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**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES  
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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070020  
**TaskID:** 4634  
**Mine Name:** HORIZON MINE  
**Title:** PERMIT MODIFICATION

#### Summary

The proposed amendment must be denied and returned.

phess

#### Operation Plan

#### Fish and Wildlife Protection and Enhancement Plan

##### Analysis:

On June 30th the Division received an amendment to discontinue the macroinvertebrate surveys at the mine. This memo will include a review of that information. There are nine surveys that have not been conducted to date and they are critical to the analyses of the data that has been collected. Absent that data the Division can not make a valid scientific determination to allow for the macroinvertebrate surveys to be discontinued.

##### Deficiencies Details:

There are nine surveys that have not been conducted to date and they are critical to the analyses of the data that has been collected. Absent that data the Division can not make a valid scientific determination to allow for the macroinvertebrate surveys to be discontinued. It is recommended that the application be denied.

jhelfric

#### Hydrologic Ground Water Monitoring

##### Analysis:

The Permittee submitted an amendment to the Horizon Mine MRP on June 27, 2014. In the proposed amendment, the Permittee states they feel that water monitoring and testing is no longer useful and is a waste of resources due to the mine being shut down. In section 7.1.2.2 and section 7.1.5, the Permittee states that when the mine becomes operational groundwater and well monitoring will resume. Due to potential impacts associated with a surface facility sitting idle, and without any information regarding subsidence and recent mining history in the area around monitored springs and wells as well as a summary of data collected at each monitoring location, approval of the amendment is not recommended. The proposal lacks the necessary information to reduce the water monitoring program.

*Deficiencies Details:*

R645-301-731.214 Ground water monitoring should proceed through mining and continue during reclamation. If justification can be provided for each individual monitoring location, demonstrating that the operation has minimized disturbance to the prevailing hydrologic balance in the permit and adjacent areas, and that material damage to these hydrologic systems have not occurred and will no longer be impacted, then reduction of the water monitoring plan can be reviewed and considered.

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## **Hydro Surface Water Monitoring**

*Analysis:*

The Permittee submitted an amendment to the Horizon Mine MRP on June 27, 2014. In the proposed amendment, the Permittee states they feel that water monitoring and testing is no longer useful and is a waste of resources due to the mine being shut down. In section 7.2.2.3, the Permittee states that when the mine becomes operational surface water monitoring will resume.

Due to potential impacts associated with a surface facility sitting idle, and without any information regarding subsidence and recent mining history in the area around monitored streams as well as a summary of data collected at each monitoring location, approval of the amendment is not recommended. The proposal lacks the necessary information to reduce the water monitoring program.

*Deficiencies Details:*

R645-301-731.224 Surface water monitoring should proceed through mining and continue during reclamation. If justification can be provided for each individual monitoring location, demonstrating that the operation has minimized disturbance to the prevailing hydrologic balance in the permit and adjacent areas, and that material damage to these hydrologic systems have not occurred and will no longer be impacted, then reduction of the water monitoring plan can be reviewed and considered.

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