

## **AMD: Position Statement Handout – Suggested Answer Sheet**

The answers listed below are only suggestions or possibilities for the outcome of the debate. The answers will vary depending on the way the students represent the stakeholders.

1. Based on your research and your role as a stakeholder, what do you think is the best management practice for treating Abandoned Mine Drainage?

*Passive or Active treatment*

2. What arguments support your position? Be specific.

*Passive treatment*

- *Passive treatment is generally less expensive than active treatment.*
- *It can be developed for the specific needs of the affected stream.*
- *It does not use chemicals that may be harmful to humans.*
- *It is a newly understood science that has been proven to work effectively.*
- *Natural processes are used to remediate the effects of AMD such as wetlands, alkalinity enhancing microorganisms, and limestone dissolution.*

*Active treatment*

- *It is a known and effective way to raise the pH of the water back to a healthy level.*
- *It may not require a long-term management plan for maintaining the site.*
- *Depending on the site conditions, six different chemicals are available for treatment.*
- *Active treatment does not require as much land as passive treatment.*

3. What other individuals in the debate do you think would agree with your position?

*Passive - DEP official, kayaker, environmental engineer, DEP official, or river ecologist*

*Active - fly fisherman, coal miner, DEP official, or environmental engineer*

4. What other individuals would disagree with your position?

*Passive - fly fisherman, coal miner, DEP official, or environmental engineer*

*Active - DEP official, kayaker, environmental engineer, DEP official, or river ecologist*

5. What are some arguments against your position?

*Against passive treatment*

- *The science is new and inexact.*
- *Treatment systems require a lot of land and maintenance.*

*Against active treatment*

- *The costs of treatment and maintenance are high.*
- *The treatment is limited to six different chemicals.*
- *The technology relies on using chemicals in the natural environment to change the water chemistry.*

6. How would you respond to the arguments against your position?