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October 18, 2017

Colonel Antoinette Gant
U.S. Army Corps of Engineers
Louisville District
600 Dr. Martin Luther King Place
Louisville, Kentucky 40202

RE: Modification to Pending Permit Application No. LRL-2013-635-gjd

Dear Colonel Gant:

Previously, we propos ed a revised mine plan which significantly reduces wetland impacts at the proposed Seven Hills mine site. This plan includes removing 162 acres of wet lands and 9,445 linear feet from the planned impact area and only requesting "Conditional" approval for future impacts to 140 acres of wetlands and 10,617 line ar feet of ephemeral and intermittent streams. Our proposal is for approval to conduct mining operations in the initial ar ea. This will allow Peabody, the Corps and the Indiana Department of Natural Resources (INDNR) to monitor the on-site and off-site mitigation efforts and whether or not significant secondary impacts to the a djacent wetlands are occurring. As you are aware, Peabody has provided engineering and environmental analysis and numerous past mining examples that indicate adjacent negative impacts are not expected; however, if the indirect impacts are significant and/or the mitigation is not being completed as the permit requires the permit "Condition" is not met. As a result, Peabody would not be allowed to continue mining into the 140 acres of wetlands depicted on the attached map. If, on the other hand, the indirect imp acts are insignificant and the mitigation is progressing as planned, then the permit "Condi tion" is met and mining is allowed to continue through the "Conditional" 140 acre wetland area. Peabody will also work with the Corps to develop an effective Adapti ve Management Plan (AMP) to outline monitoring and any needed corrective actions.

This modification directly responds to concerns raised by the Corps, USEPA and the U.S. Fish and Wildlife Service including:

- Increasing the undisturbed buffer along the west side of Pigeon Creek. The original plan included a minimum buffer width of approximately 1 10 feet, which is a typical set back distance from a perennial stream. The minimum buffer width will now be 580 feet. While Pigeon Creek is a straightened, dredged and actively eroding channel, the nearly fivefold increase in buffer width will provide additional protection between the mining area and stream and significant travel and habitat areas fo r potential wildlife and aquatic species including the Indiana Bat and Copperbelly Water snake . Along with the approved Protection and Enhancement Plans (PEPs) included in the approved Surface Mining

Control and Reclamation Act (SMCRA) permit , this plan modification will provide even greater protections to any species of concern.

- The overall footprint of the mining operation has been decreased. It was mentioned in a meeting with the Louisville Distri ct that the project needed to be reduced to a "couple hundred acres" of wetland impacts. It is unclear what this direction is based upon, but it does make the initial wetland impact acreage similar to wet land impacts approved through Environmental Asse ssments and mitigated FONSIs at Bear Run (235 acres of wetland impacts) and Wild Boar (145 acres of wetland impacts). This modification achieves the balance of minimizing the impact while allowing production of an important and valuable energy resource. Unfortunately, the reduced impact area results in an additional 3 million tons of high quality coal remaining in the ground . Nevertheless, a safe and efficie nt mine can still occur, albeit at a reduced annual production rate.

The stream and wetland impact reductions are shown below.

	Wetlands (Acres)	Streams (linear feet)
Original Application	510.16	53,840
Removed from Impacts	162.14	9,445
"Conditional" Impacts	140.70	10,617
Proposed Initial Impacts	207.32	33,778

Wetland Quality

Given you only recently assumed com mand over the Louisville District, the following summary of the wetland characteristics of the planned impact site are provided to refute incorrect claims of the wetlands being special and unique.

- There are no special or unique trees. In fact, the tree species are typical of southw estern Indiana forested wetland s, according to a review by a professional forester. Logging has occurred on multiple occasions. Please note many of the tree species present on the site are not allowed to be planted for mitigation purposes in the Louisville District, due to the less desirable non-hardwood species.

- Nearly 80% of the wetlands planned for impacts were previously farmed with conventional agricultural methods. The wetlands developed by simply ceasing to farm over time, likely due to increasing beaver activity.

- There is infrequent overbank flooding (3 -7 days per year on average) i nto the wetlands from Pigeon Creek. In addition, the channel connections from the wetlands into Pigeon Creek are actively eroding and head cutting further into the wetlands.

- The modified plan results in impacts to only 2.1% of the wetlands in the Highland – Pigeon Watershed. The Seven Hills wetlands are not a significant portion of the wetlands in the watershed and the wetland acreages will increase with the additional mitigation proposed in this plan.

- Pigeon Creek is a straightened, eroding, low quality stream . Aquatic life sampling indicates values are rated "fair". This is similar to what is found in agricultural areas in southern Indiana

- The Hydrogeomorphic (HGM) analysis shows the wetlands can be fully mitigated with an approximate 2:1 mitigation ratio. HGM does not indicate the Seven H ills wetlands are special or unique, it is only a relative measure compared to wetlands in western Kentucky that were used as a reference. Again, these wetland s mostly developed by ceasing farming activities. If a special and unique wetland is presen t in the area, the Patoka River wetlands located approximately 15 miles north of Seven Hills may be an example. This multi-thousand acre wetland complex is divers e and much more valuable than the Seven Hills wetlands.

Mitigation

Peabody is proposing on-site mitigation/minimization at a ratio of 1:1, off-site mitigation at a ratio of 1.5:1 and many additional enhancements which are quantified in the table below. The Greathouse Island property located adjacent to the Wabash River was previously proposed for mitigation; however, the surprisingly low credit values the Corps was willing to grant for this property caused Peabody to drop the option it had to purchase this property. The option was held for 5 years and nearly $400,000 was invested on what was and is still believed to be a very high potential mitigation property. We have recently requested guidance on mitigation credits for properties within the Highland -Pigeon watershed and in adjacent watersheds, yet the Louisville District has not provided any clear guidance on the potential mitigation value for these properties. The acquisition of such properties is time consuming and there are other entities competing to acquire these properties. The inability to gain a clear understanding of the mitigation value that the Corps will grant puts Peabody in a competitive disadvantage and leads to missed opportunities and wasted time and resources. This is especially frustrating and confusing, when the Louisville District suggested earlier this year, that we contact the Patoka National Wildlife Refuge manager about potential mitigation properties in the Refuge target area that would be desirable mitigation properties for Seven Hills. Furthe r, site visits were made with Louisville District personnel and favorable verbal opinions were given on the value of one property that Peabody has the potential to

acquire. Peabody renews its request to obtain clear guidance on potential mitigation values of properties that it brings forward, so it has a fair opportunity to obtain these properties and not waste valuable time and resources similar to the Greathouse Island example.

Considering the reluctance to engage on specific mitigation, Peabody is proposing the following conceptual mitigation plan. This plan can be finalized with site specific data following agreement on the requirement and appropriate feedback on mitigation values of proposed properties.

- Peabody will provide a 2.5:1 wetland mitigation ratio consisting of 1:1 acres on-site and 1.5:1 acres off-site. The HGM process which the Corps and EPA requested Peabody to use in the spring of this year, indicates an approximate 2:1 mitigation ratio fully mitigates the planned site impacts. This is consistent with the HGM assessment completed at this site initially in 2007. The HGM process has not been utilized previously for other Peabody permits in the Louisville District and it appears to provide a much better and transparent method of calculating wetland mitigation needs than the ambiguous methods employed in the past.
    - Regarding the off-site mitigation, Peabody commits to providing 1:1 acreage in the Highland – Pigeon watershed. At a minimum, this will fully mitigate the site impacts in the same watershed. When other mitigation enhancements are considered as described below, the actual mitigation ratio is increased further. It is important to note the off-site mitigation will not only create additional wetlands, but it will also reduce conventional agriculture activities as this acreage will consist of converting current croplands to wetlands.
    - Peabody will provide approximately 0.5:1 mitigation in the Highland – Pigeon or adjacent watersheds. Please note the adjacent watersheds in southwest Indiana are very similar in watershed impacts and needed improvements as there is a prevalence of conventional agricultural activities occurring in the region.
    - Peabody will complete the mitigation as a mix of forested, scrub/shrub and emergent wetlands in a manner representative of the impact site or complete all of the mitigation as a forested wetland. Forested wetlands have been considered to be of higher value by the Louisville District to date.
    - Peabody will utilize high value hardwood tree species on both the on-site and off-site mitigation areas. Please note the Louisville District has not allowed Peabody to plant many of the existing tree species currently present at the site.
    - Peabody will add intentional diversity (pools, roughness, etc.) into the topography to enhance the site.

- Peabody will lower elevations of previously reclaimed areas on the east side of Pigeon Creek to create additional wetlands that will receive more overbank flow from Pigeon Creek and pr ovide additional flood storage and flood water treatment. This issue was deemed very important to the US Fish and Wildlife Service and also serves to create additional habitat for many local species. Please note this work will be completed in advance of mining opera tions as part of the work is also needed for the flood control purposes during mining. This area will remain in its current state and the floodplain will not be expanded if the mining project is not allowed.

- Peabody will repair existing drainages and install appropriate stabilizing and habitat enhancing structures in the avoidance areas between the mining area and Pigeon Cre ek. These drainages are currently actively eroding and head cutting through the wetlands. If this project does not move forward, these drainages will continue eroding and will degrade the wetlands over time. Peabody will also restore impacted intermitte nt drainages at a 1:1 mitigation ratio with appropriate natural stream construction enhancements.

- At the completion of mining, Peabody will remove the "levee" along the west side of Pigeon Creek in strategic locations to improve the connectivity and over b ank flooding of the creek into the wetlands. If the mining project does not occur, this improvement will not occur.

- Peabody will incorporate Copperbelly watersnake (CWS) habitat into its mitigation plan along Pigeon Creek to address U.S. Fish and Wildlife Service concerns. These efforts have proven to be successful at previous mining locations, including the Columbia Mine which has been added to the Patoka National Wildlife Refuse. Also, please note one of the recent potential mitigation properties submit ted to the Corps for a mitigation value determination is in the Patoka River watershed and within the Refuge target acquisition area and is considered Core Habitat for the CWS. The Refuge has been unable to acquire this property; however, the property could be acquired and used as mitigation for this property, if the mitigation values were known and valued correctly.

- Peabody will conduct upstream and downstream sampling for Nutrient s before, during and after mining. No impacts are expected regarding Nutrient s; however, the sampling can confirm this and will address a concern from U.S. EPA.

- Peabody will place a Conservation Easement on a 20 acre forested wetland in the Pigeon Creek watershed, located approximately 3 miles south of the mining area. An Indiana Bat roost tree was identified on this tract in a 2008 Indiana Bat survey and the tract contains numerous trees with sloughing bark which is ideal roost tree habitat. This tract is currently not included in a permit and not subject to the Protection and Enhancement Plans (PEPs); therefore, timber cutting could occur at any time . Peabody intentionally acquired this

property for this purpose and will likely sell it, if appropriate credit is not given. This area will be protected in perpetuity if the mining project occurs.

- As mentioned previously, a minimum buffer width of 580 feet will be in place between the mining area and Pigeon Creek. The buffer is up to 800 feet wide in some stretches. This area will be protected with a conservation easement that will prevent future timber cutting. This protection will not be in place if the mining project is not approved.

- Peabody owns additional properties in the Pigeon Creek corr idor which it is willing to consider site protection instruments on if appropriate mitigation credit is provided.

Given the direct mitigation acreage and enhancements listed above, Peabody believes the wetland mitigation value for the initial 207 acres of wetland impacts is outlined in the table below.

. **Mitigation Activity**	**Acreage**	**Mitigation Credit Factor**	**Total Credit**
On-site mitigation	207	1	207
On-site Protection	207	0.2	41
Off-site mitigation	311	1	311
Off-site Protection	311	0.15	47
Removal of active cropland by conversion to wetlands	311	0.1	31
Preferred hardwood tree species	518	0.05	26
Stabilize and repair drainages, remove levee and add CWS habitat in avoidance/buffer area	219	0.1	22
Protection of avoidance/buffer area	219	0.2	44
Protection of 20 acre property for Indiana Bat roosting habitat	20	0.25	5
Total Credits			734

The total projected mitigation value outlined above is a significant improvement for the Highland Pigeon watershed in that it increases the acrea ge of wetlands by minim um of 207 acres, provides protection of existing forested wetlands that could otherwise be lawfully harvested for timber, provides additional habitat for terrestrial and aquatic species and provides an increase in floodplain acreage and usage. These watershed improvements will not occur if the mining project does not occur. An additional 104 acres of wetlands will be created in th e Highland-Pigeon or adjacent watershed. The 734 mitigation credit outlined above equate to an effective mitigation ratio of 3.5:1. This is a 75% increase in mitigation above what the HGM analysis indicates is needed to fully mitigate planned imp acts. Upon approval of the permit "condition", the same mitigation plan is proposed to be applied to the additional wetland impacts.

This project is very important to Peabod y's Midwest operations and workforce and we are hopeful that any remaining issues can be resolved promptly. Upon agreement of the plan modification, Peabody will move forward to revise all applicable parts of the application. If you have any questions or comments, I can be reached by email at Bwest@peabodyenergy.com or at 812-455-278.

Sincerely,

Bryce West
Vice President Environmental Services

Enclosures