



B. Defendant, FirstEnergy, an Ohio corporation, is the owner and operator of the Impoundment, a residual waste disposal facility located in Greene Township, Beaver County, Pennsylvania and Hancock County, West Virginia.

C. The parties have agreed that the settlement of this matter without further litigation is in the public interest and will serve the purpose of judicial economy.

NOW, THEREFORE, upon the consent and agreement of the parties to this Consent Decree by their authorized officials, it is HEREBY ORDERED, ADJUDGED, AND DECREED as follows:

### **I. GENERAL PROVISIONS**

1. Jurisdiction and Venue. This Court has jurisdiction over the subject matter of this action and the parties pursuant to 28 U.S.C. § 1331 and 42 U.S.C. § 6972(a)(1)(B). For the purposes of this Consent Decree and the underlying complaint, FirstEnergy waives all objections and defenses that it may have to jurisdiction of this Court or to venue in this District.

FirstEnergy does not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

2. Retention of Jurisdiction. Jurisdiction is retained by this Court for the purposes of issuing such further orders and directions as may be necessary and appropriate for the implementation or modification of this Consent Decree, and for enforcing compliance with the provisions of this Consent Decree.

3. Parties Bound. This Consent Decree shall be binding upon the Department, FirstEnergy, and FirstEnergy's officers, agents, servants, employees, successors and assigns.

4. Waiver of Certain Defenses. In any subsequent administrative or judicial proceeding initiated by the Department for injunctive relief, penalties, or other appropriate relief

relating to the Impoundment, FirstEnergy shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the Department in the subsequent proceeding were or should have been brought in the instant case.

5. Authority to Sign Consent Decree. Each undersigned representative certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind that entity to this document.

6. Notification.

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

Michael G. Forbeck  
Environmental Program Manager, Waste Management Program  
Department of Environmental Protection  
Southwest Regional Office  
400 Waterfront Drive  
Pittsburgh, PA 15222-4745  
(412) 442-4000  
Fax: (412) 442-4194

and

Compliance Specialist  
Clean Water Program  
Department of Environmental Protection  
Southwest Regional Office  
400 Waterfront Drive  
Pittsburgh, PA 15222-4745  
(412) 442-4000  
Fax: (412) 442-5228

Correspondence with FirstEnergy. All correspondence with FirstEnergy concerning this Consent Decree shall be addressed to:

Raymond L. Evans  
Vice President, Environmental

FirstEnergy Corp.  
Akron, OH 44308  
(330) 761-4482  
Fax: (330) 384-5433

FirstEnergy shall notify the Department whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this Consent Decree, including its enforcement, may be made by mailing a copy by first class mail to the above address.

7. Entire Agreement. This Consent Decree shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.

8. Costs of Suit. Each party to this action shall bear its own costs and attorneys' fees.

9. Public Notice. Prior to final approval and entry of this Consent Decree, notice will be provided to the public, and the public shall have at least 30 days in which to make any comments. The Department may withhold or withdraw its consent to this Consent Decree based on such comments.

## **II. COMPLIANCE REQUIREMENTS**

10. FirstEnergy shall effectively address the potential for constituents contained in the waste materials within the Impoundment to present a danger to one or more environmental receptors, and take all measures necessary to comply with applicable law, including but not limited to laws protecting ground water and surface waters surrounding the Impoundment.

FirstEnergy shall take the actions set forth below:

a. Seep monitoring and identification: Conduct quarterly reconnaissance within three-quarters (3/4) of a mile in Pennsylvania and West Virginia surrounding the ultimate waste disposal limits of the Impoundment, unless otherwise agreed by the Department, to locate any and all seeps or springs (“seeps”) which have developed as of or prior to such reconnaissance, using best efforts to obtain access to properties not owned or controlled by FirstEnergy. FirstEnergy shall notify the Department in writing of the location of newly identified seeps within seven (7) days of discovering a seep. Newly identified seeps shall be sampled within thirty (30) days of discovery for flow quantity and the following constituents: ammonia-nitrogen, bicarbonate, calcium, chloride, fluoride, chemical oxygen demand, nitrate-nitrogen, pH, specific conductance, sulfate, total alkalinity, total dissolved solids, total organic carbon, turbidity, iron, manganese, magnesium, potassium, sodium; total and dissolved concentrations of barium, boron, cadmium, chromium, copper, lead, mercury, selenium, silver, zinc, arsenic, molybdenum, thallium, and cyanide; unless the Department authorizes a modification to this list of parameters in writing upon a showing of good cause. FirstEnergy shall also resample all seeps, streams, domestic water supplies and monitoring wells referenced in either the Department-approved water monitoring program or the locations listed on Appendix A hereto, on a calendar quarterly basis for these constituents, to determine whether any previously identified uncontaminated seeps, streams, water supplies or monitoring wells have become contaminated by the Impoundment, and to measure flow quantity for seeps. The analytical results of all such sampling shall be submitted to the Department within sixty (60) days of sampling. FirstEnergy shall prepare and submit to the Department a quarterly report identifying any and all seeps by longitude/latitude and a map, and include current and historical sampling data and trend analyses for each seep, stream, water supply and monitoring well. Such

reports shall be submitted in paper and electronic format no later than the last day of April, July, October and January of each year.

b. Seep management: Seeps and groundwater shall be considered “contaminated by the Impoundment” for purposes of this Consent Decree when the Department or FirstEnergy determines that a seep has been impacted by waste material within the Impoundment, based upon parameter values and/or upward trending constituent levels, which indicate that ground water degradation is occurring. FirstEnergy shall, within thirty (30) days of receiving notice from the Department, or FirstEnergy’s own determination (whichever occurs earlier), that a seep is or has become contaminated by the Impoundment, submit a written plan to the Department describing the means by which FirstEnergy will manage such seep. All seeps contaminated by the Impoundment must be managed by FirstEnergy by one of the following means.

i. Within sixty (60) days of receipt of such notice from the Department, submit a full and complete application for authorization to discharge to a surface water pursuant to an NPDES permit issued by the appropriate governmental authority, or

ii. Within sixty (60) days of receipt of such written notice from the Department (or such other time period as approved in writing by the Department), submit for Department approval a plan and implementation schedule (providing that the plan will be implemented no later than ninety (90) days following Department approval unless another time frame is approved by the Department, or FirstEnergy is unable to acquire necessary property rights despite its best efforts to do so, in which case FirstEnergy shall propose in writing within such time

period an alternative plan to comply with Paragraph 10(b)), to collect and convey the seep back into the Impoundment, or

iii. As otherwise agreed to in writing by the Department and FirstEnergy.

c. Drinking water protection:

i. FirstEnergy shall monitor drinking water wells as directed by the Department. For any and all drinking water wells within one-half mile of the ultimate waste disposal limits of the Impoundment, FirstEnergy shall, upon receipt of written direction from the Department, offer the owner, and if accepted, restore the affected water supply at no additional cost to the owner or replace the affected water supply with an alternate source that is of like quantity and quality to the original supply at no additional cost to the owner, and otherwise comply with the requirements of 25 Pa. Code § 289.255. The Department expressly reserves its authority to require additional measures to protect drinking water sources pursuant to its statutes, regulations, permit and order authority.

ii. No later than two years following entry of this Consent Decree, or earlier if required pursuant to Subparagraph (i), above, FirstEnergy shall offer, and if accepted, provide at no additional cost to the residence, an alternate source of drinking water of like quantity and quality to the original supply, to the following residences: 105, 122, 223, 240, 242, 248, 249, 256, 261, 263, 264, 268, 276, 282, 292, and 292 Cullen Drive, Greene Township, Beaver County, Pennsylvania; 490 Red Dog Road, Greene Township, Beaver County, Pennsylvania; 2402 Pyramus Road, Chester, West Virginia; 61 Burgundy Lane,

Chester, West Virginia; 149 Marks Run Road, Chester, West Virginia; and 2310 Pyramus Road, Chester, West Virginia.

d. Lawrenceville seep collection repair activities: FirstEnergy shall continue to implement the measures approved by the Department on May 10, 2012, to collect previously identified contaminated seeps in Lawrenceville, West Virginia.

e. Lawrenceville seep collection improvement activities: FirstEnergy shall, no later than August 1, 2012, submit to the Department, with a copy submitted to the West Virginia Department of Environmental Protection, plans and a schedule to address any further modifications or additions to the collection facilities in Lawrenceville, West Virginia necessary to abate seeps contaminated by the Impoundment that flow into any surface stream. FirstEnergy shall implement such plans in accordance with the plans and schedule, as approved or modified by the Department.

f. Investigation of measures to reduce or prevent ground water impact: FirstEnergy shall undertake and complete an investigation and economic/technical feasibility assessment of the matters and issues listed in the subparagraphs below. No later than February 1, 2013, FirstEnergy shall submit to the Department a report, signed and sealed by a Professional Engineer, who is licensed in Pennsylvania. The report shall include, without limitation, all data and analysis, and the conclusions derived therefrom, regarding the following.

i. A detailed evaluation of: current solidification characteristics of the waste material based upon core drillings at numerous representative lateral and depth locations in the impoundment and other available testing methodologies; all methods and options available to enhance or expedite dewatering and/or solidification of the waste material, including analyses of the

projected rates of dewatering/stabilization, feasibility of implementation, and resulting waste-to-groundwater impacts for each such method and option; and the influence of current and future infiltration of precipitation and ground water into the waste material on future dewatering, stabilization, and waste-to-groundwater impacts.

ii. Infiltration rates of precipitation into waste that would occur at and after closure, based upon varying gradients, direct seeding, and/or application of natural and synthetic cover/capping materials.

iii. Feasibility of the selective application of slurry walls and associated pumping facilities installed in peripheral locations to the Impoundment to limit or re-direct groundwater infiltration or contamination.

iv. Feasibility of the selective application of pumping wells installed within and/or in peripheral locations to the Impoundment to limit or re-direct groundwater infiltration or contamination.

v. Water table levels within the waste material in the Impoundment at representative locations, and the feasibility of the following measures to reduce such levels: effects of an increase in positive slopes of waste, cover/capping to prevent/minimize infiltration of precipitation, use of synthetic and natural cover/capping materials to prevent/minimize infiltration of precipitation, and the application of pumping wells and/or other liquid removal technology. Such information shall also be used to evaluate the issues set forth in Subparagraphs (i) through (ix), herein.

vi. Feasibility of minimizing the size of the permanent pool in the Impoundment, and the installation and permanent maintenance of a natural or synthetic liner between the uncontaminated stormwater and the waste material.

vii. Explanation of the presence of arsenic in seeps and groundwater originating from the Impoundment, and the feasibility of minimizing this parameter, including, but not limited to, an investigation of any change in waste chemistry or characteristics, or change in water chemistry and pH within the Impoundment during the last seven (7) years.

viii. Evaluation of flow rates and concentration of selenium and boron discharges from the Impoundment at NPDES permitted outfalls.

ix. Evaluation of the future safety and stability of the dam in light of all methods and options for waste stabilization, dewatering, and closure activities.

g. Protection of groundwater and surface waters.

i. FirstEnergy shall take all measures necessary to ensure that the existing and designated uses of surface waters, including but not limited to Little Blue Run, receiving any contaminants from the Impoundment, are protected, and that water quality criteria in such surface waters achieve applicable regulatory standards for all parameters, including but not limited to ammonia-nitrogen, bicarbonate, calcium, chloride, fluoride, chemical oxygen demand, nitrate-nitrogen, pH, specific conductance, sulfate, total alkalinity, total dissolved solids, total organic carbon, turbidity, iron, manganese, magnesium, potassium, sodium; total and dissolved concentrations of barium, boron, cadmium, chromium, copper, lead, mercury, selenium, silver, zinc, arsenic, molybdenum, thallium, and cyanide.

Notwithstanding the foregoing, seeps contaminated by the Impoundment shall be managed pursuant to Paragraph 10(b), above.

ii. FirstEnergy shall take all measures necessary to ensure that NPDES permit limitations for point source discharges from or associated with the Impoundment are not exceeded.

iii. FirstEnergy shall take all measures necessary to ensure that groundwater impacted by the Impoundment does not exceed, and if necessary, is abated to applicable regulatory standards, including those set forth in Section 289.267 of the Department's Residual Waste regulations, 25 Pa. Code § 289.267.

h. Closure plan for the Impoundment. No later than March 31, 2013, FirstEnergy shall submit to the Department an application for a major modification to the Permit for the Impoundment proposing a closure plan for the Impoundment in accordance with the Department's Residual Waste regulations and in compliance with the requirements of this Consent Decree. The proposed closure plan shall fully address the results of FirstEnergy's investigation and feasibility assessment required by Paragraph 10(f), above.

i. Department approved plans. Any plan and schedule submitted by FirstEnergy as approved by the Department in accordance with any requirement of this Consent Decree shall become part of this Consent Decree. A violation of any such plan and schedule shall constitute a violation of this Consent Decree.

j. Information to and involvement by Community. FirstEnergy shall provide a copy of the reports required under Paragraphs 10(a) and 13, and the investigative/assessment results required under Paragraph 10(f), for review by community members by providing such materials concurrently and without charge to the Secretary of Greene Township. FirstEnergy

shall also make appropriate representatives available to attend and participate in public meetings as requested by the Department.

k. FirstEnergy shall conduct monitoring sufficient to ensure that operation of the Impoundment will not cause or contribute to an exceedance of Ambient Air Quality Standards, in accordance with Section 131.1 of the Department's regulations, 25 Pa. Code § 131.3. No later than ninety (90) days following entry of this Consent Decree, FirstEnergy shall submit for approval by the Department a plan for the establishment of a fugitive particulate monitoring system for the Impoundment. The plan shall propose monitoring site locations of sufficient number and spatial distribution to accurately determine the rates at which particulate emissions from the Impoundment are deposited in peripheral areas, and that monitors shall be constructed in conformance with the standards of ASTM D 1739-98. The location of the monitoring sites shall be initially based on a wind rose of the area derived from climatological data recorded at the nearest National Weather Service weather station. The plan shall further propose specifications for, and a location for the installation of, a meteorological monitoring station near the Impoundment that conforms to the provisions of "Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, US Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, February 2000. FirstEnergy shall prepare and submit to the Department a quarterly report of all particulate monitoring results, no later than the last day of April, July, October and January of each year. Upon completion of one calendar year of meteorological monitoring data collection, FirstEnergy shall submit to the Department a re-evaluation of the fugitive particulate monitoring system based on the site-specific data.

1. FirstEnergy shall, no later than December 31, 2016, cease disposing in the Impoundment the waste materials currently authorized under the Permit: FOG plant low solids waters, stabilized CCB sludge (includes Flue Gas Desulfurization (FGD) scrubber sludge mixed with additional lime, FOG Plant high solids water, fly ash, bottom ash, waste streams from the Low and High Dissolved Solids Ponds) and other wastes or waste waters from the Low Solids Line.

11. Reservation of Rights. The Department reserves the right to require additional measures to achieve compliance with applicable Law.

12. Compliance with Law. This Consent Decree in no way affects or relieves FirstEnergy of any responsibility to comply with any federal, state or local law or regulation, or applicable permit. FirstEnergy is responsible for achieving and maintaining compliance with all applicable federal and state laws, regulations and permits, and compliance with this Consent Decree shall be no defense to any actions commenced pursuant to such laws, regulations, or permits. This Consent Decree shall not be construed as a permit issued pursuant to federal, state or local law, or as a modification of any existing permit so issued.

13. Progress Reports. Commencing six months from the Date of Entry, and continuing every six months thereafter on or before January 31 and July 31 of each year, FirstEnergy shall submit to the Department a semi-annual progress report in both paper and electronic format. FirstEnergy shall include in these progress reports all information necessary to determine FirstEnergy's compliance with the terms of this Consent Decree.

14. Transfer of Impoundment.

a. The duties and obligations under this Consent Decree shall not be modified, diminished, terminated or otherwise altered by the transfer of any legal or equitable interest in the Impoundment or any part thereof.

b. If FirstEnergy intends to transfer any legal or equitable interest in the Impoundment, FirstEnergy shall serve a copy of this Consent Decree upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Department of such intent.

15. Civil Penalty. In full satisfaction and settlement of the Department's claim for civil penalties arising from claims set forth in the Department's Complaint, occurring up to and including July 27, 2012, FirstEnergy shall pay a civil penalty of Eight Hundred Thousand Dollars (\$800,000.00) to the Department in three payments, the first payment of Two Hundred Seventy Thousand Dollars (\$270,000.00) to be paid within one hundred twenty (120) days after entry of this Consent Decree, the second payment of Two Hundred Sixty-Five Thousand Dollars (\$265,000.00) within one (1) year thereafter, and the remaining payment of Two Hundred Sixty-Five Thousand Dollars (\$265,000.00) within two (2) years thereafter.

16. Stipulated Civil Penalties.

a. In the event FirstEnergy fails to comply in a timely manner with any provision of this Consent Decree, FirstEnergy shall be in violation of this Consent Decree and, in addition to other applicable remedies, shall pay a civil penalty in the amount determined under the following schedule:

i. For any violation of Paragraphs 10(a), (b), (c)(i), (d), (f), (h), (i), (j) and (k), Two Thousand Five Hundred Dollars (\$2,500.00) per day for each day of each violation;

ii. For any violation of Paragraphs 10(c)(ii), and (e), Five Thousand Dollars (\$5,000.00) per day for each day of each violation; and

iii. For any violation of Paragraph 10(l), Twenty-Five Thousand Dollars (\$25,000.00) per day.

b. Stipulated civil penalty payments shall be payable monthly on or before the fifteenth day of each succeeding month.

c. Any payment under this paragraph shall neither waive FirstEnergy's duty to meet its obligations under this Consent Decree nor preclude the Department from commencing an action to compel FirstEnergy's compliance with the terms and conditions of this Consent Decree. The payment resolves only FirstEnergy's liability for civil penalties arising from the violation of this Consent Decree for which the payment is made.

d. Stipulated civil penalties shall be due automatically and without notice.

17. Force Majeure.

a. In the event that FirstEnergy is prevented from complying in a timely manner with any time limit imposed in this Consent Decree solely because of a strike, fire, flood, act of God, or other circumstance beyond FirstEnergy's control and which FirstEnergy, by the exercise of all reasonable diligence, is unable to prevent, then FirstEnergy may petition the Department for an extension of time. An increase in the cost of performing the obligations set forth in this Consent Decree shall not constitute circumstances beyond FirstEnergy's control.

FirstEnergy's economic inability to comply with any of the obligations of this Consent Decree shall not be grounds for any extension of time.

b. FirstEnergy shall only be entitled to the benefits of this paragraph if it notifies the Department within five (5) working days by telephone and within ten (10) working days in writing of the date it becomes aware or reasonably should have become aware of the event impeding performance. The written submission shall include all necessary documentation, as well as a notarized affidavit from an authorized individual specifying the reasons for the delay, the expected duration of the delay, and the efforts which have been made and are being made by FirstEnergy to mitigate the effects of the event and to minimize the length of the delay. The initial written submission may be supplemented within ten working days of its submission. FirstEnergy's failure to comply with the requirements of this paragraph specifically and in a timely fashion shall render this paragraph null and of no effect as to the particular incident involved.

c. The Department will decide whether to grant all or part of the extension requested on the basis of all documentation submitted by FirstEnergy and other information available to the Department. In any subsequent litigation, the FirstEnergy shall have the burden of proving that the Department's refusal to grant the requested extension was an abuse of discretion based upon the information then available to it.

18. Withdrawal. Unless and until such time that the Court enters this Consent Decree, the Department may withdraw consent and authorization to be bound by the terms of the Consent Decree.

19. Modification. The Consent Decree may be modified by written consent of the Parties. Any modification of this Consent Decree by the Parties shall be in writing, filed and approved by the Court before it will be deemed effective.

20. Termination. The obligations of this Consent Decree may be terminated by the Court upon motion of any party for good cause shown, at any time following ten (10) years from entry of this Consent Decree.

21. If, for any reason, the Court should decline to approve this Consent Decree in the form presented, this 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.

The parties hereby consent to entry of the foregoing Consent Decree:

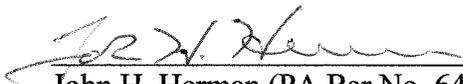
FOR FIRSTENERGY  
GENERATION CORP.:

FOR THE COMMONWEALTH OF  
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ENVIRONMENTAL PROTECTION:

  
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Attorneys for First Energy Generation Corp.

Judgment is hereby entered in accordance with the foregoing Consent Decree this \_\_\_\_ day of \_\_\_\_\_, 201\_\_\_. The parties are hereby ordered to comply with the terms thereof.

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UNITED STATES DISTRICT JUDGE