

Revision





hak, tod

COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

TR04

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- 1980-183 Site Name: Brannan Pit 29

County Adams TR# _____ (DRMS Use only)

Permittee: Brannan Sand and Gravel Company

RECEIVED

Operator (If Other than Permittee): _____ NOV 07 2014

Permittee Representative: Fred Marvel

**DIVISION OF RECLAMATION
MINING AND SAFETY**

Please provide a brief description of the proposed revision: _____

Temporary ground water mitigation plan. See attached plan from Applegate Group.

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input checked="" type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>

**Technical Revision
Temporary Ground Water Mounding Mitigation Plan, Brannan Pit 29
Permit No. M-1980-183**

The following is the temporary plan to mitigate the ground water mounding (the Plan) as stipulated in the agreement (the Agreement) between the Colorado Division of Reclamation, Mining and Safety (DRMS) and Brannan Sand and Gravel Company (Brannan) dated October 29, 2014. The Plan has been designed to eliminate flooded conditions on the Einspahr property (immediately to the south of the north cell of Pit 29) within 60 days after commencement of the Plan. Implementation of the Plan will commence within 5 days of approval by DRMS, but Brannan will undertake certain actions (as noted below) before approval of the Plan by DRMS.

The following is the Scope of Services proposed for the Plan.

SCOPE OF SERVICES

Task 1 – Survey

Brannan has obtained a proposal from High Prairie Survey Co. to establish certain elevation points. In addition to a survey of the ground elevation of Pit 29's existing monitoring well MW-4, as stipulated in the Agreement, we will also obtain elevations of other relevant points. Examples of those points may include:

- Ground and water surface points in and around the ponding water surface on the Einspahr property
- Ground surface at Stagecoach monitor well MW-8, if possible
- Invert of culvert on the east and west side of Brighton Road
- Points along the barrow ditch on the east side of Brighton Road to the culvert
- Water level in the drainage ditch on the Frei property
- South Platte River water elevation at the point where the drainage ditch enters the river
- Elevation of Zigan Lake overflow spillway
- Ground and water surface points in and around the infiltration gallery for Zigan Lake overflow spillway, if possible.

Task 2 – Data Analysis

The survey data will be compiled in both plan and cross section form. This data will be used to determine the possible options available for the mitigation.

Task 3 – Weekly Monitoring of MW-4

We will monitor water table levels in Pit 29's existing monitoring well MW-4 beginning 5 days after DRMS approves the Plan until implementation of the Permanent Groundwater Mounding Mitigation Plan (described in paragraph 4 of the Agreement) is commenced. Weekly monitoring reports shall be submitted to the Division within one week of data collection.

Task 4 – Option Analysis

This task will, most likely, explore two basic options; 1) a dewatering well and 2) a french drain. However, there may be other options that present themselves as the project develops. The analysis will include possible means of transporting the water from the well or drain off of the Einspahr property. The analysis will also consider the amount of drawdown that can be achieved as it relates to the water level on the Einspahr property. We will also consider the effect on the integrity of the slurry wall around Pit 29 for any option.

Task 5 – Onsite Implementation

Once we develop an appropriate option for temporarily eliminating flooded conditions on the Einspahr property, we will implement it as soon as reasonably feasible.

Timeline

The following are the anticipated commencement and completion dates for each Task. Note that Tasks 1 and 2 will commence in the near term regardless of when DRMS approves the Plan.

<u>Task 1 – Survey</u>	11/12
<u>Task 2 – Data Analysis</u>	11/14 -11/21
<u>Task 3 - Weekly Monitoring of MW-4</u>	
5 days after DRMS approval – Permanent Plan Commencement	
<u>Task 4 – Option Analysis</u>	11/24_ - 11/26_
<u>Task 5 – Onsite Implementation</u>	12/1 - 1/14/15

(assuming plan approval approx. 11/14/14)

Division of Reclamation, Mining, and Safety

Fee Receipt for M1980183

Brannan Sand and Gravel Company, L.L.C.

000000000

Receipt #: 18519

Date: 11/07/2014

Permit: M1980183

Payment Method	Revenue Code	Fee Description/Notes	Amount
347730 jwd	4300-MTRO	Minerals Technical Revision M-1980-183	\$216.00
Receipt Total:			\$216.00



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- 1980-183 Site Name: Brannan Pit 29

County Adams TR# _____ (DRMS Use only)

Permittee: Brannan Sand and Gravel Company

RECEIVED

Operator (If Other than Permittee): _____

Permittee Representative: Fred Marvel NOV 07 2014

DIVISION OF RECLAMATION
MINING AND SAFETY

Please provide a brief description of the proposed revision: _____

Temporary ground water mitigation plan. See attached plan from Applegate Group. *COPY*

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input checked="" type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>

**Technical Revision
Temporary Ground Water Mounding Mitigation Plan, Brannan Pit 29
Permit No. M-1980-183**

The following is the temporary plan to mitigate the ground water mounding (the Plan) as stipulated in the agreement (the Agreement) between the Colorado Division of Reclamation, Mining and Safety (DRMS) and Brannan Sand and Gravel Company (Brannan) dated October 29, 2014. The Plan has been designed to eliminate flooded conditions on the Einspahr property (immediately to the south of the north cell of Pit 29) within 60 days after commencement of the Plan. Implementation of the Plan will commence within 5 days of approval by DRMS, but Brannan will undertake certain actions (as noted below) before approval of the Plan by DRMS.

The following is the Scope of Services proposed for the Plan.

SCOPE OF SERVICES

Task 1 – Survey

Brannan has obtained a proposal from High Prairie Survey Co. to establish certain elevation points. In addition to a survey of the ground elevation of Pit 29's existing monitoring well MW-4, as stipulated in the Agreement, we will also obtain elevations of other relevant points. Examples of those points may include:

- Ground and water surface points in and around the ponding water surface on the Einspahr property
- Ground surface at Stagecoach monitor well MW-8, if possible
- Invert of culvert on the east and west side of Brighton Road
- Points along the barrow ditch on the east side of Brighton Road to the culvert
- Water level in the drainage ditch on the Frei property
- South Platte River water elevation at the point where the drainage ditch enters the river
- Elevation of Zigan Lake overflow spillway
- Ground and water surface points in and around the infiltration gallery for Zigan Lake overflow spillway, if possible.

Task 2 – Data Analysis

The survey data will be compiled in both plan and cross section form. This data will be used to determine the possible options available for the mitigation.

Task 3 – Weekly Monitoring of MW-4

We will monitor water table levels in Pit 29's existing monitoring well MW-4 beginning 5 days after DRMS approves the Plan until implementation of the Permanent Groundwater Mounding Mitigation Plan (described in paragraph 4 of the Agreement) is commenced. Weekly monitoring reports shall be submitted to the Division within one week of data collection.

Task 4 – Option Analysis

This task will, most likely, explore two basic options; 1) a dewatering well and 2) a french drain. However, there may be other options that present themselves as the project develops. The analysis will include possible means of transporting the water from the well or drain off of the Einspahr property. The analysis will also consider the amount of drawdown that can be achieved as it relates to the water level on the Einspahr property. We will also consider the effect on the integrity of the slurry wall around Pit 29 for any option.

Task 5 – Onsite Implementation

Once we develop an appropriate option for temporarily eliminating flooded conditions on the Einspahr property, we will implement it as soon as reasonably feasible.

Timeline

The following are the anticipated commencement and completion dates for each Task. Note that Tasks 1 and 2 will commence in the near term regardless of when DRMS approves the Plan.

<u>Task 1 – Survey</u>	11/12
<u>Task 2 – Data Analysis</u>	11/14 -11/21

Task 3 - Weekly Monitoring of MW-4

5 days after DRMS approval – Permanent Plan Commencement

<u>Task 4 – Option Analysis</u>	11/24_ - 11/26_
<u>Task 5 – Onsite Implementation</u>	12/1 - 1/14/15

(assuming plan approval approx. 11/14/14)