MEMORANDUM

SUBJECT: EPA Comments on "Assessment of Dam Safety of Coal Combustion Surface Impoundments: GenOn/NRG Cheswick Power Station, Springdale, PA"

DATE: November 8, 2013

1. On page 8, Section 3.1.2, add a period at the end of the first paragraph.
2. On page 13, Section 5, under Emergency Pond 203, please remove the second "Minor deficiencies include the following:" as this statement appears in the previous paragraph.
3. Remove blank page prior to Appendix C (page 54 of 121).

From:	Frank, Stephen
To:	Hoffman, Stephen; Englander, Jana
Subject:	Comments Request on Coal Ash Site Assessment Round 12 Draft Report -Cheswick Generating Station
Date:	Friday, December 13, 2013 9:39:50 AM
Attachments:	Fig 3B Pages from Cheswick Assess Report Rev Draft Nov-06-2013.pdf Cheswick_site_layout - final fence layout.pdf Final Grade of BAPA 10.2013 prnt.pdf

Dear Mr. Hoffman and Ms. Englander,

As requested, NRG has reviewed and is providing the following comments on the Draft Report for Cheswick Generating Station:

- The station owner and operator is NRG Power Midwest LP (NRG), a subsidiary of NRG Energy, Inc. and should replace “GenOn” or “GenOn Energy” throughout the report. The GenOn name changed for this station in May of 2013.

- Page 2, Note that the pond names are “Bottom Ash Recycle Pond” and “Emergency Ash Pond.” The numbers 303 and 203 are Internal Monitoring Points (IMPs) for each pond under the NPDES permit (e.g., IMP 303). Please remove “303 and 203” after the names of the ponds throughout the report.

- Page 3, Section 2.1 (2nd to last sentence is inaccurate). Note that bottom ash is sluiced from the ash hopper under the boiler to the hydrobins. Heavy ash particles settle in the hydrobins. The water with suspended ash particles overflows from the hydrobins to the bottom ash ponds for additional settling. A polymer is added to the hydrobin overflow water to facilitate settling in the ponds. The water is drained (decanted) from the hydrobins a few days per week to dewater the ash in the hydrobins prior to shipment to the landfill.

- Page 3, Section 2.1.1 (Note the ponds do not receive “sluiced” bottom ash flows. The ponds receive the ash transport water overflow from the hydrobins after settling of the heavy ash particles.)

  From the stilling basin, decant water is ~~either~~ pumped ~~back to the plant for re-use or~~ ~~discharged~~ to the Allegheny River to the south of the impoundment via a pipe along Tawney Run and over Pittsburgh Street. The discharge is authorized by Pennsylvania National Pollutant Discharge Elimination System (PA NPDES) Permit No. PA0001627 at Internal Monitoring Point (IMP) 303 via Outfall No. 003. The Recycle Pond ~~303~~ previously discharged to Tawney Run.

  (Note: The Bottom Ash “Recycle” Pond name is a misnomer from

the original design.)

- Page 3 & 4, Section 2.1.2

  Decant water flows through an effluent trough along the south side of the impoundment. From there, it enters a 24-inch Corrugated Metal Pipe (CMP) and flows along the west side of the Emergency Pond into the Stilling Basin. From the Stilling Basin, water is discharged to the Allegheny River to the south of the impoundment. ~~The 24-inch CMP runs~~ along Tawney Run and over Pittsburgh Street. The discharge is authorized by Pennsylvania National Pollutant Discharge Elimination System (PA NPDES) Permit No. PA0001627 at IMP 203 via Outfall No. 003.

- Page 5, Section 2.2.1. The hazard potential rating of SIGNIFICANT is not warranted. As defined in Appendix A, NRG believes a LOW hazard potential is appropriate for the following reasons:

  a. The ponds are relatively small compared to most other ash ponds in the industry. The Bottom Ash Recycle Pond has a maximum capacity of approximately 1,025,579 gallons. The Bottom Ash Emergency Pond has a maximum capacity of approximately 936,187 gallons. Only one pond is in service at a time. Both ponds are interconnected by two 14 inch diameter overflow pipes providing additional capacity from the out of service pond. The Recycle Pond is also equipped with an emergency overflow riser that discharges to Tawney Run minimizing the potential for over topping the embankments. Therefore, in the unlikely case of a release, the quantity of water released would be limited.

  b. Because heavier ash particles are removed from the transport water before entering the ponds, the water contains substantially less ash than the sluiced transport water entering the hydrobins. Therefore, in the unlikely case of a release from the ponds, the water would contain less ash and cause minimal environmental losses to Tawney Run.

  c. The Emergency Pond and Recycle Ponds are located more than 750 and 1,000 feet, respectively, from Pittsburgh Street. As depicted on the attached aerial map overlaid with topographic elevations and the final grade plan from a recent Erosion and Sedimentation Control Plan, the ponds are located in a valley. The land surrounding and topographically downhill from the ponds is on NRG property and is approximately 250 feet wide at its narrowest point and is a topographically low area (i.e., ~755 ft. msl). In the unlikely

case of a catastrophic release, the water would flatten out across the area south of the ponds, enter Tawney Run, and flow through the culvert under Pittsburgh Street. Homes along Duquesne Court and North Duquesne Avenue are topographically higher (i.e., >760 ft. msl) than the flow path along Tawney Run (<755 ft. msl) and would not be impacted. In addition, the NRG property is fenced to limit public access. Therefore, a release would result in no probable loss of human life and low economic losses. All losses would be contained within the fenced area of the station.

- Page 6, Section 2.3.3 Outlet Works:

Recycle Pond

Bottom Ash Recycle Pond ~~303~~ decants water through a 40-ft long weir that discharges into a 40-ft long by 18-ft wide rectangular concrete stilling basin with an open top. A floating boom and steel slide gate serve as baffles to exclude floating debris from the discharge. The pump house directs decant water for ~~re-use in the plant~~ discharge at Outfall 003. ~~Additional~~ Effluent originally discharged through an 18-inch diameter pipe to nearby Tawney run. NPDES requirements led to the re-routing of pond outflow, ~~not re-used in the plant~~, directly to the Allegheny River in the late 197~~8~~0s / early 198~~9~~0s based on discussions with plant personnel. The discharge is authorized by Pennsylvania National Pollutant Discharge Elimination System (PA NPDES) Permit No. PA0001627 at IMP 303 and Outfall No. 003.

Emergency Pond

The outlet works for Emergency Ash Pond ~~203~~ consist of an 80-foot long metal effluent trough with top plates
forming a triangle in cross-section. The effluent trough is underlain with a 3-foot wide sand base. Effluent
originally discharged through a 24-inch corrugated metal pipe to nearby Tawney run. In the late 1970s / early 1980s, NPDES requirements led to the re-routing of pond outflow into the 40-ft long by 18-ft wide rectangular concrete stilling basin with an open top. A floating boom and steel slide gate serve as baffles to exclude floating debris from the discharge. The pump house directs decant water for re-use in the plant discharge to Outfall 003. ~~directly to the Allegheny River in the late 1980s / early 1990s based on discussions with plant personnel.~~ The discharge is authorized by Pennsylvania National Pollutant Discharge Elimination System (PA NPDES) Permit No. PA0001627 at IMP 203 via Outfall No. 003.

(Note: Please see marked up Figure 3B that is attached)

- Page 8, Section 3.1.1 Stormwater Inflows:

  Assuming stormwater inflows to the ponds are limited to direct precipitation and a freeboard of 2 feet is available in each pond, available storage volume is sufficient to contain a 24-hour 100-year storm, but not sufficient to contain a PMP (Probable Maximum Precipitation) event without overtopping the crest of the ponds. If pond discharge through the normal outlet and 24 inch emergency riser pipe is considered in combination with the freeboard storage, the ponds ~~may be~~ are capable of storing/passing the PMP event; however, a complete hydrologic and hydraulic analysis along with a topographic survey of the areas surrounding the ponds is needed to evaluate the performance the ponds in these design events. Neither the Bottom Ash Recycle Pond ~~303~~ nor the Emergency Ash Pond ~~203~~ have emergency spillways for management of possible pond overflow. However, both ponds are interconnected with two 14 inch diameter steel pipes ensuring all extra pond capacity is utilized during a PMP event prior to overflow via the 24 inch corrugated metal emergency riser pipe in the Recycle Pond to Tawney Run. (A photograph of the 14" overflow pipes is attached, and Figure 3B is marked up to depict the location of these pipes.)

- Page 9, Section 3.1.3

  NPDES requirements led to the re-routing of pond outflow directly to IMP 203/303 and the Allegheny River via Outfall 003 in the late 1970s / early 1980s based on discussions with plant personnel.

- Page 11, Section 4.2 (Second to last bullet)

  A pump house, which is used to transfer water for discharge ~~to other plant processes~~, is positioned next to the concrete stilling basin at the pond's south end.

- Page 13 Conclusions

  Note: NRG no longer plans to install a drag chain system and formally close the ash ponds in 2014.

- Page 15, Section 6.4

  Based on the additional information provided in this review, NRG does not concur with the recommendation to complete a hydrology and hydraulics analysis within one year from the date of this

assessment report.

Please do not hesitate to contact me with any questions or comments.

Thank you, Steve

NRG Energy

Stephen M. Frank, PE
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Canonsburg, PA 15317
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M 724.249.3610

Reference:
Microsoft Bing Orthophoto, 2010
FEMA Digital Flood Data Allegheny County, PA, 2003
PAMAP LIDAR Data, 2006

0 60 120 180 240 Feet

Legend

- Existing Fence
- Proposed Fence
- Minor Stream
- Major Stream
- Contour (10 Foot Interval)
- Property Boundary
- Wetland
- FEMA Flood Hazard Area- Zone AE

DRAWN BY:	CBL
CHECKED BY:	TCC
APPROVED BY:	DRAFT
SCALE:	1 " = 60 '
DATE:	4/9/2012

ISSUED FOR: GENON ENERGY, INC.

ISSUED BY:

Civil & Environmental Consultants, Inc.
333 Baldwin Road - Pittsburgh, PA 15205-9072
412-429-2324 - 800-365-2324
www.cecinc.com

GENON ENERGY, INC.
CHESWICK POWER PLANT - FENCE PLAN
SPRINGDALE BOROUGH
ALLEGHENY COUNTY, PENNSYLVANIA

PROJECT NO.: 120-706 FIGURE: 2

P:\2012\120-706\GIS\maps\120706_cheswick_site_layout.mxd - 4/11/2012 @ 4:32:33 PM

DRAFT FIGURE 3B

N

LEGEND

- PIPE
- ASH POND/IMPOUNDMENT
- OTHER POND/IMPOUNDMENT
- TAWNEY RUN
- 1 PHOTO LOCATION/DIRECTION

DAM SAFETY ASSESSMENT OF
CCW IMPOUNDMENTS
CHESWICK POWER STATION
SPRINGDALE, PENNSYLVANIA

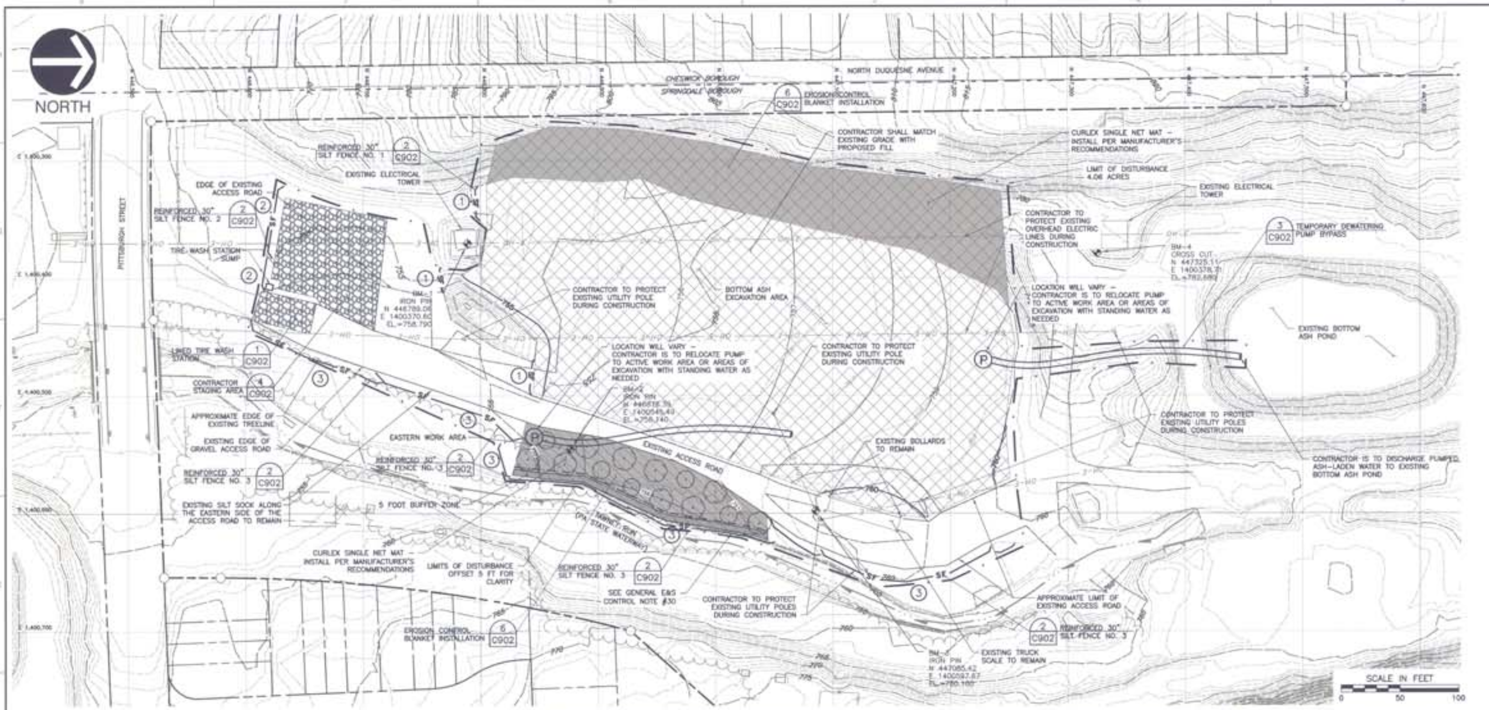
203 EMERGENCY BOTTOM ASH POND PHOTO LOCATION MAP

0 20 40 80
Feet

FEBRUARY 2013
13498/46122

O'BRIEN & GERE

This document was developed in color. Reproduction in B/W may not represent the data as intended.



LEGEND

- 755 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- APPROXIMATE STREAM CENTERLINE
- EXISTING FENCE
- OH-E — EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TREELINE
- EXISTING STORM INLET/CATCH BASIN
- EXISTING UTILITY POLE W/ GUY WIRE
- EXISTING GAS VALVE/METER
- EXISTING BOLLARD
- PROPERTY BOUNDARY
- BOTTOM ASH EXCAVATION AREA
- EASTERN WORK AREA
- BENCHMARK
- EXISTING ACCESS ROAD
- PROPOSED LIMIT OF DISTURBANCE
- SF — PROPOSED SILT FENCE
- (1) SILT FENCE BARRIER NUMBER
- PROPOSED EROSION CONTROL BLANKET
- 758 — APPROXIMATE PROPOSED INDEX CONTOUR
- 756 — APPROXIMATE PROPOSED INTERMEDIATE CONTOUR
- PROPOSED LIVE STAKES
- PROPOSED TREES

REFERENCE

1. EXISTING CONTOURS DERIVED FROM THE PAMAP PROGRAM 3.2 FT DIGITAL ELEVATION MODEL OF PENNSYLVANIA; DEVELOPED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY; DATED 2006.
2. EXISTING CONDITIONS SURVEY WAS PERFORMED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. (CEC) ON 10/1/10, PENNSYLVANIA SOUTH ZONE, NAD83.
3. PROPERTY BOUNDARY SURVEY WAS PERFORMED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. (CEC) ON 4/5/12, PENNSYLVANIA SOUTH ZONE, NAD83.

GENERAL NOTES

1. THE DRAWINGS HAVE BEEN PREPARED BASED ON THE PA STATE PLANE SOUTH COORDINATE SYSTEM. THE HORIZONTAL DATUM IS PA SOUTH NAD83 AND THE VERTICAL DATUM IS NAVD88.
2. FOUR BENCHMARKS ARE SHOWN ON SHEET C900. THE SURVEYING AND CONSTRUCTION LAYOUT WORK SHALL BE BASED ON THE CONTROL PROVIDED ON THE DRAWING.

PLANTING NOTES

1. ROW OF LIVE STAKES (APPROXIMATELY 75 STAKES TOTAL) TO BE PLANTED 3' ON CENTERS, PARALLEL TO THE 5' BUFFER ZONE. LIVE STAKE MINIMUM HEIGHT SHOULD BE 3' TOTAL, WITH 2' MINIMUM BURIAL DEPTH. LIVE STAKE TYPES SHOULD BE PLANTED WITH THREE (3) OF THE SAME SPECIES IN A ROW, FOLLOWED BY THREE (3) OF THE SECOND SPECIES, AND THREE (3) OF THE THIRD SPECIES. THIS PATTERN SHOULD BE REPEATED THROUGHOUT THE ENTIRE ROW.
2. ALL TREES TO BE PLANTED FROM BALL AND BURLAP, AT LEAST 4' TALL AND 2.5" CALIPER AT BASE. TREES ARE TO BE PROTECTED WITH 7.5' TALL TENAX "C-FLEX" DEER FENCE IN A 8' DIAMETER CIRCLE. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR DEER FENCE INSTALLATION.
3. TREE ROOTS SHALL BE INOCULATED WITH LEBANON SEABOARD "PHC TREE SAVER" SOIL INOCULATE AT A MINIMUM RATE OF TWO (2) 3-OUNCE PACKETS PER TREE PLANTING PIT AND PER MANUFACTURER'S RECOMMENDATIONS.
4. THE EASTERN WORK AREA SHALL BE SEEDED IN ACCORDANCE WITH THE SEEDING NOTES PROVIDED ON DRAWING C901. CURLEX SINGLE NET MAT SHALL BE INSTALLED AFTER THE LIVE STAKES AND TREES ARE PLANTED AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE-STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

PENNSYLVANIA ACT 38 (1991) REQUIRES NO LESS THAN 3 WORKING DAYS NOTICE NOR MORE THAN 10 WORKING DAYS NOTICE FROM EXCAVATORS WHO ARE ABOUT TO: DIG, DRILL, BLAST, AUGER, BORE, GRADE, TRENCH, OR DEMOLISH WHEN IN THE CONSTRUCTION PHASE. FOR LOCATION REQUESTS IN THE STATE OF PENNSYLVANIA, CALL TOLL FREE 1-800-242-1776. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THE LOCATION MUST BE CONSIDERED APPROXIMATE. OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN ALL PHYSICAL LOCATIONS OF UTILITY LINES PRIOR TO THE TIME OF CONSTRUCTION. IN NO WAY SHALL THE CONTRACTOR HOLD THE SURVEYOR RESPONSIBLE FOR ANY UTILITY LOCATION SHOWN ON THIS PLAN.

BEST MANAGEMENT PRACTICES AND CONSTRUCTION SEQUENCE

1. PRIOR TO COMMENCING WORK, SCHEDULE A MANDATORY PRE-CONSTRUCTION MEETING WITH ALL PARTIES INVOLVED IN EARTHMOVING ACTIVITIES.
2. NOTIFY THE PENNSYLVANIA ONE CALL (1-800-242-1776) AT LEAST THREE (3) DAYS PRIOR TO COMMENCING WORK.
3. MOBILIZE EQUIPMENT, CONSTRUCTION TRAILER, MATERIAL STORAGE BINS, ETC. ONSITE.
4. LAY OUT THE LIMITS OF THE SITE, ESTABLISH BENCHMARKS, AND REFERENCE POINTS. FLAG THE LIMITS OF THE EASTERN WORK AREA AND THE BOTTOM ASH EXCAVATION AREA AND DO NOT DISTURB ANY EARTH OUTSIDE OF THOSE LIMITS.
5. INSTALL THE TIRE WASH STATION AND TIRE WASH STATION SUMP IN THE LOCATION SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE DETAIL.
6. INSTALL THE CONTRACTOR STAGING AREA PAD IN THE LOCATION SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE STANDARD DETAIL.
7. INSTALL THE SILT FENCE AT THE LOCATIONS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE STANDARD DETAIL.
8. COMMENCE EXCAVATION ACTIVITIES WITHIN THE BOTTOM ASH EXCAVATION AREA. STRIP ALL VEGETATION FROM PROPOSED WORK AREAS AND DISPOSE AT A PADEP APPROVED FACILITY. BEGIN ASH EXCAVATION NEAR THE NORTHERN LIMIT OF THE EXCAVATION AREA. ASH CONTAINING NO FREE LIQUID SHALL BE LOADED DIRECTLY INTO DUMP TRUCKS FOR TRANSPORT TO THE LEFEVER ASH DISPOSAL AREA. IF ISOLATED AREAS OF PERCHED WATER ARE ENCOUNTERED DURING EXCAVATION AND THE ASH IS WET, STOCKPILE THE ASH IN A SEPARATE AREA ADJACENT TO THE EXCAVATION TO ALLOW WATER TO DRAIN.
9. CONTINUE WITH ASH EXCAVATION IN THE SELECTED AREA UNTIL A SOIL SUBGRADE IS EXPOSED THROUGHOUT THE SELECTED AREA (INITIAL BORINGS INDICATE A DEPTH OF APPROXIMATELY 4 FEET). AS THE SUBGRADE IS EXPOSED, CONFIRMATION SAMPLES WILL BE TAKEN AND WILL BE SUBMITTED TO A TESTING LABORATORY FOR EVALUATION OF SPECIFIC CONSTITUENTS ASSOCIATED WITH BOTTOM ASH. WHEN CONFIRMATION SAMPLE RESULTS ARE RECEIVED, THE OWNER'S REPRESENTATIVE SHALL REVIEW THE RESULTS TO DETERMINE IF THE TESTED AREA MAY BE BACKFILLED OR IF ADDITIONAL EXCAVATION IS NECESSARY.
10. ONCE EXCAVATION IS COMPLETED IN AN AREA, MOVE THE EQUIPMENT TO ANOTHER AREA AND BEGIN A NEW EXCAVATION. CONTINUE WORK IN THIS MANNER UNTIL THE ASH HAS BEEN EXCAVATED AND AREA IS DETERMINED TO BE SATISFACTORY, BASED ON A REVIEW OF CONFIRMATION SAMPLE TEST RESULTS.
11. ONCE AN AREA HAS BEEN DETERMINED TO BE COMPLETED, BASED ON A REVIEW OF CONFIRMATION SAMPLE TEST RESULTS, BACKFILL THE AREA WITH CLEAN FILL. IMMEDIATELY PRIOR TO BACKFILLING, REMOVE ANY ACCUMULATED WATER FROM THE EXCAVATION AREA. SPREAD FILL USING A DOZER IN APPROXIMATELY 12-INCH THICK LIFTS AND COMPACT FILL BY REPEATED TRACKING WITH A DOZER. CONTINUE UNTIL THE AREA HAS BEEN BACKFILLED TO APPROXIMATELY 6-INCHES BELOW FINAL PROPOSED GRADE.
12. ONCE THE BOTTOM ASH EXCAVATION AREA HAS BEEN BROUGHT TO GRADE, SPREAD TOPSOIL TO A MINIMUM DEPTH OF 6-INCHES OVER THE CLEAN FILL. INSTALL EROSION CONTROL MAT (CURLEX SINGLE NET) ON ALL SLOPES 3:1 OR STEEPER AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. UPON COMPLETION OF TOPSOIL PLACEMENT, SEED AND MULCH THE ENTIRE AREA IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES ON THE E&S CONTROL NOTES, DRAWING C901.
13. COMMENCE ACTIVITIES WITHIN THE EASTERN WORK AREA. STRIP ALL VEGETATION FROM THE EASTERN WORK AREA AND DISPOSE AT AN APPROVED FACILITY. REMOVE AND DISPOSE OF CONCRETE PIECES AND SCRAP METAL. EXCAVATE BOTTOM ASH WITHIN THE EASTERN WORK AREA. ASH CONTAINING NO FREE LIQUID SHALL BE LOADED DIRECTLY INTO DUMP TRUCKS FOR TRANSPORT TO THE LEFEVER ASH DISPOSAL AREA. IF ISOLATED AREAS OF PERCHED WATER ARE ENCOUNTERED DURING EXCAVATION AND THE ASH IS WET, STOCKPILE THE ASH IN A SEPARATE AREA ADJACENT TO THE EXCAVATION TO ALLOW WATER TO DRAIN.
14. CONTINUE UNTIL BOTTOM ASH IS REMOVED IN THE EASTERN WORK AREA. UPON REMOVAL OF THE BOTTOM ASH, CONFIRMATION SAMPLES WILL BE TAKEN AND WILL BE SUBMITTED TO A TESTING LABORATORY FOR COMPARISON OF SPECIFIC CONSTITUENTS ASSOCIATED WITH BOTTOM ASH TO ESTABLISHED CLEANUP CRITERIA. WHEN CONFIRMATION SAMPLE RESULTS ARE RECEIVED, THE OWNER'S REPRESENTATIVE WILL REVIEW THE RESULTS TO DETERMINE IF THE TESTED AREA MAY BE BACKFILLED OR IF ADDITIONAL EXCAVATION IS NECESSARY.
15. ONCE EXCAVATION IN THE EASTERN WORK AREA HAS BEEN DETERMINED TO BE COMPLETED, BASED ON A REVIEW OF CONFIRMATION SAMPLE TEST RESULTS, BACKFILL THE AREA WITH CLEAN FILL. IMMEDIATELY PRIOR TO BACKFILLING, REMOVE ANY ACCUMULATED WATER FROM THE EXCAVATION AREA. SPREAD FILL IN APPROXIMATELY 12-INCH THICK LIFTS AND COMPACT FILL BY REPEATED TRACKING WITH A DOZER. CONTINUE UNTIL THE AREA HAS BEEN BACKFILLED TO APPROXIMATELY 6 INCHES BELOW FINAL PROPOSED GRADE.
16. ONCE THE EASTERN WORK AREA HAS BEEN BROUGHT TO GRADE, PLANT THE LIVE STAKES AND TREES FOR THE EASTERN WORK AREA. SPREAD TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES OVER THE CLEAN FILL. SEED AND MULCH THE ENTIRE AREA IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES ON THE E&S CONTROL NOTES, DRAWING C901. COVER THE RE-SEEDED AREA WITH EROSION CONTROL MAT (CURLEX SINGLE NET) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
17. UPON ACHIEVING A 70% PERENNIAL VEGETATIVE COVER WITHIN THE BOTTOM ASH EXCAVATION AND EASTERN WORK AREA, REMOVE THE SILT FENCE, TIRE WASH STATION, AND ANY OTHER TEMPORARY E&S CONTROLS, AND STABILIZE ANY AREAS DISTURBED BY THE BOTTOM ASH REMOVAL PROCESS.

SEQUENCE OF REMOVAL

AFTER BACKFILLING IS COMPLETE IN THE BAPA AND A 70% VEGETATIVE COVER IS ESTABLISHED, REMOVE THE TIRE WASH STATION AND TANK AND RESTORE AREA WITH AGGREGATE. ONCE A UNIFORM 70% VEGETATIVE COVER IS ESTABLISHED, ALL ACCUMULATED SEDIMENT AND REMAINING CONSTRUCTION MATERIAL AND ANY TEMPORARY E&S CONTROLS SHALL BE DISPOSED OF AT A PADEP-APPROVED FACILITY.

GENERAL E&S CONTROL NOTES

1. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN AND BECOME FAMILIAR WITH ITS CONTENTS.
2. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE EROSION AND SEDIMENTATION CONTROL PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
4. EROSION AND SEDIMENTATION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
5. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL.
6. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
7. ALL WASH WATER (VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
8. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
9. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
10. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
11. ALL STORMWATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS EROSION AND SEDIMENTATION CONTROL PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
12. ALL DENUDED AREAS THAT WILL BE INACTIVE FOR 4 DAYS OR MORE, SHALL BE IMMEDIATELY STABILIZED TEMPORARILY WITH THE USE OF TEMPORARY SEEDING AS SPECIFIED ON SHEET C901, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS AS SHOWN ON SITE MAP.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDED, SODDED, AND/OR VEGETATED IMMEDIATELY AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. ALL VEHICLES ARE REQUIRED TO BE WASHED DOWN AT THE TIRE WASH STATION BEFORE EXITING THE SITE. PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT AND ASH BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
15. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
16. SOIL STOCKPILE AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES.
17. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
18. CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE EROSION AND SEDIMENTATION CONTROL PLAN, INSIDE OF THE LIMITS OF DISTURBANCE FOR DELIVERY AND MATERIAL STORAGE.
19. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
20. ALL WORK WILL BE DONE DURING LOW-FLOW CONDITIONS, AVOIDING PERIODS DURING OR IMMEDIATELY FOLLOWING HEAVY PRECIPITATION.
21. DURING LARGE STORM EVENTS THAT PRODUCE GREATER THAN 3" OF RAINFALL IN 24 HOURS, TAWNEY RUN HAS THE POTENTIAL TO FLOOD OVER ITS BANKS AND ACROSS THE BOTTOM ASH EXCAVATION AREA. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLAN FOR LARGE STORM EVENTS. THE EXPOSED WORK LIMITS SHALL BE MINIMIZED AND STABILIZED BEFORE TAWNEY RUN OVERTOPS ITS BANKS. THE CONTRACTOR SHALL HAVE SUFFICIENT PUMP CAPACITY TO PUMP SEDIMENT-LADEN WATER FROM THE BOTTOM ASH EXCAVATION AREA TO THE ASH PONDS AND KEEP SEDIMENT-LADEN WATER FROM FLOWING BACK INTO TAWNEY RUN.
22. ALL EARTHMOVING ACTIVITIES MUST INCORPORATE MEASURES TO MINIMIZE ACCELERATED EROSION AND MUST HAVE EROSION AND SEDIMENT POLLUTANT CONTROL PLAN AT THE SITE OF ACTIVITY AT ALL TIMES.
23. CLEAN FILL: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, OR DREDGED MATERIAL. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. MATERIAL WILL SATISFY THE REQUIREMENTS OF PADEP'S MANAGEMENT OF FILL POLICY DATED AUGUST 7, 2010 (DOC. NO. 258-2182-773).
24. CONTRACTOR IS TO GRADE SITE IN SUCH A MANNER AS TO ENSURE A MAJORITY OF SURFACE WATER RUNOFF FLOWING TO THE SITE PERIMETER WILL BE FROM AREAS WHERE ASH EXCAVATION ACTIVITIES ARE NOT BEING PERFORMED.
25. INITIAL BORINGS CONDUCTED AT THE SITE INDICATE THAT THE BOTTOM ASH RANGES FROM 1 TO 5 FEET IN THICKNESS, WITH MUCH OF IT APPROXIMATELY 4 FEET THICK.
26. ANY WET BOTTOM ASH ENCOUNTERED DURING EXCAVATION SHALL BE STOCKPILED ON SITE WITHIN THE BOTTOM ASH EXCAVATION AREA AND ALLOWED TO DRAIN. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING AT THE END OF EACH WORK DAY. WATER FROM WET ASH SHALL NOT CONTACT CLEAN FILL. FREE WATER GENERATED BY THE STOCKPILE IS TO DRAIN INTO THE UNDERLYING ASH OR BE DIRECTED INTO THE OPEN EXCAVATION.
27. WATER ACCUMULATING IN THE OPEN EXCAVATION IS TO BE COLLECTED AND PUMPED TO THE EXISTING BOTTOM ASH POND THROUGH THE USE OF TRASH PUMPS AND TEMPORARY HOSES OR PIPING. CONTRACTOR IS TO DETERMINE WHEN DEWATERING IS NECESSARY BASED ON THE PLANNED CONSTRUCTION ACTIVITIES IN THE AREA.
28. AS AN AREA IS EXCAVATED AND THE SOIL SUBGRADE IS EXPOSED, CONFIRMATION SAMPLES WILL BE TAKEN AND WILL BE SUBMITTED TO A TESTING LABORATORY FOR EVALUATION OF SPECIFIC CONSTITUENTS ASSOCIATED WITH BOTTOM ASH. CONTRACTOR IS TO INFORM OWNER WHEN SUBGRADE HAS BEEN REACHED SO CONFIRMATION SAMPLING CAN BE SCHEDULED.
29. THE CONTRACTOR IS TO PROTECT AND NOT DISTURB EXISTING UTILITY POLES, UTILITY TOWERS, BOLLARDS AND THE TRUCK SCALE.
30. PROPOSED SILT FENCE SHALL BE INSTALLED BETWEEN TAWNEY RUN AND THE EASTERN WORK AREA. THE PROPOSED SILT FENCE SHALL BE INSTALLED ABOVE TAWNEY RUN'S ORDINARY HIGH WATER LEVEL.
31. NO WORK OR DISTURBANCE IS PERMITTED WITHIN TAWNEY RUN OR ITS STREAMBANKS.
32. THE FINAL GRADING SHALL BE FREE DRAINING AND VOID OF ANY DEPRESSION AREAS THAT COULD IMPEDE SURFACE RUNOFF AND DETAIN STANDING WATER.

*HAND SIGNATURE ON FILE

ANGELO LOUIS MASULLO, JR

REVISION RECORD

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GenOn POWER MIDWEST, L.P.
CHESWICK GENERATING STATION
BAPA DECOMMISSIONING
EROSION AND SEDIMENTATION CONTROL PLAN
ALLEGHENY COUNTY, SPRINGDALE, PA

EROSION AND SEDIMENTATION CONTROL PLAN

DATE: 04/09/2013 DWG SCALE: 1" = 50' PROJECT NO: 111-131

DRAWING NO.: C900

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