



DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

March 11, 2013

REPLY TO

Operations Division
Regulatory Branch
2009-2175

Kristina Johnson
Enduring Hydro
5425 Wisconsin Avenue, Suite 600
Chevy Chase, Maryland 20815

Dear Ms. Johnson:

I am replying to Pennsylvania Department of Environmental Protection Permit No.E03-451, received in this office February 26, 2013, requesting our comments on eligibility for authorization under the Pennsylvania State Programmatic General Permit (PA SPGP-4). This project associated with the construction of the Mahoning Hydroelectric Project, has also been reviewed for authorization under the U.S. Army Corps of Engineers (Corps) 408 program. This project is located at approximately 40.9248° N -79.2908° W, 22.9 miles upstream of the confluence of Mahoning Creek with Allegheny River, in the townships of Redbank and Wayne in Armstrong County, Pennsylvania.

The following are the impacts which have been reviewed for authorization under provisions of the Corps Section 404 of the Clean Water Act program. You propose to construct: two road crossings associated with the access road, the Camp Run crossing (constructed of a span type bridge with concrete abutments impacting 115 linear feet of Camp Run), and a unnamed tributary crossing (constructed of a pipe culvert and a riprap apron impacting 60 linear feet of the unnamed tributary); the tailrace associated with the proposed powerhouse (impacts include 0.13 acre of excavation and fill below the ordinary high water mark of the Mahoning River, and 72 linear feet of riprap slope protection); a 260 linear foot temporary bladder dam to be used during the construction of the tailrace, and 0.06 acre of riprap for temporary work pad associated with bladder dam. Aquatic resource impacts associated with this activity will total: 247 linear feet, and 0.13 acre of permanent stream impact; 250 linear feet, and 0.06 of temporary stream impact.

Mitigation for the 247 linear feet, and 0.13 acre of permanent stream impact will consist of: permanent seeding and mulching of a 1000 foot by 50 foot riparian area (1.1 acre) with native plant species to enhance riparian habitat (starting at the gate valve and ending at the unnamed tributary crossing), additionally a floodplain riparian planting area of trees and woody plant species to the west of the tailrace which will total 0.077 acre.

Our review and agency coordination has determined that the proposed project qualifies for Federal authorization by PA SPGP-4. You are authorized to perform the work in accordance with the terms and conditions outlined in the enclosure.

In addition to the enclosed conditions, the following special conditions must be adhered to for your authorization to remain valid:

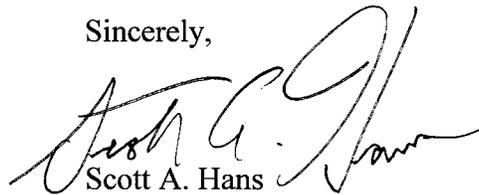
1. You must develop and implement a yearly monitoring plan and report for the mitigation/replanted riparian area. This monitoring plan shall be submitted to this office annually (by December 31st of the year) for a minimum of five years. This will include a minimum of two inspections per year for the first three years, and one inspection per year for the remaining years (site inspections should occur during the growing season). This report should include but is not limited to information regarding the survival rate of the trees, shrubs, and herbaceous vegetation planted in the impacted riparian areas. Plantings must meet or exceed an 80% survival rate (planted at 400 stems per acre) by the end of the third growing season. No less than 4 species (native to Pennsylvania) per stratum should be planted, and no single species planted shall comprise greater than 33% of total area coverage or corrective measures will be required. The monitoring area consists of: a 1000 foot by 50 foot riparian area (1.1 acre) starting at the gate valve and ending at the unnamed tributary crossing, additionally a floodplain riparian planting area of trees and woody plant species to the west of the tailrace which totals 0.077 acre. Monitoring information collected should include but is not limited to:
 - Colored photographs (location and direction of the photos must be indicated on plan view drawings).
 - Description of physical conditions before and after restoration activities.
 - A description of any adaptive management performed during the monitoring period.
2. All temporary stream construction entrances must be removed, stabilized, and re-seeded immediately upon project completion.
3. The 260 linear foot temporary bladder dam to be used during the construction of the tailrace, and 0.06 acre of riprap for temporary work pad associated with bladder dam must be completely removed from the Mahoning River upon completion of the phase of the project it is installed for. The waterway must be completely restored to original contours. You must notify this office in writing upon removal/restoration of this location.

This verification is valid for the length of the Pennsylvania Department of Environmental Protection permit, including 401 Water Quality Certification, or until the PASPGP-4 expires (June 30, 2016), is modified, reissued, suspended, or revoked. Activities authorized under the PASPGP-4 that have commenced construction or are under contract to commence construction, will remain authorized provided the activity is completed within 12 months of the date of the

PASPGP-4's expiration (June 30, 2016), modification, reissuance, suspension, revocation; or until the expiration date of the project specific verification, whichever is sooner.

If you have any questions, please contact Jon T. Coleman by phone at (412) 395-7188 or email at jon.t.coleman@usace.army.mil. Please complete our customer survey online and provide us with feedback at <http://www.lrp.usace.army.mil/or/or-f/permits.htm>.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott A. Hans". The signature is fluid and cursive, with a large initial "S" and "H".

Scott A. Hans
Chief, Regulatory Branch

Enclosure

Copy Furnished
Joe Snyder - PADEP Southwest Regional Office

PASPGP-4 PERMIT COMPLIANCE, SELF-CERTIFICATION FORM

Project Name: **Mahoning Hydroelectric Project**

Applicant Name: **Enduring Hydro**

PADEP Permit No: **E03-451**

Date of Issuance: **February 19, 2013**

Corps Permit Number: **2009-2175**

Date of Issuance: **March 11, 2013**

Waterway: **Mahoning Creek**

County: **Armstrong County**

In accordance with the compliance certification condition of your PASPGP-4 authorization, you are required to complete and sign this certification form and return it to the appropriate Corps of Engineers District in which the work is located.

- | | | |
|--|--|--|
| <input type="checkbox"/> U.S. Army Corps of Engineers
Philadelphia District
Regulatory Branch
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390 | <input type="checkbox"/> U.S. Army Corps of Engineers
Baltimore District
1631 South Atherton Street
Suite 101
State College, PA 16801-6260 | <input checked="" type="checkbox"/> U.S. Army Corps of Engineers
Pittsburgh District
Regulatory Branch
Federal Building, 20 th Floor
1000 Liberty Avenue
Pittsburgh, PA 15222-4186 |
|--|--|--|

Please note that the permitted activity is subject to compliance inspections by U.S. Army Corps of Engineers representatives. As a condition of this permit, failure to return this notification form, provide the required information below, or to perform the authorized work in compliance with the permit, can result in suspension, modification or revocation of your authorization in accordance with 33 CFR Part 325.7 and/or administrative, civil, and/or criminal penalties, in accordance with 33 CFR part 326.

Please provide the following information:

- Date authorized work commenced: _____
- Date authorized work completed: _____
- Was all work, including any required mitigation, completed in accordance with your PASPGP-4 authorization?
 YES NO
- Explain any deviations (use additional sheets if necessary)

5. Was mitigation accomplished through an approved in-lieu fee program?
 YES NO (if **YES** please provide documentation, if **NO** complete Nos. 6 and 7 below).

6. Wetland Mitigation: Required? YES NO Required Completion Date _____
 Completed? YES NO Mitigation Monitoring Reports Required? Yes No

7. Attach labeled photographs showing completed work including mitigation area(s) (not required for PADEPGP's/Waivers)

I hereby certify that, except as noted above, that all work, including mitigation, has been completed in accordance with the terms and conditions, including special conditions of the above referenced permit

Applicants Signature:	Consultant/Agents Signature:
Address:	Address:
Telephone:	Telephone:
Email:	Email:

PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT – 4

(PASPGP-4)

July 1, 2011

Please note: the full text of the PASPGP-4 may be viewed on the Baltimore District web site at <http://www.nab.usace.army.mil/Wetlands%20Permits/> or by calling the Corps at 814-235-0570

Applicant: Enduring Hydro

State Authorization(s): E03-451

Corps District:

Philadelphia
U.S. Army Corps of Engineers,
Philadelphia District
Regulatory Branch
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390

Baltimore
U.S. Army Corps of Engineers,
Baltimore District
Regulatory Branch
1631 South Atherton Street
Suite 101
State College, PA 16801-6260

Pittsburgh
U.S. Army Corps of Engineers,
Pittsburgh District
Regulatory Branch
Federal Building, 20th floor
1000 Liberty Avenue
Pittsburgh, PA 15222-4186

It has been determined that your proposed project, which includes the discharge of dredged and/or fill material and/or the placement of structures into waters of the United States, including wetlands, qualifies for Federal authorization under the provisions of Section 404 of the Clean Water Act and /or Section 10 of the River and Harbor Act of 1899, under the terms and conditions of the PASPGP-4.

All activities authorized under PASPGP-4 must comply with all conditions of the authorization, including General, Procedural, and Special Conditions. Failure to comply with all the conditions of the authorization, including project special conditions, will constitute a permit violation and may be subject to criminal, civil, or administrative penalties, and /or restoration.

The authorized activity must be performed in compliance with the following General Conditions to be authorized under PASPGP-4:

General Conditions:

1. **Permit Conditions:** The permittee shall comply with all terms and conditions set forth in the PADEP authorization for use of this permit, including all conditions of Section 401 Water Quality Certification, and any subsequent amendment or modification to such authorization. The permittee shall conduct all work and activities in strict compliance with all approved maps, plans, profiles, and specifications used by PADEP and/or the Corps as the basis for its authorization or subsequent modification of authorization.

2. **Aquatic Life Movements:** No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be appropriately depressed to maintain aquatic life movement and low flow conditions.

3. **Threatened and Endangered Species:** If an activity is authorized under the PASPGP-4, and a Federally listed threatened or endangered species, or proposed species or critical habitat, is subsequently found to be present, all work must cease, and the Corps and USFWS (or NMFS) must be notified. The PASPGP-4 verification is suspended and will not be re-issued until consultation pursuant to Section 7 of the ESA is concluded and adverse effects to Federally listed threatened, endangered, and proposed species and critical habitat are avoided.

Furthermore, persons have an independent responsibility under Section 9 of ESA to not engage in any activity that could result in the “take” of a Federally listed species.

4. Spawning Areas: The permittee shall comply with all time-of-year restrictions as set forth by the PFBC or other designated agency. Discharges or structures in spawning or nursery areas shall not occur during spawning seasons, unless written approval is obtained by the PFBC or other designated agency. In addition, work in areas used for other time sensitive life span activities of fish and wildlife (such as hibernation or migration) may necessitate the use of seasonal restrictions for avoidance of adverse impacts to vulnerable species. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of the year.

5. Waterfowl Breeding and Wintering Areas: Activities including discharges of dredged or fill material or the placement of structures in breeding and wintering areas of migratory waterfowl must be avoided to the maximum extent practicable.

6. Shellfish Production: No discharge of dredged or fill material and/or the placement of structures may occur in areas of concentrated shellfish production, unless the discharge is directly related to an authorized shellfish harvesting activity.

7. Adverse Effects From Impoundments: If the activity, including the discharge of dredged or fill material or the placement of a structure, creates an impoundment of water, the adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow, including impacts to wetlands, shall be minimized to the maximum extent practicable.

8. Obstruction of High Flows: To the maximum extent practicable, the activity must be designed to maintain pre-construction downstream flow conditions (i.e., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters), and the structure or discharge of dredged and/or fill material shall be designed to withstand expected high flows.

9. Erosion and Sediment Controls: During construction, appropriate erosion and siltation controls must be used and maintained in effective operating condition in accordance with State regulations. All exposed soil and other fill material must be permanently stabilized.

10. Suitable Material: No activity, including discharges of dredged and/or fill material or the placement of structures, may consist of unsuitable material (i.e., asphalt, trash, debris, car bodies, etc.). No material discharged shall contain toxic pollutants in amounts that would violate the effluent limitation standards of § 307 of the CWA.

11. Temporary Fill: Temporary fill in waters and wetlands authorized by the PASPGP-4 (i.e., access roads and cofferdams) shall be properly constructed and stabilized during use to prevent erosion and accretion. Temporary fill in wetlands shall be placed on geotextile fabric laid on existing wetland grade. Whenever possible, rubber or wooden mats should be used for equipment access through wetlands to the project area. Temporary fills shall be removed, in their entirety, to an upland site, and suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their preconstruction contours, elevations, and hydrology and revegetated with non-invasive, native species.

12. Equipment Working in Wetlands: Measures must be taken to minimize soil disturbance when heavy equipment is used in wetland areas. These measures include, but are not limited to, avoiding the use of such equipment, use of timber mats or geotextile fabric, and the use of low pressure tire vehicles.

13. Installation and Maintenance: Any structure or fill authorized shall be properly installed and maintained to ensure public safety.

14. PASPGP-4 Verification:

- a. The PASPGP-4 expires June 30, 2016, unless suspended or revoked.

b. Activities authorized under a project specific PASPGP-4 expire June 30, 2016, unless suspended, revoked, or the PADEP authorization expires, whichever date occurs sooner. Activities authorized under the project specific PASPGP-4 that have commenced construction or are under contract to commence construction will remain authorized provided the activity is completed within 12 months of the date of the PASPGP-4's expiration, modification, or revocation; or until the expiration date of the project specific verification, whichever is sooner.

15. **One-Time Use:** A PASPGP-4 authorization is valid to construct the project, or perform the activity, one time only, except for PASPGP-4 authorizations specifically issued for reoccurring maintenance activities.

16. **Water Supply Intakes:** No activity, including discharges of dredged and/or fill material and/or the placement of structures, may occur in the proximity of a public water supply intake and adversely impact the public water supply.

17. **Cultural Resources:** For all activities verified under a PASPGP-4, upon the discovery of the presence of previously unknown Historic Properties (historic or archaeological), all work must cease and the permittee must notify the SHPO and the Corps of Engineers. The PASPGP-4 authorization is not valid until it is determined, through the Section 106 consultation process, whether the activity will have an effect on the Historic Property. The PASPGP-4 may be reverified and special conditions added if necessary, after an effects determination on the Historic Property is made. The PASPGP-4 authorization may be suspended and/or revoked in accordance with 33 CFR 325.7 for the specific activity if an adverse affect on the Historic Property cannot be avoided or mitigated.

18. **Tribal Rights:** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

19. **Corps Civil Works Projects:** The PASPGP-4 does not authorize any work which will interfere with an existing or proposed Corps Civil Works project (i.e., flood control projects, dams, reservoirs, and navigation projects). The permittee understands and agrees that, if future operations by the United States require removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration.

20. **Navigation:** No activity authorized under PASPGP-4 may cause more than a minimal adverse affect on navigation. No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein. In addition, activities that require temporary causeways that prohibit continued navigational use of a waterway (i.e., temporary causeways extending greater than $\frac{3}{4}$ the width across the waterway) shall be removed in their entirety upon completion of their use. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

21. **Inspections:** The permittee shall allow a District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary in order to ensure that the work is being performed in accordance with all the terms and conditions of the PASPGP-4. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work.

22. PASPGP-4 Permit Compliance Self Certification Form: A Self Certification Form, regarding the PASPGP-4 authorized work and required mitigation, will be forwarded to each permittee with the PASPGP-4 verification. Every permittee, who receives a written PASPGP-4 verification, shall submit the signed Self Certification Form upon completion of the authorized work and required mitigation. The completed form shall be returned to the appropriate Corps District.

23. Permit Modifications: Any proposed modification of the authorized overall project that results in a change in the authorized impact to, or use of waters of the United States, including jurisdictional wetlands, must be approved by PADEP. Corps approval is also required if the overall project had been previously reviewed by the Corps as a Category III activity, or the proposed modification causes the overall project impacts to exceed 1.0 acre of waters of the United States, including jurisdictional wetlands, or 250 linear feet of streams, rivers, other watercourses and open water areas. Project modifications that cause the overall project impacts to exceed 1.0 acre of waters of the United States, including wetlands, may not be eligible for PASPGP-4 and will be forwarded to the Corps for review.

24. Recorded Conservation Instruments: As per Part IV.A.26 and Part IV.B.4 and Part IV.C.8 of this permit, proposed Draft Conservation Instruments may be submitted by the applicant as part of the permit application package for review and approval. **When such proposed Conservation Instruments are submitted by the applicant, verification of the recorded deed restriction, conservation easement, or deed restricted open space area shall be forwarded to the appropriate Corps District and appropriate PADEP offices, prior to the initiation of any permitted work.**

25. Property Rights: This PASPGP-4 does not convey any property rights, either in real estate or material, or any exclusive privileges; nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

26. Navigable Waters of the United States (Section 10 Waters): In addition to the conditions referenced above, the following conditions are applicable for navigable waters of the United States eligible for the PASPGP-4. The PASPGP-4 may be used to authorize work in the following navigable waters of the United States:

a. Codorus Creek – from the confluence with the Susquehanna River 11.4 miles upstream to the Indian Rock Dam in York, Pennsylvania;

b. Main Stem Susquehanna River – from the confluence with the Chesapeake Bay upstream to Athens, Pennsylvania (approximately 4 miles south from the New York State line);

c. West Branch of the Susquehanna River – from the confluence with the main stem Susquehanna River upstream to the dam at Lock Haven, Pennsylvania;

d. Chester Creek – from the confluence with the Delaware River 2 miles upstream;

e. Crum Creek – from the confluence with the Delaware River 1 mile upstream to the upstream side of the dam at Eddystone;

f. Darby Creek – from the confluence with the Delaware River 5 miles upstream to the upstream side of 84th Street Bridge in Philadelphia;

g. Delaware River – from the Morrisville-Trenton Railroad Bridge in Morrisville, Pennsylvania, including the West Branch of the Delaware River, upstream to the Pennsylvania/New York border at the 42nd parallel;

h. Lehigh River – from the confluence with the Delaware River 72 miles upstream to the downstream side of PA Route 940 Bridge;

i. Neshaminy Creek – from the confluence with the Delaware River, including the Neshaminy State Park Harbor Project at the mouth of Neshaminy creek, 4 miles upstream to the downstream side of the Newportville Bridge;

j. Pennypack Creek – from the confluence with the Delaware River 2 miles upstream to the downstream side of Frankford Avenue Bridge in Philadelphia;

k. Ridley Creek – from the confluence with the Delaware River 1 mile upstream to the upstream side of the Baltimore and Ohio Railroad Bridge in Chester, Pennsylvania;

l. Schuylkill River – from the Fairmont Dam, 104 miles upstream to Port Carbon, Pennsylvania; and

m. Schuylkill Navigation Channel (Manayunk Canal) – along the Schuylkill River for two miles from the Flat Rock Dam to Lock Street in the Manayunk Section of Philadelphia, Pennsylvania.

27. For Aerial Transmission Lines Across Navigable Waters:

a. The following minimum clearances are required for aerial electric power transmission lines crossing navigable waters of the United States. These clearances are related to the clearances over the navigable channel provided by existing fixed bridges, or the clearances which would be required by the United States Coast Guard for new fixed bridges, in the vicinity of the proposed aerial transmission line. These clearances are based on the low point of the line under conditions producing the greatest sag, taking into consideration temperature, load, wind, length of span, and type of supports as outlined in the National Electrical Safety Code:

NOMINAL SYSTEM VOLTAGE (kV)	Minimum additional clearance (ft.) above clearance required for bridges.
115 and below	20
138	22
161	24
230	26
350	30
500	35
700	42
750-765	45

i. Clearances for communication lines, stream gauging cables, ferry cables, and other aerial crossings must be a minimum of ten feet above clearances required for bridges, unless specifically authorized otherwise by the District Engineer.

ii. Corps of Engineer regulation ER 1110-2-4401 prescribes minimum vertical clearances for power communication lines over Corps lake projects. In instances where both this regulation and ER 1110-2-4401 apply, the greater minimum clearance is required.

b. **Encasement:** The top of the cable, encasement, or pipeline shall be located a minimum of three feet below the existing bottom elevation of the streambed and shall be backfilled with suitable heavy material to the preconstruction bottom elevation. Where the cable, encasement, or pipeline is placed in rock, a minimum depth of one foot from the lowest point in the natural contour of the streambed shall be maintained. When crossing a maintained navigation channel, the requirements are a minimum of eight feet

between the top of the cable, encasement, or pipeline and the authorized depth of the navigation channel. For maintained navigational channels, where the utility line is placed in rock, a minimum depth of two feet from the authorized depth of the navigation channel shall be maintained.

c. **As-built drawings:** Within 60 days of completing an activity that involves an aerial transmission line, submerged cable, or submerged pipeline across a navigable water of the United States (i.e., Section 10 waters), the permittee shall furnish the Corps and the National Oceanic and Atmospheric Administration, Nautical Data Branch, N/CS26, Station 7317, 1315 East-West Highway, Silver Spring, Maryland, 20910 with professional, certified as-built drawings, to scale, with control (i.e., latitude/longitude, state plane coordinates), depicting the alignment and minimum clearance of the aerial wires above the mean high water line at the time of survey or depicting the elevations and alignment of the buried cable or pipeline across the navigable waterway.

d. **Aids to Navigation:** The permittee must prepare and provide for United States Coast Guard (USCG) approval, a Private Aids To Navigation Application (CG-2554). The form can be found at: http://www.uscg.mil/forms/cg/CG_2554.pdf. Within 30 days of the date of receipt of the USCG approval, the permittee must provide a copy to the applicable Corps District

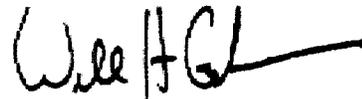
By Authority of the Secretary of the Army:



David E. Anderson
Colonel, Corps of Engineers
District Engineer, Baltimore



Philip M. Secrist, III
Lieutenant Colonel, Corps of Engineers
District Engineer, Philadelphia



William H. Graham
Colonel, Corps of Engineers
District Engineer, Pittsburgh