



Proposed Mine Portal

YEAR 1 Mining Forecast

Mining Projection is tentative and may change with market conditions.

| Drill Hole | Surface Elevation | Overburden | Strata Thickness | Strata Name | Bottom Elevation | Static Water Level |
|------------|-------------------|------------|------------------|-------------|------------------|--------------------|
| Y-1 | 1145.9' | 20' | 24" | Wbg | 1112.9' | --- |
| Y-2 | 1181.6' | 62' | 24" | Wbg | 1119.6' | --- |
| Y-3 | 1167.9' | 49' | 30" | Wbg | 1118.9' | --- |
| Y-6 | 1170' | 42' | 36" | Wbg | 1128' | --- |
| Y-7 | 1221.5' | 38' | 24" | Wbg | 1183.5' | --- |
| Y-8 | 1180.7' | 62' | 36" | Wbg | 1118.7' | --- |
| Y-9 | 1167.1' | 48' | 84" | Wbg | 1119.1' | --- |
| Y-10 | 1073' | 97' | --- | --- | --- | --- |

Legend

- Permit Boundary - 336.7 acres
- Surface Site Boundary - 67.5 acres
- Underground Mining Boundary - 252.1 acres
- 1000' Perimeter
- Property Ownership (keyed to table and module 5)
- Property Line
- Municipal Boundary
- Utility (overhead)
 - E-Electric (West Penn Power)
 - T-Telephone (Maritima/Sweeney Hill Telephone Co.)
 - G-Gas (As Noted)
 - W-Water (Southwestern Pennsylvania Water Authority)
- Buildings (occupied/unoccupied)
- Existing Gas Well
- Variance Area
- Restricted Mining Zone
- Wetland - Delineated, Flagged and Surveyed
- Wetland - Visually Identified and Mapped
- Structure Contour Line - Bottom of Benwood Limestone
- Inferred Structure Contour Line - Bottom of Benwood Limestone
- Existing Highways (exposed) - N/A
- Existing Highways (buried)
- Coal or Mineral Croplines
- Deep Mine Area and Portal
- Previously Surface Mined Areas
- Existing Culverts
- Proposed Culverts
- RCP-Reinforced Concrete Pipe CPP-Corrugated Plastic Pipe CMP-Corrugated Metal Pipe SP-Steel Pipe
- Cemetery
- Proposed Final Highway
- Existing Highway
- Reclaimed Highway (4/2021)
- The Benwood Limestone mine floor will not go below elevation 820' in this area
- Geologic Cross Section
- Sedimentation Pond
- Collection Ditch - Grass Lined
- Collection Ditch - Rock Lined
- Diversion Ditch
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Existing Pond / Impoundment
- Test Hole
- Overburden Analysis Test Hole
- Water Sampling Point (Monitoring)
- Private Water Supply
- Strike and Dip
- Monitoring Well - N/A
- NPDES Point
- Flow Measuring Station - Flow Measurement Only
- Indicates dwelling is served by public water
- No underground mining if less than 100 feet of cover
- 125' Gas Well Barrier - No Mining Until Pillar Permit is Approved
- Module 14 Cross-sections
- Proposed Working Contour Lines (10' Interval)
- Haul Road
- Tennille Creek 300' Underground Mining Barrier (please refer to Module 15.6 b for additional clarification)

| Drill Hole | Surface Elevation | Overburden | Strata Thickness | Strata Name | Bottom Elevation | Static Water Level |
|------------|-------------------|------------|------------------|-------------|------------------|--------------------|
| DH-1-OB | 1145.1' | 62' | 12" | Wbg | 1084.1' | --- |
| DH-2-OB | 1120.8' | 41' | 36" | Wbg | 1079.8' | --- |
| DH-3-OB | 1137.7' | 50' | 72" | Wbg | 1087.7' | --- |
| DH-4-OB | 1152.68' | 69' | 36" | Wbg | 1083.68' | 1084.68' |
| DH-5-OB | 1138.14' | 55' | 48" | Wbg | 1083.14' | 1088.14' |

| Drill Hole | Surface Elevation | Overburden | Strata Thickness | Strata Name | Bottom Elevation | Static Water Level |
|----------------|-------------------|------------|------------------|----------------------|------------------|--------------------|
| BH-1 | 915.67' | 32.9' | 43.5' | Benwood Limestone | 839.27' | 882.87' |
| BH-2 | 931.75' | 51.5' | 46.5' | Benwood Limestone | 834.75' | 845.95' |
| BH-3 | 939.75' | 108.3' | 1.1' | Benwood Limestone | 829.65' | 845.75' |
| DH-1 | 922.66' | 33' | 48" | Benwood Limestone | 841.66' | 900' |
| DH-2 | 920.76' | 35' | 44" | Benwood Limestone | 841.76' | 901' |
| DH-3 | 911.56' | 75' | 1.5' | Benwood Limestone | 833.06' | 901' |
| DH-4 | 925.08' | 27' | 31" | Benwood Limestone | 846.08' | 904' |
| DH-5 | 934.08' | 33' | 52" | Benwood Limestone | 849.08' | 929' |
| DH-6 | 871.5' | 33' | 1.5' | Benwood Limestone | 847.5' | 845' |
| JLF-50 | 820' | 114' | 12" | Pittsburgh Rider (1) | 705' | --- |
| Thompson Shaft | 979' | 399' | 34" | Waynesburg | 936.5' | --- |
| 3523 | 1223' | 235' | 51" | Waynesburg | 722.5' | --- |
| H-BH-1 | 902' | 165' | MV | Pittsburgh B.O.V. | 717' | 745' |
| H-BH-2 | 846.2' | 136' | MV | Pittsburgh B.O.V. | 710.2' | 746.2' |
| H-BH-3 | 814.1' | 98.1' | MV | Pittsburgh B.O.V. | 716' | 743' |
| H-BH-4 | 816.7' | 104.7' | MV | Pittsburgh B.O.V. | 712' | 743' |
| Hole #1 | 875.4' | 59' | 25' | Benwood Limestone | 826.4' | Dry |
| Hole #2 | 872.6' | 25' | 2' | Mostly Absent | 845.6' | 854' |
| B-1 | 1023.8' | 156.2' | 41.7' | Benwood Limestone | 826.4' | 887.5' |
| B-2 | 1016.1' | 181.4' | 45.4' | Benwood Limestone | 829.3' | 873.3' |

ENDANGERED PLANT 50' BUFFER ZONE WITH ORANGE CONSTRUCTION FENCE AROUND THE PERIMETER

Dip 1.6%
Dip 1.2%

N 111° E Strike of the Morgan Creek
N 130° E Strike of the Morgan Creek
N 55° E Strike of the Morgan Creek
N 111° E Strike of the Morgan Creek
N 130° E Strike of the Morgan Creek
N 55° E Strike of the Morgan Creek

The Benwood Limestone mine floor will not go below elevation 820' in this area

Tennille Creek 300' Underground Mining Barrier (please refer to Module 15.6 b for additional clarification)

Property Ownerships

1. John Kosky Contracting Inc.
2. Cyde Holding, Inc.
3. John Kosky Contracting Inc.
4. John Kosky Contracting Inc.
5. John Alan & Stacy A. Kosky
6. Equitable Gas Co.
7. Equitable Gas Co.
8. Kathleen Martinic et al
9. Cathy H. & John P. Lesosky
10. Dolores Thompson & Leslie A. Hutchins, Jr.
- 10A. Edger C. Sweeney, Jr. & Carol Hupp
- 10B. Gary F. Wolf
11. Frank & Mary Jane Elav
12. Travis D. & Shannon R. Rhodes
13. William & Dana Miklay
14. Wilford A. & Pearlle Buel
15. John L., Jr. & Kim Ordick
16. Paul A. & Deanne Hein
17. Robert E. & Patricia L. Kiefer
18. David K. & Robert G. Sloan
19. Bryan L. Lancaster
20. Virginia Crawford Rev. Trust
21. Christopher J. & Brittany N. Coffield
22. Harriet Keys Estate & William M. Keys
23. East Bethlehem Church
24. Kenneth & Cathleen Harasty
25. Michael J. & Sylvia A. Burke
26. Alyssa M. Ford
27. Thelma L. Webeck
28. Joshua A. Zuzowski
29. James C. & Marliou Webeck
30. Robert Sweeney and Donald & Marliou Webeck
- 30A. Robert J. & Marliou L. Sweeney
31. Southwestern PA Water Co.
32. Renee E. Simpson
33. William L. Beck
34. Buckingham Cemetery Assn
35. Mark A. Yohe
36. Earl H. & Tracy L. Gilpin
37. Earl H. & Tracy L. Gilpin
38. Frank G. & Margaret J. Sartare
39. Joseph J. & Nena M. Sartare
40. Jason White
41. Freddie B. Ervin
42. Deborah J. & Joseph C. Shriner
43. Deborah J. & Joseph C. Shriner
44. Robbin L. Doman & S.G. Gurchuck and Mr. & Mrs. Tracy M. Doman, Jr.
45. Joseph A. & Shirley S. Yabonski and Joseph M. Yabonski
46. Harold & Kathleen Rice
47. Harold & Kathleen Rice
48. Margaret A. Furman & Katherine M. Kasula
49. Margaret A. Furman & Katherine M. Kasula
50. Arlene Rhodes
51. Arlene Rhodes
52. David A. Smerczak
53. Joanna L. Dragan

Flow Monitoring Chart

| Sample Point | Surface Elevation | Description |
|--------------|-------------------|--|
| 15 | 901.3' | Spring - Monthly Flow Only |
| A | 891.9' | Unnamed Tributary "E" downstream above wetland - Monthly Flow Only |
| B | 908.5' | Unnamed Tributary "E" downstream of confluence with Eastern Branch - Monthly Flow Only |
| D | 914.3' | Unnamed Tributary "E" Branch downstream - Monthly Flow Only |
| E | 962' | Unnamed Tributary "E" downstream of sample point 22 at confluence with stream from pond 17 - Monthly Flow Only |
| F | 958' | Unnamed Tributary "E" downstream from pond sample point 17 at confluence with flow measuring point E - Monthly Flow Only |
| G | 937.9' | Unnamed Tributary "E" downstream of sample point 5 and upstream of flow measuring point D - Monthly Flow Only |
| H | 995.6' | Unnamed Tributary "E" downstream of sample point 5 and upstream of flow measuring point G - Monthly Flow Only |
| 17 | 1037.84' | Pond - Monthly Flow Only |
| 21 | 1062.12' | Iron stoned seep zone - Monthly Flow Only |

Mine Summary Chart

| Key | Operator | Permit No. | Mine Name | Status | Coal Seams |
|------|--|------------|--------------------|-----------|--------------------------|
| I | Neiswonger Construction, Inc. | 6310401 | Maggie Lynn Quarry | Completed | Benwood Limestone |
| II | Neiswonger Construction, Inc. | 6311011 | Suggar #1 | Active | Wbg |
| III | PA Coal Reclamation, Inc. | 63813210 | Hawkins | Active | Coal Refuse Reprocessing |
| IV | Tenrich Industries, Division of U.S. Natural Resources, Inc. | 32475343 | LOS | Completed | Wbg |
| V | Boyle Land & Fuel Co. | 6386108 | Fitzwater | Completed | Wbg |
| VI | Boyle Land & Fuel Co. | 6382308 | Huffman | Completed | Wbg |
| VII | Dragan & Son | 328765M2 | Belle #11 | Completed | Wbg |
| VIII | B.L.F. Corp. | 328765M8 | Busha | Completed | Wbg |
| IX | Narden Contracting Co., Inc. | 32753M30 | Fitzwater | Completed | Wbg |
| X | Westmont Coal Company, Inc. | 6376144 | Overman | Completed | Wbg |
| XI | TRAM Resources, Inc. | 32A775M6 | Fargo | Completed | Wbg |
| XII | B.L.F. Corp. | 328765M8 | Busha | Completed | Wbg |
| XIII | Dragan & Son | 328765M2 | Belle No. 11 | Completed | Wbg |
| XIV | MonValley Steel Company, Inc. | 63891301 | Cyde | Completed | Pittsburgh |
| XV | Unknown | Unknown | County Bank | Abandoned | Wbg |

* The Cyde underground mine underlies the entire permit boundary and the 1000' perimeter around it.

Water Monitoring Chart

| Sample Point | Surface Elevation | Description |
|--------------|-------------------|--|
| 1 | 815' | Ten Mile Creek - intermediate point |
| 5 | 1064' | Small underground mine discharge and headwaters of eastern branch Unnamed Tributary "E" to Ten Mile Creek - Monthly Flow |
| 9 | 1085' | Headwaters of Unnamed Tributary "D" eastern branch |
| 11 | 1122' | Unnamed Tributary "D" - upstream |
| 13 | 1020' | Unnamed Tributary "D" to Ten Mile Creek - intermediate point |
| 14 | 886' | Unnamed Tributary "E" to Ten Mile Creek - downstream & Monthly Flow |
| 25 | 817.1' | Wetland discharge |
| 26 | 826.9' | Spring |
| 27 | 817.4' | Spring |
| 28 | 808.6' | Unnamed Tributary "G" to Ten Mile Creek - downstream |
| 29 | 804' | Ten Mile Creek - downstream |
| 30 | 820' | Unnamed Tributary "G" to Ten Mile Creek - downstream |
| 31 | 820' | Ten Mile Creek - upstream |
| 32 | 1166.9' | Unnamed Ephemeral Tributary "A" to Black Dog Hollow - upstream |
| 33 | 1131.4' | Headwaters of Unnamed Tributary "B" to Black Dog Hollow |
| 41 | 948.5' | Unnamed Tributary "G" to Ten Mile Creek - intermediate location |
| 42 | 812' | Reconstructed stream - downstream |
| 54 | 907.1' | Unnamed Tributary "G" - downstream |
| 61 | 1044' | Unnamed Tributary "G" - upstream |
| 66 | 1142' | Headwaters of Unnamed Ephemeral Tributary "A" to Black Dog Hollow |
| 67 | 1080' | Unnamed Tributary "A" to Black Dog Hollow - downstream |
| 68 | 1050.5' | Unnamed Tributary "B" to Black Dog Hollow - downstream |
| 73 | 819.4' | Spring |
| MP-4 | 805' | Ten Mile Creek - downstream |
| MP-F | 830' | Hawkins Permit subchapter F point |
| C | 940' | Unnamed Tributary "E" to Ten Mile Creek - upstream & Monthly Flow |

Notes:

- This map is comprised of topography (10' contour) developed from LIDAR 2 contour data obtained from the PASAD website. The locations of roads, buildings, surface water features and other cultural data were obtained from the Ellsworth & Mather, PA 7.2 USGS Quadrangle maps and supplemented/enriched by field survey and aerial photography.
- The property lines and property ownership shown on this map were obtained from Washington County tax assessment maps and records. This map does not represent an actual field survey of the properties shown and should not be used as such. All surface and mineral ownership information should be verified by the permittee.
- All overburden and test hole elevations and locations were determined by field survey.
- The location and extent of abandoned surface and deep mine workings depicted on this map are based upon available data without the benefit of a final certified mine map. Accordingly, neither GeoTech Engineering, Inc. nor the professional engineer/professional geologist signing this map certifies, warrants or guarantees the precise location or extent of abandoned, reclaimed or active workings depicted herein. Unlabeled or ungrouped mines may extend beyond the depicted boundaries and may contain abandoned mine pools as well as other safety hazards.
- This map is georeferenced to the Pennsylvania State Plane South, North American Datum 1983 (NAD 83) coordinate system.
- All units are in feet.
- Cut slopes shall not exceed 2:1 unless in competent rock.
- Fill slopes shall not exceed 2:1.
- There are no geologic faults noted within the permit area.
- There are no areas designated "Unsuitable For Mining".
- There are no known public parks or historic places.
- There are no known landable prone areas.
- There are no hospitals.
- See Exhibit B for full surface site design.
- Processing waste may be placed in shallow sections of the Maggie Lynn deep mine in accordance with Module 15.10.

Scale 1" = 200'

Scale 1" = 200'

100-YEAR FLOOD PLAIN LIMIT FROM FEMA'S FLOOD INSURANCE RATE MAPS 42125C0454E & #42125C0706E

100-YEAR FLOOD PLAIN (ELEVATION 823.5) AFTER CONSTRUCTION OF SEDIMENTATION POND P-1

Neiswonger Construction, Inc.
17592 Route 322, Strattanville, PA 16258
Phone: (814) 764-3455

Maggie Lynn Underground Mine
Permit No. 63192001
Exhibit 15.2: Mine Development Map

Washington County

Deepeston Borough

Prepared By: **GeoTech Engineering, Inc.**

GEOTECH ENGINEERING, INC.
ENGINEERS SURVEYORS GEOLOGISTS

PENNSYLVANIA ACT 187 (1991) REQUIRES 3 WORKING DAYS NOTICE FROM EXCAVATORS WHO ARE ABOUT TO DIG, BLAST, AUGER, BORE, GRADE, TRENCH OR DEMOLISH ANYWHERE IN THE COMMONWEALTH.

POCS SERIAL NUMBER: 20172563550

In the design phase of this project, GeoTech Engineering, Inc. performed a PA One Call inquiry for the proposed permit area. All underground utility owners who responded to the PA One Call and submitted their coordinates and depth information are shown on this map. It is the responsibility of the permittee to verify the location and depth of all underground utilities shown on this map. The permittee is responsible for any damage to underground utilities caused by their operations. Vandalism of underground utilities is a criminal offense. The permittee is responsible for any damage to underground utilities caused by their operations. The permittee is responsible for any damage to underground utilities caused by their operations.

Date: December, 2021

Seal: [Professional Engineer Seal]