Questions & Answers – Spruce Mine Final Determination

1. What were EPA's conclusions after its § 404(c) review of the Spruce No. 1 Mine?

EPA concluded that the Spruce No. 1 surface coal mine will have unacceptable adverse effects on water quality and the environment. EPA's decision to stop mining waste discharges to high quality streams at the Spruce No. 1 Mine was based on several major environmental and water quality concerns. The proposed mine would have:

- Disposed of 110 million cubic yards of coal mine waste into streams.
- Buried more than six miles of high-quality streams in Logan County, West Virginia with millions of tons of mining waste from the dynamiting of over 2,200 acres of mountains and forestlands.
- Buried more than 35,000 feet of high-quality streams under mining waste, which will eliminate all fish, small invertebrates, salamanders, and other wildlife that live in them.
- Polluted downstream waters as a result of burying these streams, which will lead
 to unhealthy levels of salinity and toxic levels of selenium that turn fresh water
 into salty water. The resulting waste that then fills valleys and streams can
 significantly compromise water quality, often causing permanent damage to
 ecosystems and rendering streams unfit for swimming, fishing and drinking.
- Caused downstream watershed degradation that will kill wildlife, impact birdlife, reduce habitat value, and increase susceptibility to toxic algal blooms.
- Inadequately mitigated for the mine's environmental impacts by not replacing streams being buried, and attempting to use stormwater ditches as compensation for natural stream losses

Finally, EPA's decision prohibits five proposed valley fills in two streams, Pigeonroost Branch, and Oldhouse Branch, and their tributaries. Mining activities at the Spruce site are underway in Seng Camp Creek as a result of a prior agreement reached in the active litigation with the Mingo Logan Coal Company. EPA's Final Determination does not affect current mining in Seng Camp Creek.

EPA also identified concerns that the permit does not comply with the environmental review criteria under § 404(b)(1) of the Clean Water Act, such as the availability of alternatives, prevention of significant degradation, and adequacy of compensatory mitigation, which further confirm the unacceptability of these impacts.

2. What is the result of EPA's § 404(c) action on the Spruce No. 1 Mine?

EPA's § 404(c) action prohibits the burial of two high-quality streams on the Spruce No. 1 project site, Pigeonroost Branch and Oldhouse Branch. EPA's action prevents the Spruce No. 1 project from disposing of mining waste in these two streams. EPA's action also prevents other mining waste disposal activities in these two streams that would have

impacts of a similar scope and scale as the Spruce No. 1 Mine. However, EPA's action does not prohibit mining activities that are currently being conducted at the Spruce No. 1 Mine in Seng Camp Creek, a third stream that has already been impacted by mining activities.

3. What are the environmental benefits of EPA's decision?

EPA is acting under the law and using the best science to protect water quality, wildlife and Appalachian communities, who rely on clean waters for drinking, fishing and swimming. These streams contain vibrant wildlife communities and play a critical role in sustaining the quality of downstream waters. These six miles of streams are among the last remaining high-quality streams within a watershed that has been fundamentally altered by prior and ongoing surface coal mining activities. By preventing these streams from being permanently buried, EPA's action protects these streams and the wildlife that live within them, including fish, amphibians, macroinvertebrates, and water-dependent birds. EPA's action also ensures that these streams will continue to sustain the aquatic wildlife communities downstream of the project site, which would have been significantly affected by pollution from the Spruce No. 1 Mine.

4. Why are these discharges harmful to wildlife?

Discharges associated with the Spruce No. 1 mine will have unacceptable effects on wildlife in two ways. First, dumping millions of tons of mining waste into six miles of streams will completely destroy these streams and kill all wildlife that live within them, including fish, amphibians, and macroinvertebrates. Second, as a result of burying these streams, downstream waters will be irreversibly polluted by potentially toxic levels of total dissolved solids and selenium, which will kill or injure wildlife such as fish, amphibians, water-dependent birds, and macroinvertebrates.

5. Why did EPA review and veto the Spruce mine but not others?

The Spruce No. 1 mine is one of the largest surface coal mines ever proposed in central Appalachia. EPA has consistently raised concerns regarding the environmental impacts that the project would cause. Since issuance of the Spruce No. 1 permit in 2007, significant new information has arisen to confirm and further inform EPA's earlier concerns and to emphasize the value of the environmental resources that would be affected by the Spruce No. 1 mine. Additionally, litigation associated with the environmental impacts of the Spruce No. 1 Mine has delayed the start of mining activities on the site, meaning that unacceptable adverse effects have not yet occurred.

EPA takes its § 404(c) responsibility seriously, and recognizes that EPA's use of 404(c) should meet a high standard. EPA has only completed 13 Final Determinations in the Agency's 40-year history, emphasizing the careful consideration EPA gives to its Section

404(c) responsibilities and the seriousness with which EPA views the impacts from the Spruce No. 1 Mine. EPA also recognizes that action in the context of a previously issued permit should only occur under exceptional circumstances.

6. What does this decision mean for the future of other previously permitted coal mines in Appalachia?

EPA's determination on the Spruce mine is extremely rare. EPA has used this Clean Water Act authority in just 12 circumstances since 1972 and reserves this authority for only unacceptable cases.

The determination on the proposed Spruce No. 1 Mine is limited to the particular circumstances of this mine. Because of the unique combination of scale of impacts and the nature of the impacted resources both in and of themselves and within the larger context of the watershed, EPA's concerns with the Spruce No. 1 Mine are unlikely to be repeated for other Appalachian surface coal mining projects for which permits have previously been issued.

EPA applied rigorous scientific research to the particular facts of the Spruce No. 1 Mine and determined that the environmental impacts would be unacceptable.

Despite EPA's willingness to consider alternatives, the company did not offer any new proposed mining configurations in response to EPA's concerns based on science and the law.

7. Is EPA considering vetoing other surface coal mining projects with existing permits?

At this time, EPA is not currently reviewing any other previously permitted Appalachian surface coal mining projects pursuant to § 404(c).