



Technical Analysis and Findings
Utah Coal Regulatory Program

PID: C0070020
TaskID: 4797
Mine Name: HORIZON MINE
Title: PERMIT CHANGE

General Contents

Permit Application Format and Contents

Analysis:

The submitted format does not meet the approved format accepted by the Division for review of proposed changes to an approved mining and reclamation plan.

Deficiencies Details:

The information submitted has not been submitted in the format required by the Division (See R645-301-121.300). Information submitted within Chapter 3 (normally submitted relative to the Biology discipline (R645-301-300) contains information relative to engineering (section 3.2.3.300, page 3-3), roads (3.2.3.3, page 3-6), sediment pond removal, reclamation channel re-construction,(page 3-25) etc. Sediment pond removal should be discussed in Chapter 7, as should the reclamation channel construction. Each proposed change to each discipline should be discussed in its assigned section of the R645 Coal Mining Rules, i.e., Chapter 1, Ownership and Control; Chapter 2, Soils; Chapter 3, Biology; Chapter 4, Geology; Chapter 5, Engineering, including proposed revisions to the APPROVED reclamation plan, Chapter 6, Geology, and Chapter 7, Hydrology. The submittal deletes entire sections of the approved reclamation plan, which proposes, in effect, to delete the requirements of SMCRA relative to the reclamation of coal mine sites in the State of Utah.

phess

Maps and Plans

Analysis:

Plans submitted as they relate to the mine site sediment pond at Horizon were submitted as Appendix 7-4, and contain copies of an amendment approved on April 7, 1998 (Task ID # 97H) for peak flows for drainages at the Horizon Mine, the sediment pond design, data for the sediment pond operational decant, data for a sediment pond non-operational decant, design for the sediment pond decant pipe spillway, design for a sediment pond discharge point without a decant spillway, a second set of design information for a sediment pond decant pipe spillway, and a second design for a sediment pond discharge point with a decant pipe spillway. All of these have been previously approved by the Division, and all were submitted without proposed changes. It is unclear what the Permittee wants the DOGM to do with this information (Appendix 7-4).

Deficiencies Details:

In accordance with the requirement of R645-301-121.200, the Task ID # 4797 application is unclear. Therefore the application should be returned.

Completeness

Analysis:

The pages submitted as part of the Task ID # 4797 only contain the proposed changes (the page numbers reference the approved plan page numbers) but are not submitted as COMPLETE chapters as required under the Submittal Format Guide - Utah Coal Regulatory Program. This document requires that "each submission (be submitted) as a complete package including all maps and text".

Deficiencies Details:

The submittal Task ID # 4797 is not a complete package (See R645-301-150, Completeness).

phess

Operation Plan

Mining Operations and Facilities

Analysis:

The Permittee's application for a permit change included removal of several lines of text throughout Chapter 3. Text was removed in section 3.2.3 Surface buildings and structures that stated at the end of mining all structures would be removed and the area reclaimed as outlined in section 3.5. The Permittee failed to add narrative that justified how retaining the buildings meets R645-301-413.100 through-413.334, R645-301-521.180 R645-302-270, -271.100 through -271.400, R645-302-271.600, -271.800, and -271.900. Text was added to section 3.2.3 stating that upon termination of mining operations, the following structures will be removed and the area reclaimed as outlined in Section 3.5. The Permittee failed to list which structures would be reclaimed after said sentence and did not add any narrative justifying why any of the structures would remain.

Deficiencies Details:

The application is deficient on page 3-3 at the first sentence of section 3.2.3 per R645-301-521.180, R645-301-526.115, R645-301-413.100 through-413.334, R645-301-541.300,-.400, R645-302-270, -271.100 through -271.400, R645-302-271.600, -271.800, and -271.900.

The R645 Rules referenced above require the permit application to include a narrative explaining the construction, modification, use, maintenance and removal of all mine structures and facilities. The burden of proof of why the mine structures would not be removed rests on the Permittee to provide narrative explaining why retaining the structures:

- Fit the post mining land use of grazing (as shown on Plate 4-1 of the current MRP).
- Support grazing for a higher or better use
- Have consolation between the Permittee, Division, and landowner or land manager agency having jurisdiction over the lands
- After Division approval, the watershed of the permit and adjacent areas is shown to be improved.
- Have an reasonable likelihood for achievement
- Do not present any actual or probable hazard to public health or safety
- Will not be impractical or unreasonable
- Are consistent with applicable land-use policies
- Do not cause or contribute to violation of federal or Utah, or local law.

The application is deficient per R645-301-542.400 and -522 on page 3-3 section 3.2.3 where text was added stating what structures will be removed and does not list what structures will be removed or provide information how the structures to remain meet R645 Rules All structures approved by the Division to remain after reclamation must meet R645-301.542.400 meeting the requirements of R645 Rules for permanent structures, have been maintained properly and meet the requirements of the approved reclamation plan for permanent structures and impoundments. The operator will renovate such structures if necessary to meet the requirements of the R645 Rules and to conform to the approved reclamation plan.

cparker

Support Facilites and Utility Installations

Analysis:

The Permittee removed text from section 3.2.3.2 that stated that all utility installations associated with the Horizon Mine will be removed following mining in accordance with the reclamation plan discussed in Section 3.5 of the MRP. The Permittee failed to add text justifying why all utility installations and support facilities would not be removed. Required justification narrative was missing from the application such as that the landowner approval and how the retaining the utilities would improve the post mining land use of grazing.

Deficiencies Details:

The Permittee's application is deficient in section 3.2.3.2 spanning page 3-5 and 3-6 per R645-301-526.200-222, R645-301-521.180, R645-301-526.115, R645-301-413.100 through-413.334, R645-301-541.300,-.400, R645-302-270, -271.100 through -271.400, R645-302-271.600, -271.800, and -271.900 here text was removed stating all utilities, support facilities, and water pollution control features would be removed.

The Permittee did not define what or how utilities are currently maintained or provide how the utilities will be maintained in the future according to the above R645 Rules. Nor did the application include any narrative justifying how the remaining structures, including utilities must meet R645-301-542.400.

The Permittee did not define what support facilities would not be removed or supply any narrative to show how said facilities are maintained or improve the post mining land use according to R645-301.542.400.

The Permittee did not define how retaining any of the water pollution control facilities will improve the post mining land use, how the facility is maintained, and how it meets R645-301-542.400, R645-301-552.100 through -552.200, and R645-301-553.

cparker

Reclamation Plan

General Requirements

Analysis:

The Task ID # 4797 application (page 3-32, section 3.5 Reclamation Plan, Plan for Backfilling, Soil Stabilization, Compacting and Grading proposes to remove the requirement to restore the pad area to AOC, remove the requirement to construct stable reclamation channels, remove the requirement relative to topsoil replacement, remove the requirement to re-vegetate and stabilize the disturbed area, and remove the requirement to provide sediment controls until the requirements of Phases 1, 2, and 3 have been addressed.

The application proposes (See page 3-32.2) to remove and revise Table 3-4, Reclamation Timetable. It is unclear as to what the Permittee is proposing; does it want to remove or replace Table 3-4, and if it wants to replace Table 3-4, reclamation schedule, where is the replacement page. Therefore, the application is incomplete here as well.

Deficiencies Details:

The application proposes to remove the requirements of the approved reclamation plan (in accordance with the requirements of the R645 Coal Mining Rules and SMCRA) and allow any reclamation to occur without a defined plan or guidance.

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General Requirements

Analysis:

The Permittee removed text from the MRP in the section 3.5 page 3-32 removing reclamation of various support facilities and associated reclamation grading and section 3.4 page 3-23 the Permittee removed text describing how acceptable seed mixtures will be utilized to recreate the pre-mining land use of grazing. No narrative was added to justify how a different seed mix improves the post mining land use. The section now also lacks clarity in what seed mixture will but utilized in place of the previously stated mix.

Deficiencies Details:

The Permittee's application is deficient in the section 5.3 as it fails to meet R645- Rules R645-301-413, R645-301-553,-301-512, -301-513, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542.

cparker

General Requirements

Analysis:

Analysis:

Section 3.5.1 states that roads will be reclaimed if not needed for the post mining land use. Section 3.5.3 Final Abandonment states that all surface equipment not needed for the post mining land use will be removed. Section 4.5 states that existing access roads will be maintained to facilitate access for hunting and hiking. These statements are vague. The length of the road and the equipment that will remain to support the post mining land use should be specified or shown on a map.

Deficiencies Details:

Findings:

R645-301-542.320, The plan can not be approved because the length of the road and the equipment that will remain to support the post mining land use should be specified in the narrative or shown on a map.

pburton

PostMining Land Use

Analysis:

The Permittee's proposed change to Chapter 4, Land Use, page 4-6, section 4.5, Post Mining Land Use is as follows; "Once mining has ceased, the disturbed areas will be reclaimed to pre-mining use, i.e., support wildlife, hunting, hiking, grazing, and recreation. Existing access roads will be maintained to facilitate access for hunting and hiking'.

The current APPROVED principle pre-mining land use is UNDEVELOPED LAND. Undeveloped land is a defined land use term. The Permit applicant has removed this term from page 4-6, Section 4.5 and inserted "support Wildlife, hunting, hiking, grazing and recreation". These are also defined terms under the Land Use categories discussed in the definitions section of R645-100, Administrative / Introduction. These land "uses" are a proposed change to the current post-mining land use. Plate 4-1, "Land Use" as approved within the MRP, and P.E. certified by Mark D. Wayment (Indiana P.E.) show that mining and grazing are the two major land uses in the area surrounding the Horizon Mine permit area. Plate 4-2, Surface Ownership, shows that much of the land surrounding the surface lands owned by Hidden Splendor Resources is privately held, with the exception of two 1/4 / 1/4 parcels managed by the BLM (north and NE quarters / quarters). A wildlife management area (State of Utah) exists about 1 mile SE of the Horizon Mine disturbed area. Plate 4-1 shows two sections approximately three miles North of the Horizon Mine disturbed area that are labeled as "recreational properties".

The proposed land uses listed on page 4-6, section 4.5, Post Mining Land Use are proposed post-mining land use changes. In accordance with the requirements of R645-301-412.100, 412.110, 412.140, 412.200, 413.100, 413.110, and 413.120, "the Permittee must provide a detailed description of the proposed use of the land within the permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans" (See 412.100 and 412.110), as well as address the requirements listed in 412.140 through R645-301-413-120.

Deficiencies Details:

The Permit applicant has submitted a Permit Change amendment which proposes to change the post-mining land use from the "pre-mining use" of "undeveloped land" to "support wildlife, hunting, hiking, grazing, and recreation" (See revised page 4-6, Chapter 4, section 4.5, Post Mining Land Use). The Permittee must address the requirements of R645-301-412.110, 412.120, 412.130, 412.140, 412.200, and 413.100 through 413.334.

phess

PostMining Land Use

Analysis:

4.5: Post Mining Land Use

The amendment removes the commitment to reclaim the disturbed areas to support premining land use to a degree acceptable to UDOGM.

The amendment removes regrading the yards, reclaiming the roads and portal areas, and monitoring for reclamation success.

3.4.1 Preservation of Land Use

The amendment removes the commitment to recreate the premining land use and directs reclamation efforts to accommodate postmining land use.

Deficiencies Details:

Information provided in the application is not considered adequate to meet the minimum requirements of the regulations. Prior to approval the permittee must provide the following in accordance with R645-301-412.100-300 and R645-301-413.100-334

A substantial portion of the amendment is related to the post-mining land use. However, very little information regarding the post mining land use is provided in 4.5. The permittee must explain how roads and equipment will be used in the post mining land use and provide a higher or better use.

The permittee must provide a detailed description of the proposed use, following reclamation, of the land within the proposed permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land-use policies and plans. The plan will explain how the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use.

Higher or better uses may be approved as alternative postmining land uses after consultation with the landowner or the land management agency having jurisdiction over the lands, if the proposed uses meet the following criteria: there is a reasonable likelihood for achievement of the use; the use does not present any actual or probable hazard to public health and safety, or threat of water diminution or pollution; and , the use will not be impractical or unreasonable, inconsistent with applicable land use policies or plans, involve unreasonable delay in implementation, or cause or contribute to violation of Federal, State, or local law.

Although it is not directly stated, it appears the applicant is proposing to change the postmining land use (wildlife, grazing, recreation) and therefore must abide by R645-301-414.100 An application for a permit revision of this type: 414.100. Must be submitted in accordance with the filing deadlines of R645-303-220; 414.200. Will constitute a significant alteration from the mining operations contemplated by the original permit; and 414.300. Will be subject to the requirements of R645-300-120 through R645-300-155 and R645-300-200.

Ireinhart

Approximate Original Contour Restoration

Analysis:

The Task ID # 4797 plan proposes to concentrate only on the backfilling and regrading of the portal entrances (highwalls) and leave backfilling of the pad area / valley fill to chance with total disregard to the requirements of R645-301-553.100, 110, 120, 130, 140, 150. These are minimum requirements in a reclamation plan and they must be achieved in order meet phased bond release requirements.

Page 3-35 proposes to not provide sediment control for runoff reporting from the disturbed area by deleting "removal of the sediment pond" , removal of the requirement discussing silt fences, and removal of the text addressing construction of the reclamation channels. Surface roughening techniques for water harvesting to stimulate plan germination is not discussed. Sediment control and the treatment of runoff are minimum requirements which cannot be deleted.

Deficiencies Details:

The Permittee must address the minimum requirements of R645-301-760, Reclamation.

phess

Backfill and Grading General

Analysis:

The Permittee's application removed text from section 3.5 page 3-32 stating that the following would be removed and reclaimed at the end of mining: the main facility pad, backfilling the portal entries, construction of stable channels across regarded areas, placement of topsoil, revegetation and mulching of site, and removal of the sedimentation pond and interim sediment control measures.

Deficiencies Details:

The Permittee's application is deficient in section 5.3 spanning pages 3-32 to 3-32.2, page 3-34 through page 3-37, section 35.3.3 page 3-41 through page 3-42 per R645-301-513, R645-301-529, R645-301-550, R645-301-512, R645-301-553, R645-301-537, R645-301-551, R645-301-552 and R645-301-542.630,-542.400,-542.600.

The Permittee is required to:

- replace topsoil per R645-301.553.222
- regrade the site to best suit the post mining land use per R645-301-553.100
- backfill and seal the portal area per R645-301-551, R645-301-513, R645-301-529
- create stable post mining channels per R645-301-552, R645-301-512
- roads will meet R645-301-542.600 and R645-301-552. R645-301-512
- remove the all stormwater controls unless they meet R645-301-542.400, R645-301-552 and R645-301-512
- provide a time table of reclamation must be supplied R645-301-526.

cparker

Backfill and Grading General

Analysis:

Analysis:

Reclamation of the sediment pond has been deleted from the reclamation plan (Section 3.5.1). No justification for retention of the pond was provided in the narrative. The retention of the pond in its current configuration would not restore the land for the hikers/hunters and would not be easily accessible for the wildlife/grazing post mining land use. A smaller basin with gently sloping, riparian vegetated banks might serve the post mining land use of wildlife/grazing and hiking/hunting.

Section 3.5.3.2 states that structures not required for the post mining land use will be removed. Concrete foundations will be left in place. The plan as revised does not specify a depth of cover. As concrete falls under non-coal waste, the concrete must be covered with a minimum of 2 ft of suitable soil. Less cover would be necessary to achieve the two foot depth requirement, if the vertical foundations were first demolished and then covered.

Section 3.5.4 states that backfilling and grading to the approximate original contour will not be completed. Horizon mine falls under the backfilling and grading requirements for a continuously mined site R645-301-553.500. The special requirements for CMA's state that all reasonably available spoil must be used to eliminate the highwalls to the maximum extent practicable as stated in R645-301-553.600 et seq .

Deficiencies Details:

Findings:

R645-301-542.742, The plan can not be approved because it does not specify a minimum of two feet of cover over the concrete foundations. Less cover would be necessary to achieve the two foot depth requirement, if the vertical foundations were first demolished and then covered.

R645-301-553.150, The plan can not be approved because the retention of the pond in its current configuration would not restore the land for the hikers/hunters and would not be easily accessible for the wildlife/grazing post mining land use. A smaller basin with gently sloping, riparian vegetated banks might serve the post mining land use of wildlife/grazing and hiking/hunting.

R645-301-553.600, The plan can not be approved because it does not state that all reasonably available spoil will be used to eliminate the highwalls to the maximum extent practicable.

pburton

Mine Openings

Analysis:

Task ID # 4797 proposes to delete the paragraph committing to plugging of the water monitoring wells associated with the Horizon Mine site when no longer needed. In accordance with the requirements of R645-301-529.100 and 551 require that all openings to the underground workings be permanently closed. This is a minimum requirement of any reclamation plan.

Deficiencies Details:

R645-301-529.100 and 551 are minimum requirements of the R645 Coal Mining Rules and SMCRA and deletion of the commitment to seal (i.e., not seal) is prohibited.

phess

Mine Openings

Analysis:

The Permittee's application in section 3.5.3.1 removed text detailing how the monitoring wells at Horizon Mine will be sealed according to the Utah Division of Water Rights.

Deficiencies Details:

The Permittee's application is deficient in section 5.3.3.1 where text was removed regarding backfill and sealing of the portal area which is required per R645-301-551, R645-301-512, R645-301-513, and R645-301-529.

cparker

Topsoil and Subsoil

Analysis:

Analysis:

The disturbed area is shown on Plate 3-1. Reclamation topography is shown on Plate 3-7 and 3-7A. Although Plates 3-7 and 3-7A were not revised with this amendment, plans for redistribution of soils found in Chapter 8, Section 8.8 were revised to state that the site will not return to the approximate original contour and that the riparian soil salvaged and stored separately will not be returned to the flood plain in Jewkes Creek. Chapter 3 Section 3.5.1 was also revised to remove the requirement for backfilling and grading and replacement of topsoil (electronic page 14). The cut and fill Table 3-1 (e-pg. 16) was revised to show only 0.4 acres cut/fill at an average depth of 6 -7 ft. The reclamation plan is to move approximately 4,500 cu yds.

Chapter 9 Section 9.5 was revised to remove a reclamation seed mix and Section 9.8 was revised to remove a designed channel in Jewkes Creek. The PHC was also revised to remove a statement saying that stream channels would be returned to a stable state (electronic document page 70). This plan does not meet the requirements of R645-301-358.400 to restore and replace riparian areas and wetlands along rivers and streams.

Deficiencies Details:

Findings:

R645-301-242.100 et seq and R645-301-250, This plan can not be approved because it does not meet the minimum performance standard of topsoil and topsoil substitute redistribution.

R645-301-358.400, This plan can not be approved because it does not meet the requirements of R645-301-358.400 to restore and replace riparian areas and wetlands along rivers and streams.

pburton

Road System Reclamation

Analysis:

Page 4-6, section 4.5, Post Mining Land Use states that "existing access roads will be maintained to facilitate access and hiking". A review of the Horizon Mine disturbed area on Google Earth indicates that no road ever existed to the upper

slopes of the Portal Canyon area from the Mine disturbance on the SE side of the Canyon. This indicates that the road used to provide underground access at the Horizon Mine (albeit a primary road, as indicated on Plate 3-4 of the MRP) does not go anywhere except to the top of the disturbed area. Therefore this road must be reclaimed as part of the regrading process of the pad area. There is no requirement to provide access to the reclaimed mine area for hunting and hiking.

Deficiencies Details:

The road through the disturbed area must be reclaimed in accordance with the requirements of R645-301-541.100, R645-301-534.100, 534.140 and 534.150.

phess

Road System Reclamation

Analysis:

The Permittee's application edited text on page 3-36 of the MRP removing that all roads will be reclaimed. The Permittee failed to add any narrative stating how the road will be maintained and justification how the roads will improve the post mining land use.

Deficiencies Details:

The Permittee's application is deficient on page 3-36 where text was removed regarding reclamation of the roads which is required per R645-301-553, R645-301-534, R645-301-541, R645-301-512, R645-301-513, R645-301-542.600 and R645-301-552.

cparker

Road System Retention

Analysis:

The Permittee's application edited text on page 3-36 of the MRP removing that all roads will be reclaimed. The Permittee failed to add any narrative stating how the road will be maintained and justification how the roads will improve the post mining land use.

Deficiencies Details:

The Permittee's application is deficient on page 3-36 where text was removed regarding reclamation of all the roads without detailing what road would remain and missing justification for how said roads improve the postmining land use which is required per R645-301-553, R645-301-512, R645-301-513, R645-301-542.600 and R645-301-552.

cparker

Hydrological Information Reclamation Plan

Analysis:

The Permittee submitted an amendment to revise their current MRP to change their currently approved reclamation plan. The Permittee has deleted large sections that discuss the design, implementation, and timeline of the reclamation work. This review is to address changes made to the hydrology related sections.

In a number of sections, all references to removing the pond during reclamation were deleted. This was found in sections 3.2.3.2, 3.5, 3.5.3.1, and throughout Chapter 7.

The sections of the approved MRP that discussed the removal of the surface facility pad were deleted.

Information regarding the reconstruction of Jewkes Creek and the construction of the channel in Portal Canyon were deleted.

Section 3.5.3.1 entitled "Sealing of Mine Openings", has had the section deleted that commits to seal the monitoring wells when no longer needed for monitoring groundwater.

Most of the "Reclamation Hydrology Design" section of Chapter 7 (starting on page 7-63), has been deleted. This removes the design discussion of the reclaimed channels and removal of the sediment pond, as well as other various hydrologic protection commitments to be utilized during reclamation.

The PHC was not updated to include a discussion of how hydrologic consequences could change if the pad, by-pass culverts, and pond remain in place.

There was no discussion of how the Permittee feels they are justified, under the current and unchanged post-mining land use, to leave the by-pass culverts in place. If the culverts are left in place, the natural riparian habitats found along Jewkes Creek would not be restored.

Deficiencies Details:

R645-301-742.300 There is no justification provided for why, under the current post-mining land use, Jewkes Creek and the channel in Portal Canyon don't need to be returned to their pre-mining conditions. There is no discussion as to how the current by-pass culverts would be maintained if they were to be left in place. There is also no discussion as to why, under the current post-mining land use, it is justified to lose the riparian habitats found along Jewkes Creek that would no longer be restored.

Under the current Stream Alteration Permit, issued by the Utah Division of Water Rights, and found in Appendix 7-12, the Permittee is not permitted to leave the culverts in place. Permit number 97-91-08SA, sent on August 14, 1997 states, "Reclamation, following the mining activity, must include the removal of the pipes section of the creek and the restoration of the existing riparian area." The Permittee must obtain approval from the Division of Water Rights prior to seeking approval from DOGM to keep the by-pass culverts in place.

R645-301-763 The Permittee should provide justification for leaving the sediment pond in place under the current post mining land use. There is no discussion of how the pond would be maintained or the state at which it would be left in.

R645-301-765 The Permittee has deleted the commitment to reclaim monitoring wells found on page 3-37. It is required that these wells be properly sealed and abandoned under R645-301-765 and according to the Utah Division of Water Rights under rule R655-4-12. This commitment should not be removed from the MRP.

R645-301-728 The PHC should be updated to consider possible impacts associated with leaving the pad, pond and by-pass culverts in place.

adaniels

Revegetation General Requirements

Analysis:

3.5.5 Revegetation Plan

The commitment to reclaim the site to a productive self perpetuating plant community has been removed and replaced with a commitment to reclaim the site to accommodate post-mining land use.

The amendment removed the following statement "The goal of the plan is to create diverse plant communities which are at least as productive and in comparable amounts to plant cover existing on the site prior to this mining operation".

3.5.5.2

The commitment to revegetate areas that have been disturbed as a result of mining operations was removed and was replaced with "areas to be revegetated".

The approval of the Division for a seed mix substitution was removed.

The commitment to seed during the first normal period for favorable planning time was removed.

The commitment to reclaim riparian areas, which are important to fish and wildlife, with containerized or cuttings of willow stock and other containerized shrubs and sedges was removed.

3.5.6

The commitment to return the site to a stable plant community is removed.

Chapter 9, page 9-7;The commitment to reclaim the channel within the disturbed area boundary was removed.

9.8. The commitment to reclaim Jewkes Creek to the premining condition is removed.
The commitment to provide vegetative cover equal to the premining ground cover is removed.

Deficiencies Details:

Information provided in the application is not considered adequate to meet the minimum requirements of the regulations. Prior to approval the permittee must provide the following in accordance with:

R645-301-353: The permittee will establish on regraded areas and on all other disturbed areas, except water areas and surface areas of roads that are approved as part of the postmining land use, a vegetative cover that is in accordance with the approved permit and reclamation plan and will be diverse, effective, and permanent; comprised of species native to the area, or of introduced species where desirable and necessary to achieve the approved postmining land use and approved by the Division; at least equal in extent of cover to the natural vegetation of the area; and, capable of stabilizing the soil surface from erosion.

The reestablished plant species shall: be compatible with the approved postmining land use which is approved as hunting, hiking, and grazing. (Wildlife habitat and grazing forage)

R645-301-354. Revegetation: Timing. Disturbed areas will be planted during the first normal period for favorable planting conditions after replacement of the plant-growth medium. The normal period for favorable planting is that planting time generally accepted locally for the type of plant materials selected.

R645-301-356.230. For areas to be developed for fish and wildlife habitat, recreation, shelter belts, or forest products, success of vegetation will be determined on the basis of tree and shrub stocking and vegetative ground cover.

On page 10-38 of the approved MRP, it states "Riparian areas provide wildlife a source of water and food a feeding and nesting site and a resting or roosting site. Hidden Splendor Resources, Inc., understands the importance of the riparian area which they will disturb, therefore they have agreed to properly reclaim and improve the riparian area." The permittee must maintain this commitment as required by R645-301-342.100 Enhancement measures that will be used during the reclamation and postmining phase of operation to develop aquatic and terrestrial habitat. Such measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and the replacement of perches and nest boxes. Where the plan does not include enhancement measures, a statement will be given explaining why enhancement is not practicable.

Ireinhart

Stabilization of Surface Areas

Analysis:

The Permittee removed text from section 3.5.4 page 3.42 that state how slopes will be reclaimed to meet R645-301-553.130. The Permittee failed to add any narrative to the MRP application to justify how R645-301-533.130 will now be met.

Deficiencies Details:

The application is deficient as the Permittee failed to supply information meeting R645-301-512, R645-301-553, R645-301-541, and R645-301-542 with the information presented in table 3-1 on page 3-34.

cparker

Stabilization of Surface Areas

Analysis:

Analysis:
Chapter 3 Section 3.4.1 has been revised to state that reclamation efforts will accommodate the post mining land use Section 3.5.1 has been modified to remove the use of straw bale dikes to control erosion during revegetation. Section 3.5.4.3 has been modified to remove fencing to protect revegetation from grazing during establishment. The plan states that two seed mixes (temporary and final) will be used on areas to be reseeded (Section 3.5.5.2 and Tables 3-2 and Table 3-3). Section 3.5.5.3 states that 2,000 lbs/ac mulch will be incorporated at the time of surface roughening. The type of mulch will be determined by the Permittee at the time of reclamation.

Chapter 4 Section 4.5 has been revised to state that disturbed areas not being used for the post mining (presumably for the post mining land use of wildlife, hunting, hiking, grazing and recreation) will be planted. This statement should be elaborated upon. What areas will be seeded?

Chapter 7 reclamation sediment control was revised to leave the sediment pond and culvert system. Other proven sediment control measures (silt fences, mulching, seeding etc.) would be employed in the event of pond or culvert failure. (electronic document p. 59).

Deficiencies Details:

Findings:

R645-301-244.200, This amendment can not be approved because the areas to receive reclamation treatments: (topsoil, mulch, seed) are ambiguous and should be specified on a map.

pburton

Maps Affected Area Boundary

Analysis:

No maps were submitted with the application to reflect the reclamation that has taken place at the site that is not currently described in the MRP in

Deficiencies Details:

The application is deficient as the Permittee failed to supply updated maps meeting R645-301-512, R645-301-553, R645-301-541, and R645-301-542.

cparker

Maps Reclamation BackFilling and Grading

Analysis:

No maps were submitted with the application to reflect the reclamation that has taken place at the site that is not currently described in the MRP and to show the changes in cut/fill that resulted in such variance in Table 3-1.

Deficiencies Details:

The application is deficient as the Permittee failed to supply updated maps meeting R645-301-512, R645-301-553, R645-301-541, and R645-301-542 to justify changes in Table 3-1

cparker

Maps Reclamation Facilities

Analysis:

No maps were submitted with the application to reflect the reclamation that has taken place at the site that is not currently described in the MRP

Deficiencies Details:

The application is deficient as the Permittee failed to supply updated maps meeting R645-301-512, R645-301-553, R645-301-541, and R645-301-542 showing what facilities the Permittee intends to retain.

cparker

Maps Reclamation Final Surface Configuration

Analysis:

No maps were submitted with the application to reflect the reclamation that has taken place at the site that is not currently described in the MRP

Deficiencies Details:

The application is deficient as the Permittee failed to supply updated maps meeting R645-301-512, R645-301-553, R645-301-541, and R645-301-542 showing the variance in AOC and grading described in section 3.5.

cparker

Maps Reclamation Certification Requirments

Analysis:

No maps were submitted with the application to reflect the reclamation that has taken place at the site that is not currently described in the MRP

Deficiencies Details:

The application is deficient as the Permittee failed to supply updated maps meeting R645-301-512, R645-301-553, R645-301-541, and R645-301-542.

cparker

Bonding Determination of Amount

Analysis:

No information was submitted updating the calculation of the bond estimate in regards to the changes in the reclamation plan.

Deficiencies Details:

The application is deficient per R645-301-800 as no information was submitted updating the calculation of the bond estimate in regards to the changes in the reclamation plan. Permittee has failed to supply and updated bond from their 2014 midterm review as per R645-301-830.140.

The Permittee will provide line item updated costs of the Bond reclamation estimate using Division approved cost references such as RS Mean Heavy Construction. The bond estimate will then be escalated with the Division approved escalation rate to the point of the next midterm, five years.

cparker