Reply to DEP Review Letter for Pre-Application No. 63192001P dated September 19, 2019 from Kerry Speelman, P.G.

Re: Neiswonger Construction, Inc.
Maggie Lynn Underground Mine
Pre-Application No. 63192001P
Deemston Borough, Washington County

General

1. The intent was and still is to combine the existing current approved surface mine permit with the underground mining permit as an encompassing permit, but we did not convey that as well as we should have in the narratives or on the maps. The narratives and the exhibit maps have been revised to more accurately reflect this intent.

2. The permit boundary has been set to include the former Fitzwater property, as the property has been purchased by Clyde Holding, Inc., and the acreages have been adjusted accordingly.

3. Please see the revised Module 5. Notes have been added to Exhibits 9 and 15.2 stating that no mining will take place on properties 5, 36 and 37 until Contractual Consent of Landowner forms and valid lease agreements are obtained for these properties.

Module 2/NPDES

4. Module 2 has been revised to indicate that this is a new permit, not a revision to an existing permit. Also, a new NPDES permit application is being submitted for the new compassing permit application.

MODULE 4

5. A new PNDI application was completed on October 19, 2021 and is included as part of Module 4 in the permit. An email comment from the U.S. Fish & Wildlife Service is included.

MODULE 5

6 Module 5.1 has been updated with regards to Properties 36 and 37. No underground mining is shown on those properties until a lease is obtained from the mineral owner.

7 Property 2, both surface and minerals, has been purchased by Clyde Holding, Inc.

Exhibit 6.2

8. The Wbg and WbgA crop lines have been added to the legend along with the word “coal” to indicate these are coal crop lines.

9. The BLS (Benwood Limestone) crop line is now indicated in the legend, which is the base of the limestone.

10. The legend has been revised to denote structures and cemeteries more clearly.

11. Bugger 25 is a water sample point from the Neiswonger Construction, Inc., Bugger #1 surface mine.

12. MW-1 is shown on Exhibit 6.2. It is about 100' west of monitoring point 14. MW-1 was discussed in our re-submittal of a Maggie Lynn Quarry revision. The well is no longer accessible. Seven (7) water samples were collected and showed no adverse impact from groundwater migration from the adjacent Hawkins permit. This sample point has been officially removed as a water monitoring point.

13. The legend has been revised to indicate that the word "PUBLIC" means that a home is serviced by public water.

14. The limits of the 100-year flood plain are now depicted on the exhibits.

15. The access road from Pump Station Road to the gas regulator valves just to the east of the Maggie Lynn permit have been added to the exhibits.

16. The symbol for the blue shaded polygons/circles on the exhibits, such as the ones shown near sample points 10 and 17, has been added to the legend.

17. The previous Waynesburg coal seam underground mine entries are now shown on the Exhibit 6.2 and are also shown on the Exhibit 15.2.

18. The mine summary chart has been revised.

19. The legends of all applicable exhibits have been revised to indicate that the structure contour lines represent the base of the Benwood limestone.

Module 7

20. The location of the Thomson Shaft and drill hole 3523 are now shown more visibly in relation to the proposed permit boundary on the Exhibit 6.1 map.

21. All of the sites that have permit numbers with them are Waynesburg coal surface mine sites. A Map key has been added for the deep mine entries, which typically advanced a very short distance of approximately fifty (50') feet.

22. The cross sections are signed and sealed as required.

Module 8

23. Module 15.6 has been revised to discuss the amount of water that is anticipated to accumulate within the deep mine. It is not anticipated that any discharge would develop and emanate from the downdip portals. In the event this was to occur the water quality from a limestone mine would not be detrimental to the hydrologic system of the area.

24. Streams, seeps, and springs in the area, concerning quantity, are impacted directly by the amount of precipitation that occurs at any given time.

25. Sample point 19 has been removed. There is no spring or seep at this location.

26. Module 10.1 and Module 15.6 (b) have been revised to address this comment. Please note that the version of Module 8 originally completed for the pre-application has been replaced by a new DEP version dated January 2020, as such, this has been done. We could not find the subject matter in the pre-application correction letter item 26 in the original Module 8.

27. The property owner of private well supply, sample point 35, was interviewed on October 19, 2019. The well is old, constructed in the 1920's to 1930's. There is a surface jet pump that is used which suggests that the well is shallow. Based on its location this well supply intercepts the local water table with the bottom of the well (assuming a maximum depth of sixty feet), is at least 130 feet above the base of the Benwood Limestone. An interview on the same day with the owner of private well supply, sample point 58, came up with the same answer as the initial interview. The property owner has no idea of the depth of the well. A static water level measurement was taken and found to be 42.5 feet from the surface, which lies very near the Waynesburg coal horizon. This supply more than likely intercepts the intermediate water bearing zone.

28. A discussion has been added to Module 8.4 (b) as requested. Comparisons were made to the water quality of the upstream monitoring point 1 to the downstream monitoring station MP-4. It was found since January 2019 through July 2020 that the suspended solids were actually higher upstream of the active surface mining quarry than downstream.

29. Unnamed ephemeral streams A, C, F, and G flows are directly affected by seasonal changes is precipitation.

30. Module 8.4 (b) has been revised to identify whether surface or underground mining of the Waynesburg coal (or both) affected water quality of springs or streams of the area.

31. The revised Module 8 does not include a subsection "d" under Module 8.6. In regard to concerns in this question, information concerning MW-1 is referenced in Module 8.6 (a), private water supply information is included in Module 8.4 (b) and previous mining effects on groundwater is discussed in Module 8.3 (c).

32. Module 7.5 has been revised to show the locations of abandoned Waynesburg coal seam underground mine entries. These mines typically did not advance further than fifty (50') feet. Revisions have been made to discuss the impacts of these underground mines to water quality and quantity.

33. As discussed in question 27, both owners of wells 35 and 58 were interviewed. Module 8.3 (c) has been revised accordingly.

34. Module 8.6 has been revised to discuss the water quality of MW-1, and test holes TH-2, TH-4, TH-6, and TH-7.

35. Monitoring point 73 is a spring located near the base of the Benwood Limestone at the downdip end of the proposed underground mine. As per the discussion at the pre-application field meeting, this point will be the downdip monitoring point.

Exhibit 9

36. The mine entries are now depicted on the Exhibit.

37. MW-1 is now depicted on the Exhibit 6.2 as a background sample point, it is no longer a monitoring point as approved by the Department.

38. The symbol for a water treatment facility is shown with "N/A" in the legend to indicate that this feature is Not Applicable.

39. The mining area has been revised and is now shown on the Exhibit.

40. The locations of the steel tanks are now depicted on the Exhibit.

41. The phase lines have been removed from the Exhibit.

42. Please see the revised Exhibit 9 for the location of the equipment used for processing stone at this site.

Module 10

43. The major equipment that will be utilized for processing, surface mining and underground mining has been added to Module 10.1.

44. The 100-year flood elevation has been added to the exhibit maps. The 100-year flood elevation at the upstream end of the permit is 829, at the upstream end (beginning) of collection ditch C-1 it is 828, and at the downstream end of the permit it is 823. The elevation at the beginning (upstream) of collection ditch C-1 is 850 and it empties into sediment pond P-1 at an elevation of 826. As such, there is very little, if any, chance of flooding affecting the surface or underground mining operations. The level of Tenmile Creek referred to in Module 10 is the Normal Water Level. Module 10 has been revised accordingly.

45. A 5 foot floor and a ceiling ranging from 7' to 25' will be left as the mining moves forward. The extraction is consistent with 25' of limestone taken as the mining moves forward. Please see the revised Module 10.1.

46. All existing and proposed gas wells, based on emap PA and on-site inspection, have been identified and listed as part of Module 10.9. This includes two wells that were permitted but not drilled. All existing wells are shown on exhibits 6.2, 9, 15.2, 16 and 18.

47. Module 10.10 has been revised with regards to sealing of drill holes and bore holes stating that all drill holes will be sealed complaint with Pennsylvania code regulatory requirements.

48. Module 10.11 has been revised to agree with the geology report in Module 7.

49. Module 10.11 as been revised to provide information on any coal seams that have been underground mined in the vicinity of this site.

50. Included with Module 10 is the information supplied to PennDOT and PennDOT's response where they indicate they would like to review the PADEP approved plan.

51. There is no public sewage within the underground permit boundary. Module 10 includes copies of the certified letters to the electric and public water utilities along with a response from the Southwestern Pennsylvania Water Authority.

52. Blasting for final reclamation is included in the bond calculations.

Module 12

53. We are proposing to install an Earthen Level Spreader at the outlet of Diversion Ditch D-1 to provide infiltration and sheet flow of the water exiting D-1. This appears to be the best option because of the long and very steep slope between the end of D-1 and a natural watercourse. Please see the details in Module 12.

54. The Manning Coefficients for rock lined channels are now determined using figure 6.2 on page 138 of the Department's E&SPCP Manual. The Manning Coefficient of the vegetated channel is now determined using the calculations on page 129 in the same Manual. There are no longer any diversion/collection ditches with channel slopes greater than 10%.

55. The permit number has been revised on the ditch data sheets.

56. Ditch CD-2 is now shown on the Exhibit 9 map.

57. A drainage map is now provided which clearly depicts the drainage areas for all E&S control structures. It is labeled as Exhibit 12: Water Handling Plan.

58. With freeboard collection channel CD-1 is designed at almost 200% over the peak discharge of the 10-year storm. This channel is downgradient of the mine openings into the Maggie Lynn underground mining operation, and should be able to handle any flows that may emanate from those openings

59. A complete and encompassing Module 12 has been prepared and it included with this submittal.

Module 13

60. The sediment pond design provided in this application has been revised to match the design and address the comments in the July 17, 2019 return letter for the Maggie Lynn surface mine application.

61. Module 13.3(f) has been revised to provide the amount of cover between the abandoned underground Pittsburgh coal seam mine workings and the sediment pond.

62. As was mentioned in the response to question 58, CD-1 is downgradient of the mine openings and upgradient of Tenmile Creek. For a 10-year storm the peak anticipated flow without the underground mine drainage is 85.4 cfs, with the channel with freeboard is sized to handle 164 cfs. This allows for the handling of additional groundwater in the worst of storm events.

Module 14

63. The 100-year flood plain elevation has been added to the Tenmile Creek cross sections of Exhibit 14.1A.

Module 15/Exhibit 15.2

64. Form 15.12 is now signed and dated.

65. This box was checked by error. No citizen provided any information about any underground mining.

66. Exhibit 15.12: Mine Map Validation, which includes mapping of the Pittsburgh seam underground mines in relation to the Maggie Lynn Underground Mine permit boundary, has been prepared and is attached.

67. The "Thompson Shaft" is too far away to show on Exhibit 15.2. Its location is shown on Exhibits 6.1 and 15.12.

68. The narrative has been revised to provide a sealing plan in the event the long-term storage plan does not materialize. The costs of sealing have been added to the bond calculations. The potential for water discharging from the underground mine is low because the entries (portals) will actually be on strike rather than downdip. Any groundwater that might develop in the underground mine will accumulate in the northwest quadrant of the mine at least 1,700 feet northwest of the portals.

69. New S-Pillar calculations are enclosed using 324' as a depth. This is the depth to the Benwood limestone at TH-6, and is the maximum depth to the top of the limestone layer based on all of the test holes drilled on the site.

70. Cross section locations are shown on Exhibit 9 and Exhibit 15.2

71. The legends on Exhibits 9 and 15.2 have been revised to indicate what the word "PUBLIC" means.

72. a. It is discussed the roof will have universal bolting until the first crosscut, then evaluation of the roof will be ongoing to ensure stability as the mine moves forward.

    b. The ability to control the blasting as the mining progresses is discussed, option include changing patterns, hole centers and even blasting product until the most efficient way to proceed is determined.

73. Module 15.5 has been revised to indicate that a typical thickness of 15 feet of limestone will be left in place for roof material and 5 feet of limestone will be left in place for floor material.

74. As discussed at the field meeting the intent was to present the similarities of the operational plan for this site to the operations at underground mines in the Loyalhanna limestone not to compare their geologies.

75. Typically, fifteen feet of limestone will remain in place above the underground mine to maintain a stable roof and a confined layer preventing draining into the Benwood limestone from water bearing zones that lie above the proposed underground mine.

76. Module 15.6 has been revised to indicate that the Hawkins surface mine permit is active rather than in reclamation status.

77. Module 15 has been revised to remove language concerning Pittsburgh deep mining effects on the Benwood Limestone and overlying horizons.

78. Module 15.6 has been revised to explain why the three hundred (300') foot barrier was chosen on the downdip section of the underground mine along Tenmile Creek.

79. Mining will not take place below the 820 foot (msl) level in the extreme northwestern section of the mining area as shown on the Exhibit 15.2 Map. During a substantial flooding event mining will cease until conditions allow for mining to continue safely.

80. Flows of streams, seeps, and springs are directly impacted by seasonal amounts of rainfall. Any reference to impacts from underground coal mining to these features has been removed from all applicable modules.

81. As discussed during the pre-application field meeting spring sample point 73 is the best downgradient monitoring point. This spring occurs near the base of the Benwood limestone. Monitoring well MW-1 has been deleted from the monitoring program, as well as MW-TH-6.

82. Wetland monitoring point 25; springs, 25, 26, 27, and 73 will monitor groundwater conditions near the base of the Benwood Limestone better that establishing monitoring wells.

83. This item has been discussed in detail in Module 15.6. Minimal groundwater is anticipated to accumulate in the mine after it is completed. It is anticipated that the downdip portion of the mine groundwater will migrate into the groundwater system.

84. Module 15 has been revised to discuss post-mining impacts if the mine would actually free drain.

85. Module 15.10 and Exhibit 15.2 have been revised to address your comments.

86. The symbol for existing ponds has been added to the legend.

87. The blue colored blocks indicating backup reserves have been removed from the map and the legend.

MODULE 17

88 Item 17.1c. specifies that the underground permit application is an encompassing permit that includes the current SMP#63100401. It is our intension that any revised permits (general permits as well as the air quality permit) will apply to the encompassing Maggie Lynn underground mine permit.

EXHIBIT 18

89. We have confirmed the land and reclamation map for the encompassing underground permit is consistent with that approved under the Maggie Lynn Quarry SMP.

90. The scale house is now shown on Exhibit 18.

91. The legend has been revised to indicate that the blue colored arrow is for the surface water post-mining drainage pattern.

MODULE 20

92. The intent was to combine the existing current approved surface mine permit with the underground mining permit as an encompassing permit, but we did not convey that as well as we should have in the narratives or on the maps. The narratives and the exhibit maps have been revised to reflect this intent more accurately.

MODULE 23

93. Red Top has been removed from the seeding plan and replaced with species which will provide habitat for wildlife.

94. Black Locust is now limited to 25 stems per acre.