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September 19, 2011

Mr. Joshua Longmore
Luzerne Conservation District
485 Smiths Pond Road
Shavertown, PA 18708

**BELL BEND NUCLEAR POWER PLANT
PLANT NPDES INDIVIDUAL STORMWATER
PERMIT APPLICATION REVISION No. 1
BNP-2011-171 Docket No. 52-039**

Reference: 1) LCD-2010-342, H. Berlew, LCD, to B. Wise, PPL, "Erosion and Sedimentation Control Plan Review, December 9, 2010

Enclosed is revision 1 to the PPL Bell Bend Nuclear Power Plant application for a NPDES Individual Permit for Discharges of Stormwater Associated with Construction Activities. Per agreement with Heather Berlew of your staff a single hardcopy is being provided at this time (Enclosure 1). Two additional copies will be provided upon acceptance of the Erosion and Sedimentation Control Plan portion of this revision. All parties copied on this transmittal will receive a copy of the revised application on disc by October 15th.

At the time of our original submission on November 12, 2010 PPL anticipated disposing of up to two million cubic yards of fill off-site. A balanced cut-fill design has now been developed that avoids potential off-site environmental disposal impacts. As a result, changes have been made to the grading in five areas of the site, which resulted in numerous changes to the Erosion and Sedimentation Plan and the Post-Construction Stormwater Management Plan. This revision also addresses all comments received from Heather Berlew of the Luzerne Conservation District in her December 9, 2010, transmittal (Reference 1). A summary response to these comments is provided in Enclosure 2.

Please do not hesitate to contact Brad Wise of my staff [610-774-6508 or bawise@pplweb.com] directly with any questions you may have regarding this application.

Respectfully,

A handwritten signature in blue ink, appearing to read "T. Harpster", is written over a horizontal line. The signature is fluid and cursive.

Terry L Harpster

TLH/kw

- Enclosures:
- 1) Revision No. 1 of the NPDES Individual Permit for Discharges of Stormwater Associated with Construction Activities
 - 2) J. Mullen, P.E., Pennoni Assoc., to B. Wise, PPL, "RE: Erosion and Sediment Control Plan Review, Bell Bend Nuclear Power Plant, Salem Township, Luzerne County", September 16, 2011

cc: (w/ Enclosure 1 Only)

Ms. Stacey Imboden
Senior Project Manager
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852

Ms. Jamie Davis
Office of Environmental Programs (3EA30)
U.S. Environmental Protection Agency
1650 Arch Street
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Mr. Tom Shervinskie
Pa Fish & Boat Commission
450 Robinson Lane
Bellefonte, PA 16823

Ms. Jennifer Kagel
United States Fish & Wildlife Service
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315 S. Allen St. #322
State College, PA 16801

Ms. Paula B. Ballaron
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102-0425

Mr. Joseph Buczynski
Pa Dept Environmental Resources
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18711

Ms. Karen J. Karchner
Zoning/Building Code Official
38 Bomboy Lane
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Enclosure 1

Revision No. 1 of the NPDES Individual Permit for Discharges of Stormwater
Associated with Construction Activities

Enclosure 2

J. Mullen, P.E., Pennoni Assoc., to B. Wise, PPL, "RE: Erosion and Sediment Control Plan Review, Bell Bend Nuclear Power Plant, Salem Township, Luzerne County",
September 16, 2011



PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

September 16, 2011

Bradley Wise
Environmental Permitting Supervisor
PPL Nuclear Development, LLC
38 Bomboy Lane, Suite 2
Berwick, PA 18603

**RE: Erosion and Sediment Control Plan Review
PPL Bell Bend Nuclear Power Plant
Salem Township, Luzerne County**

Dear Mr. Wise:

This letter is in response to the initial review of the Erosion and Sediment Control Plan for the above-referenced project that the Luzerne Conservation District has completed, and provided on December 9th, 2010.

Our point-by-point responses to the comments are listed below.

GENERAL

105 Permits & Stormwater Management

1. Because of its location, construction of Power Plant, bridges, roads, etc. may require a *GP/encroachment permit, etc.* The DEP Soils and Waterways Section of the Northeastern Regional Office, 2 Public Square, Wilkes-Barre, PA 18711 should be contacted for guidance concerning the need for a permit. Include a copy of the application face sheet in the narrative of your Erosion and Sediment Pollution Control Plan re-submittal.

Response: A water obstruction and encroachment permit application has been submitted to DEP and USACE. Please find attached to this response a copy of the Chapter 105/JPA Application Cover sheet as proof of application (Attachment B)

2. Since the proposed dredging dewatering pond constructed embankment exceeds 15 feet in height (*or the tributary acreage to the pond exceeds 100 acres, or the storage capacity exceeds 50 acre-feet*), a dam safety permit would be required. The DEP, Bureau of Waterways Engineering, Division of Dam Safety, P. O. Box 8460, Harrisburg, PA 17105-8460 should be contacted for guidance concerning the procedure of obtaining a dam safety permit. Include a copy of the application face sheet for a dam safety permit in the narrative of your Erosion and Sediment Pollution Control Plan re-submittal.

Response: With regard to the dredging/dewatering pond adjacent to the Susquehanna River, DEP's Dam Permit Fact Sheet (3140-FS-DEP2725-attached --

Attachment C) Item 2 states “A dam permit is required if the proposed dam is not located across a stream and criteria 1.b AND 1.c listed above are met.”

- **Item 1.b is, as stated above in the original comment, “an embankment height exceeding 15 feet.”**
- **Item 1.c is as follows, “The impounding capacity (storage volume) at maximum storage elevation is greater than 50 acre-feet.”**

The Dredge Pond storage capacity is approximately 10 acre-feet and is not located across a stream, therefore a dam permit will not be required.

102.4(b)(5)(i) The existing topographic features of the project site and the immediate surrounding area

1. Sheet match lines with overlap have not been provided on the plan drawings.

Response: Match lines have been added to all plan sheets. Overlap has not been provided in an effort to minimize total sheets. Additional roll plots are available upon request to aid in review if match lines are not sufficient.

2. Existing contour elevations have not been adequately labeled on the plan drawing. (sheet CS8116).

Response: Additional existing contour elevations have been added to all plan sheets.

3. The 100-year floodway boundary has not been provided on the E&S plan drawing.

Response: The 100-year floodway boundary has been added to the E&S plans for Walker Run and surrounding tributaries on sheets CS8102, CS8103, CS8106, CS8107, CS8118, CS8119, CS8120, CS8121. The 100-year floodway boundary has also been added to the E&S plans for the Susquehanna River on sheets CS8116, CS8126, CS8130, and CS8136.

4. The 100-year floodplain boundary has not been provided on the E&S plan drawing.

Response: The 100-year floodplain boundary and proposed 100-year floodplain boundary have been added to the E&S plans for Walker Run and surrounding tributaries on sheets CS8102, CS8103, CS8106, CS8107, CS8118, CS8119, CS8120, CS8121. The 100-year floodplain boundary has also been added to the E&S plans for the Susquehanna River on sheets CS8116, CS8126, CS8130, and CS8136.

5. Edge of water (river) not provided.

Response: The edge of water for the Susquehanna River has been provided on sheets CS8116, CS8126, CS8130, and CS8136 and added to the legend on sheet CS8004

6. Please explain whether there is an existing drainage channel feeding proposed 48" culvert on Sheet CS8110. If so, please label it.

Response: Yes there is an existing drainage channel running along the south side of the Susquehanna Steam Electric Station overflow parking lot. Refer to Sheet CS8110A in the new plan set revision. This existing channel is Tributary No. 3 to Lake Took-A While and has been labeled as such on the plans. Refer to sheets CS8110, CS8114, CS8115, and CS8129 for Tributary No. 3.

7. Sheet match lines with overlap have not been provided on the plan drawing for CS 113, 123 and 126. Technical review of these areas cannot be performed without complete plans.

Response: Match lines have been added to all plan sheets. Overlap has not been provided in an effort to minimize total sheets. Additional roll plots are available upon request to aid in review if match lines are not sufficient.

8. Existing rock construction entrance.

Response: Existing rock construction entrances previously permitted (3/29/10) have been added to the plans. Please see pages CS8101A&B and CS8119A&B

102.4(b)(5)(iii) Characteristics of the earth disturbance activity, including the past, present, and proposed land uses and the proposed alteration to the project site.

1. Access has not been provided to Dredge Dewatering Pond for maintenance activities, etc., and for proposed railroad construction (as well as E&S in this area).

Response: An access road to the Dredge Dewatering Pond has been designed and is shown on Sheet CS8116. Rock Construction Entrances have been added for this access road and for the railroad construction on Sheet CS8127. Additional E&S measures for the railroad have been added, including silt fence.

2. Topsoil stockpile not provided for Dewatering Pond area.

Response: Topsoil from the site is proposed to be stockpiled at two locations. Please see sheets CS8112A and CS8118A.

3. The final grades have not been provided for removal/regrading of Dredge Dewatering Pond.

Response: Proposed contours have been added to show the final grading for this area. Grading will be re-established as close as possible to the existing condition after construction. Please see sheet CS8116.

4. All proposed improvements have not been provided on the plan drawing (ex. BBNPP Intake Structure, associated construction parking areas.)

Response: Parking shall be as designated and workers transported on site. Please see sheets CS8106A, CS8107 and CS8121 for construction parking locations.

5. Proposed earth moving not labeled for what looks like an access road running West of Dredge Pond.

Response: Updated grading has now been provided. Proposed work in this area consists of canal restoration and trail resurfacing. Please see sheet CS8309 for plan view, and CS8310 for general notes and details.

6. There appears to be an Inlet within Dredge Pond, however piping to and from/grading not provided.

Response: The inlet has been removed from the Dredge Pond. The Dredge Pond will be dewatered through the use of the sediment pumped filter bag as shown on sheet CS8116. A sediment pumped filter bag is displayed as shown on the legend sheet CS8004.

7. Channel discharging to Basin 18, Blowdown Line (sheet CS8114), rock construction entrances (numbering), Silt Dike (Ph. 1), Canal Restoration Activities has not been identified/labeled on the plan drawing. If proposed Silt Dike is a new product, please refer to page 136 of the E&S manual.

Response: Items identified above have now been identified through the legend or labeled on the plans. Silt Dike has been removed from the plans/narrative.

8. Proposed contours/grades have not been provided on the plan drawing for E&S Swale discharging to Basin 6, 10, 10.1, 12, 15, 21, Trap 2A, IA and contours for Basin 2, Basin 3.1 and proposed RR Bridges.

Response: E&S Swales have been graded in and temporary contours are now provided. Additionally, A & B sheets have been added, where needed, to help show both proposed and temporary conditions.

9. Silt fence is outside the LOD N of Bridge 5, sheet CS8106.

Response: All silt fence has been adjusted to remain within the Limit of Disturbance (LOD).

10. Limits of Disturbance is illegible from Station 343 to 332 on Sheets CS8109 and 8107.

Response: The limit of disturbance has been revised in this area for proper plan presentation.

11. Proposed contours for Traps IA, 2A and Sediment Basin 1 are illegible.

Response: In this location (CS8103, CS8106, CS8107, and CS8121) and additional locations, A & B sheets have been added to help show both proposed and temporary conditions. Sediment Traps 1A and 2A have been replaced with Sediment Basin 1A.

12. Grading East of Basin 15 not continued on adjacent sheet from CS8123.

Response: The layers on CS8123 have been reworked to show all appropriate information.

13. LOD is indistinguishable along Market Street between stockpile and cooling towers. Perhaps this is access to stockpile. Please provide grading, E&S, etc. for access road.

Response: A proposed fence has been removed from this area and the LOD has been updated. This has provided clarity on the exact location of the LOD. See sheets CS8117 and CS8118.

14. Trap 2A on E&S plan is labeled Trap 1B on drainage area map.

Response: All Sediment Basins have been re-checked and are now labeled appropriately. Sediment traps have been removed from the design. Refer to sheet CS8001 for table of sediment basins.

15. Proposed constructed wetlands and rip-rap shore protection not shown/labeled on E&S plan.

Response: Additional sheets have been incorporated into the plan set to show E&S measures for the proposed wetland creation and enhancement. Please see sheets CS8301 - CS8310.

16. Please explain where the permanent spoil areas are located, within Step 7, Ph. 11 of the construction sequence.

Response: Through re-grading, the need for a permanent offsite spoil area has been eliminated. Spoil areas can be seen on sheets CS8112 and CS8118.

17. E&S Channels 1-38 have not been identified/labeled on the E&S plan drawing.

Response: Labels for E&S Channels have been added to the E&S Plan sheets. A list of E&S channels can be seen on sheet CS8501.

18. Permanent Swales have not been identified/labeled on the E&S plan or PCSM drawing.

Response: Labels for Permanent Swales have been added to the E&S plans and PCSM drawings. A list of permanent swales can be seen on sheet CS6003.

19. The plan does not provide a conveyance for sediment laden runoff around the work area to Basins 1, 8, 9, 1, 15A, 15B, 20, 3 and 18.

Response: A note requiring perimeter control around all basin excavation has been added to the plans on CS8505. The note reads as follows, "Contractor shall ensure perimeter controls are installed on upslope side of all infiltration excavation pits to prevent sediment laden water from entering the infiltration beds."

102.4(b)(S)(vii) Sequence of BMP installation and removal

1. The construction sequence does not provide perimeter BMPs for the cut/fill required for the installation of Access Road, BBNPP Intake Structure, Dredge Pond, Blowdown Line, Main Access Road and Shops from Station 150-168 and Access Road near Meteorological Tower from Station 339-355 as well as SUPP Road from Station 41-23.

Response: The construction sequence has been modified to include perimeter BMPs for the cut/fill areas specified above. The plans have also been coordinated to show perimeter controls in these areas as well. Please see sheets CS8003 and CS8004 of the plan set for a modified construction sequence. The modified construction sequence can also be found in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pgs. 7-38.

2. There appears to be an existing drainage channel on Sheet CS8114 feeding a pond/open water. Please explain how hydrology will be maintained as well as providing perimeter BMPs for the cut/fill placed in this area. A rock filter between the SSF may be adequate.

Response: The channel on the north side of the page flows from an outlet pipe from the existing SSES plant. This pipe is now shown as being extended through the fill slope and outlet protection on drawing CS8114.

3. The construction sequence does not provide perimeter BMPs for the cut/fill required for Basin 18 grading, Batch Plant Slopes (and downslope of SSF/below Basin 6 grading) and downslope of Two Spur Track slopes.

Response: The construction sequence has been modified to include perimeter BMPs for the cut/fill areas specified above. The plans have also been coordinated to show perimeter controls in these areas as well. Please refer to Sheets CS8110A&B, CS8114, and CS8115A&B.

4. Perimeter BMPs have not been provided for
 - a. installation of 48" culvert on Sheet CS8110,
 - b. S of Access Road-sheet on CS8109,
 - c. S of wetlands CS8108,
 - d. proposed 500KV Yard Access Road
 - e. N of Sediment Basin 9,
 - f. N of wetlands between E&S Swale and Basin 6,
 - g. all bridge construction
 - h. pipe/level spreader installation.

Response:

- a) Tributary No. 3 to Lake Took-A While crosses under the proposed rail road. A Rail Road Culvert Report is included with this submission in Appendix L. E&S BMPs have been added to the plan and information has been added to the construction sequence on how the hydrology will be maintained.
- b) Silt fence has been added South of Access Road A on sheet CS8109.
- c) Silt fence and orange construction fence has been added around the interior wetland shown on sheets CS8108 and CS8109.
- d) Additional BMPs have been added to the 500KV Yard access road on sheet CS8122.
- e) A large portion of the sediment stockpile north of Sediment basin 9 has been removed and no perimeter controls are needed in that area. Please see sheet CS8118.
- f) Silt fence and orange construction fence has been added around the wetland on sheets CS8110 and CS8111.

- g) Complete Bridge E&S Plans have been added to the plan set. Please see sheets CS8201 - CS8205.**
- h) Silt Fence has been added or adjusted around all level spreaders. See plan sheets CS8101 thru CS8136**

5. The plan map(s) show collector channels, traps and basins located within the proposed grading area (for the exception of Area 9, 1, 2). This means that they will not be available to control runoff during part of the grading process. Consideration should be given to relocating this facility outside the work area. If this is not possible, explain how runoff will be controlled during their absence.

Response: Runoff from unstabilized areas will be minimal when the site reaches a point in time when these BMPs will be decommissioned and filled in. Steps have been added to the construction sequence detailing satisfactory stabilization of proposed features prior to removal of these items. Removal of these items and the work proposed in their place will be completed under perimeter controls as outlined in the construction sequence. Please see sheets CS8003 and CS8004 of the plan set for a modified construction sequence. The modified construction sequence can also be found in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pgs. 7-38.

6. A standard note is needed at the beginning of the construction sequence stating, *"Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution."*

Response: This note has been added to the construction sequence. Please see sheet CS8003 of the plan set. The note can also be found in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 9.

7. The construction sequence does not address field-marking all Waters of the Commonwealth boundaries (ex. stream buffers, wetland boundaries, spring seeps, and floodway) prior to proposed earth disturbance.

Response: Field marking of Waters of the Commonwealth has been added as a first step for all ten (10) phases of the construction sequence. Please see sheets CS8003 and CS8004 of the plan set for a modified construction sequence. The modified construction sequence can also be found in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pgs. 7-38.

8. The construction sequence does not address field-marking all limits of disturbance within the interior the site (ex. any steep slopes, infiltration areas and trees selected to be saved).

Response: Field marking interior limits of disturbance on the site has been added as first step for all ten (10) phases of the construction sequence. Please see sheets CS8003 and CS8004 of the plan set for a modified construction sequence. The modified construction sequence can also be found in Binder 5 of 6 - Erosion

and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pgs. 7-38.

9. The construction sequence does not address immediate temporary or permanent stabilization of BMPs or site disturbance.

Response: Immediate temporary and permanent stabilization of BMPs and site disturbance has been added to the construction sequence as a general note prior to the phased steps. Please see sheet CS8003 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 8.

10. The construction sequence does not address installation & stabilization of all Post Construction Stormwater Management (PCSM) BMPs shown on the PCSM plan. (Area 9)

Response: Steps have been added to the construction sequence detailing the installation of all PCSM BMPs shown on the plans. Specifically the installation of PCSM Basin 15.3 (as seen on sheet CS8123) can be found on sheet CS8004 and in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations, Phase V, Step 13 Pg. 27.

11. The sequence should specify seeding and mulching of fill slopes in regular vertical increments (e.g. 15, 20, or 25 feet) to promote early stabilization of the fill slope.

Response: A note requiring seeding and mulching of fill slopes in regular vertical increments of 15 feet has been added to the construction sequence as a general note prior to the phased steps. Please see sheet CS8003 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 8. Suggested seeding mix can be found on sheet CS8505 and in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VIII – SEEDING, Pg. 38.

12. Indicate when the proposed erosion control blanketing is to be installed.

Response: Erosion Control Blanketing is to be installed on all disturbances within 50' of Waters of the Commonwealth. A note specifying this has been added to the construction sequence on drawings CS8003 and CS8004.

13. The construction sequence does not address stabilization of all interior slopes of basins above the sediment storage zone elevation and the interior/exterior slopes of the embankment immediately upon completion of basins.

Response: Stabilization of all interior and exterior slopes as stated above has been added to the construction sequence as a general note prior to the phased steps. Please see sheet CS8003 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 9.

14. The construction sequence does not address installation and stabilization of E&S Swales.

Response: Steps have been added to the construction sequence specifying the installation and stabilization of E&S Swales. Please see sheets CS8003 and

CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 10 step 5, Pg. 22 step 22, Pg. 24 step 49, and Pg. 29 step 7.

15. The construction sequence does not address removal of sediment basins.

Response: The construction sequence has been modified to state the removal of all E&S BMPs, including sediment basins. Please see sheets CS8003 and CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 16 step 25, Pg. 22 step 25, Pg. 22 step 30, Pg. 25 step 63, Pg. 27 step 15, and Pg. 30 step 19.

16. Phase II Perimeter controls (silt fence) should be installed prior to sediment basin grading.

Response: The perimeter control installation has been adjusted in the sequence so that it is installed prior to sediment basin grading. Please see sheets CS8003 and CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 9 step 4, Pg. 10 step 3, Pg. 11 step 7c, Pg. 12 step 14c, Pg. 14 step 16c, Pg. 15 step 17, Pg. 17 step 3, Pg. 18 step 7, Pg. 18 step 9c, Pg. 19 step 10, Pg. 21 step 11, Pg. 23 step 43, Pg. 24 step 46, Pg. 28 step 3, Pg. 30 step 3, Pg. 31 step 3, Pg. 31 step 6, and Pg. 35 step 2.

17. The construction sequence does not address installation and stabilization of Swales and Drainage Trenches noted in Step 33, Ph. II, Ph. III, Step 12,25,42, Ph. IV, Ph. V, Ph. VI, Ph. VII, VIII, IX, X. Drainage trenches and swales are also not identified on the E&S plan.

Response: Steps have been added to the construction sequence specifying the installation and stabilization of E&S Swales. Please see sheets CS8003 and CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 10 step 5, Pg. 22 step 22, Pg. 24 step 49, and Pg. 29 step 7.

E&S Swales are now labeled on the plans. E&S Swale table can be found on CS8501.

All references to “drainage trenches” have been removed from the submission.

18. Ph. II, step 1 and Ph. IV should specify which BMPs are to remain.

Response: The BMPs to remain between Phase II/Phase III and Phase III/Phase IV, are now identified in the construction sequence phases. Please see sheets CS8003 and CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 17 step 1 and Pg. 26 step 2.

19. The construction sequence Ph. III, Step 4 and Ph. V should specify how and which perimeter controls are to be modified.

Response: Perimeter controls between Area 2 and Area 5 to be modified in Phase III are now specified on sheet CS8003 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 23 step 45.

20. The construction sequence does not address how areas will be stabilized in Ph. III, Step 11.

Response: Stabilization steps are now outlined throughout the sequence in all phases. Please see sheets CS8003 and CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations.

21. Regarding Ph. III, Step 14, the plan does not address installation of an erosion control blanket on all disturbed areas within 50 feet of Waters of the Commonwealth (ex. streams, ponds, wetlands)(see page 78 of March 2000 E&S Manual).

Response: A general note has been added to the beginning of the construction sequence for each of the ten (10) phases to address the multiple areas which are disturbed within 50 feet of Waters of the Commonwealth. Please see sheet CS8003 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pg. 8.

22. Appropriate BMPs (including perimeter controls and temporary stream crossings) should be installed and functioning prior to general site clearing and grubbing operations. (Ph. III Steps 28 and Sed. Basin 3 installation after Step 30.)

Response: The sequence has been adjusted to require appropriate BMPs are installed and functioning prior to general site clearing and grubbing.

23. The construction sequence does not address what the temporary excavation dewatering features are.

Response: Temporary excavation dewatering steps have been added to the construction sequence. Please see sheets CS8003 and CS8004 and Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Phase IV, Pg. 26 step 3. A plan has been added to Binder 5 Appendix F as well.

24. The construction sequence does not address conditions of stabilization prior to flow being returned to canal.

Response: Additional steps have been added to the construction sequence that outlines construction of the Riverlands, Confers Lane, and Walker Run Mitigation sites. The Riverlands sequence includes construction in and modifications to the North Branch Canal. Please see sheets CS8301 thru CS8310 Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Section VI – Sequence of earthmoving operations Pgs. 37-40.

25. The construction sequence does not specify and the plan does not label what temporary stormwater management features are within Ph. VII, step 10, step 20.

Response: Phase VII Steps 10 and 20 have been removed from the sequence. There are no temporary stormwater management features proposed in Phase VII in revision 1 of the E&S Plan Set.

26. Ph. X, step 14 should specify which controls are to be removed and the conditions of stabilization to be achieved prior to their removal.

Response: Steps have been added to all ten (10) phases stating when BMPs shall be removed and the conditions of stabilization required prior to their removal. Please reference Sheets CS8003 and CS8004.

102.4(b)(5)(ix) Plan Drawings

CHANNELS/BERMS

1. Channel design information (Standard Worksheets #21) has not been provided for permanent channel(s) 9.5 to 20.2.

Response: Standard Worksheets are now provided for each permanent and temporary channel. Please see Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Appendix H.

2. Proposed contours not provided for Earthen Berms. Also, please explain their function.

Response: Earthen berms have been removed from the plans.

COLLECTION CHANNELS

1. Lining should extend to the bottom of the sediment basins and at least 10' along the basin bottom to dissipate excess energy.

Response: A note has been added to CS8501 requiring that all lining extend 10' along the basin bottom to dissipate excess energy.

2. E&S Channel(s) have not been designed for each significant change in bed slope.

Response: Temporary Channel design has been updated for the temporary contours shown on the plans. Revised calculations can be seen in Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Appendix H.

SEDIMENT BASINS

1. The entire proposed drainage area to Basin 6 does not appear to be conveyed to the basin by E&S Swale.

Response: Drainage areas for sediment basins have been designed to account for both the existing and proposed conditions. Due to proposed grading, additional water may be shifted into a sediment basin's "existing" drainage area, therefore all sediment basins have been designed for the maximum drainage area defined by both proposed and existing conditions.

2. An emergency spillway has not been provided for sediment basin(s). All sediment basins must have a minimum 8' bottom width and 1' deep stable emergency spillway (assume 6" flow depth).

Response: All sediment basins have been adjusted to meet the requirements stated above. Please see Binder 5 of 6 - Erosion and Sedimentation Control Plan Narrative, Appendix E for sediment basin calculations. Emergency spillways have been graded in on the plans as well; Sheets CS8101 thru CS8136 (both A and B sheets).

3. Clean out marker locations have not been provided on the plan drawing halfway between all incoming channels/berms/storm sewer pipes, and the basin outlet structure for sediment basin(s).

Response: Clean out marker locations have been added to the plans and legend. The elevations for these markers have also been added to the plans. Please see sheet CS8112B, Sediment Basin 3 as an example.

4. Sediment basin(s) 10A, 18 principal spillway discharge does not extend to waters of the Commonwealth, an adequately-sized stable channel, or an adequately-sized storm sewer. Due to the steep slope, consideration should be given to using a slope pipe to convey the discharge to the bottom of the slope.

Reference: All sediment basin discharges have been reviewed and adjusted as necessary to propose a location that discharges to Waters of the Commonwealth.

5. Sediment basin(s) 6, 15, 15A, 8, 12, principal spillway discharge does not extend to waters of the Commonwealth, an adequately-sized stable channel, or an adequately-sized storm sewer.

Response: All sediment basin discharges have been reviewed and adjusted as necessary to propose a location that discharges to Waters of the Commonwealth. Please see sheet CS8123 and CS8124 as an example. Infiltration Basin 15.3, as well as Sediment Basins 15 and 15A previously discharged atop the existing slope. Current design conveys the outflow, via a slope pipe, down to and across Beach Grove Road.

6. Basin 20 contours do not tie into existing contours and/or are indistinguishable. Please check all basins.

Reference: All basin contours have been reviewed and adjusted to ensure they tie into existing contours. Reference basin 15A on sheet CS8123 as an example.

7. An outlet structure not shown on E&S plans for Basin 15B.

Response: Outlet structures are now shown for all proposed basins and sediment basins. Sediment Basins 15 and 15A can be found on sheet CS8123.

8. Please explain why a Faircloth Skimmer detail is provided.

Response: Faircloth Skimmers are being used to dewater each sediment basin. Please see Appendix E for the calculations and Sheet CS8502 and CS8503 for the detail.

9. Complete basin berm and outlet details (Standard Construction Details #3, 4, 5, & 6) for sediment basin is inconsistent with E&S narrative Design Calculations and the use of barrel riser versus skimmer.

Response: Faircloth Skimmers are being used to dewater each sediment basin. Please see Appendix E for the calculations and Sheet CS8502 and CS8503 for the details. The calculations and details are now consistent.

10. The basin berm and outlet details (see Standard Construction Details #3, 4, 5 & 6) provided for sediment basin(s) are inadequate. For example:

- a. Skimmer arm diameter, Top of Landing Device Elevation, Flexible Hose Length and diameter, Flexible Hose Attachment Elevation, maintenance, sediment removal, temporary stub diameter, elevation and material, permanent riser crest elevation, horizontal opening, riser extension crest elevation.

Response: The basin berms and outlet details have been modified to meet all requirements and to be consistent with the plans/calculations/standard worksheets. The Standard Construction details can be found on sheet CS8502.

FILTER FABRIC FENCE

1. Filter fabric fence may be used to control runoff from small disturbed areas when it is in the form of sheet flow. The silt fence located SW of wetlands on sheet CS8111 is proposed in an area(s) of concentrated flow.

Response: Once this area is disturbed, the concentrated flow will be dispersed due to proposed grading. Initially a rock filter will be placed at this location to address the concentrated flow. See sheet CS8111 for solution.

2. The plan drawing does not show the silt fence placed at the toe of the fill slope above the end of the pipe and/or tying into the sides of the pipe, headwall in the location of level spreaders or rip rap aprons.

Response: Additional silt fence has been added at the toe of each fill slope and above the end of each outlet. Please see fill slopes on Sheet CS8112B as an example.

3. Silt fence appears to be blocking Trap 2A discharge.

Response: All silt fence has been adjusted to tie into/above all outlet structures. Trap 2A has been removed from the design. Sediment Basin 1A is now used to control the area previously controlled by Trap 2A.

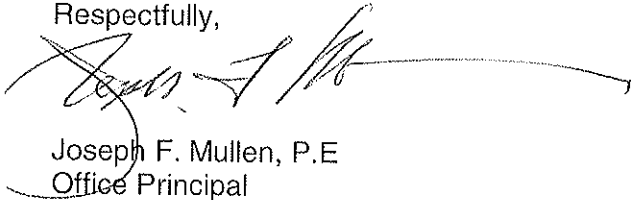
OUTLET STRUCTURES

1. Explain how the discharge from OP6 will be safely conveyed to a natural waterway.

Response: OP6 has been modified to outlet to the existing channel that discharges into the wetlands. This is shown on Sheet CS8115B.

Please do not hesitate to contact me directly with any questions you may have regarding this application.

Respectfully,

A handwritten signature in black ink, appearing to read "Joseph F. Mullen", with a long horizontal flourish extending to the right.

Joseph F. Mullen, P.E
Office Principal
Pennoni Associates, Inc.
Engineering Consultant – Bell Bend Project

Enclosures: Attachment A – LCD Comment Letter 1 dated December 9th, 2010
Attachment B – JPA/Chapter 105 application cover sheet.
Attachment C – DEP's Dam Permit Fact Sheet 3140-FS-DEP2725

Attachment A

LCD Comment Letter 1 dated December 9th, 2010



December 9, 2010

PPL Bell Bend, LLC
Brad Wise
38 Bomboy Lane, Suite 2
Berwick, PA 18603

RECEIVED DEC 28 2010

Re: Erosion and Sediment Control Plan Review
PPL Bell Bend Nuclear Power Plant
Salem Township, Luzerne County

Dear Mr. Wise:

The Luzerne Conservation District has completed its initial review of the Erosion and Sediment Control Plan for the above-referenced project.

The submitted plan has been found to be **inadequate** for erosion and sediment pollution control and does not meet the minimum requirements of the Department of Environmental Protection's (DEP) rules and regulations, Chapter 102, Erosion and Sediment Control and The Clean Streams Law. The following additional information and/or corrections must be provided in order to continue processing the requested plan review.

GENERAL

105 Permits & Stormwater Management

1. Because of its location, construction of Power Plant, bridges, roads, etc. may require a *GP/ encroachment permit, etc.*. The DEP Soils and Waterways Section of the Northeastern Regional Office, 2 Public Square, Wilkes-Barre, PA 18711 should be contacted for guidance concerning the need for a permit. Include a copy of the application face sheet in the narrative of your Erosion and Sediment Pollution Control Plan re-submittal.
2. Since the proposed dredging dewatering pond constructed embankment exceeds 15 feet in height (*or the tributary acreage to the pond exceeds 100 acres, or the storage capacity exceeds 50 acre-feet*), a dam safety permit would be required. The DEP, Bureau of Waterways Engineering, Division of Dam Safety, P. O. Box 8460, Harrisburg, PA 17105-8460 should be contacted for guidance concerning the procedure of obtaining a dam safety permit. Include a copy of the application face sheet for a dam safety permit in the narrative of your Erosion and Sediment Pollution Control Plan re-submittal.

102.4(b)(5)(i) The existing topographic features of the project site and the immediate surrounding area



1. Sheet match lines with overlap have not been provided on the plan drawing.
2. Existing contour elevations have not been adequately labeled on the plan drawing. (sheet CS8116)
3. The 100-year floodway boundary has not been provided on the E&S plan drawing.
4. The 100-year floodplain boundary has not been provided on the E&S plan drawing.
5. Edge of water (river) not provided.
6. Please explain whether there is an existing drainage channel feeding proposed 48" culvert on Sheet CS8110. If so, please label it.
7. Sheet match lines with overlap have not been provided on the plan drawing for CS113, 123 and 126. Technical review of these areas can not be performed without complete plans.
8. Existing rock construction entrance.

102.4(b)(5)(iii) Characteristics of the earth disturbance activity, including the past, present, and proposed land uses and the proposed alteration to the project site

1. Access has not been provided to Dredge Dewatering Pond for maintenance activities, etc., and for proposed railroad construction (as well as E&S in this area).
2. Topsoil stockpile not provided for Dewatering Pond area.
3. The final grades have not been provided for removal/regrading of Dredge Dewatering Pond.
4. All proposed improvements have not been provided on the plan drawing (ex. BBNPP Intake Structure, associated construction parking areas.)
5. Proposed earth moving not labeled for what looks like an access road running West of Dredge Pond.
6. There appears to be an Inlet within Dredge Pond, however piping to and from/grading not provided.
7. Channel discharging to Basin 18, Blowdown Line (sheet CS8114), rock construction entrances (numbering), Silt Dike (Ph. 1), Canal Restoration Activities has not been identified/labeled on the plan drawing. If proposed Silt Dike is a new product, please refer to page 136 of the E&S manual.
8. Proposed contours/grades have not been provided on the plan drawing for E&S Swale discharging to Basin 6, 10, 10.1, 12, 15, 21, Trap 2A, 1A and contours for Basin 2, Basin 3.1 and proposed RR Bridges.
9. Silt fence is outside the LOD N of Bridge 5, sheet CS8106.
10. Limits of Disturbance is illegible from Station 343 to 332 on Sheets CS8109 and 8107.
11. Proposed contours for Traps 1A, 2A and Sediment Basin 1 are illegible.
12. Grading East of Basin 15 not continued on adjacent sheet from CS8123.
13. LOD is indistinguishable along Market Street between stockpile and cooling towers. Perhaps this is



access to stockpile. Please provide grading, E&S, etc. for access road.

14. Trap 2A on E&S plan is labeled Trap 1B on drainage area map.

15. Proposed constructed wetlands and rip-rap shore protection not shown/labeled on E&S plan.

16. Please explain where the permanent spoil areas are located, within Step 7, Ph. 11 of the construction sequence.

17. E&S Channels 1-38 have not been identified/labeled on the E&S plan drawing.

18. Permanent Swales have not been identified/labeled on the E&S plan or PCSM drawing.

19. The plan does not provide a conveyance for sediment laden runoff around the work area to Basins 1, 8, 9, 1, 15A, 15B, 20, 3 and 18.

102.4(b)(5)(vii) Sequence of BMP installation and removal

1. The construction sequence does not provide perimeter BMPs for the cut/fill required for the installation of Access Road, BBNPP Intake Structure, Dredge Pond, Blowdown Line, Main Access Road and Shops from Station 150-168 and Access Road near Meteorological Tower from Station 339-355, as well as SUPP Road from Station 41-23.

2. There appears to be an existing drainage channel on Sheet CS8114 feeding a pond/open water. Please explain how hydrology will be maintained as well as providing perimeter BMPs for the cut/fill placed in this area. A rock filter between the SSF may be adequate.

3. The construction sequence does not provide perimeter BMPs for the cut/fill required for Basin 18 grading, Batch Plant Slopes (and downslope of SSF/below Basin 6 grading) and downslope of Two Spur Track slopes.

4. Perimeter BMPs have not been provided for installation of 48" culvert on Sheet CS8110, S of Access Road-sheet CS8109, S of wetlands CS8108, proposed 500KV Yard Access Road, N of Sediment Basin 9, N of wetlands between E&S Swale and Basin 6, all bridge construction and pipe/level spreader installation.

5. The plan map(s) show collector channels, traps and basins located within the proposed grading area (for the exception of Area 9, 1, 2). This means that they will not be available to control runoff during part of the grading process. Consideration should be given to relocating this facility outside the work area. If this is not possible, explain how runoff will be controlled during their absence.

6. A standard note is needed at the beginning of the construction sequence stating, *"Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution."*

7. The construction sequence does not address field-marking all Waters of the Commonwealth boundaries (ex. stream buffers, wetland boundaries, spring seeps, and floodway) prior to proposed earth disturbance.

8. The construction sequence does not address field-marking all limits of disturbance within the interior of



the site (ex. any steep slopes, infiltration areas and trees selected to be saved).

9. The construction sequence does not address immediate **temporary** or **permanent** stabilization of BMPs or site disturbance.
10. The construction sequence does not address installation & stabilization of all Post Construction Stormwater Management (PCSM) BMPs shown on the PCSM plan. (Area 9)
11. The sequence should specify seeding and mulching of fill slopes in regular vertical increments (e.g. 15, 20, or 25 feet) to promote early stabilization of the fill slope.
12. Indicate when the proposed erosion control blanketing is to be installed.
13. The construction sequence does not address stabilization of all interior slopes of basins above the sediment storage zone elevation and the interior/exterior slopes of the embankment immediately upon completion of basins.
14. The construction sequence does not address installation and stabilization of E&S Swales.
15. The construction sequence does not address removal of sediment basins.
16. Phase II Perimeter controls (silt fence) should be installed prior to sediment basin grading.
17. The construction sequence does not address installation and stabilization of Swales and Drainage Trenches noted in Step 33, Ph. II, Ph. III, Step 12, 25, 42, Ph. IV, Ph. V, Ph. VI, Ph. VII, VIII, IX, X. Drainage trenches and swales are also not identified on the E&S plan.
18. Ph. II, step 1 and Ph. IV should specify which BMPs are to remain.
19. The construction sequence Ph. III, Step 4 and Ph. V should specify how and which perimeter controls are to be modified.
20. The construction sequence does not address how areas will be stabilized in Ph. III, Step 11.
21. Regarding Ph. III, Step 14, the plan does not address installation of an erosion control blanket on all disturbed areas within 50 feet of Waters of the Commonwealth (ex. streams, ponds, wetlands)(see page 78 of March 2000 E&S Manual).
22. Appropriate BMPs (including perimeter controls and temporary stream crossings) should be installed and functioning prior to general site clearing and grubbing operations. (Ph. III Steps 28 and Sed. Basin 3 installation after Step 30.)
23. The construction sequence does not address what the temporary excavation dewatering features are.
24. The construction sequence does not address conditions of stabilization prior to flow being returned to canal.
25. The construction sequence does not specify and the plan does not label what temporary stormwater management features are within Ph. VII, step 10, step 20.



26. Ph. X, step 14 should specify which controls are to be removed and the conditions of stabilization to be achieved prior to their removal.

102.4(b)(5)(ix) Plan Drawings

CHANNELS/BERMS

1. Channel design information (Standard Worksheets #21) has not been provided for permanent channel(s) 9.5 to 20.2.
2. Proposed contours not provided for Earthen Berms. Also, please explain their function.

COLLECTION CHANNELS

1. Lining should extend to the bottom of the sediment basins and at least 10' along the basin bottom to dissipate excess energy.
2. E&S Channel(s) have not been designed for each significant change in bed slope.

SEDIMENT BASINS

1. The entire proposed drainage area to Basin 6 does not appear to be conveyed to the basin by E&S Swale.
2. An emergency spillway has not been provided for sediment basin(s). All sediment basins must have a minimum 8' bottom width and 1' deep stable emergency spillway (assume 6" flow depth).
3. Clean out marker locations have not been provided on the plan drawing halfway between all incoming channels/berms/storm sewer pipes and the basin outlet structure for sediment basin(s).
4. Sediment basin(s) 10A, 18 principal spillway discharge does not extend to waters of the Commonwealth, an adequately-sized stable channel, or an adequately-sized storm sewer. Due to the steep slope, consideration should be given to using a slope pipe to convey the discharge to the bottom of the slope.
5. Sediment basin(s) 6, 15, 15A, 8, 12, principal spillway discharge does not extend to waters of the Commonwealth, an adequately-sized stable channel, or an adequately-sized storm sewer.
6. Basin 20 contours do not tie into existing contours and/or are indistinguishable. Please check all basins.
7. An outlet structure not shown on E&S plans for Basin 15B.
8. Please explain why a Faircloth Skimmer detail is provided.
9. Complete basin berm and outlet details (Standard Construction Details #3, 4, 5, & 6) for sediment basin is inconsistent with E&S narrative Design Calculations and the use of barrel riser versus skimmer.
10. The basin berm and outlet details (see Standard Construction Details #3, 4, 5 & 6) provided for sediment basin(s) are inadequate. For example:
 - a. Skimmer arm diameter, Top of Landing Device Elevation, Flexible Hose Length and diameter, Flexible



Hose Attachment Elevation, maintenance, sediment removal, temporary stub diameter, elevation and material, permanent riser crest elevation, horizontal opening, riser extension crest elevation.

FILTER FABRIC FENCE

1. Filter fabric fence may be used to control runoff from **small** disturbed areas when it is in the form of sheet flow. The silt fence located SW of wetlands on sheet CS8111 is proposed in an area(s) of concentrated flow.
2. The plan drawing does not show the silt fence placed at the toe of the fill slope above the end of the pipe and/or tying into the sides of the pipe, headwall in the location of level spreaders or rip rap aprons.
3. Silt fence appears to be blocking Trap 2A discharge.

OUTLET STRUCTURES

1. Explain how the discharge from OP6 will be safely conveyed to a natural waterway.

Only complete plan resubmissions that address all of the above deficiencies will be reviewed. Resubmission must include a full set of plans, accompanying narratives and specifications. **Please provide a written reply to this letter detailing the corrective measures. Please note the location of the corrections on the drawing/narrative.**

If you have any questions regarding the identified deficiencies or wish to schedule a meeting, please call this office at the above number within the next 30 days.

Sincerely,



Heather Berlew
Resource Conservation Specialist II

Cc: Salem Township
Pennoni
File Copy



Attachment B

JPA/Chapter 105 application cover sheet



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 and
 DEPARTMENT OF ARMY CORPS OF ENGINEERS
 (Baltimore, Philadelphia, and Pittsburgh Districts)

Coordination #

**JOINT APPLICATION FOR
 PENNSYLVANIA WATER OBSTRUCTION AND ENCROACHMENT PERMIT AND
 U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT**

**Before completing this form, please read the step-by-step instructions
 and Section F Application Completeness Checklist provided with this Joint Permit package.**

AGENCY USE ONLY	
Application ID# (Assigned by DEP) _____	RECEIVED DATE _____ CHECK NO. _____
Program Application No. _____	REQUIRED APP. FEE _____ AMOUNT \$ _____

SECTION A. APPLICATION TYPE: STANDARD SMALL PROJECTS

SECTION B. APPLICANT IDENTIFIER

Applicant Name
 PPL Bell Bend, LLC

SECTION C. PROJECT LOCATION DATA

Name of stream and/or body of water.
 Walker Run and North Branch Susquehanna River

Corps District where project will occur.
 Baltimore Philadelphia Pittsburgh

Name of the U.S.G.S. 7 1/2 Minute Quadrangle Map where project is located: Berwick, PA

Indicate location of project on this map by measuring (in inches) from the lower right corner:
 North (up) 16 inches; West (to the left) 5 3/4 inches; Latitude 41 05'21.19" ; Longitude 76 09' 57.34"

Project type, purpose and need: Nuclear power plant construction is needed to produce 1600 MW of baseload power to meet eastern PJM market regional energy demand.

SECTION D. PROJECT STATUS

HAS ANY PORTION OF PROPOSED PROJECT BEEN COMPLETED? yes no _____ date completed
 If yes, attach description of those portions of the project that have been completed and identify dates of completion.

T. L. Harpster
VP-Bell Bend Project-Development

PPL Bell Bend, LLC
38 Bomboy Lane, Suite 2
Berwick, PA 18603
Tel. 570.802.8111 FAX 570.802.8119
tlharpster@pplweb.com



June 29, 2011

Mr. Joseph Buczynski, P.E.
Pennsylvania DEP Northeast Regional Office
Bureau of Watershed Management
2 Public Square
Wilkes-Barre, Pennsylvania 18711-0790

Ms. Amy Elliott
U.S. Army Corps of Engineers – Baltimore District
State College Field Office
1631 South Atherton Street, Suite 102
State College, PA 16801

**BELL BEND NUCLEAR POWER PLANT
JOINT PERMIT APPLICATION AND
REQUEST FOR WATER QUALITY CERTIFICATION
BNP-2011-118 Docket No. 52-039**

PPL Bell Bend, LLC is pleased to submit to the Pennsylvania Department of Environmental Protection and the U.S. Army Corps of Engineers a Joint Application for Pennsylvania Water Obstruction and Encroachment Permit and a U.S. Army Corps of Engineers Section 404 Permit for the proposed Bell Bend Nuclear Power Plant in Salem Township, Luzerne County, Pennsylvania. PPL Bell Bend is also requesting state Water Quality Certification under Section 401 of the Clean Water Act.

Please do not hesitate to contact Brad Wise of my staff [610-774-6508 or bawise@pplweb.com] directly with any questions you may have regarding this application.

Respectfully,

Terry L. Harpster

TLH/cw

Enclosure: 1) Joint Application for Pennsylvania Water Obstruction and Encroachment Permit and U.S. Army Corps of Engineers Section 404 Permit
Seven (7) binders and a DVD

Attachment C

DEP's Dam Permit Fact Sheet 3140-FS-DEP2725



DAM PERMITS IN PENNSYLVANIA

What is a dam?

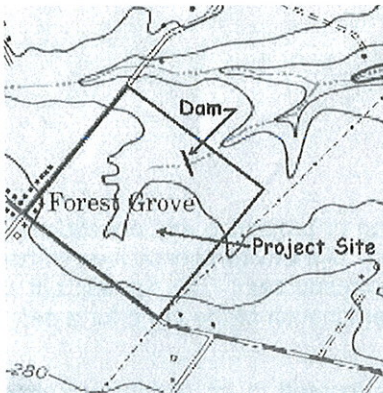
A dam is any artificial barrier, such as an earthen embankment or concrete structure, built for the purpose of impounding or storing water or another fluid or semi-fluid.

When does a dam need a permit?

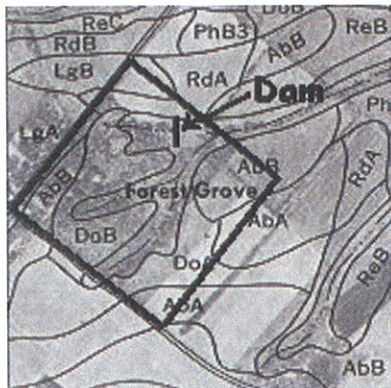
1. A dam permit is required if the proposed dam will be built across a stream and it meets one of the following criteria:
 - a. The contributory drainage area is greater than 100 acres. The drainage area is the land area that during a storm event contributes water runoff to the impounding area.
 - b. The maximum depth of water, measured from the upstream toe of the dam to the top of the dam at maximum storage elevation, is greater than 15 feet.
 - c. The impounding capacity (storage volume) at maximum storage elevation is greater than 50 acre-feet.
2. A dam permit is required if the proposed dam is not located across a stream and criteria 1.b **AND** 1.c listed above are met.
3. A dam permit is required if the dam will store a fluid or semi-fluid other than water that may result in pollution or danger to persons or property if it escapes.

Who makes the determination of the need for a permit for a proposed dam?

A determination of the need for a permit can be requested from the Department of Environmental Protection's (DEP's) Division of Dam Safety. The following information is necessary for a jurisdictional determination:



- *1. The location of the proposed project site, indicated on a copy of a United States Geological Survey Topographic Map.



- *2. A copy of the Soil Survey Map for the project area.

* Copies of these maps may be obtained from your County Conservation District Office.