Seven Hills (ID No. LRL-2013-00635-gjd) Permit Application Modification Summary (Oct 18, 2017)

Avoidance and Minimization:

- In addition to the 510 acres already designated as avoidance, Peabody is modifying the mining plan to avoid impacting an additional 162 acres of wetlands and 9,445 linear feet of streams in the Seven Hills mining area. This change results in an additional 3 million tons of high quality coal that will not be mined. The resulting buffer between Pigeon Creek and the mining area in increased from a minimum of 110 feet to a minimum of 580 feet and is 800 feet wide in many areas. Peabody is also proposing to include 141 acres of wetlands in a "Conditional" area where approval to mine will not be granted unless Peabody is meeting its permit mitigation obligations and secondary impacts to adjacent wetlands are minimal, as expected. The initial mining area Peabody is seeking approval for includes 207 acres of wetlands and 33,778 linear feet of streams. The footprint and WOTUS impacts at Seven Hills are significantly less than those approved for impacts at Bear Run and Wild Boar. The stream and wetland impact reductions are shown in the table 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

Mitigation and Proposed Enhancements:

Consistent with past permits where an ARNI and/or EIS have been requested, Peabody proposes the following mitigation plan to fully satisfy a Mitigated FONSI resolution for the Seven Hills permit. The HGM analysis requested by the Corps and EPA indicate an approximate 2:1 mitigation ratio fully mitigates site impacts. HGM analysis will be utilized on all mitigation sites to finalize values. Peabody believes the plan below produces 734 mitigation credits and an effective 3.5:1 mitigation ratio for the initial mining area. This is a 75% increase over what the HGM analysis shows is needed for mitigation and well exceeds the less than 2:1 average ratio proposed in the original submittal.

- 2.5:1 Wetland mitigation
  - 1:1 on site mitigation
  - 1:1 off-site mitigation in the Highland-Pigeon watershed.
  - 0.5:1 off-site mitigation in the Highland-Pigeon or adjacent watershed.
- High value "preferred" tree species will be utilized on all mitigation sites.
- Add diversity (roughness, pools, etc.) into the mitigation plan
- Lower elevations of previously reclaimed areas on the east side of Pigeon Creek to enhance floodplain effectiveness and create additional wetlands.
- Stabilize and repair drainages connecting the wetlands to Pigeon Creek to prevent further head-cutting into the wetlands.
- At the completion of mining, Peabody will undertake removal of the "levee" along the west side of Pigeon Creek to enhance the connectivity and overbank flooding into the wetlands.
- Add Copperbelly watersnake habitat enhancements in the reclamation/mitigation plans.
- Conduct upstream and downstream sampling for Nutrients pre, post and during mining.
- Place a Conservation Easement on a 20 acre forested wetland tract containing an Indiana Bat roost tree in a survey from 2008. This is located approximately 3 miles south of the mining area.
- Provide a Conservation Easement on the avoided wetlands (219 acres) that provide the buffer between the mining area an Pigeon Creek.
- All intermittent streams will be mitigated at a 1:1 ratio utilizing natural stream restoration techniques.