Module 10: Operational Information
[§§77.452/77.456/77.563/77.564]

10.1 Equipment and Operation Plan

For each phase of mining, identify the type and method of mining; engineering techniques; major equipment to be used; starting point; and the anticipated sequence in which the phases are to be mined.

Mining will be performed in two phases. Phase 1 consists of stockpile and process yard construction and other support area features as shown on the Exhibit 9. Phase 2 will consist of Benwood Limestone mining, primarily the southern portion of the permit.

Phase 1 will begin upon permit approval and once bond has been posted. The major work associated with Phase 1 will consist of the construction of a processing pad along with haul roads connecting the proposed pad to site access points and existing SMT permit. Sediment Pond 1 will be constructed prior to any earth disturbance for the processing pad and haul road construction. The proposed pad will be used to produce crushed aggregate products of common sizes from the stone obtained from the existing SMT permit and Benwood Limestone mining. Major equipment to be used includes surface mining equipment such as excavators, dozers, front loaders, and haul trucks. Such equipment will be used for earthwork to create a flat pad surface. Topsoil will be stripped and stockpiled ahead of pad construction to be used during reclamation and to re-apply to the outslopes. Bulk cut and fill will be performed to achieve balanced site. If any coal, black shale or other potential acid producing rock is encountered, it will be stockpiled above treatment ponds and properly lined and placed in pad construction fill. The cut/fill slopes of the pad and haul road will be covered with a layer of topsoil and seeded and mulched upon reaching final grade. The pad and haul road surfaces will be topped with a layer of crushed aggregate. Earthen berms will be constructed on the edges of the pad and haul roads where vehicle overturnment is possible. A heavy equipment crossing will be installed over the Buckeye and Enterprise gaslines. See attached correspondence. After the crossing is installed, sediment pond 3 will be installed with associated ditches. After this sediment pond is complete, two process water ponds may be installed. These process ponds will be used to settle wash water from sandstone products.

Phase 2 will begin once bond is posted for the Phase 2 area. The major work associated with Phase 2 will consist of haul road construction from the processing pad to the mineral extraction areas, as well as the mining of Benwood Limestone. Sediment Pond 2 will be constructed prior to any earth disturbance associated with haul road construction or the mining of Benwood Limestone. The Benwood Limestone extracted will be transported to the processing pad and processed to produce crushed aggregate products of common sizes. Mining will be performed using the block-cut method. Major equipment to be used in this phase includes surface mining equipment such as excavators, dozers, front loaders, and haul trucks. Such equipment will be used to excavate the overburden over the Benwood Limestone. Drilling and blasting will take place to remove the Benwood Limestone.

10.2 Pit Configuration

a) Identify the maximum depth of mining and the elevation of the pit floor at the maximum depth of mining for each mining phase.

The maximum total depth of mining will be 70 feet. The pit floor will be at an elevation of approximately 1,100 feet at the maximum depth of mining in Phase 2.

b) If mining consolidated rock, identify the maximum highwall height and the benching interval to include the distance between the benches measured vertically (i.e. height of the working face of the bench) and the width of the benches.

In a typical pit, there will be one bench located at the top of the Benwood Limestone unit. This bench will be approximately 20 vertical feet above the pit floor and will be a minimum of 25 feet wide. Above the bench will be an approximate maximum of 50 feet. If overburden is encountered greater than 50 feet, a safety bench will be installed. Where the overburden consists of consolidated rock, a maximum of 40
vertical feet of highwall will be constructed above the bench. The top 10 vertical feet of overburden and all overburden that is not consolidated rock will be sloped to provide stability of the highwall.

c) If mining consolidated rock and the reclamation plan is an alternative to approximate original contour involving restoration of the pit floor and final working face, identify the total acreage of pit floor and final graded slopes.

The reclamation plan for this site will be restoring to approximate original contour. The overburden will be removed and temporarily stored at a nearby location. At the time of reclamation, the material will be pushed back to fill in the pit. The swell of the overburden will compensate for the removed Benwood Limestone. The overburden consists of approximately 60% shale, 15% sandstone, and 25% earth/clay. According to the Federal Highway Administration, shale has a swell factor of 49%, sandstone has a swell factor of 34%, and earth/clay has a swell factor of about -10%. Using a weighted average of the composition of the overburden and their swell factors, the average swell factor for the overburden as a whole is approximately 32%. To account for any shrinkage or variations in swell factors, a swell factor of 30% will be used for calculations. The ratio of overburden to Benwood Limestone is approximately 2BCY:1BCY. In other words, the overburden accounts for approximately 67% of the total volume in the pit area pre-mining. Once the Benwood Limestone is removed and the overburden has swelled, there will be approximately 87% of the total volume remaining to fill in the pit ((67%+67%)*30%=87%). With an average total depth of approximately 45 feet from the existing surface to the bottom of Benwood Limestone, it was determined that there would be an average drop of about 6 feet once the pit is reclaimed. See Exhibit 18 for reclamation cross sections.

10.3 Existing Structures

Identify and describe the intended use of all existing structures or facilities to be used in connection with or to facilitate mineral removal activities. (Common existing structures include impoundments, stream crossing facilities, water obstructions and processing waste dams.)

The adjoining SMT permit will be used in coordination with this permit. Access may traverse through the sites. Runoff will not cross permit boundaries. The haul road that crosses permit boundaries will have a high point right at the permit boundary so that runoff will not be able to cross permit boundaries. There are no proposed or required stream crossings, water obstructions or processing waste dams for this permit.

The proposed process yard will utilize the flat terraced area. This area was created from the previous landowner accepting and placing fill from nearby construction activities. This responds to comment 11.e.

10.4 Overburden Piles

Provide a narrative plan for reclamation of overburden piles specifying the timing and extent of overburden piles returned to the pit and final grading of the overburden pile areas for blending into existing contours.

The overburden removed in development of the pits will be stockpiled after excavation. The overburden will be placed in designated areas. After mining is completed, the overburden pile will be pushed into the last pit with a dozer. The fill will be built and constructed to fill the entire pit void. Positive drainage will be the minimum required backfilling for the surface grade. It is anticipated that with the overburden swell factor, there will be sufficient material available to backfill the pit and subsequent highwall to safe slopes at approximate original contour. The areas where overburden piles are located will be restored to approximate original contour as well. This operation will primarily be block cut mining where adjacent pit overburden is used to backfill the previous pit, hence current reclamation of the overburden piles will closely follow the mining progression. Reclamation of the overburden piles must begin within 30 days of when mineral extraction is terminated per §77.456.
10.5 **Final Grade and Drainage**

Identify the final grading and drainage pattern, including topographic contours on Exhibit 18 and a description of compaction and stabilization techniques. Provide cross-sections or a contour map showing permit line setback(s), final postmining slopes, postmining watertable and safety benches.

The final grade and drainage pattern will be returned to approximate original contour (AOC). Compaction will be achieved by tramming a dozer over the fill slopes. Upon reaching final grade, an even layer of topsoil will be spread across the area being reclaimed and the permanent seed mixture will be applied to stabilize the site. The proposed mining will be block cut surface mining. See Exhibit 18 for reclamation cross sections.

10.6 **Reclamation Timetable**

Provide a sequence of operations for the accomplishment of major stages in the reclamation plan demonstrating compliance with the concurrent reclamation requirements in 25 Pa Code 77.595. Include an estimated timetable for reclamation which is tied to the mining phases and the termination of mineral extraction.

Reclamation of a pit will begin once all the marketable Benwood Limestone is removed from that pit. At the same time, excavation of the next pit will commence. The permanent seed mixture will be applied once final grade is established. This process will continue until all the marketable Benwood Limestone has been extracted from the bonded area. It is anticipated that the life of the mineral extraction area will be approximately 9 years. The lifetime may vary due to market conditions. The processing pad and haul roads indicated on Exhibit 18 will remain post-mining per landowner request. Other haul roads will be reclaimed to AOC once they are no longer in operation. Reclamation must begin within 30 days of when mineral extraction is terminated. It is anticipated that reclamation activities of the mining area will be completed within 2 years after mineral extraction is terminated. The process pad and haul roads may remain active for a longer duration depending on operations and market conditions.

10.7 **Identification of Toxic Materials**

When applicable (e.g., noncoal operation in coal measures) provide a detailed description of the methods used in the identification of potentially acid and toxic forming materials (boney, rooster, blossom or other inferior coal and noncoal strata) which will be encountered and separately handled. Correlate and identify these strata in the test hole data.

No potentially acidic materials are expected to be encountered during this mining operation. The formations to be mined are stratigraphically above the sewickly coal bed. Thus mining of the benwood will not encounter the sewickly coal. Site drilling did not positively confirm what may be encountered.

Sewickey and/or Redstone coal is not expected to be present under the processing pad area. However, if coal is present, some coal may be encountered during excavation for the pad. This may consist of crop coal or previous mining special handle material. Black shale and coal, if found, will be separated, may be stored in the potential acid producing material area, and tested for sulfur content. Proper alkaline addition (per testing results) may be applied to neutralize any carbonaceous material and the mixture may be placed in the pad fill.

10.8 **Special Handling of Toxic Material**

When applicable (e.g. noncoal operation in coal measures) provide a detailed description of the methods to be used in the separation and handling of acid and toxic forming materials. Include transportation, storage, treatment and return of the material to the backfill. Identify the amount and source of clean fill to be placed above and below the material and the compaction and other methods to preclude combustion of the material and prevent groundwater contamination. Indicate all disposal areas on Exhibits 9 and 18.

If potential acid producing material is encountered during the pad excavation, it will be loaded onto trucks and temporarily stockpiled in the designated location shown on Exhibit 9. Treatment Ponds will be constructed below the stockpile area to treat surface runoff that comes in contact. Black shales and inferior coal will be treated with lime as per PA DEP Acid Producing Rock handling guidance. It is anticipated that a very minor amount, if any, would be encountered and could be incorporated into the process pad fill.
10.9 Oil and Gas Wells

Where mining activities are proposed to be conducted within 125 feet of any oil or gas well, identify the location on Exhibits 6, 9 and 18 and provide a description of the activity. Provide a demonstration that the well has been sealed; or describe the measures to be taken to insure the integrity of the well, access to the well at all times and the well operator's consent to the proposed activity.

All known active oil and gas wells are shown on Exhibits 6.2, 9, and 18 with the appropriate 125 feet setback. Surface operations will not be within 125 feet of any oil or gas well nor affect access to any wells unless a variance has been obtained.

A variance has been granted by Apollo Resources to be within 125 feet of any of their gas wells, but no closer than 50 feet of the active gas wells.

Many gas wells in this area have been plugged and/or are planned to be plugged. Once the gas well is plugged and a final plugging certificate is obtained by the operator, the gas well and associated barrier will cease to exist.

10.10 Wells, Exploration Holes and Bore Holes

Identify the type and location of wells, exploration holes, bore holes and monitoring wells and provide a description of the manner in which each will be cased, sealed or otherwise managed.

See Exhibits 6.2 and 9 for locations of exploration drill holes. Drill holes were backfilled upon completion of drilling.

10.11 Underground Mines

Where proposed surface mining activities will be conducted within 500 feet of any point of either an active or abandoned underground mine (coal or noncoal), provide a description of the nature, timing, and sequence of the operation. Identify the location of each underground mine opening and the manner in which the opening will be sealed or otherwise managed including appropriate cross sections and design specifications for mine seals. Provide a description of the potential hydrologic impacts of the proposed activities, the effects on the existing groundwater system, and the effect the proposed activities will have upon abatement of pollution or the elimination of hazards to the health and safety of the public.

The abandoned Isabella and Brenizer underground mines are below the proposed operation. Both Isabella and Brenizer are located on the Pittsburgh coal seam. Approximate extents of both mines along with all known entries are shown on Exhibits 6.2, 9, and 18. The Pittsburgh coal seam-abandoned underground mine complexes are located over 100 feet below the bottom of the proposed mining activities. Therefore, all mining activities proposed on this permit are not anticipated to have any effect on the abandoned underground mines. There are no proposed mine seals. The Pittsburgh Coal is overlayed by layers of sandstone. There is not expected to be any subsidence issues. The local stream flows in this area help aid in proving stable ground conditions and lack of fractured overburden.

10.12 Public Highways
Where opening or expansion of pits are proposed within 100 feet of the outside right-of-way of a public highway, or a relocation of a public highway is proposed, identify the name and section of the public highway involved, a description of the activities to be conducted and detailed plans and cross-sections of the proposed activities. Include the written approval of the government agency having jurisdiction over the highway.

(Note: If the initial public notice advertisement does not contain a notice of the variance request, attach the proof of publication for advertisement of the variance.)

N/A. No operations are to occur within 100 feet of the outside right-of-way of a public highway. Limestone Drive is shown on the map and may be used for access to this operation.

10.13 Public Parks and Historic Places

Where the proposed mining activities may affect any public park or historic place, provide a demonstration of the measures which will be taken to minimize or prevent adverse impacts.

N/A. There are no public parks or historic places that will be affected by this project.

10.14 Utilities

Where the proposed mining activities may adversely affect services provided by oil, gas, and water wells; oil and gas pipelines; railroads; utility lines; and water and sewage lines, provide a demonstration of the measures which will be taken to minimize or prevent these impacts.

The haul road is proposed to cross gas pipelines owned by Buckeye and Enterprise. Crossing agreements are attached from both Buckeye and Enterprise. The haul road will be built-up so that a safe cover over the pipelines is achieved. The crossings are covered under Phase I due to expiration dates of agreements.

The electric lines within the Phase 2 limit of surface disturbance will be relocated at the operator's expense prior to mining operations in this area. See attached correspondence for relocation.

An agreement to cross, drive over and along, to relocate, and to disconnect pipelines owned by Apollo Resources has been established. All of their gas lines within the permit boundary are inactive.

A 50-foot setback will be maintained from the top of the proposed highwall and the private waterline located between properties #11 and #2 to ensure there are no impacts to the waterline.

A 20-foot barrier will be maintained around all utility poles located to the east of the proposed processing pad. Equipment crossing under the electric line will be limited to the area(s) where there is a haul road. Warning signs should be placed at the crossing area(s) to ensure equipment operators are aware of the overhead electric lines.

The underground cable line serving the house on property 2 will be either relocated or temporarily disconnected during mining operations in this area.

10.15 Bonding Calculations

Attach a completed Bond Calculation Summary-Noncoal for consolidated (5600-FM-BMP0474) or unconsolidated (5600-FM-BMP0473) material (sand, gravel, shale, soil). Complete a Bonding Increment Application and Authorization To Conduct Noncoal Mining Activities (5600-FM-BMP0304).

See the bond calculation forms included with this submittal.
To: The Department of Environmental Protection, or To Whom It May Concern:

We, Apollo Resources, agree to grant a variance to Ligonier Stone & Lime Company (Operator), 117 Mareia Street, Latrobe, PA 15650, to cross, drive over and along, to relocate, and to disconnect our pipelines when Ligonier Stone & Lime Company requires the need during their mining activities at the SMT East Surface Mine. A variance is granted to be within the 125' barrier of any gas well, but no closer than 50' of the active gas wells. This will be used for support activities including but not limited to constructing ditches, haul roads, stockpiles, etc. We also agree to grant a variance to Ligonier Stone & Lime Company to blast no closer than 100-feet from any of our gas lines and said gas wells. The gas pipelines and gas wells are located on the Ligonier Stone & Lime property in Derry Township, Westmoreland County.

State of Pennsylvania
County of Armstrong

Before me, the undersigned Notary, personally appeared Jesse Colangelo, known to me (or satisfactorily proven) to be the person subscribed to in this instrument and who executed the same, this 4th day of January 2022.

Notary Public Jessica Luthill

My Commission Expires: November 12, 2025
Keyrock Energy LLC
POBox 2223
Johnson City, TN 37605

Ligonier Stone and Lime Company
117 Marcia Street
Latrobe, PA 15650

ATTN: Dave Herrholz

Please be advised that Keyrock Energy has no interest in ever using the abandoned Water Treatment Facility located on your property in Derry Township.

1. Keyrock sold all Coalbed Methane Assets located in Derry Township to Apollo Resources LLC located in Yatesboro, Pa (724-783-5035).
2. There are no producing Coalbed Methane Wells located in Derry Township.
3. Without any producing CBM wells in the Field, there is no reason to have a Water Treatment Facility.
4. The NPDES permit that Keyrock Energy had for the Derry Water Treatment Plant was not renewed with DEP.
5. Keyrock Energy did not own the property. Keyrock Energy leased the property from Bentley Coal/Bentley Development.
6. The Water Treatment Facility Site, per the requirements of the Lease Agreement, had to be restored to its original state when the Lessee elected not to renew the lease. Subsequently, the Lessor, Bentley Coal/Bentley Development asked Keyrock to leave the ponds for the proposed future use of the new Landowner, Ligonier Construction. However, Keyrock was asked to remove the Liner, the Fencing, the discharge piping, and the Inflow piping.
7. At this point in time, Keyrock Energy LLC does not have any operational Coalbed Methane Assets located in Pennsylvania.

Michael A. Buchheit
Land Agent for Keyrock Energy LLC
724-771-4275 (cell)
mbuchheit@wpa.net
Jerry Crossing for Surface Mine (water pipe and equipment crossing)

Brian Verwelst <bverwelst@earthtechinc.net>

To: clythgoe@buckeye.com
Cc: DFarster@buckeye.com, JBowers@buckeye.com, Christian Yoder <cyoder@earthtechinc.net>

Casey,

Please see attached the plan for proposed crossing and installation of the process water pipes across the buckeye pipeline.

This crossing relates to design PA One Call 20213422646

Thanks

Brian Verwelst, P.E.
Earthtech, Inc. P.O. Box 44, Lemont Furnace PA 15456
Office: (724) 439-1313 Cell: (724) 787-1127
http://earthtechinc.net

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LS&L-SMT East-BUCKEYE PIPE CROSSING.pdf
2427K
Derry Crossing for Surface Mine (water pipe and equipment crossing)

Brian Verwelst <bverwelst@earthtechinc.net>
To: Philip Hood <phil@eprod.com>
Cc: Christian Yoder <cyoder@earthtechinc.net>

Philip,
Please see attached the plan for proposed crossing and installation of the process water pipes across the enterprise pipeline.

This crossing relates to design PA One Call 20213422646
Thanks
--

Brian Verwelst, P.E.
Earthtech, Inc. P.O. Box 4A, Lemont Furnace PA 15456
Office: (724) 439-1313 Cell: (724) 767-1127
http://earthtechinc.net

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2427K

LS&L-SMT East-ENTERPRISE PIPE CROSSING.pdf
LETTER OF NO OBJECTION
Expires: June 16, 2022

Revised
December 16, 2021

Brian Verwelst
Earthtech, Inc.
P.O. Box 4A
Lemont Furnace, PA 15456

Re: REQUEST FOR ENROCCHMENT ACROSS THE GREENSBURG TO CHELSEA PIPELINE
(TEPPCO NORTHERN REGION LID #A3; TRACT #104; DB #16089)
LETTER OF NO OBJECTION – WESTMORELAND COUNTY, PA

Dear Mr. Verwelst:

This letter is to memorialize our understanding regarding your request on behalf of Ligonier Stone & Lime Co. ("ENTITY") regarding ENTITY’S proposed construction of a thirty feet (30’) wide by minimum twelve inch (12") thick gravel access road, including two feet (2’) to six feet (6’) thick fill as per plans and/or specifications from Earthtech dated February 3, 2021, a copy of which are attached hereto as Exhibit A (collectively referred to as the "ENCROACHMENT") crossing the Greensburg to Chelsea (the "PIPELINE") of Enterprise TE Products Pipeline Company LLC as represented by its operator Enterprise Products Operating LLC ("COMPANY") located within the right-of-way/easement as depicted on the GIS map attached hereto as Exhibit B and further described in that certain Right-of-Way Agreement from Charles C. Hotham et ux to Sinclair Refining Company dated February 17, 1942 and recorded in Volume 1115, Page 587 in the Records of Westmoreland County, Pennsylvania (the "EASEMENT").

COMPANY is committed to protecting the environment and the health and safety of its employees, contractors, customers and the public by conducting its business in a safe and environmentally responsible manner. Activity that may disturb the PIPELINE, its appurtenant assets or its support structure can pose a threat to the environment, persons and public safety. Consequently, we request that ENTITY adhere to this same commitment to the environment and safety when undertaking construction of the ENROCCHMENT in and around the EASEMENT. At this time, COMPANY will not make an objection to the proposed ENROCCHMENT, conditioned upon ENTITY’S understanding of the following:

1. A minimum of 48 hours (excluding weekends and holidays) prior to commencing construction activities relating to the Enrocchment, ENTITY will (i) confirm that the local One-Call has been notified of the construction activities (ENTITY or its agents may contact One-Call by dialing 811) and (ii) contact COMPANY’S Operations representative Ryan Hayes at 724-850-1113, so that Mr. Hayes or his designated representative can be present during any approved construction operations.

2. COMPANY’S designated representative in the field ("COMPANY’S REPRESENTATIVE") will have the right to observe the construction of the ENROCCHMENT. ENTITY understands that COMPANY’S REPRESENTATIVE may suspend any work activities on the ENROCCHMENT if COMPANY’S REPRESENTATIVE, in his sole and absolute discretion, determines that such activities are in violation of any applicable law, ordinance or regulation or pose an imminent risk of bodily injury or death to persons, a threat to the environment or damage to the PIPELINE.

3. The following language must be conspicuously displayed on all drawings depicting the PIPELINE:
WARNING! HIGH PRESSURE PIPELINE
Excavation and/or Construction Prohibited without Prior Written Permission From
Enterprise Products Operating LLC

4. ENTITY’S crossing(s) will be as close to ninety (90) degrees as possible to the PIPELINE, but not
less than forty-five (45) degrees. COMPANY will require physical verification of the PIPELINE
depth of cover and alignment, at ENTITY’S expense, prior to work being performed near the
PIPELINE. Physical verification may be via hydro-excavation or any other method and shall be
coordinated with and approved by COMPANY’S REPRESENTATIVE. If the PIPELINE is not at
the anticipated alignment or depth, ENTITY shall adjust accordingly at no expense to COMPANY
or its affiliates.

5. ENTITY’S aforementioned access road crossing(s) will be installed in such a way that a minimum
vertical separation of six feet (6’) is maintained between the top of the PIPELINE and the top of
the gravel access road. The width of the access road should not exceed thirty feet (30’) with
twelve inch (12”) thick gravel. ENTITY shall be responsible for all future damages to the gravel
access road in the event that COMPANY, or its designee, must access the PIPELINE and/or
associated EASEMENT to perform routine or emergency maintenance.

6. ENTITY understands that moving heavy construction equipment across the PIPELINE and/or the
EASEMENT can damage the PIPELINE, thereby posing a threat to the environment and the safety
of persons in the vicinity and the public. ENTITY will provide COMPANY with a minimum of 72
hours notice prior to crossing the PIPELINE with any heavy equipment. Wherever ENTITY is
intending to cross the PIPELINE and/or the EASEMENT with heavy equipment, ENTITY will place
matting or other suitable material over the PIPELINE as determined by COMPANY’S
REPRESENTATIVE. NOTE: It is the responsibility of ENTITY to confirm that the matting is
constructed in a manner that will sustain proposed heavy equipment. No vibratory compaction
equipment is allowed within the EASEMENT. ENTITY will maintain a minimum of three feet (3’)
of cover over the top of the PIPELINE at locations where construction or maintenance activities will
take place over the PIPELINE.

7. ENTITY may place excavated material inside the EASEMENT, but may not place such material
over the PIPELINE unless approved by COMPANY’S REPRESENTATIVE. No equipment will be
allowed to work over the PIPELINE unless approved by COMPANY’S REPRESENTATIVE.
COMPANY requires hand excavation to be performed within eighteen-inches (18”) plus half the
diameter of the PIPELINE; however, at no point should mechanical excavation be performed less
than two feet (2’) from the PIPELINE. All mechanical digging equipment must have the teeth
removed or barred with a plate welded across the teeth, no detachable implements will be allowed
without safety locks.

8. ENTITY will not place large landscaping with a mature untrimmed height greater than eighteen
inches (18”) on the EASEMENT. No trees will be permitted on the EASEMENT and COMPANY
reserves the right to trim the canopy of any trees adjacent to the EASEMENT to prevent overhang
onto the EASEMENT. No permanent structures will be permitted on the EASEMENT, including,
but not limited to, light or utility poles, fences, buildings, houses, barns, garages, patios, swimming
pools, or reinforced concrete slabs.

9. Any and all use of the EASEMENT for temporary workspace and any and all crossings of the
PIPELINE must be approved by COMPANY’S REPRESENTATIVE, provided, however, that such
approval shall not be unreasonably withheld. ENTITY agrees to clean up and repair all damages
to the EASEMENT resulting from any ENTITY’S use of, or work on or across, the EASEMENT.
Any and all damage repairs and cleanup of the EASEMENT will be subject to COMPANY’S
acceptance.
10. ENTITY may place and maintain utility markers on either edge of the EASEMENT, unless said markers interfere with landowner’s or tenant’s land use.

11. The existence of the ENCROACHMENT does not modify or constitute a waiver of COMPANY’S rights under the EASEMENT or any other rights which may be implied by law or equity; and COMPANY expressly reserves all such rights.

12. ENTITY understands that COMPANY’S issuance of this letter of no objection was based on many factors, including the circumstances of the COMPANY, the EASEMENT, the PIPELINE and COMPANY’S business at the time issued and in the future these factors and circumstances can change. COMPANY’S issue of no objection to the construction of the ENCROACHMENT will expire six (6) months from the date of this letter, unless the construction/encroachment described in the scope of work crossing the pipeline easement has been completed. If ENTITY is unable to commence construction of the ENCROACHMENT within six (6) months after the date of this letter or, if after timely commencement of construction of the ENCROACHMENT, suspends construction thereof for a period greater than six (6) months, and ENTITY still intends to construct and/or complete construction of the ENCROACHMENT, ENTITY must resubmit the construction plans for the ENCROACHMENT, whether or not such plans have changed, for review by COMPANY and COMPANY, in its sole and absolute discretion, will determine whether it will have no objection at that time to such plans as resubmitted.

If you believe anything set forth in this letter misstates our understanding or if you require more information or clarification of any matters set forth herein, please contact the undersigned at your soonest convenience. The undersigned can be reached at (713) 381-3119 or contacted via e-mail at ysiddiqui@eprod.com.

Regards,

Yameena Siddiqui
Yameena Siddiqui
Senior Land Representative

cc:  Liz Neidlinger
     Ryan Hayes
     Israel Silva
     Caesar Leynes
     Ryan Reppert
     Chris Robertson
     Philip Hood
CROSS SECTION A-A'
SCALE: 1" = 10'

NOTES:

1.) THE DEPTH AND LOCATION SHOWN FOR THIS GAS LINE WERE DETERMINED BY A FIELD REPRESENTATIVE FOR BUCKEYE PARTNERS, L.P. ON 7/28/2021.

2.) THE CONTACT INFORMATION FOR THE FIELD REPRESENTATIVE IS AS FOLLOWS:

BUCKEYE PARTNERS, L.P.
P.O. BOX 4400, IN PROCTOR, OH 43440.
614-563-9368

3.) DEPTHS SHOWN ARE BASED ON FIELD READINGS PROVIDED BY THE REPRESENTATIVE ONLY. NO EXCAVATION OCCURRED FOR THIS EXHIBIT.

4.) AN EARTHTECH, INC. SURVEYOR LOCATED EACH OF THE READINGS AND RECORDED THE DEPTHS PROVIDED. THESE DEPTHS ARE SHOWN ON BOTH THE PLAN VIEW AND PROFILE EXHIBITS.

PROPOSED CROSS-SECTION WITH DEPTHS

LIGONIER STONE & LIME COMPANY
SMT EAST SURFACE MINE
DERRY TOWNSHIP
WESTMORELAND COUNTY, PA
PURPOSE: This drawing provides a typical temporary pipe crossing for construction traffic. The design of this crossing has been developed based on the assumptions listed below. Should any of the assumptions not be present for the specific site in question, Earthtech, Inc., and the utility line owner should be contacted to provide alternate crossing details.

1. The crossing design was developed to be consistent with Enterprise Products Encroachment Guidelines and Buckeye Partners, L.P. and affiliates right-of-way use restrictions specification revision 6, attachment 6: earthen ramp detail.

2. Design vehicle: Caterpillar 773D off-highway truck
   Dimensions: 33.32' length x 14.47' width x 14.83' height
   Weight: 350,000 lb (empty), 426,503 lb (loaded)
   Maximum axle load: 147,257 lb (rear axle, loaded)
   Given from Caterpillar 773D Off-Highway Truck Large Specalog

3. Subsurface soil conditions have been assumed to consist of medium dense sand (drained friction angle of 32° or higher), or stiff consistency clay (cohesion of 1 kP per square foot or greater), or a combination thereof. Groundwater has been assumed to be at least 5 feet below the bottom of the pipe. If these conditions are not present, the design engineer shall be notified to develop an alternate design.

4. Under no circumstances shall loading of any type be permitted on the ground surface directly over the pipeline.

5. Equipment shall not be permitted to remain parked or in idle on crossing ramp.

6. Crossing ramp to be constructed under supervision of Earthtech, Inc., personnel.

7. Any fill used must be deemed acceptable by the utility line owner personnel as well as being tested and approved prior to placement.

8. Fill ramp shall be underlain by geogrid (Tensar BX1200 or approved equivalent).

9. The ramp shall be extended 5' in either direction from the centerline of the pipeline(s).

10. A minimum of 6' of cover must be maintained over the pipeline where heavy equipment will cross. A minimum of 3' of cover must be maintained over the pipeline where ditches will cross.

11. Crossing may not be placed in service until cleared by utility line owner personnel.

12. Upon completion of crossing activity, R.O.M. must be returned to original condition.

TYPICAL PIPE CROSSING DETAILS
Ligonier Stone & Lime Company
SMT East Surface Mine
Derry Township, Westmoreland County, PA

Earthtech, Inc.
Unit 150, P.O. Box 5A, Lebanon, PA 17046
Telephone: 724-439-1333 Fax: 724-439-8633
http://www.earthtechinc.net/
February 19, 2021

David S. Herrholtz
Ligonier Stone & Lime Company
dh@ligonierconstruction.com

RE: SMT East Surface Mine
Derry Township, PA
BPL ER # 2021-4827

Mr. Herrholtz:

Buckeye has received and reviewed the project plans for the above-referenced project. Upon review it has been determined that Buckeye Partners, L.P. ("Buckeye") does have pipeline facilities in the vicinity of the proposed project area.

Any further correspondence or updated plans relating to this project please reference Buckeye’s ER # 2021-4827 and can be submitted to myself.

The following files relating to work around the Buckeye pipeline have been reviewed:

This written approval is contingent on the following conditions and references the above plans:
- The proposed access road crossing shall be constructed and as detailed on the above mentioned plans provided by Earthtech, Inc.
- The maximum cover above Buckeye’s pipeline shall be 7’ and the minimum cover shall be 6.3’ at the crossing.
- The access road shall be 12” of AASHTO #1 stone and underlain with geogrid.
- The stone access road shall be 30’ in width when crossing Buckeye’s pipeline and extend at least 10’ on each side of Buckeye’s pipeline.
- This crossing is approved for a Caterpillar 773G Off-Highway Truck (39,638 lb point load) and smaller. Anything larger or in question must be submitted to Buckeye for review prior to crossing.
- The crossing party is responsible for maintaining the crossing and adhering to the above-mentioned specifications at all times.
- NO WORK SHALL TAKE PLACE WITHOUT A BUCKEYE ON-SITE FIELD MEMBER PRESENT.
- This process can be coordinated through your state 811 process.

Should the scope of the project extend beyond the currently defined limits, Buckeye’s pipeline involvement could become more advanced. In this case or if further correspondence relating to this project is required, please reference Buckeye’s ER # 2021-4827.
All other work not specifically mentioned within this letter will need to abide by the Buckeye Partners Right-of-Way Use Restrictions Revision 6.2.

When any construction activity is conducted in or around our pipeline right-of-way, Buckeye’s On-Site Inspector must be present at all times. NO WORK SHALL TAKE PLACE WITHOUT A BUCKEYE ON-SITE INSPECTOR PRESENT. To coordinate this procedure, please place the necessary notification through your state 811 one-call system.

Should you have any questions or need any additional information, please do not hesitate to contact me at (610) 904-4409 or by email at dajones@buckeye.com.

Sincerely,

[Signature]

David Jones
Right-of-Way Specialist

CROSSING PARTY

[Signature]

Accepted by (signature):

[Signature]

Print: [Print Name]

Date: 2-19-2021

Company/Title
CROSS SECTION A-A'
SCALE: 1" = 10'

NOTES:
1.) THE DEPTH AND LOCATION SHOWN FOR THE GAS LINE WERE DETERMINED BY A FIELD REPRESENTATIVE FOR BUCKEYE PARTNERS, L.P. ON 1/22/2021.

2.) THE CONTACT INFORMATION FOR THE FIELD REPRESENTATIVE IS AS Follows:
JEFFREY BOWERS
BUCKEYE PARTNERS, L.P.
PIPELINES
CELL: 614-241-3866

3.) DEPTHS SHOWN ARE BASED ON FIELD READINGS PROVIDED BY THE REPRESENTATIVE ONLY. NO EXCAVATION OCCURRED FOR THIS EXCEPt.

4.) AN EARTHECH, INC. SURVEYOR LOCATED EACH OF THE READINGS AND RECORDED THE DEPTHS PROVIDED. THESE DEPTHS ARE SHOWN ON BOTH THE PLAN VIEW AND PROFILE EXCEPtS.

PROPOSED CROSS-SECTION WITH DEPTHS
LIGONIER STONE & LIME COMPANY
SMT EAST SURFACE MINE
DERRY TOWNSHIP
WESTMORELAND COUNTY, PA
PURPOSE: THIS DRAWING PROVIDES A TYPICAL TEMPORARY PIPE CROSSING FOR CONSTRUCTION TRAFFIC. THE DESIGN OF THIS CROSSING HAS BEEN DEVELOPED BASED ON THE ASSUMPTIONS LISTED BELOW. SHOULD ANY OF THE ASSUMPTIONS NOT BE PRESENT FOR THE SPECIFIC SITE IN QUESTION, EARTHTECH, INC. INC AND THE UTILITY LINE OWNER SHOULD BE CONTACTED TO PROVIDE ALTERNATE CROSSING DETAILS.

1. THE CROSSING DESIGN WAS DEVELOPED TO BE CONSISTENT WITH ENTERPRISE PRODUCTS ENHANCEMENT GUIDELINES AND BUDDY'S PARTNERS, L.P. AND APPLIES RIGHT-OF-WAY USE RESTRICTIONS SPECIFICATION REVISION 6, ATTACHMENT E: EARTH RAMP DETAIL.

2. DESIGN VEHICLE: CATERPILLAR 773G OFF-HIGHWAY TRUCK
   DIMENSIONS: 33.29' LENGTH X 14.47' WIDTH X 14.83' HEIGHT*
   WEIGHT: 101,200 LB (EMPTY), 226,503 LB (LOADED) *
   * TAKEN FROM CATERPILLAR 773G OFF-HIGHWAY TRUCK LARGE SPECALOG

3. SUBSURFACE SOIL CONDITIONS HAVE BEEN ASSUMED TO CONSIST OF MEDIUM DENSE SAND (DRAINED FRICTION ANGLE OF 32° OR HIGHER), OR STIFF CONSISTENCY CLAY (COHESION OF 1 KIP PER SQUARE FOOT OR GREATER), OR A COMBINATION THEREOF. GROUNDWATER HAS BEEN ASSUMED TO BE AT LEAST 5 FEET BELOW THE BOTTOM OF THE PIPE. IF THESE CONDITIONS ARE NOT PRESENT, THE DESIGN ENGINEER SHALL BE NOTIFIED TO DEVELOP AN ALTERNATE DESIGN.

4. UNDER NO CIRCUMSTANCES SHALL LOADING OF ANY TYPE BE PERMITTED ON THE GROUND SURFACE DIRECTLY OVER THE PIPELINE.

5. EQUIPMENT SHALL NOT BE PERMITTED TO REMAIN PARKED OR IN IDLE ON CROSSING RAMP.

6. CROSSING RAMP TO BE CONSTRUCTED UNDER SUPERVISION OF EARTHTECH, INC. PERSONNEL.

7. ANY FILL USED MUST BE DEEMED ACCEPTABLE BY THE UTILITY LINE OWNER PERSONNEL AS WELL AS BEING TESTED AND APPROVED PRIOR TO PLACEMENT.

8. FILL RAMP SHALL BE UNDERLAIN BY GEOFABRIC (TENSAR BX1200 OR APPROVED EQUIVALENT).

9. THE RAMP SHALL BE EXTENDED 5' IN EITHER DIRECTION FROM THE CENTERLINE OF THE PIPELINE.

10. A MINIMUM OF 6' OF COVER MUST BE MAINTAINED OVER THE PIPELINE WHERE HEAVY EQUIPMENT WILL CROSS. A MINIMUM OF 3' OF COVER MUST BE MAINTAINED OVER THE PIPELINE WHERE DITCHES WILL CROSS.

11. CROSSING MAY NOT BE PLACED IN SERVICE UNTIL CLEARED BY UTILITY LINE OWNER PERSONNEL.

12. UPON COMPLETION OF CROSSING ACTIVITY, R.O.W. MUST BE RETURNED TO ORIGINAL CONDITION.

TYPICAL PIPE CROSSING DETAILS

LIGONIER STONE & LIME COMPANY
SMT EAST SURFACE MINE
DERRY TOWNSHIP, WESTMORELAND COUNTY, PA

Dwg File Name: Typical Crossing.DWG
Date: 1-26-2021

Earthtech, Inc.

1300 Broadview Office Park
34 A
Lancaster, PA 17603
Telefon: 724-479-1113 Fax: 724-479-1839
http://www.earthtechinc.com/
Earth Tech, Inc.
Attn: Mr. Brian Verwest, PE
PO Box 4A
Lemont Furnace, PA 15456

Re: Surface Mining Operations, Ligonier Stone and Lime, Overhead Electric Line Relocation, Pizza Barn Road, Blairsville, PA

To Whom It May Concern,

This letter is to confirm that Penelec, a First Energy Company will relocate the overhead electric line for surface mining operations as per the terms of our Tariff filed with the Pennsylvania Public Utility Commission (PaPUC). The existing overhead electric line has a 30 foot right of way width which prohibits surface mining. When the electric line needs relocated to access this piece of land for surface mining operations, you can start the process by contacting our Customer Service Center at 1-800-545-7741 or through our website at www.firstenergycorp.com, making application for the overhead electric line relocation. You will be responsible for providing all replacement right of ways needed and for all costs associated with this relocation.

If there are any questions or concerns, you can reach me at the telephone numbers shown below.

Sincerely,

Keith A. Gardner
Distribution Tech IV,
Distribution Services
Penelec, a First Energy Company
311 Industrial Park Road
Johnstown, PA 15904
Ph 814-269-6678
Fax. 234-678-2535
Email: kgardner@firstenergycorp.com
## BOND CALCULATION SUMMARY-NONCOAL CONSOLIDATED

| Permittee: Ligonier Stone & Lime Company | Date: 12.29.2021 |
| Permit #: 65210301 | Mine Name: SMT East Surface Mine – Phase I Bond |
| Municipality: Derry Township | County: Westmoreland |

<table>
<thead>
<tr>
<th>Operation (see attached calculations)</th>
<th>Quantity</th>
<th>Units</th>
<th>Rate $/Unit</th>
<th>Bond Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining Area (i.e. minor grading/vegetation)</td>
<td>15.9</td>
<td>Acres</td>
<td>$3500</td>
<td>$55,650.00</td>
</tr>
<tr>
<td>Support Area (revegetation)</td>
<td>46.0</td>
<td>Acres</td>
<td>$1830</td>
<td>$59,841.00</td>
</tr>
<tr>
<td>Spoil Storage/Earthmoving</td>
<td>Cubic yards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highwall Blasting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 20 ft Height</td>
<td>Linear foot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;20 up to 30 Height</td>
<td>Linear foot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;30 up to 40 Height</td>
<td>Linear foot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;40 up to 50 Height</td>
<td>Linear foot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;50 Height</td>
<td>Linear foot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mine Sealing</td>
<td>Calculation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponds</td>
<td>5</td>
<td>No of Ponds</td>
<td>$3,800</td>
<td>$19,000.00</td>
</tr>
<tr>
<td>Demolition of Structures</td>
<td>Calculation</td>
<td>Calculation</td>
<td>Costworks</td>
<td>$27,803.00</td>
</tr>
<tr>
<td>Large Tires</td>
<td>Each</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trees</td>
<td>Each</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilization/Demobilization</td>
<td>Calculation</td>
<td>Calculation</td>
<td>4%</td>
<td>$6,491.76</td>
</tr>
<tr>
<td><strong>Total Reclamation Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$168,785.76</strong></td>
</tr>
</tbody>
</table>

See attached calculations.
## Noncoal Bond Rate Guidelines 2021

**Project Name:** SMT East Surface Mine  
**Operator:** Ligonier Stone & Lime Company  
**Municipality:** Derry Township  
**County:** Westmoreland  

<table>
<thead>
<tr>
<th>Unit Operation</th>
<th>Unit Measure</th>
<th>Unit Costs ($)</th>
<th>If Applies to Permit Mark with &quot;X&quot;</th>
<th>Amount of Units</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining Area</td>
<td>acre</td>
<td>3,500.00</td>
<td>x</td>
<td>15.9</td>
<td>55,650.00</td>
</tr>
<tr>
<td>Support Area</td>
<td>acre</td>
<td>1,830.00</td>
<td>x</td>
<td>46.0</td>
<td>59,841.00</td>
</tr>
<tr>
<td>Pond Removal</td>
<td>pond</td>
<td>3,800.00</td>
<td>x</td>
<td>5</td>
<td>19,000.00</td>
</tr>
<tr>
<td>Structure Demolition</td>
<td>Costs for structure demolition will be calculated using costs listed in the construction industry's latest annual cost publications, such as the Means Building Construction Cost Data publication.</td>
<td>2022 CostWorks</td>
<td>x</td>
<td>27,803</td>
<td>27,803.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>162,294.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Condition</th>
<th>Unit Measure</th>
<th>Unit Costs ($)</th>
<th>If Applies to Permit Mark with &quot;X&quot;</th>
<th>Amount of Units</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization/Demobilization</td>
<td>4% of subtotal or maximum of $40,000.00</td>
<td>0.04</td>
<td>x</td>
<td>162,294.00</td>
<td>6,491.76</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,491.76</td>
</tr>
</tbody>
</table>

**Conventional Bond Total Required** $168,785.76
# CONVENTIONAL BOND CALCULATIONS

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>EXPLANATION FOR CALCULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grading</td>
<td>N/A, process pad and haul roads to remain</td>
</tr>
<tr>
<td>Pond:</td>
<td>5 ponds</td>
</tr>
<tr>
<td>Mobilization/Demobilization</td>
<td>4% of direct costs or $40,000 maximum</td>
</tr>
</tbody>
</table>

Other:

Structure Demolition Details:
**Total from below: $27,803.00**

The 2022 edition of Means Building Construction Cost Data publication was used in order to determine the structure demolition figure:

- Conveyor & Belts: 2,850 feet of belt  
  Steel Frame Structure Demolition: Labor Foreman $47.80/hr at 40 hrs = $1,904.00 and 4 Laborer $45.60/hr each at 40 hrs = $7,296.00; $1,904.00 + $7,296.00 = Total $9,200.00, reference CSI #024116130020 crew info.
- Front-End Loader (95 h.p.) for 5 days @ $445.00/day = $2,225.00; reference #015433204620
  Total Conveyor & Belts: $9,200.00 + $2,225.00 = $11,425.00

- Scale Steel Frame & Concrete Footer Ramps
  Steel Frame Structure Demolition = 70' x 10' x 1'; $0.48/c.f. = $336.00, reference #024116130020
  Concrete Footer Ramps = 10' x 10' x 1 1/2'; $0.68/c.f. = $102.00, reference #024116130050

- Removal Costs for Mobile Items: **Total = $800.00**
  Scale House
  $800.00/item for removal off of the site

- 4 - Scalping Screen Tower: 35 feet high, $2,850.00 each = $11,400.00; Rock Breaker Tower: 25 feet high = $2,850.00; 60' tower $2,850.00, reference CSI #024113780700  
  **Total = $14,250.00**

- Jaw Crusher = $445.00 + Secondary Crusher = $445.00; reference CSI #050505100270  
  **Total = $890.00**