

March 1, 2019

Mr. Raymond J. Bologna
Champion Processing, Inc.
P.O. Box 1073
Coraopolis, PA 15108

Re: Technical Deficiencies
Champion Processing, Inc.
APS ID# 981695, General Permit No. WMGR052SW001, AUTH ID# 1253239
Robinson Township
Washington County

Dear Mr. Bologna:

The Department of Environmental Protection (DEP) has reviewed the above-referenced application and has determined it to have the following technical deficiencies.

Technical Deficiencies

1. Section E of Form 20, Item 7, requires that a Pennsylvania Natural Diversity Inventory (PNDI) Project Planning Environmental Review be conducted. Champion Processing Inc.'s (Champion) application includes documentation, dated December 17, 2015, that a PNDI review was conducted. In accordance with DEP's Technical Guidance relative to PNDI coordination during permit review and evaluation, Document No. 021-0200-001, PNDI search results are valid for a 2-year period. Please update the application to include a new PNDI review.
2. Paragraph A.3.a. of General Permit No. WMGR052 states that coal ash, other than waste coal ash, to be used under the permit must be certified in accordance with 25 Pa. Code § 290.201. In addition, Champion's application does not identify a source of certified coal ash or waste coal ash. Approval to use all sources of ash, both certified coal ash and waste coal ash, at a specific coal mining activity site must be approved by the appropriate District Mining Office prior to the first beneficial use of the ash. Please revise the application to specify the following:
 - a. Coal ash, other than waste coal ash, used as an ingredient in the production of stabilized FGD material, will be certified in accordance with 25 Pa. Code § 290.201 prior to processing or beneficial use, and

- b. All sources of ash, both certified coal ash and waste coal ash, to be used under the permit at a specific coal mining activity site will be approved by the appropriate District Mining Office prior to the first beneficial use of the ash.
3. Condition D.1 of General Permit No. WMGR052 requires that a defined blend or recipe be identified by the permittee for the production of stabilized FGD material. The application does not identify a blend or recipe to be used or demonstrate that the proposed mixture will meet the requirements of Table 1 in General Permit WMGR052. Please revise the application to include a blend or recipe for the production of stabilized FGD material, along with a demonstration that the proposed mixture will meet the requirements of Table 1.
4. Condition D.2 of General Permit No. WMGR052 requires that stabilized FGD material achieve a hydraulic conductivity of 1×10^{-6} cm/sec or less within 56 days of placement, based on laboratory testing, using the ASTM D5084 method, or other testing method approved in writing by DEP, through approval of the initial permit application or a minor modification to the permittee's coverage under General Permit No. WMGR052, unless the alternative criteria in Condition E.11 is used. The analyses presented in Section 7 of Champion's application indicates the proposed stabilized FGD material does not meet this requirement. Please revise Section 11 of the application to indicate how Champion will comply with Condition D.2 or E.11 of the general permit.
5. Throughout the permit application, references are made to expired General Permit No. WMGR111 and Chapter 288 of Pennsylvania's Residual Waste Regulations. Please revise the permit application to correct the references to General Permit No. WMGR052, and Chapter 290 or Chapter 287, as applicable.
6. The permit application contains proof that written notice of Champion's intention to operate under General Permit No. WMGR111 was provided to both Robinson Township and Washington County. Please correct the required notification to state Champion's intention to operate under General Permit No. WMGR052 and amend the application to supply proof of said notification.
7. The following geologic and hydrogeologic deficiencies were identified:
 - a. Champion's four proposed groundwater monitoring wells were drilled in 1984 as open bore holes. "Some years later," the wells were retrofitted with PVC, screens, etc., and constructed into monitoring wells. These monitoring wells do not meet the minimum construction requirements of 25 Pa. Code § 290.303(a). These wells must be modified to conform to the applicable regulations or replaced.
 - b. Champion's proposed monitoring system does not meet the minimum requirements of 25 Pa. Code § 290.302(a)(1)(2). According to Champion's geologic cross-sections, one well is screened in the Connellsville Sandstone (GWP-1U) and the other three are screened in the Pittsburgh Limestone (Upper Casselman Formation)

(GWP-2D, GWP-3D and GWP-4D). These wells appear to be screened in two distinct flow systems beneath the proposed site. In accordance with 25 Pa. Code § 290.302(a), the water quality monitoring system shall accurately characterize groundwater and surface water flow, groundwater and surface water chemistry, and flow systems on the site and adjacent area. Based on the 600 acres to be affected by the proposed activities on the site, Champion should propose additional wells for each flow zone beyond the minimum.

The application states that the hydrogeologic model for the Champion Processing Site relied upon the White and Merritt Geology and Hydrogeology Report, dated July 5, 2006. In Section 3.0-Work Plan, it states “as indicated by White and Merritt, the Pittsburgh Coal Underclay has been sufficiently removed from past site operations that the anticipated perched groundwater above the underclay does not exist. Therefore, the uppermost continuous groundwater bearing zone which is monitored by the four (4) site groundwater monitoring wells represents the regional groundwater table...”. However, the report itself states, “rainfall that infiltrates into the mine refuse pile permeates downward toward what may be a shallow water table (in the refuse). At the mine site, the downward movement of water is impeded by the confining layers mainly the underclay of the Pittsburgh Coal and the upper member of the Pittsburgh Limestone. These confining layers prevent the downward migration of infiltrating water reaching the permeable zones of the Pittsburgh Limestone.” The White and Merritt report further states, “at the Champion Processing site the groundwater system is made more complex by the very diverse permeabilities of the different rock layers.” Based on the differing statements regarding the presence, or lack thereof, of the underclay of the Pittsburgh Coal, along with the permeability issues above and below the Pittsburgh Coal, DEP is requesting a groundwater investigation be conducted in a more centrally located part of the proposed active area. This investigation should include wells installed into the Pittsburgh Limestone (Upper Casselman Formation) and Connellsville Sandstone, and pump tests conducted to precisely determine the hydrogeologic conditions, as well as to determine if the underclay exists in accordance with 25 Pa. Code § 290.302(a).

- c. The groundwater elevation contours illustrated on Exhibit SP-01 appear to be the Upper Casselman formation. However, several inaccuracies have been identified on the exhibit. The following list of current wells shows their static water levels and designated gradient positions that were used to construct Exhibit SP-01:

1. GWP-1U, 1094.2'
2. GWP-2D, 1120.2'
3. GWP-3D, 1175.95'
4. GWP-4D, 1124.3'

The map shows that GWP-1U is the designated upgradient well but has the lowest static water level, and GWP-3D is designated as a downgradient well but has the

highest static water level. Therefore, Exhibit SP-01 presents no reliable basis regarding any interpretations of groundwater flow beneath the site. In addition, Exhibit SP-01 has not been stamped by a Licensed Professional Geologist. Please submit a revised Exhibit SP-01 that has been certified by a Licensed Professional Geologist.

- d. Drawing No. CS1: This drawing contains two geologic cross-sections through the proposed site. Drawn on each cross-section is a groundwater table elevation line. On Cross-Section 1, the elevation levels used to construct this line are GWP-1U and GWP-2D. As stated above, GWP-1U is screened in the Connellsville Sandstone and GWP-2D is screened in the Pittsburgh Limestone (Upper Casselman Formation). Therefore, as presented, the line appears to be combining two distinct flow zones into one.

On Cross-Section 2, the same scenario illustrated above applies. Also, Drawing No. CS1 has not been stamped by a Licensed Professional Geologist. Please submit a revised Drawing No. CS1 to address these deficiencies and indicate certification by a Licensed Professional Geologist.

- e. Exhibit 8.1A: Exhibit 8.1A indicates that 10 residences border the Champion Processing site and use groundwater wells as their primary water sources. Please revise the application to include well construction data on these 10 private wells.

The narrative portion of Exhibit 8.1A states that these private water supplies derive their water from the Pittsburgh Limestone (Upper Casselman Formation), Connellsville Sandstone, and the Morgantown Sandstone. All of these geologic units extend beneath the entire footprint of the proposed Champion site. Please revise the application to provide background water quality data from the 10 private water supplies.

- f. The surface water characterization does not comply with 25 Pa. Code § 290.302(a)(3). Exhibit SP-01 shows the location of numerous surface water locations that should be sampled and characterized. In addition, the proposed surface water locations to be sampled are not identified as to their gradient position in relation to the site. Please submit a revised Exhibit SP-01 to address these deficiencies.
- g. The permit application lacks the required 12 minimum background samples and analytical data that is required for all monitoring wells and surface water locations in accordance with 25 Pa Code §§ 290.301(b)(2) and (e)-(f). Please revise the application to include the required data.

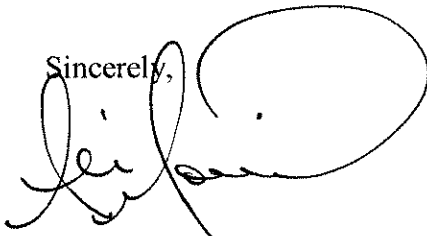
8. Use of material for “reclamation fill” and “structural fill” are not approved beneficial uses for a mine site under 25 Pa. Code, Chapter 290. Please update the application to remove references to “reclamation fill” and “structural fill.”
9. Additional information will be required to use this material on a coal mining activity site. This information will be required as part of the mine site permit revision evaluated separately from this application by the California District Mining Office and the Bureau of Mining Programs. Champion is reminded of the following pertinent sections of General Permit No. WMGR052.
 - a. Condition C.1. regarding revision to the mining permit prior to the commencement of beneficial use activities.
 - b. Condition E.1. regarding the requirement to submit an application for a mining permit or revision to a mining permit justifying beneficial use, to demonstrate no presumptive evidence of potential pollution, and demonstrate the reclamation plan can be feasibly accomplished.
 - c. Condition E.3. regarding each new source of FGD and coal ash used in production of the stabilized FGD material approved via a minor revision to the mining permit.
 - d. Condition H.2. regarding public notice of an application to beneficially use this material on a mine site.

You must submit a response fully addressing each of the significant technical deficiencies stated above by April 30, 2019, or DEP may deny the application.

If you believe that any of the stated deficiencies is not significant, instead of submitting a response to that deficiency, you have the option of asking DEP to make a decision based on the information with regard to the subject matter of that deficiency that you have already made available. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be denied.

Should you have any questions regarding the identified deficiencies, please contact Christopher Tersine by telephone at 717.787.6755, or via email at ctersine@pa.gov, and refer to Application No. 981695, Authorization No. 262882, to discuss your concerns or schedule a meeting. The meeting must be scheduled by April 30, 2019, unless otherwise extended by DEP.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ali Tarquino Morris'. The signature is written in a cursive style with a large, prominent loop at the end.

Ali Tarquino Morris, Program Manager
Division of Municipal and Residual Waste