Below is a compilation of the public comments from the Signal Peak Energy (SPE) Permit Amendment 3 (AM3) Acceptability comment period. The comment period ended Monday, October 7, 2013. The comment topics laid out below are not exact from individuals, but attempted to draw out the environmental concerns from each comment. Many comments were simply statements that are not addressed below.

Comment responses for SPE AM3 Acceptability:

1. **Longwall mining impacts and issues need to be studied more sufficiently.** Longwall mining is damaging the land surface and the impacts cannot be ignored.

   While new to Montana, the longwall mining process has been used in other parts of the US and other countries for many decades. That body of experience provides a general understanding of subsidence mechanisms and their estimation. Prior to issuance of the initial permit a study was conducted to predict probable subsidence impacts considering the geology and other conditions specific to this site. Monitoring and observation of two completed panels indicates that subsidence has occurred consistent with initial predictions.

2. **Subsidence issues need to be looked at as they pose a danger to people and livestock.** Long-term effects of subsidence need to be looked at and should be monitored. Subsidence poses a danger to livestock, wildlife, and people in the area. Subsidence causes large cracks - some 19 feet deep. Subsidence has impacted livestock production.

   Reclamation of Subsidence Features:

   Subsidence features generally include surface cracks. In local areas, cracks with significant width or scarps have occurred. Subsidence features are reclaimed as necessary to restore the premining land use. Although not anticipated, any features that are found to significantly disrupt the surface or groundwater hydrologic balance will be addressed.

   Features such as cracks that concentrate flow and lead to excessive erosion will be corrected.

   Due to the land disturbance associated with transporting equipment, minor surface cracks (generally less than 6 inches in width) or cracks on slopes greater than 20% will not be repaired unless repairs are agreed to by the operator, landowner, and DEQ. DEQ can prescribe the repair if the operator is nonresponsive.

   Where repairs are to be undertaken, the method will vary according to the specific feature and specific site condition. The repair of cracks with significant width is described on Figure 313-2 through Figure 313-4. In general, repairs will salvage and replace topsoil where possible or steps will be taken to avoid the displacement or loss of topsoil into the crack.

   Cracks with sufficient width and length of up-gradient drainage path will be repaired to prevent excess loss of topsoil into the crack. It is expected that heavy equipment will be required for
most repairs. The method and equipment chosen will minimize damage to the land caused by access routes, material storage or incidental activities.

Repair of cracks will generally not begin until mining of the next adjacent panel is complete to ensure full subsidence. Exceptions may include times where repair is needed to facilitate mining; or where delay has potential to exacerbate a problem such as erosion or negatively affect water resources. To the extent possible, prior to significant surface disruption, DEQ and SPE will conduct a survey of the surface above the panel to be reclaimed to establish agreement on which features are to be reclaimed and the methods to be used.

A subsidence monitoring program is in place which records the vertical displacement of a number of survey markers in the mine area. In addition, a LIDAR aerial survey was conducted over the entire life of mine area prior to mining. The survey provides a very detailed baseline elevation contour map. A further LIDAR survey was conducted after mining of the first two panels. Comparison of the two surveys allows for a very accurate and detailed view of the overall subsidence that has occurred.

The nature of the subsidence produces a number of expressions at the surface including cracks, ridges, and slumps. The surface features are monitored with periodic ground tours of mined areas. The ground tours are supplemented with periodic helicopter inspections of steep and remote features. Additionally, SPE has agreed to periodically monitor one large crack on the southwest corner of Dunn Mountain.

Undoubtedly, open cracks will present some increased risk to livestock. Observations to date indicate most cracks close back up as mining progresses. Field observations indicate many of the remaining cracks are healing fairly quickly. The mine is committed to repairing persistent large cracks where the repair itself does not cause undue surface damage. Cattle have been grazing throughout the mining operation with little or no adverse effect to date.

SPE has conducted repair of select subsidence features. The methods used to date include grading (flat areas), grouting (steep areas), and dozer work. The dozer repairs were rather disruptive and required seeding of the disturbed areas.

3. **Signal Peak Energy’s permit application for Amendment 3 is incomplete. Data for existing wells in the area, archaeological studies, new waste disposal area needs to be reviewed.**

SPE’s amendment application was determined to be complete on December 14, 2013. All applicable data has been reviewed. Data for existing wells in the area are collected monthly or quarterly and it is reported to DEQ two times per year and/or upon request by DEQ.

A Class I survey has been conducted over the entire Life-of-Mine (LOM) area. A class III inventory has been conducted in the facilities area, as well as the area all areas up to Panel 6. A Class III inventory was also completed on the surface related to the federal coal leases.
Therefore, only a portion of the area has not been covered by a Class III survey. SPE has committed to complete Class III surveys two panels in advance of mining.

SPE acknowledges that a new waste disposal area may be needed in the future, however; there is no new waste disposal area proposed in this amendment. When SPE determines the location and operating plan needed for a second Waste Disposal Area, SPE will be required to submit the application as a major revision; there will be a significant adjustment to the bond and the hydrologic balance will be affected.

4. **DEQ needs to look at the location for the proposed waste disposal area.**

   See comment 3 above.

5. **Signal Peak has a long history of safety issues and violations. These should be considered in DEQ’s review of the application.**

   DEQ does not have a law or rule that would allow SPE’s history of safety issues and associated violations to be considered during the review of the amendment application.

6. **There are additional impacts to the following: air quality (dust), roads (visibility is impaired by trucks disposing of material), vegetation (no new plants should be introduced-such as Knapweed), wildlife (animals such as Canada geese, mallards, teal, black duck were not mentioned in the list of birds), water (how does one replace a dried up spring, well, or pond?), archeological studies and pipelines. How will these impacts be mitigated?**

   **Air Quality** – There should be no additional impacts other than extending the same impacts that are occurring today. The air quality permit issued by DEQ’s Air Resource Management Bureau addresses these issues.

   **Roads** – SPE in conjunction with the county recently cold paved the county road up to the WDA to reduce the amount of dust generated and improve the visibility situation. Dust is required to be controlled by use of best management practices (e.g. water).

   **Vegetation** – As committed to by SPE in Permit Section 313, “Noxious weeds found on the permit area will be controlled throughout the life of the operation to reduce the seed source available to invade reclaimed areas. Re-vegetated areas will be qualitatively evaluated annually to assess weed populations. Weed control plans have been developed in accordance with the Noxious Week Management Act in cooperation with the Musselshell and Yellowstone County Weed Control Boards and are included in Section 17.24.308 of the permit.

   **Wildlife** – The above mentioned are not considered species of special concern and for that reason not mentioned in the list of species of concern. A complete list of wildlife species
observed on the mine site is incorporated into the Annual Wildlife Monitoring Reports. These reports provided the baseline information needed for this discipline.

Water – Current operations at SPE indicate only short term disruption or interruption of springs, ponds, and wells pumping from the upper overburden directly above active underground mining. Nevertheless, section 313 of the permit describes the commitments SPE has made to mitigate dried up springs, wells or ponds in the event of long term disruption or interruption. Mitigation measures include the enhancement of existing natural springs, seeps and water holes, and the construction of water developments such as wells, reservoirs, small ponds, tanks, and guzzlers. The selection of appropriate enhancement/development techniques depends on many site specific factors such as current function and management of existing water resources, existing level of development of at spring sites, seasonal water availability and flow, potential for increasing existing spring flow, topographic characteristics at spring sites and habitat enhancement goals and objectives, and the needs of local water users. SPE is committed to mitigate springs, stream reaches, and ponds to achieve post mining land use and to ensure no net loss of wetlands.

Archaeology - The archaeological studies are required to be completed in areas that disturbance is going to occur. SPE has committed to conducting Class III level surveys approximately two panels (2 years) in advance of longwall extraction. SPE has committed to protect all eligible sites per Section 106 of the National Historic Preservation Act and mitigated with SHPO and DEQ approval.

7. **Signal Peak Energy’s postmining plant mix has low nutritional value. Post-mining plants need to be able to sustain wildlife and agriculture.**

The postmining seed mix used by SPE is adjusted based on the surrounding vegetation, agreements with land owners, pre-veg surveys etc. Additionally, the areas re-seeded associated with AM 3 will be areas associated with roads and drill pads. There will be a very limited amount of disturbance associated with AM3 (proposed 25 acres of 7,161 acres).

8. **Longwall mining and subsidence issues put burdens on local farmers and ranchers. Ranching is a lifestyle and DEQ needs to represent the people in their livelihoods. Ranch country depends on water and high-quality springs. Agriculture is the biggest industry in Montana.**

DEQ acknowledges that subsidence related to underground mining at SPE places short term burdens on owners of surface rights. However, results of current operations indicate that cracking and fracturing related to subsidence heal rapidly. SPE has agreed to provide surface owners with information about the location of mining activity so that ranch operators can avoid losses. SPE has also committed to mitigate effects of subsidence as explained in the response to comment no. 2. Also, see response to comment 6 for further details.
9. The data that the state is looking at is old and outdated.

SPE is required to collect and submit a variety of data. Data collection efforts are on-going and DEQ utilizes the most up-to-date information available in making regulatory decisions. DEQ utilizes both original data associated with the permit and monitoring data collected since the mine was initially permitted.

10. A fourteen page checklist environmental assessment is not sufficient to cover this expansion.

The checklist EA is utilized to refresh the existing EIS for the mine. In addition to the Environmental Assessment, the DEQ conducts a Cumulative Hydrologic Impact Analysis (included in the Written Findings) that considers potential hydrologic impacts from mining activities.

The EA is the fourth that DEQ has completed to update the EIS. Additionally, the Bureau of Land Management completed an EA for the Federal Coal leasing action.

11. Requesting that the Montana Department of Environmental Quality (DEQ) prepare a full Environmental Impact Statement (EIS). The DEQ should finalize an EIS before considering this permit expansion.

DEQ determined at completeness that an EIS was not necessary for this mine amendment as the original EIS conducted for the Bull Mountain Mine addressed all anticipated and potential impacts from mining in the LOM. The amendment area is included in the LOM area addressed in the original EIS.

12. The expansion will reduce the value of property in the area. We need to ensure that the land is left economically viable for future ranching opportunities.

See comment 6 above for further discussion.

13. DEQ has a statutory duty to study the impacts of coal mining in our state and not ignore them.

DEQ works diligently at seeing that the law and the rules associated with Coal Mining are followed.

14. The U.S. market for coal is declining.

DEQ disagrees with the premise of the comment. U.S. domestic demand for western coal and has been relatively stable since 2008. See U.S. Energy Information Administration, July 26, 2013, report. In addition, the strength of existing or future demand for the product of a particular coal mine for the term of a permit may not follow a general market trend. Most importantly, the
marketability of the anticipated production of an operator seeking a permit falls outside the scope of considerations appropriate for review of a permit amendment under MSUMRA.

15. Coal will be shipped to China. Air pollution from China’s coal plants cause severe respiratory health problems. These air pollutants affect the air quality in the US. People who suffer from asthma or other issues that affect a person’s ability to breathe will be impacted by higher levels of air pollutants.

The proposed activity is the mining, processing, and transportation of coal at SPE and does not include how the coal is used outside Montana. Although the impacts of burning coal may qualify as an indirect impact for the purpose of environmental review under NEPA, MEPA, specifically section 75 -1- 201(2)(a) MCA, excludes from the scope of environmental review actual or potential impacts beyond Montana’s borders or impacts that are regional, national, or global in nature. Although one commenter questions the legality of the section 75-1-201(2)(a) limitations on MEPA review, as an agency of the State of Montana, DEQ is obligated to enforce statutes within its delegated authority. See response to comment 18.

16. The EA does not address global warming

See response to comment 15.

17. DEQ has violated federal and state legal requirements by failing to make the original EIS, which is supplemented by the environmental review for AM3, reasonably available to the public.

DEQ disagrees with the comment. DEQ complied with the procedures for supplementing an EIS described in MEPA Model Rule X. In response to comments received, the original EIS is available for public review on the DEQ website as explained in the text of the EA under the “Background” heading.

18. The Montana Constitution provides a right to a clean and healthful environment.

DEQ acknowledges that the Montana Constitution provides a right to clean and healthful environment. Nevertheless, MSUMRA describes the standards and criteria, in part to evaluate whether a proposed coal mine operation to implement those constitutional rights. MSUMRA authorizes strip and underground coal mining operations within the state in accordance with its provisions and requirements. The Legislature has authorized DEQ to permit and regulate surface and underground coal mining operations in accordance with MSUMRA and other environmental laws applicable to coal mining operations. DEQ, as a state agency, “must faithfully execute the laws of Montana” and the authority to determine the constitutionality of state statute such as MSUMRA rests outside of its purview. See Merlin Myers Rev. Trust v. Yellowstone County, 2002 MT 201, P22, 311 Mont. 194, 200, 53 P.3d 1268, 1272.
19. The presence of federal coal requires NEPA analysis of the proposed mine expansion and preparation of an EIS.

DEQ disagrees that state review and possible approval of the SPE AM3 application triggers federal NEPA review by DEQ. DEQ recognizes that that the presence of federal coal requires federal approval of the mining plan under SMCRA and Montana’s State-Federal Cooperative Agreement, 30 CFR § 746 and 30 CFR § 926.30. The Office of Surface Mining is responsible for any environmental review under NEPA. No provision of NEPA or MEPA requires joint federal and state environmental review.

Renewal of the SPE AM3 permit application is state action that requires environmental review under MEPA. DEQ determined that preparation of an environmental assessment is the appropriate level of environmental review for renewal of the SPE AM3. DEQ issued its draft environmental assessment simultaneously with the public notice of acceptability of the application on September 3, 2013.

20. The proposed expansion of mining operations will cause violation of water quality standards in the permit area and material damage to the hydrologic balance outside the permit area.

DEQ agrees that impact of mining operations on the hydrologic balance and prevention of material damage outside the permit area are considerations that must be evaluated before the permit may be issued. Although DEQ assesses whether the proposed operation is designed to prevent disruption to the hydrologic balance in the permit area, Montana water quality standards do not apply within the permit area. DEQ must assess the cumulative hydrologic impacts and whether the operation is designed to prevent material damage to the hydrologic balance outside the permit area. Violation of a water quality standard is an indicator of material damage. The assessment of cumulative hydrologic impacts is incorporated within the findings that DEQ must issue with the permit. See Findings, Appendix I. In the assessment, DEQ finds that the mining operation described in the application is designed to prevent material damage outside the permit area as neither drawdown nor a decrease in water quality is expected to be sufficient to disrupt or interrupt the beneficial use of water. This finding is based in large part on current groundwater monitoring which indicates that no material damage has resulted from current operations. Findings, Appendix 1, ¶10.2.2, 10.3. The assessment considers mitigation measures available in the event that mining operations disrupt or interrupt either a surface or groundwater resource. In any event, the reclamation bond will not be released until the operator demonstrates that concentration of TDS in groundwater within the mined area no longer poses a reasonable threat of material damage.

21. The provisions for hydrologic reclamation are inadequate.

DEQ disagrees with this comment. Reclamation by providing alternate sources of water that support an existing use is consistent with MSUMRA. This conclusion is reasonable based on current usage of water from the underburden for existing beneficial uses. Otherwise,
groundwater monitoring of current mine operations indicates no material damage to groundwater resources. See DEQ’s response to Comment No. 20.

22. **The Draft EA does not address possible pollution from use of waters taken from the Madison Formation in mine operations.**

DEQ added language in the final EA to address this comment. SPE proposes to use Madison Formation water for coal processing and dust suppression. Although Madison Formation water is not suitable for use as portable water, DEQ concludes the proposed use poses no threat of contamination of state waters outside the permit area. This conclusion is based on storage of Madison Formation water in a lined pond and use for dust suppression which does not constitute a discharge to state waters. One commenter’s claim that Madison Formation water exceeds DEQ Circular 7 standards for arsenic is attributable to misreading of the information in the application.

23. **The EA fails to consider cumulative impacts from prospecting.**

DEQ added language to the final EA to address this comment. The impacts from prospecting activity at the Bull Mountains Mine are minimal and are not significantly cumulative to the direct or indirect impacts of the proposed activity, as the SPE’s prospecting activities are subject to a prospecting permit that precludes any substantial disturbance, as defined in ARM 17.24.301, of the natural land surface.

24. **The EA fails to consider indirect impacts from the need to enlarge the Waste Disposal Area.**

DEQ added language to the final EA to address this comment. DEQ acknowledges that the Waste Disposal Area is insufficient to handle additional waste from mining activity contemplated by the AM3 expansion. Environmental review for expansion of the Waste Disposal Area will be addressed in a subsequent major revision to allow SPE to prepare a comprehensive proposal for the expanded Waste Disposal Area. Because the impacts of expansion of the Waste Disposal Area are reasonably expected to be confined within the permit area, it is not necessary to address this issue at this time.