COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

ACKNOWLEDGMENT OF APPRISAL OF PERMIT CONDITIONS

·	Permit No.	E03-451	
Project Location	County	Armstrong	
	Municipality	Redbank and Wayne Townships	
Gentlemen:			
Acknowledgment is made that I, (Permittee Name) bhak C	ollins of Maho	ning Creek Hydroele	ctric Company, LL
and J. Lee Rutledge c/o The Ruhlin Company, (Name/address/telephone of individual respor	D . D	5 - 6 1 B 1 A	' .
have been apprised of and are familiar with the terms and condition		E03-451	issued to
(Permittee): Mahoning Creek Hydroelectric (Company, LI	<u>.</u> c	
giving its consent to:			
To modify an existing dam across the Mahoning Creek (WWI constructing and maintaining:	F) to generate hy	droelectric power, by	

- 1. an intake structure within the Mahoning Creek Reservoir (250 sq ft);
- 2. a 223-ft long soldier pile wall, along the north bank of the existing stilling basin, of the Mahoning Creek Dam, to support the fill over a penstock;
- 3. fill in floodplain of Mahoning Creek, at 3 locations (435 sq ft);
- 4. outlets from tile drains in stilling basin (122 sq ft);
- 5. tile drain outlets in floodplain
- 6. 72 linear feet (lf) of riprap along the Mahoning Creek, for slope protection, along the tailrace;
- 7. a powerhouse, along 80 If of the Mahoning Creek, which will occupy 1,107 sq ft of watercourse and 550 sq ft of floodplain;
- 8. a 37-ft long culvert (30-in diameter CMP) and outlet protection in an unnamed drainage way to the Mahoning Creek;
- 9. a bridge crossing (18-ft long X 80-ft span X 4-ft height) across Camp Run (CWF);
- 10. a 25kV utility line stream crossing (to replace existing 12kV line) over 60 ft of Camp Run;
- 11. and a 600 sq ft fishing pier and six (6) 4-ftx4-ftx4-ft boulders in the stilling basin, and
- 12. by excavating 5805 sq ft of stream bed materials from the Mahoning Creek (along 145 lf of watercourse) and 156 sq ft of floodplain, to construct the tailrace, below the powerhouse.

Temporary impacts will result from the placement of fill in an approximately 2400 sq ft area, in and along Mahoning Creek, to construct a temporary work pad, which will be used during tailrace excavation. This temporary fill will be removed as the tail race is being excavated. The project is located in Redbank and Wayne

Townships, Armstrong County (Distant, PA Quadrangle N: 8.4 inches, W: 4.4 inches; Latitude: 40° 55' 17"; Longitude: 79° 16' 55").

RETURN TO:

Department of Environmental Protection Permitting & Technical Services Section Waterways and Wetlands Program 400 Waterfront Drive Pittsburgh, PA 15222-4745

2/20/2013 Date 2/20/2013 Date

(Permittee signature)

(Signature of individual responsible for supervision work)

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WATER OBSTRUCTION AND ENCROACHMENT PERMIT **COMPLETION REPORT**

obstructions have been removed.

		Permit No.	E03-451
		County	Armstrong
		Municipality	Redbank and Wayne Townships
Gentlemen:			
I (We) hereby	y certify that the work authorized by Permit E03-45	51	
To modify an maintaining:	existing dam across the Mahoning Creek (WWF)	to generate hydroelec	stric power, by constructing and
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	an intake structure within the Mahoning Creek I a 223-ft long soldier pile wall, along the north b Dam, to support the fill over a penstock; fill in floodplain of Mahoning Creek, at 3 locatioutlets from tile drains in stilling basin (122 sq tile drain outlets in floodplain 72 linear feet (If) of riprap along the Mahoning Creek a powerhouse, along 80 If of the Mahoning Creek of floodplain; a 37-ft long culvert (30-in diameter CMP) and o Mahoning Creek; a bridge crossing (18-ft long X 80-ft span X 4-ft a 25kV utility line stream crossing (to replace ex and a 600 sq ft fishing pier and six (6) 4-ftx4-ftx by excavating 5805 sq ft of stream bed materials and 156 sq ft of floodplain, to construct the tailra	ank of the existing strons (435 sq ft); Creek, for slope proteck, which will occupy utlet protection in an height) across Campuisting 12kV line) over 4-ft boulders in the strom the Mahoning (ection, along the tailrace; 1,107 sq ft of watercourse and 550 unnamed drainage way to the Run (CWF); er 60 ft of Camp Run; tilling basin, and Creek (along 145 lf of watercourse)
Mahoning Cre will be remove	orary impacts will result from the placement of fill tek, to construct a temporary work pad, which will ed as the tail race is being excavated. The project is nt, PA Quadrangle N: 8.4 inches, W: 4.4 inches; Land	be used during tailraces located in Redbank	ce excavation. This temporary fill and Wayne Townships, Armstrong
was completed	f on 20, in accordance w	rith the plans approve	d and that all unauthorized

Name:	
	(typed or printed)
Signature:	
Title:	
Firm:	
Date:	

RETURN TO:

Department of Environmental Protection Permitting & Technical Services Section Waterways and Wetlands Program 400 Waterfront Drive Pittsburgh, PA 15222-4745

This permit expires if construction is not completed by December 31, 2018 See Condition No. 9.

Commonwealth of Pennsylvania
Department of Environmental Protection
Southwest Regional Office
Waterways and Wetlands Program - Permitting and Technical Services Section

WATER OBSTRUCTION AND ENCROACHMENT PERMIT

The Department of Environmental Protection ("Department"), established by the Act of December 3, 1970, P.L. 834 (71 P.S. §§510.1 et seq.) and empowered to exercise certain powers and perform certain duties under and by virtue of the Act of November 26, 1978, P.L. 1375, as amended by the Act of October 23, 1979, P.L. 204 (32 P.S. §§693.1 et seq.) known as the "Dam Safety and Encroachments Act"; Act of October 4, 1978, P.L. 851 (32 P.S. §§679.101 et seq.) known as the "Flood Plain Management Act"; Act of June 22, 1937, P.L. 1987, (35 P.S. §§691.1 et seq.), known as "The Clean Streams Law"; and the Administrative Code, Act of April 9, 1929, P.L. 177, as amended, which empowers the Department to exercise certain powers and perform certain duties by law vested in and imposed upon the Water Supply Commission of Pennsylvania and the Water and Power Resources Board, hereby issues this permit to:

Mahoning Creek Hydroelectric Co, LLC Care of: Enduring Hydro, LLC 5425 Wisconsin Avenue Chevy Chase, MD 20815

giving its consent to: To modify an existing dam across the Mahoning Creek (WWF) to generate hydroelectric power, by constructing and maintaining:

- 1. an intake structure within the Mahoning Creek Reservoir (250 sq ft);
- 2. a 223-ft long soldier pile wall, along the north bank of the existing stilling basin, of the Mahoning Creek Dam, to support the fill over a penstock;
- 3. fill in floodplain of Mahoning Creek, at 3 locations (435 sq ft);
- 4. outlets from tile drains in stilling basin (122 sq ft);
- 5. tile drain outlets in floodplain;
- 6. 72 linear feet (If) of riprap along the Mahoning Creek, for slope protection, along the tailrace;
- 7. a powerhouse, along 80 lf of the Mahoning Creek, which will occupy 1,107 sq ft of watercourse and 550 sq ft of floodplain;
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- 9. a bridge crossing (18-ft long X 80-ft span X 4-ft height) across Camp Run (CWF);
- 10. a 25kV utility line stream crossing (to replace existing 12kV line) over 60 ft of Camp Run;
- 11. and a 600 sq ft fishing pier and six (6) 4-ftx4-ftx4-ft boulders in the stilling basin, and
- 12. by excavating 5805 sq ft of stream bed materials from the Mahoning Creek (along 145 lf of watercourse) and 156 sq ft of floodplain, to construct the tailrace, below the powerhouse.

WQ-SW-105 Rev 03/01/11 Permit No. E03-451

Temporary impacts will result from the placement of fill in an approximately 2400 sq ft area, in and along Mahoning Creek, to construct a temporary work pad, which will be used during tailrace excavation. This temporary fill will be removed as the tail race is being excavated. The project is located in Redbank and Wayne Townships, Armstrong County (Distant, PA Quadrangle N: 8.4 inches, W: 4.4 inches; Latitude: 40° 55' 17"; Longitude: 79° 16' 55").

Except as otherwise noted below, the Department of Environmental Protection, pursuant to Section 401(a) of the Federal Clean Water Act, as amended, 33 U.S.C.A. Section 1341(a), certifies that the construction and operation herein described will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of that Act, and that the construction will not violate applicable Federal and State water quality standards.

This permit is issued in response to an application filed with the Department of Environmental Protection on 3th day of November, 2009, and with the understanding that the work shall be performed in accordance with the maps, plans, profiles and specifications filed with and made a part of the application on February 11, 2010, March 29, 2010, June 7, 2010, February 4, 2011, June 8, 2011, July 05, 2011, July 27, 2011, July 29, 2011, February 27, 2012, November 27, 2012, January 17, 2013, and January 22, 2013 subject, however, to the provisions of the Dam Safety and Encroachments Act, the Flood Plain Management Act, The Clean Streams Law, the Administrative Code, the Rules & Regulations promulgated thereunder and the following conditions and restrictions.

- 1. The Department, in issuing this permit, has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the Department may, in addition, institute appropriate legal proceedings.
- 2. This permit does not give any property rights, either in real estate or material, nor any exclusive privileges, nor shall it be construed to grant or confer any right, title, easement, or interest in, to, or over any land belonging to the Commonwealth of Pennsylvania; neither does it authorize any injury to private property or invasion of private rights, nor any infringement of Federal, State, or Local laws or regulations; nor does it obviate the necessity of obtaining Federal assent when necessary.
- 3. The work shall at all times be subject to supervision and inspection by representatives of the Department, and no changes in the maps, plans, profiles, and specifications as approved shall be made except with the written consent of the Department. The Department, however, reserves the right to require such changes or modifications in the maps, plans, profiles, and specifications as may be considered necessary. The Department further reserves the right to suspend or revoke this permit if in its opinion the best interest of the Commonwealth will be subserved thereby.
- 4. This permit authorizes the construction, operation, maintenance and normal repair of the permitted structures conducted within the original specifications for the water obstruction or encroachment, and in accordance with the regulations of the Department and term and conditions of this permit. Any repairs or maintenance involving modifications of the water obstruction or encroachment from its original specifications, and any repairs or reconstruction involving a substantial portion of the structure as defined by regulations of the Department shall require the prior written approval and permit of the Department.
- 5. All construction debris, excavated material, brush, rocks, and refuse incidental to this work shall be removed entirely from the stream channel and placed either on shore above the influence of flood waters, or at such dumping ground as may be approved by the Department.
- 6. There shall be no unreasonable interference with the free discharge of the river or stream or navigation during construction.

Permit No. E03-451

- 7. If future operations by the Commonwealth of Pennsylvania require modification of the structure or work, or if, in the opinion of the Department of Environmental Protection, the structure or work shall cause unreasonable obstruction to the free passage of floodwaters or navigation, the permittee shall, upon due notice, remove or alter the structures, work or obstructions caused thereby, without expense to the Commonwealth of Pennsylvania, so as to increase the flood carrying capacity of the channel or render navigation reasonably free, easy, and unobstructed, in such manner as the Department may require. No claim shall be made against the Commonwealth of Pennsylvania on account of any such removal or alteration.
- 8. The permittee shall notify the Department, in writing, of the proposed time for commencement of work at least 15 days prior to the commencement of construction.
- 9. If this work is not completed on or before the 31st day of December AD, 2018, this permit, if not previously revoked or specifically extended by the Department in writing, shall become void without further notification. This expiration applies only to approval to construct facilities under this permit. Approval to operate and maintain those facilities does not expire once those facilities are built.
- 10. If construction work has not been completed within the time specified in this permit and the time limit specified in this permit has not been extended in writing by the Department or if this permit has been revoked for any reason, the permittee shall, at his own expense and in a manner that the Department may prescribe, remove all or any portion of the work as the Department requires and restore the watercourse and floodplain to their former condition.
- 11. The permittee shall fully inform the engineer or contractor, responsible for the supervision and conduct of the work, of the terms, conditions, restrictions and covenants of this permit. Prior to the commencement of construction, the permittee shall file with the Department in writing, on a form provided by the Department, a statement signed by the permittee and an individual responsible for the supervision or conduct of the work acknowledging and accepting the general and special conditions contained in this permit. Unless the acknowledgment and acceptance have been filed, this permit is void. A copy of this permit and the acknowledgment shall be available at the work site for inspection upon request by an officer or agent of the Department or another Federal, State, County, or municipal agency.
- 12. The permittee shall operate and maintain the structure or work authorized herein in a safe condition in accordance with the permit terms and conditions and the approved maps, plans, profiles, and specifications.
- 13. This permit may not be transferred without prior written approval from the Department, such approval being considered upon receipt of the properly executed "Application of Transfer of Permit" form.
- 14. If and when the permittee desires to discontinue use or abandon the activity authorized herein, he must remove all or part of the structure or work authorized and take other actions as are necessary to protect safety and the environment in accordance with a permit issued by the Department;
- 15. If the use of explosives in any waterways is required, the permittee shall secure the prior written permit from the Pennsylvania Fish and Boat Commission, pursuant to the Pennsylvania Fish and Boat Code, Act 1980-175 Title 30 Pennsylvania Consolidated Statutes, Section 2906. Requests should be directed to the Pennsylvania Fish and Boat Commission, Division of Environmental Services, 450 Robinson Lane, Bellefonte, PA 16823-9620, telephone 814-359-5140;
- 16. Permittee shall implement and monitor an Erosion and Sedimentation Control Plan prepared in accordance with Chapter 102 so as to minimize erosion and prevent excessive sedimentation into the receiving watercourse or body of water;

WQ-SW-105 Rev 03/01/11 Permit No. E03-451

17. The project site shall at all times be available for inspection by authorized officers and employees of the Pennsylvania Fish and Boat Commission. Prior to commencement and upon completion of the work authorized by this permit, the permittee shall notify the Pennsylvania Fish and Boat Commission's Southwest Regional Office, RD #2, Box 39, Somerset, PA 15501, telephone 814-445-8974.

- 18. The project site shall at all times be available for inspection by authorized officers and employees of the County Conservation District. Prior to commencement and upon completion of the work authorized by this permit, the permittee shall notify the Armstrong Conservation District, 124 Armsdale Road, Suite B-2, Kittanning, PA 16201-3738; Phone: 724.545-9012.
 - 19. SPECIAL CONDITIONS see next page

WQ-SW-105 Rev 03/01/11 Permit No. E03-451

SPECIAL CONDITIONS

A. Periodic stream cleaning shall be performed in accordance with the Department's "Standards for Channel Cleaning at Bridges and Culverts", a copy of which is attached and made part of this permit.

- B. This permit does not convey any real property rights or interests or authorization to trespass on privatelyowned riparian land. By accepting this permit, the permittee certifies that he/she holds title, easement, right or other real interest in the riparian land. Any dispute over ownership of this land is solely a matter for private litigation.
- C. This permit does not relieve the permittee of the responsibility to obtain any applicable approval/permit from the District Engineer, Pittsburgh District, U.S. Army Corps of Engineers, Room 1817 Federal Building, 1000 Liberty Avenue, Pittsburgh, PA 15222, under Section 10 of the Rivers and Harbor Act or Section 404 of the Clean Water Act of 1977.
- D. Operation of the Mahoning Creek Hydroelectric Project facility shall be in accordance with the submitted Operations Plan, dated November 2012, to insure that the operation of this facility does not interfere with the operation and maintenance of the existing Mahoning Creek Dam and Reservoir, which are currently owned, operated and maintained by the U.S. Army Corps of Engineers. Any changes to this Operations Plan document must be reported to the Department, and may require the Department's approval, prior to implementing any changes.
- E. Approval is based upon the submitted drawings. If any changes are made to these drawings, you must contact DEP, to determine whether further authorization from DEP, will be required.
- F. Operation of the Mahoning Creek Hydroelectric Project facility shall be in accordance with the submitted Adaptive Management Plan, which is a component of the Operations Plan (dated November 2012), to insure that water quality is maintained within the reservoir, stilling basin, and within Mahoning Creek below the stilling basin. While the Department recognizes that the Adaptive Management Plan is designed to comply with the minimum water quality standards that are outlined in a U.S. Army Corps of Engineers letter, dated 10/22/2012, water quality standards shall also satisfy the applicable specific water quality criteria that is listed in the Department's Chapter 93 rules and regulations. Any changes to the Adaptive Management Plan document must be reported to the Department, and may require the Department's approval, prior to implementing any changes.
- G. The permittee shall submit to the Department, on a monthly basis, a water quality report and an annual summary report. These reports will provide the water quality measurements, as recorded by the permittee and as outlined in the permittee's Water Quality Monitoring Plan, and shall identify any deviations from the water quality requirements that are outlined in the Adaptive Management Plan, and the specific water quality criteria that are listed in the Department's Chapter 93 rules and regulations. If any deviations from the water quality standards and/or specific water quality criteria are detected, then reporting frequency shall increase to weekly, and shall document any corrective actions that were taken, or will be taken, to address any detected deviations. The water quality reports shall be submitted to:

PA Dept. of Environmental Protection Waterways and Wetlands Program 400 Waterfront Drive Pittsburgh, PA 15222 WQ-SW-105 Rev-03/01/11 Permit No. E03-451

H. If the Department observes and/or the permittee's water quality reports document any deviations from the specific water quality criteria that is outlined in the Department's Chapter 93 rules and regulations, and corrective actions undertaken by the permittee do not adequately address these deviations, then the permittee shall consult with the Department, to examine ways to come into compliance with the Department's specific water quality criteria.

- I. Since Camp Run is a stocked trout stream, and Mahoning Creek is also managed for walleye, no work shall be done in these watercourses between March 1 and June 15 without the prior written approval of the Pennsylvania Fish and Boat Commission.
- J. The Submerged Lands License Agreement entered into between the Department and Permittee covering this operation, is incorporated herein by reference and the permittee shall comply with all of its terms and conditions.
- K. This project also requires a Limited Power Permit to be issued by Department. Work in areas covered by the Limited Power Permit cannot be started until that permit is issued.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Rita Coleman

Program Manager

Waterways and Wetlands Program

DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATERSHED MANAGEMENT DIVISION OF WATERWAYS, WETLANDS AND EROSION CONTROL

STANDARDS FOR CHANNEL CLEANING AT BRIDGES AND CULVERTS

1. A work schedule which includes a written description of each structure, a description of the proposed work and a map showing each project location shall be submitted concurrently to the Department of Environmental Protection, the Pennsylvania Fish and Boat Commission, and the Conservation District of the county in which the project is located not less than 30 days in advance of initiating work. The work schedules shall be submitted to the appropriate Department of Environmental Protection Regional Office listed on Exhibit B and to the appropriate Pennsylvania Fish and Boat Commission Regional Headquarters listed on Exhibit A.

Addresses for County Conservation Districts may be obtained from the Department of Environmental Protection or may be found in local telephone directories.

- 2. The owner shall notify the appropriate Pennsylvania Fish and Boat Commission's Regional Headquarters (Exhibit A) and the appropriate County Conservation District 10 days in advance of starting work each time at any location identified in the proposed work schedule. Notification by postcard is suggested.
- 3. The work schedule shall be in the possession of the person in charge on the site whenever work is being performed. The project description and limits must be clearly indicated on the work schedule.
- 4. No work may be done in stocked trout streams between March 1 and June 15 except for emergencies. Emergency work must be approved by the Department of Environmental Protection in consultation with the Pennsylvania Fish and Boat Commission.
- 5. Work in the stream channel shall be limited to 50 feet upstream and 50 feet downstream from the bridge or culvert. In addition, work should be accomplished by working from the stream banks. In those cases where this is not possible, the operation of equipment in the water is to be minimized.
- 6. Channels may be excavated to a width no greater than the width of the normal low flow channel immediately upstream and downstream of the bridge or culvert. The remainder of the channel width shall be maintained as an elevated flood plain and may be excavated only to six inches above water level at the time of work.
- 7. Material removed shall be disposed of at a location which precludes re-entry into the stream and in a manner which does not obstruct flood flows in the floodway. If material removed from the stream is needed for backfill or bank restoration, it should be faced to the ordinary high water level with riprap suitably sized according to the anticipated stream velocity. All disturbed areas above the level of the riprap must be stabilized or seeded. Excess excavated material shall not be deposited in any wetland, river, lake, water course, floodway, or other regulated waters of the Commonwealth without first applying for and receiving the written permit of the Department of Environmental Protection.
- 8. Tree and shrub growth on stream banks shall not be disturbed unless absolutely necessary.
- 9. If an access road is constructed, stormwater diversion shall be provided to assure that water will not flow along the access road directly into the stream or the work area.

STANDARDS FOR CHANNEL CLEANING AT BRIDGES AND CULVERTS - continued

- 10. Erosion and sediment pollution control measures must be properly implemented and closely monitored to minimize erosion and prevent sediment from entering the stream channel.
- 11. Where it is necessary for construction equipment to cross the stream, a temporary stream crossing shall be provided by the permittee for this purpose unless the stream flow is shallow and the stream bed consists of solid or nonerodible material. The temporary crossing must be authorized by and comply with the conditions of General Permit BDWM-GP-8, Temporary Road Crossings. Any fill material provided for temporary crossings shall be clean granular material and entire fill shall be kept to an absolute minimum elevation to avoid obstructing flood flows and creating backwater flooding condition upstream. The owner is responsible for any damages resulting from the obstruction of flood flows by this temporary stream crossing. Upon completion of the project, the temporary crossing shall be removed in its entirety and the disturbed areas restored to their original condition. Copies of, and authorization to use, BDWM-GP-8 are available from the Department offices listed on Exhibit B.
- 12. The Department shall have the discretion to require a separate individual permit application to be submitted for any project or portion thereof, which the Department determines to have a potential significant effect on safety or protection of life, health, property, or the environment.
- 13. Any repairs or maintenance involving modification of the structure from its original specifications and any repairs or reconstruction or replacement involving a substantial portion of the structure shall require the prior written permit of the Department.