



PERMITTING & RECLAMATION DEPARTMENT  
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September 13, 2014

Mr. James R. Deutsch, Director  
Reclamation Division  
North Dakota Public Service Commission  
600 E. Boulevard Ave.  
Bismarck, ND 58505

**RE: ND Permit ACPG-9701 Revision 7 Round 2 Technical Deficiency Comment (dated 7/16/2014) Response.**

Dear Mr. Deutsch:

Please find enclosed two CDs providing American Colloid Company (ACC) Permit ACPG-9701 Revision 7 Round 2 Technical Review Comment Response to the Reclamation Division's July 16, 2014 Round 2 technical review comments. Revision No. 7 to ACPG-9701 proposes to add 149.28 acres to the permit through addition of the Tompkins Mine Area.

If problems with links appear to occur throughout a section, please check your browser. If you are using Google Chrome, please re-try with Internet Explorer, as earlier PSC problems with links seemed to be resolved by ACC changing from use of Google Chrome to Internet Explorer.

The Reclamation Division requires that the following items be addressed or corrected before the Reclamation Division will recommend Commission approval:

**General**

1. The hyperlinks in a number of sections of the electronic permit application do not work. For example, Sections 2.4.1, 2.7.1 through 2.7.4, and 3.1.5. Please correct these links so that the information can be viewed as intended. (GAW)

Links from referenced sections were reviewed and with exception of old currently permitted sections that had not been modified during addition of this permit area appeared to work. However, hyperlinks were re-created on the referenced sections. (No links were observed in Section 3.1.5; Section 3.5.1 was addressed in case the reference was intended to be to that section.)

2. Numerous maps included in the Revision No. 7 permit application identify the Tompkins permit addition area as the "Amendment Area" and is depicted different than the "Permitted Area" on the maps and in the associated legends. Please revise each of these maps so that the entire permit area is properly identified. In other words, the Page, Perkins and Tompkins permit areas should

all be depicted and identified in the same manner, as these areas will constitute the entire permit area once Revision No.7 is approved. NDAC 69-05.2-05-02 (GAW)

Maps showing both currently permitted and proposed permit (amendment) areas have been revised to omit amendment area reference. The Tompkins portion of the permit is referenced as the Tompkins area of the permit.

### **Section 1.0 – General Introduction**

3. Follow-up to item No. 2: It was noted that newly added reference Naomi Knight of Knight Technologies, Inc., provided updated Probably Hydrologic Consequences and this typo should be changed to Probable Hydrologic Consequences. Please make this simple change to the narrative. (BEB)

The General Introduction has been modified as requested.

### **Section 1.3 – Business Entity/Compliance Information**

4. Follow-up to item No. 7: Updates are required for the “Other Licenses and Permits” spreadsheet in Section 1.3.5. Currently, the Issuing Regulatory Agency for road use approval as well as the approval to operate within 100 feet of 127<sup>th</sup> Ave. SW that is associated with the Tompkins Mine Area addition is listed as Gascoyne Township and this needs to be changed to Fischbein Township. Please update the spreadsheet. (BEB)

Section 1.3.5 has been modified as requested. Note that the modified text is shown in red, as color coding individual text was not allowed by the system.

5. Follow-up to Item No. 8: Section 1.3.5, Other Licenses and Permits, shows that the NDPDES permit for the plant site expired June 30, 2014. Although the plant site is outside of the mining permit area, American Colloid may want to update this information since it is listed in the table comprising Section 1.3.5. (GAW)

The plant NDPDES entry has been removed from Section 1.3.5 since it is not applicable to the permit.

### **Section 1.5 – Identification of Interests and Right of Entry**

6. The yellow font on the Surface Ownership Map, Section 1.5.3(a), is not legible and it is difficult to read the green font. Please revise so that the information is legible. (GAW)

Map 1.5.3(a) has been updated as requested.

7. Please accurately depict the entire permit boundary of Permit ACPG-9701 on the Surface Ownership Map, Section 1.5.3a, and on the Mineral Ownership Map, Section 1.5.3b. The wording *Amendment Boundary* should be removed from the legends. (GAW)

Maps 1.5.3(a) and 1.5.3(b) have been updated to reflect Tompkins as permitted.

### **Section 2.2 – Ground Water Hydrology**

8. Follow-up to item No. 10: The third Well Driller's Report that is provided in Section 2.2.2(c) provides the lithology and construction details of a 2-inch diameter monitoring well screened between 61 and 76 feet and located within the SE1/4NE1/4 of Section 34; however, the well has been identified as Ponds 9 and 10 on the report. We are unsure of what this means and there appears to be no ponds located within the SE1/4NE1/4 of Section 34. Please review and provide clarification. (BEB)

The notes on the referenced Well Drillers Report identified the drill hole *location* as "Ponds 9 and 10" in 1979. ACC assumes the nomenclature is an area spatial reference only that was commonly utilized in the area at that time period, likely related to the Gascoyne mine. The red text "Ponds 9 and 10" area identifier has been removed from the upper right hand corner of the report to avoid confusion, though that descriptor remains on the area notes.

9. Of the 15 or so pages of Well Driller's Reports provided (Page and Perkins) in Section 2.2.2(a), it appears that only wells LP #3, LP #4, and LP #5 have been identified on the report forms. Hence, it appears that wells LP #1, LP #2, and LP #6 as shown on the Water Well Location Map, Section 2.2.2(b), and located in Sections 19, 7, and 6, respectively, are not included in the list of the 15 or so Well Drillers Reports that are provided. If available, please provide the Well Drillers reports or any other construction detail information for these missing wells (#1, #2, and #6) and place them in the permit. Labeling of the Well Drillers Reports for these wells or the labeling of whatever construction detail information is available for these wells; similar to what was done for the Tompkins wells (shown in red at the top of the report) would be appreciated. (BEB)

ND State Water Commission records were reviewed on 9/12/2014 and no water driller's reports were available for the locations identified as LP #1, LP#2, and LP#6 on the map in Section 2.2.2(b). The only records for wells in those sections were completed December 2005 and in 2008. No additional well information has been added to Section 2.2.2(a). Labels have been added to Drill Logs to reflect sample status and State Water Commission record number (assigned when downloaded from the site).

### **Section 2.4 – Fish and Wildlife Resources**

10. Follow-up to Item Nos. 16 and 17: A sentence in the first paragraph of Section 2.4.1 states that the ND Game and Fish Department was contacted to verify that the proposed mining plan will have no significant adverse impacts on wildlife or wildlife habitat. Correspondence from the NDGFD is included for the Page and Perkins Mine areas but not the Tompkins Addition Area. Please revise to clarify if this statement is applicable to the Revision No. 7 Tompkins Addition Area, and discuss communication with NDGFD regarding the Revision No.7 Addition Area. (GAW)

Reference to original correspondence and agency response was previously provided in the PSC letter dated 8/7/2007 that is included in the Tompkins area wildlife baseline report (Section 2.4.4). A second letter addressing consultation and a concurrence request was submitted to the NDGFD via email on 9/2/2014.

Information has been added to Section 2.4.1 and the two referenced correspondence letters are presented in Section 2.4.4.2. The 2007 PSC correspondence letter stated that the USFWS did not

respond with any concerns related to the Tompkins area, and that the NDGFD called the PSC and stated the Department did not have any concerns. We do not have a copy of the original correspondence on file however, so do not know exactly what that plan indicated.

11. Follow-up to Item Nos. 16 and 17: The second sentence of Section 2.4.1, Fish and Wildlife Narrative, references Sections 2.4.2, 2.4.3 and 2.4.4 for fish and wildlife information but Sections 2.4.2 and Sections 2.4.3 contain only a letter to the NDGFD and their reply, and no meaningful basic information for the permitted areas. Please revise to provide some basic meaningful fish and wildlife baseline information for these permit areas, which should at least include a summary of the habitat types or land uses within the permitted areas. (GAW)

Section 2.4.1 has been revised to include general information about habitat within and around the permit area and the references to Sections 2.4.2 and 2.4.3 modified to reflect that they show only vegetation community mapping as related to habitat types. Wildlife habitat information was not provided in the NDGFD correspondence; habitat information is provided only in the form of baseline vegetation information. Section 2.4.1 text has been clarified as related to Tompkins area baseline wildlife surveys and the associated habitat map.

12. Follow-up to Item Nos. 16 and 17: Please revise the first sentence of the third paragraph of page 1 in Section 2.4.1 to clarify that “No designated critical habitats or high value wildlife habitats occur in or adjacent the permit area” rather than the current language. (GAW)

Section 2.4.1 has been modified as requested.

13. Follow-up to Item Nos. 16 and 17: Please revise the last sentence of the third paragraph on page 1 in Section 2.4.1 to clarify that the table below the narrative is a County List and revise the table to include the Northern Long-Eared Bat and Rufa Red Knot which are both Candidate species. (GAW)

The species have been added to Section 2.4.1 as requested, but as Proposed species rather than Candidate species per the online July 2014 s update of the species list by county.

14. Follow-up to Item Nos. 16 and 17: Please revise Section 2.4.1 to provide a summary of the habitat types in the Revision No. 7 addition and adjacent areas and discuss if there is any suitable habitat in the area for any threatened, endangered or candidate species for Bowman County as identified by the USFWS, or if there is any high value wildlife habitat in the permit or adjacent area. For example, discuss if the permit area is in the whooping crane flyway and if there are any wetlands in the area that may be considered suitable as stopover habitat for this species. Discuss if there are any prairie dog towns in the area where Black-footed ferrets may exist, or any native grassland communities with habitat suitable for the Greater sage grouse or Sprague’s pipit. Please also discuss whether or not the permit and adjacent area have any habitat suitable for the Northern Long-Eared Bat. (GAW)

Section 2.4.1 has been revised as requested.

15. Follow-up to Item Nos. 16 and 17: Please revise the last sentence of Section 2.4.1 to meet the requirements of NDAC 69-05.2-09-17, and include enhancement measures that will be used during mining that will benefit wildlife. (GAW)

Section 2.4.1 was modified as requested.

**Section 2.4.4 – Fish and Wildlife Baseline Inventory...Section 35, T132N, R99W**

16. Follow-up to Item Nos. 16 and 17: Section 2.4.4.1, Wildlife Habitat Map (for the Revision 7 Addition Area) depicts areas identified and labeled as “Drainage” in the area adjacent the permit area. Please characterize the vegetation habitat type associated with both drainage areas so the revision can determine what type of habitat exists in the area. Please also clarify if the National Wetland Inventory identifies all or portions of these drainages as wetlands. (GAW)

Text in Section 2.4.4 has been modified to explain the habitat types identified on the map in Section 2.4.4.1.

17. Follow-up to Item Nos. 16 and 17: The Wildlife Habitat Map (for the Revision 7 Addition Area), Section 2.4.4.1, identifies the NE1/4 of Section 35 as “Native”, presumably native grassland, but much of this area was mined by the Gascoyne Mine and consists of reclamation vegetation that is not native. Please review and revise to properly characterize this habitat type. (GAW)

The map in Section 2.4.4.1 has been revised based on August 2014 field verification and text in Section 2.4.4 has also been revised.

18. Follow-up to Item Nos. 16 and 17: The Wildlife Habitat Map (for the Revision 7 Addition Area), Section 2.4.4.1, does not show a wetland in the cropland located in the NE1/4 of Section 35 where a closed depression appears to exist. Please review and update if necessary. If a seasonal or more permanent wetland exists in this area, then the watershed within the permit area to this wetland should be restored, or justification should be provided why it is not necessary to restore the watershed to this wetland. (GAW)

No seasonal or more permanent wetlands occur within the Tompkins area. No revisions have been made to Section 2.4.4.1 in response to this comment. See response to Comment #53 for additional information.

**Section 2.6 – Surface Water Information and Monitoring Plan**

19. Follow-up to Item No. 20: The reference and link to Section 2.2.2, Ground Water Narrative, does not appear relevant in the narrative added to Section 2.6.2 regarding surface water sampling since the surface water sampling information could not be found in Section 2.2.2. Please remove the reference or revise as appropriate. (RLK)

The reference and link have been removed as requested.

**Section 2.7 – Pre-Mine Land Use and Vegetation**

20. Section 2.7.4(j) is the only link that functions in the ACPG-9701 Electronic Permit Master TOC.htm. Please repair the links to Sections 2.7.4 through 2.7.4(i). (ZAB)

The links were checked and were functional on all copies (CD and server) of ACC files. Use of Google Chrome verses Internet Explorer as the web browser may affect link functionality based on previous tests. The documents were completed using Internet Explorer due to apparent earlier

resolution of link functionality during PSC review. Please try Internet Explorer as your browser if you experience wide scale link failures.

21. Please add Section 2.7.5(a) and a link to the ACPG-9701 Electronic Permit Master TOC.htm. (ZAB)

The original premine drainage basins map (Section 2.7.5(a)) was changed to Section 2.9(b) as it related to hydrology rather than vegetation.

22. Please repair the link to Section 2.7.5(a) – Pre-mine Basins (Tompkins Mine Area) in the Detailed\_Rev\_7\_TOC.htm. (ZAB)

The link to Section 2.7.5(a) has been removed from the Detailed Revision 7 TOC; the map previously constituting Section 2.7.5(a) was renamed Section 2.9(b).

#### **Section 2.7.4 – Pre-mine Vegetation Tompkins**

23. Follow-up to Item No. 32: Please revise Section 2.7.4, Pre-Mine Vegetation Tompkins, to discuss the wetland identified in Section 5.0 and clarify the classification of this wetland feature as a temporary, seasonal or more permanent feature as required by NDAC 69-05.2-08-08(1)(5)(b). This wetland should also be identified on the Vegetation Map, Section 2.7.4. If the wetland area is normally cropped it should be considered a temporary wetland. Please also discuss if this wetland is identified in the National Wetlands Inventory or if it is considered a wetland by NRCS. (GAW)

Section 2.7.4 vegetation text and the maps in Section 2.7.4(h) Vegetation Map and 2.7.4(j) Cropland [soils] Mapping Units have been modified to contain the required information.

24. Section 4.1.8, Weed Management Plan, states that premine surveys of noxious weeds will be conducted during the permitting process and that infestations will be identified on a map (Subsection 2.0 of 4.1.8). Please revise Section 2.7.4 to discuss if the Tompkins Addition area contains any State listed noxious weeds and identify infestations on a map as stated would be done. (GAW)

Section 2.7.4 has been revised as requested. No noxious weed populations were identified on Tompkins at the time of the survey; therefore no control activities or population mapping was conducted.

#### **Section 2.8.1 – Soil Resources**

25. Follow-up to item No. 35: Please expand the prime farmland narrative of the Tompkins Mine Area in Section 2.8.1 to include the prime farmland soil map unit information required by NDAC 69-05.2-09-15(1). Please add the soil map unit description, soil series description, and horizon properties for both prime farmland soil map units (from the NRCS Soil Survey) to the narrative instead of referencing the permit's detailed soil survey. The prime farmland information is available from the NRCS Web Soil Survey and related NRCS websites. We also suggest revising both paragraphs of the prime farmland narrative of the Tompkins Mine Area in Section 2.8.1 by removing the references and hyperlinks to the detailed soil survey report and the detailed soil survey map. While the detailed soil survey for the Tompkins Mine area shows the location of the

prime soils, it does not provide the other required information for prime farmland. The link to Section 2.8.4(c) is acceptable; however, this section should be appended with the additional requested prime farmland information or it should be provided in a separate subsection. (WTG)  
The section has been modified as requested.

### **Section 2.9 – Probable Hydrologic Consequences**

26. Follow-up to Item No. 38: Please include a link to the Premine Drainages map, Section 2.9(b), in the table of contents. Also, in the Section 2.9(a) narrative, please fix or activate the links to *Section 3.6.1(c) Tompkins Surface Water Study and Erosion Control Plan* and *Section 2.9(b)* appearing on pages 2 and 4. (RLK)

Section 2.9(b) has been added to TOCs as requested and the referenced links have been checked and revised as appropriate.

27. Please expand the narrative on page 4 in Section 2.9(a) regarding the post mining drainage changes to provide more information on the potential ponding/flooding or other effects that may result from roughly tripling the size of the drainage area for the east drainage. The narrative added under the heading *Postmining Drainages* in the surface water management study for the Tompkins Mine Area provided in Section 3.6.1(c) does not discuss the potential impact due to increased peak flow or runoff volume due to the changes to the east basin area. The probable hydrologic consequences determination for the permit and adjacent area must identify any effects resulting from the change in drainage area as required by NDAC 69-05.2-08-04(4). (RLK)

Section 2.9(a) has been modified as requested and Section 3.6.1(c) Tompkins Surface Water Study and Erosion Control Plan is referenced for additional information.

### **Section 3.1 – General Operation Plan**

28. The links to Sections 3.1.3 and 3.1.5 in the ACPG-9701 Permit Master TOC do not work. Please repair or activate these links. (FSE)

Links have been included as requested.

29. If necessary, please update the Pit Layout and Facility Map in Section 3.1.3(c) to reflect the current anticipated mining schedule. (FSE)

The mining schedule is anticipated to remain as shown; no modifications have been made to Section 3.1.3 in this regard.

30. Follow up to Item No. 70: Please revise the Operations Description Narrative to clarify that Section 3.1.5c, *Backfilling Calculations (Tompkins Mine)*, contains yardage information about the amount of overburden that will be removed from the North and South Borrow Areas and information about when these borrow areas will be disturbed. (GAW)

Section 3.1.1 has been modified as requested.

### **Section 3.2 – Existing Structures**

31. Follow-up to Item No. 46 (d): The summary description of the structures that occur within 0.5 miles of the Tompkins Addition Area states that there is a power line south, east and north of the permit area but a power line is not identified along the north side of the permit area on the Existing Structures Map, Section 3.2(a). The summary also states that there are roads on all sides, presumably of the permit area, but Section 3.2(a) does not show a road along the north side of the permit area or the pipeline to the south of the Tompkins Mine Area. Please review and revise as necessary to provide clarity. Please also clarify if the 2-track road depicted along the west side of the permit addition area is a public road as defined by regulation. (GAW/ZAB)

Section 3.2 has been revised as requested.

32. Follow-up to item No. 46(c): Please change the color of the Section numbers from light gray to black so they are more visible on the Existing Structures Map, Section 3.2(a). (ZAB)

Map 3.2(a) has been revised as requested.

### **Section 3.4.2 - Climatology**

33. Please update Section 3.4.2(a), Hettinger, ND Precipitation Data 1950-1994, so that it is current through 2013 as required by NDAC 69-05.2-05-02. (GAW)

Section 3.4.2(a) has been revised to show 30-year monthly historical data and averages from the Reeder, ND NOAA weather station.

### **Section 3.5 – Transportation Facilities**

34. Follow-up to item No. 50: Please label US Highway No. 12 and any other existing transportation structures that will be used to transport leonardite in the Transportation Facilities Map, Section 3.5.2. Also, please change the Mine Haul Road color from yellow to a color that is visible without magnification on the Transportation Facilities Map, Section 3.5.2. (FSE/ZAB)

Section 3.5.2 Transportation Facilities Map has been revised as requested.

### **Section 3.6 – Surface Water Management**

35. Follow-up to Item Nos. 51 and 52: The responses provided state that Section 3.6.2 has been renamed “Major Area Watersheds” but this change does not appear to have been made in the permit. We have no preference on the name for the map so the change would be your choice. (RLK)

Follow up to Item No. 51: label legibility has been addressed as requested. The section has not been renamed.

Follow up to Item No. 52: boundary legibility has been addressed as request. The section has not been renamed.

36. Follow-up to Item No. 54: The narrative in Section 3.6.1 describing the surface water management for the Tompkins area refers to two shallow closed basins in the permit area but

three closed basin areas are discussed. Please correct this discrepancy in the first paragraph of the Tompkins area surface water management narrative as appropriate. (RLK)

The low point of two closed basins occurs within the Tompkins area; the third reference to a closed basin is a water shed for which the low point (ponding area) occurs off of the Tompkins area, along Highway 12. The text has been modified as requested.

37. Follow-up to Item No. 54: In the last paragraph of the Tompkins area narrative in Section 3.6.1, a typographical error appears in the statement "...will be pumped into an open pit." Please revise as appropriate. (RLK)

Section 3.6.1 has been revised as requested.

38. Follow-up to Item No. 39: Please revise the title for Table 5 in Section 3.6.1(c) to identify that the information is for the post mining drainage basins. (RLK)

Section 3.6.1(c) has been modified as requested.

39. Follow-up to Item No. 53: Please depict the 5-foot contour intervals on Figure 4b of Section 3.6.1(c) so the reviewer can determine the hydrologic balance of the permit and adjacent area as required by NDAC 69-05.2-16-01(a). This information will allow one to determine the depth of the water that will pond in the low area in the NE1/4 of Section 35 prior to flowing to a tributary to Buffalo Creek in the NE1/4 of Section 35. (GAW)

Figure 4B has been updated with available 1-foot contours modeled from field topography surveys, because topography is such that the requested 5-foot contours show very little information for the area due to relative lack of topographic relief. Figure 4C has been added to show the surveyed contours with the 10-foot contours shown on the USGS DRG for the area.

No indications of current or historic flow out of the referenced low area in the NE1/4 of Section 35 toward the unnamed tributary to Buffalo Creek was observed during field visits or review of historic photography. The lack of wetlands in areas other than portions of the drainages and the referenced low area indicates that overland flow and area accumulation is not common in the area; water typically infiltrates or evaporates.

40. Follow-up to Item No. 54: Figure 2 of Section 3.6.1(c) shows that ditches for water management are planned around all overburden and SPGM stockpiles. However, Temporary Overburden Pile No. 1 is located in a closed depression that will pond several feet of water prior to discharging to the north sediment pond. The first paragraph of Section 3.6.1(c) only briefly mentions that stockpiles will have localized control measures such as ring ditches and sumps. Please provide more specific details for each topsoil stockpile, subsoil stockpile and overburden pile so that it is clear how runoff will be managed for each of these features. This should include a discussion as to the type of material that will be used to construct each "ring ditch". NDAC 69-05.2-16-08 (GAW)

A paragraph has been added to the first page of Section 3.6.1(c) to further explain the construction and purpose of ring ditches around stockpiles.

Specifically regarding the inquiry regarding Temporary Overburden Pile #1; it will be constructed with the development of pit N1. With the development of this pit, non-infiltrated surface runoff within the Closed Drainage North will drain into the open mine pit. There will be no water accumulation within the depression contours against Temporary Overburden Pile #1, or draining backwards through the spillway into the North Pond. This text is not specified in the engineer's document.

#### **Section 4.1 – Post-Mining Land Use and Revegetation**

41. The pdf file for Section 4.1.1(c) Post-Mining Land Use Narrative was accidentally replaced with the post mine land use map. Section 4.1.1(c) and Section 4.1.2(c) are now both the Tompkins post mine land use map. Please reinsert the pdf file for the Post-Mine Land Use Narrative 4.1.1(c) back into the permit so that we may review the changes made to this section. (ZAB/GAW)

Section 4.1.1(c) was reinserted as required.

42. Follow-up to item No. 56: Please change the total pounds per acre from 26 to 25 for the Perkins **and** the Tompkins seed mix C in Section 4.1.3 Seed Mixes. (ZAB)

Section 4.1.3 has been modified as requested.

43. Please review the backfilling and respread dates for Pit C-4 in Section 4.1.5(b) Revegetation Procedures for Perkins and on the Reclamation Schedule for Perkins, Section 4.2.2(b). Revise as appropriate so the dates listed for backfilling and respread of Pit C-4 are consistent. If changes are made to the Reclamation Schedule Section 4.2.2(b), the Pit C-4 dates will also need to be revised on the Variance to Reclamation Schedule in Section 4.1.7(a)(1). (ZAB)

Section 4.1.5(b) has been modified to reflect 2016 backfilling and SPGM respread per the reclamation schedule in Section 4.2.2(b). No modifications were made to Sections 4.2.2(b) or Section 4.1.7(a)(1) in response to this comment.

44. Follow-up to item No. 56: Please provide narrative in Section 4.1.5 for Perkins and Tompkins to clarify if seeding in October is intended to be a fall or a dormant seeding or revise the October seeding dates listed in the Variance Request to Reclamation Schedules, Sections 4.1.7(a)(1) Perkins **and** 4.1.7(b)(1) Tompkins as well as the Reclamation Schedules in Sections 4.2.2.(b) Perkins and 4.2.2(c) Tompkins. The seeding dates should be consistent with the narrative of Section 4.1.5 which states respread areas will be seeded during the first normal period for favorable planting. Normal seeding dates for Bowman County can be found on the first page of the UDSA-NRCS- North Dakota Herbaceous Vegetation Establishment Guide in the Reference Subjects in Section I of the NRCS FOTG, Field Office Technical Guide at <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg>. (ZAB)

Sections 4.1.5(b) Perkins and 4.1.5(c) Tompkins revegetation procedure narratives have been modified to include general recommended seeding date information for the area. Section 4.1.5(c) was also modified to reflect that respread areas will be seeded during the first normal period for favorable planting.

Sections 4.1.7(a)(1) Perkins and 4.1.7(b)(1) Tompkins variance summaries and Sections 4.2.2(b) Perkins and 4.2.2(c) Tompkins reclamation schedules have been modified as appropriate to reflect non-dormant season seeding dates. Generally September and October seeding dates changed to May, though if conditions are appropriate will seed in the fall.

45. Please review and make the following corrections to the Variance to Reclamation Schedule, Section 4.1.7(a)(1), for Perkins Mine. (ZAB)
- a) Correct the spacing in first column for pits A-3, A-4, and A-5 so the pit names are in the same row as the dates and subsequent columns of information.
  - b) Review the placement of the circles in the Approved 3 Year Variance column and ensure they are in the correct row for the A pits.
  - c) Revise the first sentence in the footnote section which implies that the PSC is requesting these variances.

Modifications have been completed as requested.

46. Section 4.1.8, Weed Management Plan, is entitled Section 4.1.5(d) at the top of the first page but this document is listed as Section 4.1.8 in the TOC. Please correct this error and label the document the same in all locations of the permit. (GAW)

Section 4.1.8 has been modified as requested.

47. Table 1 in Section 4.1.8, Weed Management Plan, includes a list of weeds that ACC thinks is most likely to be present in the mining area and the list apparently does not include all species considered noxious by all entities. Please consider simply revising to list only the species considered noxious by the State and County Noxious Weed Control Authorities. The list is confusing as presented and it contains species not considered noxious weeds by Control Authorities, such as field bindweed, scotch thistle, and houndstongue but excludes species such as leafy spurge, absinth wormwood and yellow and Dalmatian toadflax. Please revise to provide clarity. (GAW)

Section 4.1.8 has been modified as requested.

#### **Section 4.2 – Reclamation General**

48. Follow-up to Item No. 70: Please revise Section 4.2.1, Reclamation Procedures Narrative, to discuss the postmine topographic changes compared to the pre-mine setting and explain how the thin overburden provisions of NDAC 69-05.2-21-04 factor into the topographic changes being proposed. It appears these provision are the reason topographic changes in the borrow areas can be allowed but this is not discussed. (GAW)

Modifications have been completed as requested.

49. Follow up to Item No. 70. Please reference Section 3.1.5(c) in the fourth paragraph on page 1 of Section 4.2.1, Reclamation Procedures Narrative. Section 3.1.3(c) is referenced in this sentence but this exhibit does not provide any meaningful information as to how the borrow areas will be utilized. (GAW)

Section 4.2.1 has been modified as requested.

50. Follow-up to Item No. 73: The updated Reclamation Schedule, Section 4.2.2, indicates that pits S3, S4, and S5 will not be seeded until two years following SPGM respread. Please revise the table or explain (justify) why the pit areas cannot be seeded during the first normal period for favorable planting conditions following SPGM respread along with a description of the erosion control practices that would be used on the areas if they cannot be seeded for two years in accordance with NDAC 69-05.2-22-04 and 05. (RLK)

The table constituting Section 4.2.2(c) has been revised to reflect seeding in the first normal period for favorable planting conditions following projected SPGM respread. The text in Section 4.1.5(c) was also updated to reflect those revisions.

51. In Section 4.2.4, Reclamation Costs (Bonding Calculations), please provide the assumptions for the worst case scenario and include specific times and material quantities. Section 4.2.4 refers the reader to Section 3.1.5 for the worst case scenario; however, the year of the worst case scenario is not readily apparent. Please clarify in Section 4.2.4 which is the year of the worst case scenario. (FSE)

Section 4.2.4 Reclamation Costs (Bonding Calculations) has been revised to address this comment as well as to reflect the 2014 Variable Cost Updates for Policy Memo #16.

52. On Post-Mining Contour Map, Section 4.2.7(b)(3), the drainage area in the southwest corner of the permit is labeled as the "Southeast Drainage Area" but it appears to be labeled as the "Southwest Drainage Area". Please correct as necessary. (FSE)

The drainage area name in the southwest corner of the permit on the map in Section 4.2.7(b)(3) has been renamed "Southwest Drainage Area".

### **Section 5.0 - Wetlands**

53. Follow-up to Item No. 32: Section 5.0 explains that there is a 0.58 acres wetland area in the permit area as depicted on the wetlands map, Section 5.1, but it is not clear if this is a temporary, seasonal or more permanent wetland feature. Please classify this wetland and discuss how it will be replaced in the postmine setting. The Reclamation Division believes that the pre-mine temporary wetland is located on the Dimmick clay loam soil mapping unit rather than the Arnegard soil mapping unit as can be seen on the Pre-Mine Vegetation Map, Section 2.7.4(h). (GAW)


Section 5.0 Wetland text has been modified as requested. Section 5.1 Wetland map has been modified to reflect premine and planned post mine topography on 1-ft contours and the pre-mine temporary wetland location. The wetland polygon has been added to Section 2.7.4(j) to show the relative location of the mapped wetland and soils.

Also, when high-lighting text that is revised please refrain from using any dark colored high-lighting such as the red/hot pink color used for the 5/2014 changes. Shading was utilized rather than highlighting to allow for options to address this request.

Mr. James Deutsch  
September 13, 2014  
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If you have any questions, please contact me at 605-892-7178 or [melody.smith@colloid.com](mailto:melody.smith@colloid.com).

Sincerely,



Melody Smith  
Environmental Specialist  
American Colloid Company  
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