caustic drip system described in **Paragraph 2.b**, above.
 - ii. An application for a Minor Permit Modification to conform the bonding requirements to include the attendant long-term maintenance described in **Paragraph 2.a**, above, and the operation and maintenance of the Leachate Storage Impoundment caustic drip system described in **Paragraph 2.b**, above.
 - iii. If FirstEnergy wishes to change the approved closure plan in the Permit, an application for a Major Permit Modification to incorporate such changes.
 - b. Within sixty (60) days of the Effective Date, FirstEnergy shall submit to the Department one or more applications for Minor Permit Modification as described in **Paragraphs 5.a.i and 5.a.ii**, above. FirstEnergy shall use all

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reasonable good faith efforts to ensure that said application(s) is/are technically and administratively complete.

- c. If FirstEnergy wishes to change the approved closure plan in the Permit as described in **Paragraph 5.a.iii**, above, it shall submit to the Department an application for a Major Permit Modification within two hundred seventy (270) days of the Effective Date. FirstEnergy shall use all reasonable good faith efforts to ensure that said application is technically and administratively complete. Provided, however, that FirstEnergy reserves the right to submit an application to change the approved closure plan in the Permit later than two hundred seventy (270) days after the Effective Date, but in such case the tolling provisions of **Paragraph 4.c**, above, shall not apply.

6. 90-Day Deferral in Shipments. FirstEnergy agrees not to ship any CCBs from Bruce Mansfield to the Landfill until December 1, 2017.

7. Sierra Club and FirstEnergy Reservation of Rights. Sierra Club and FirstEnergy reserve the right to appeal the final action(s) of the Department under this Consent Adjudication. Provided, however, that both Sierra Club and FirstEnergy waive any right to appeal any matter that is expressly and conclusively addressed by the terms of this Consent Adjudication. As an example and for the avoidance of doubt, FirstEnergy could not appeal a final action by the Department that denied a FirstEnergy request for a waiver of the cap requirements of 25 Pa. Code § 288.234(a)(1) for Phase 3 of the Landfill, because that matter is expressly and conclusively addressed by **Paragraph 4.b**, above.

8. Other Reservation of Rights. The Department reserves the right, outside of the scope of and without modification to this Consent Adjudication, to require additional measures

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to those referenced herein to achieve compliance with applicable law, as well as to regulate all operations at the Landfill pursuant to the Solid Waste Management Act, the Administrative Code, the rules and regulations, and the Environmental Protection Acts (as that term is defined in 25 Pa. Code Section 287.1), whether by permit modification, administrative order, assessment of civil penalties, or otherwise as provided by law. Sierra Club and FirstEnergy reserve any rights they may have under law to challenge any action which the Department may take to require those measures.

9. Inspections of the Landfill. Commencing on the Effective Date and continuing for a period of one (1) year thereafter, FirstEnergy shall provide Sierra Club with copies of all Department reports for inspections conducted by the Department at the Landfill. Said reports shall be provided to Sierra Club via the email addresses set forth in **Paragraph 15**, below, within twenty (20) days after FirstEnergy receipt of said reports.

10. Modifications. The Parties may modify the terms of this Consent Adjudication by mutual written agreement signed by all of the Parties without a modification of this Consent Adjudication by the Board.

11. Entire Agreement. This Consent Adjudication shall constitute the entire integrated agreement between Sierra Club, FirstEnergy, and the Department. No prior contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or intent of any provisions herein in any litigation or any other proceeding.

12. Attorney Fees. The Parties shall bear their respective attorney fees, expenses, and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this Consent Adjudication.

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13. Enforcement. The Parties hereto agree that the terms of this Consent Adjudication are enforceable in Commonwealth Court. The Parties' sole and exclusive remedy for breach of this Consent Adjudication shall be an action for specific performance or injunction. In no event shall any Party be entitled to monetary damages for breach of this Consent Adjudication. In addition, no legal action for specific performance or injunction shall be brought or maintained until: (a) the non-breaching Party provides written notice to the breaching Party which explains with particularity the nature of the claimed breach, and (b) within thirty (30) days after receipt of said notice, the breaching Party fails to cure the claimed breach or, in the case of a claimed breach which cannot be reasonably remedied within a thirty (30) day period, the breaching Party fails to commence to cure the claimed breach within such thirty (30) day period, and thereafter diligently complete the activities reasonably necessary to remedy the claimed breach.

14. Correspondence with the Department. All correspondence with the Department concerning this Consent Adjudication shall be addressed to:

Program Manager
Waste Management
Pennsylvania Department of Environmental Protection
400 Waterfront Drive, Pittsburgh, PA 15222
(412) 442-4000

15. Correspondence with Sierra Club and FirstEnergy. All correspondence with Sierra Club concerning this Consent Adjudication shall be addressed to:

Charles McPhedran, Esq.
Earthjustice
1617 JFK Boulevard, Suite 1130
Philadelphia, PA 19103
(215) 717-4521
cmcphedran@earthjustice.org

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Lisa Perfetto, Esq.
Earthjustice
48 Wall Street, 19th Floor
New York, NY 10005
(212) 845-7388
lperfetto@earthjustice.org

All correspondence with FirstEnergy concerning this Consent Adjudication shall be addressed to:

James A. Meade, Esq.
Environmental Counsel
FirstEnergy Corp.
800 Cabin Hill Drive
Greensburg, PA 15601
(724) 838-6965

Sierra Club and/or FirstEnergy shall notify the Department and the other Party whenever there is a change in the contact person's name, title, or address.

16. Service. Service to Sierra Club and/or FirstEnergy of any notice or any legal process for any purpose under this Consent Adjudication, including its enforcement, may be made by mailing a copy by first class mail to the above address.

17. Non-Severability. The paragraphs of this Consent Adjudication are NOT severable and should any part hereof be declared invalid or unenforceable, the entire Consent Adjudication shall be declared invalid and unenforceable.

18. Transfer of the Landfill.

- a. The duties and obligations under this Consent Adjudication shall not be modified, diminished, terminated or otherwise altered by the transfer of any legal or equitable interest in the Landfill or any part thereof.
- b. If FirstEnergy intends to transfer any legal or equitable interest in the Landfill which is affected by this Consent Adjudication, FirstEnergy shall serve a copy of this Consent Adjudication upon the prospective transferee of the legal

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and/or equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Department of such intent.

19. Public Notice. The Parties agree and acknowledge that final approval of the Department and entry of this Consent Adjudication are subject to the requirements and procedures of 25 Pa. Code § 1021.141(c), which provides, among other things, for notice of the entry of this Consent Adjudication in the *Pennsylvania Bulletin* and an opportunity for public comment and an opportunity for a third party to object to or appeal from the Consent Adjudication. The Parties recognize the right of the Department to withdraw or withhold consent if the comments, objections, or appeal disclose facts or considerations that indicate that the Consent Adjudication is inappropriate, improper, or inadequate.

20. Entry of this Consent Adjudication. The parties agree and acknowledge that final approval and entry of this Consent Adjudication are subject to the requirements and procedures of 25 Pa. Code Section 1021.141(c), which provides, among other things, for notice of entry of the Consent Adjudication in the *Pennsylvania Bulletin* and an opportunity for public comment and an opportunity for a third party to object to or appeal from the Consent Adjudication. The parties recognize the right of the Department to withdraw or withhold consent if the comments, objections or appeal disclose facts or considerations that indicate that the Consent Adjudication is inappropriate, improper or inadequate. The Consent Adjudication shall become effective (the "Effective Date") when the Board enters the Consent Adjudication provided no appeal thereof is filed, or on such date that any such appeal is denied by Commonwealth Court.



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21. Effect If Not Approved. If, for any reason, the Board should decline to approve this Consent Adjudication in the form presented, the agreement is voidable at the sole discretion of any Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

22. Effect If Approved. If the Board approves this Consent Adjudication in the form presented, then this Consent Adjudication constitutes a full settlement of all issues raised in the above-captioned consolidated appeals and a termination of said appeals before the Board.

23. Titles. A title used at the beginning of any paragraph of this Consent Adjudication shall not be considered to control but may be used to aid in the construction of the paragraph.

24. Termination. The obligations of this Consent Adjudication may be terminated by the Board upon motion of any Party, demonstrating that the obligations herein have been satisfied.

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IN WITNESS WHEREOF, the Parties have caused this Consent Adjudication to be executed by their duly authorized representatives. The undersigned representatives of Sierra Club and FirstEnergy certify under penalty of law, as provided by 18 Pa.C.S. § 4904, that they are authorized to execute this Consent Adjudication on behalf of Sierra Club and FirstEnergy, that Sierra Club and FirstEnergy consent to the entry of this Consent Adjudication; and that Sierra Club and FirstEnergy hereby knowingly waives their rights to appeal this Consent Adjudication and to challenge its content or validity, which rights may be available under Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, the Administrative Agency Law, 2 Pa. C.S. § 1103(a) and Chapters 5A and 7A; or any other provisions of law. Signature by Sierra Club's and FirstEnergy's attorneys certifies only that the Consent Adjudication has been signed after consulting with counsel.

Consent to:

FOR THE COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL PROTECTION:



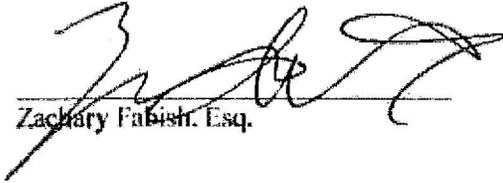
Michael G. Forbeck, P.E.
Waste Management
Environmental Program Manager
Southwest Region

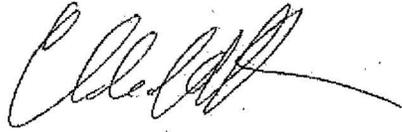


John Herman, Esq.
Marianne Mulroy, Esq.
Forrest Smith, Esq.
Office of Chief Counsel

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FOR SIERRA CLUB


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Charles McPhedran, Esq.
Lisa K. Perfetto, Esq.
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FOR FIRSTENERGY GENERATION, LLC

Donald A. Moul
President, FirstEnergy Generation, LLC

Donald C. Bluedorn II, Esq.
Mark D. Shepard, Esq.
Alana E. Fortna, Esq.
Babst, Calland, Clements & Zomnir, P.C.

James A. Meade, Esq.
FirstEnergy Corp.

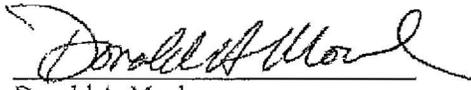
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FOR SIERRA CLUB

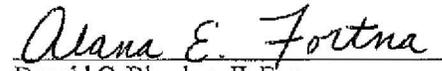
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James A. Meade, Esq.
FirstEnergy Corp.



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This Consent Adjudication is hereby approved and entered by the Board this _____ day
of _____, 2017.

BY THE ENVIRONMENTAL HEARING BOARD

THOMAS W. RENWAND
Chairman and Chief Judge

BERNARD A. LABUSKES, JR.
Judge

MICHELLE A. COLEMAN
Judge

RICHARD P. MATHER, SR.
Judge

STEVEN C. BECKMAN
Judge

Exhibit A

Active Surface Improvement Plan Hatfield's Ferry Coal Combustion Byproduct (CCB) Landfill



Source: Google Earth Pro, 2016

Prepared by:

FirstEnergy

FirstEnergy Generation, LLC
800 Cabin Hill Drive
Greensburg, Pennsylvania 15601

Date Prepared:
August 31, 2017



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1 INTRODUCTION

On July 6, 2017, FirstEnergy Generation, LLC (FirstEnergy) submitted surface improvement procedures to the Pennsylvania Department of Environmental Protection (PADEP) to address erosion rill repair, re-establishing vegetation and stormwater management at the Hatfield's Ferry Coal Combustion Byproduct (CCB) Landfill (hereinafter referred to as the "Landfill"). After FirstEnergy addressed certain points of clarification, PADEP subsequently approved the surface improvement procedures proposed by FirstEnergy. FirstEnergy's contractor has mobilized at the Landfill and started the surface improvement work. This Active Surface Improvement Plan redrafts and expands the previously submitted surface improvement procedures into a more formalized plan.

1.1 BACKGROUND

The Landfill at the Hatfield's Ferry Power Station (hereinafter referred to as the "Station") located in Greene County, Pennsylvania is operated by FirstEnergy. The Station was deactivated and ceased operations in 2013. Wastes generated by Station operations were disposed of at the Landfill, which is a captive site located approximately 1 mile west-southwest of the Station. The Landfill is permitted under Pennsylvania Department of Environmental Protection (PADEP) Solid Waste Permit No. 300370. Between 2009 and 2013, the Phase III disposal area was constructed in stages (referred to as "Steps"): Steps 1, 2, and 3-1, which have a combined lined area of approximately 58 acres. Surface water runoff and leachate collected from the Phase III disposal area are routed to the LSI, which is located east of the Phase II and Phase III disposal areas.

Upon deactivation of the Station in 2013, the Landfill surface was graded to provide positive drainage and was subsequently seeded to provide stabilization from surface water runoff. Recently the active Landfill surface has exhibited localized areas of surface erosion, poorly-draining areas, and areas of inadequate vegetative cover. Figure 1 shows the current surface water conditions.

2 PURPOSE

The purposes of this Active Surface Improvement Plan are to, among other things, further promote positive drainage, prevent ponding of stormwater, and ensure adequate vegetation.

3 WORK SCOPE/PROCEDURE

This Active Surface Improvement Plan outlines activities to identify areas on the active Landfill surface that should be repaired/regraded to promote positive drainage, to reestablish adequate vegetative cover, and to install Erosion and Sediment (E&S) control best management practices (BMPs) in accordance with the PADEP Erosion and Sediment Pollution Control Program Manual. Figure 2 depicts the improved surface water management plan. The following procedures shall be implemented to execute the proposed plan.

3.1 IDENTIFICATION

A FirstEnergy representative and a contractor representative will walk the active Landfill surface to identify and mark:

- Existing E&S control features and assess their condition
- Erosion rills and areas that should be repaired (filled in/smoothed out) using on-site bottom ash
- Erosion rills and areas that can be regraded to remove the rills
- Exposed bottom and fly ash areas
- Areas that have partial vegetative cover
- Areas that should be regraded to divert runoff to prevent erosion
- Areas that could benefit from additional sedimentation control features on the active surface
- Areas of ponding water/poorly-draining areas must be regraded to minimize standing water on the active surface

3.2 IMPROVEMENTS

Once all areas of the active Landfill surface requiring improvement have been identified and marked, the contractor shall proceed as follows:

- Fill in and/or regrade the rills
- Remove sediment and debris that has accumulated in existing E&S control structures
- Install 12" diameter compost filter sock on the down gradient side of the bottom ash stockpile
- Establish additional E&S control measures (as applicable)
- Establish bottom ash maintenance roads to support future pipe jetting efforts

Permanent/existing and new E&S control BMPs shall be implemented and maintained in accordance with the PADEP Erosion and Sedimentation Control Program Manual and the facility's solid waste permit. Damaged sediment control structures shall be repaired or replaced immediately.

Compost filter sock material shall be of photodegradable multi-filament polypropylene (MFPP). Sock fabric and compost shall meet the standards of Tables 4.1 and 4.2, respectively, of the PADEP Erosion and Sedimentation Control Program Manual. Traffic shall not be permitted to cross filter socks.

As disturbed areas within the active Landfill boundary approach grade, preparations should be made for seeding and mulching to begin (refer to Section 3.4 below). The Contractor shall not

disturb areas beyond that necessary to satisfactorily complete the required work. Contractor should track or groove the disturbed surface to slow surface water during a storm event.

3.3 SOIL COVER

Soil will be placed on areas of the active Landfill surface which have exhibited signs of erosion or minimal vegetative growth and in areas where addition of soil is needed to prevent ponding of water on the landfill surface. Soil will be obtained from the on-site soil stockpiles or from the permitted borrow areas.

- As the rills are repaired a layer of soil sufficient to support vegetation will be applied
- A layer of soil to support vegetation will also be applied to the identified exposed bottom/fly ash areas
- Regrade the soil stock piles/borrow areas and install E&S controls as appropriate

3.4 SEEDING/MULCHING

Disturbed areas of the active Landfill surface will be seeded as soon as practical upon completion of improvements and placement of soil cover as outlined in Sections 3.2 and 3.3 herein. In accordance with facility's solid waste permit Form H (Revegetation), direct seeding of CCBs may be performed. Form H, Table C.a.2 provides a temporary seed mixture for direct seeding of CCBs. Based on current discussions with a seeding contractor a slightly modified seed mix will be used as follows:

- All soil, partially vegetated areas, and the soil stock piles/borrow areas will be addressed
- Lime and fertilizer will be applied
- Seed will be applied at 170 pounds per acre
- Seed mix:
 - 40% Fawn Tall Fescue
 - 15% Birdsfoot Trefoil
 - 15% Alsike Clover
 - 10% Perennial Ryegrass
 - 10% Orchardgrass
 - 10% Climax Timothy
- Mulching will be with hay, straw, or if hydro seeding, a wood cellulose fiber

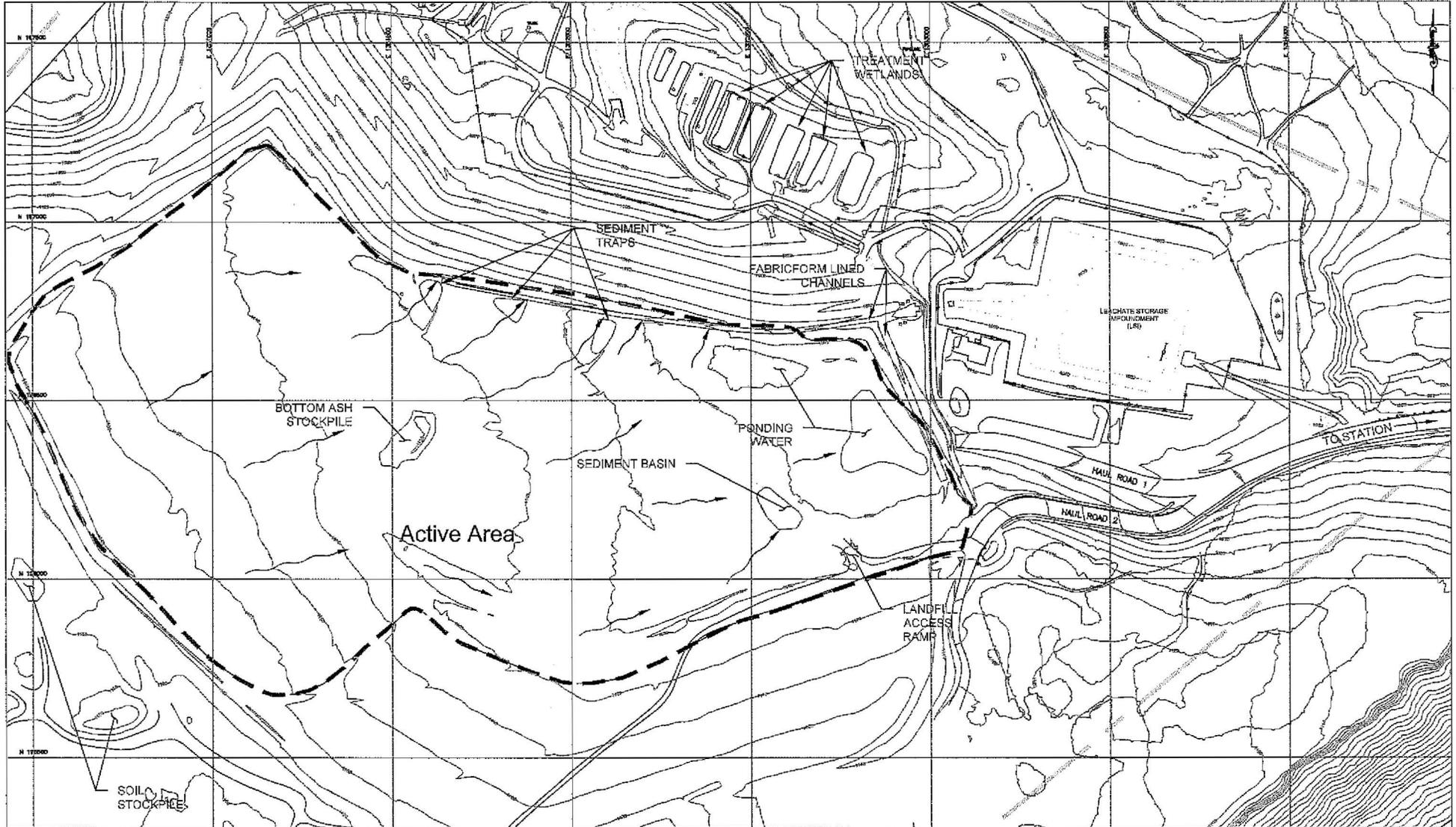
FirstEnergy will periodically inspect the Landfill surface and make any repairs needed in order to maintain the surface improvements made pursuant to this Active Surface Improvement Plan.

4 SCHEDULE

The following schedule outlines the activities and durations associated with the implementation of the Active Surface Improvement Plan:

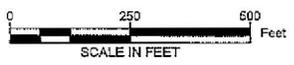


- Contractor mobilized on July 10th to begin repair activities in accordance with this procedure
- Approximately 8 weeks will be needed to prepare the site for seeding
- Seeding will occur within one week after site is prepared



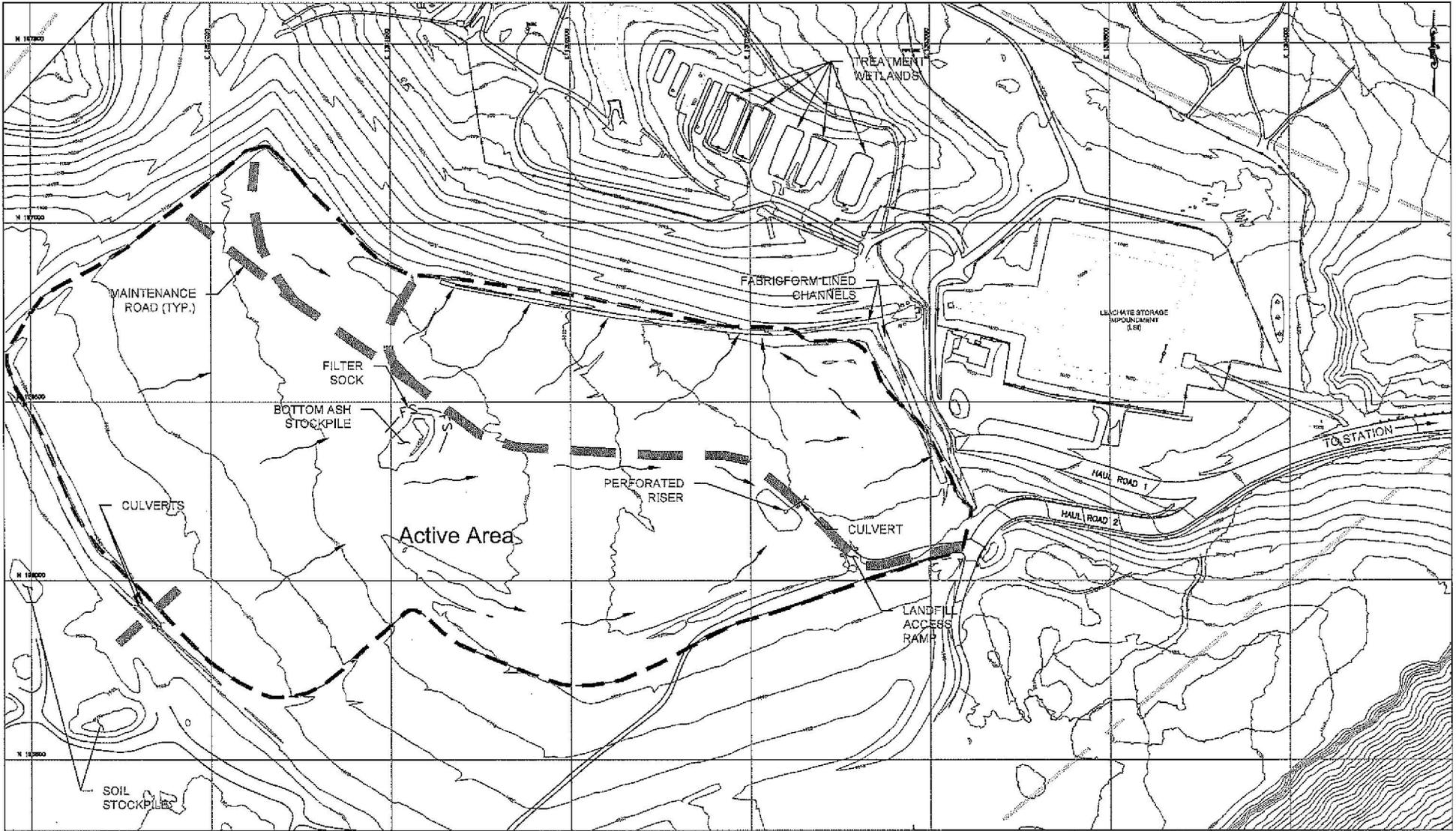
LEGEND

- ACTIVE LANDFILL BOUNDARY
- FLOW PATH



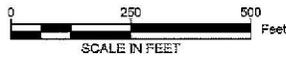
TETRA TECH
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400 PENN CENTER BLVD - SUITE 200
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HATFIELD CCB LANDFILL
SURFACE WATER CURRENT CONDITIONS
FIGURE 1
08/31/2017



LEGEND

-  ACTIVE LANDFILL BOUNDARY
-  FLOW PATH
-  MAINTENANCE ROAD



www.tetra-tech.com
400 PENN CENTER BLVD - SUITE 800
PITTSBURGH, PA 15225
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HATFIELD CCB LANDFILL
IMPROVED SURFACE WATER
MANAGEMENT PLAN
FIGURE 2

08/31/2017