Community & Economic
Development Department
www.adcogov.org

ADAMS COUNTY
COLORADO

4430 South Adams County Parkway
1st Floor, Suite W2000
Brighton, CO 80601-8204
PHONE 720.523.6800
FAX 720.523.6998

DEVELOPMENT APPLICATION FORM

APPLICANT

Name(s):	Mark Doran	Phone #:	720-951-1301
Address:	6201 McIntyre Street		
City, State, Zip:	Golden, CO 80403		
2nd Phone #:		Email:	mdoran@kti-usa.com

OWNER

Name(s):	4K Equipment, LLC	Phone #:	303-279-4150
Address:	6201 McIntyre Street		
City, State, Zip:	Golden, CO 80403		
2nd Phone #:		Email:	lkelley@kti-usa.com

TECHNICAL REPRESENTATIVE (Consultant, Engineer, Surveyor, Architect, etc.)

Name:	Mark Molen	Phone #:	303-519-7877
Address:	P.O. Box 142		
City, State, Zip:	Lafayette, CO 80026		
2nd Phone #:		Email:	mark@molenandassociates.com

DESCRIPTION OF SITE

Address:	6405 Calhoun Byers Road
City, State, Zip:	Byers, CO 80103
Area (acres or square feet):	52
Tax Assessor Parcel Number	018110340002
Existing Zoning:	A-3, Agricultural
Existing Land Use:	Sand Extraction
Proposed Land Use:	Sand Extraction

Have you attended a Conceptual Review? YES [x] NO [ ]

If Yes, please list PRE#: PRE-2024-00059

I hereby certify that I am making this application as owner of the above-described property or acting under the authority of the owner (attached authorization, if not owner). I am familiar with all pertinent requirements, procedures, and fees of the County. I understand that the Application Review Fee is non-refundable. All statements made on this form and additional application materials are true to the best of my knowledge and belief.

Name: Luke Kelley Date: 12/27/2024

Owner's Printed Name

Name: 

Owner's Signature

RENEW CONDITIONAL USE PERMIT
EXPLANATION OF REQUEST
SAND CREEK FARMS, BYERS, CO
Updated January 9, 2025

This request is to extend the time for a gravel mining operation under a Conditional Use Permit (CUP), Case No. RCU2014-00030, Sand Creek Farms. The site is located approximately 7 miles north of Byers, Colorado at 6405 Calhoun Byers Road, Byers, CO. The primary access to the site is off of Calhoun Byers Road off of Highway 36. The site is located in the SE ¼ of Section 3, T3S, R61W of the 6th P.M., Adams County, Colorado. The Adams County Parcel number is #0181103400003 and is in an A-3 zoning. The site is approximately 52 acres. West Bijou Creek is generally located on the eastern portion of the site. Sand has been mined by Jones Fine Sand, the previous operator of the facility.

Mining has been permitted at this site since at least 1992, with the mining permit M-1992-038. The mining site maintains a minimum of 25 feet setback from all property lines and a 100-foot setback from E 64th Avenue. Excavation has generally proceeded from the south to the north. The site has no water wells, septic or sewer service available, and a porta-let will be on site for use by employees.

No retail sales are conducted on the site and there is no blasting or processing. This is a dry mine site where extraction equipment is utilized to load trucks for transportation and delivery off-site. Mining has typically been done in the upper 30 feet, and groundwater is known to be approximately 65 feet below ground surface. Future mining may be deeper and will follow the constraints established in the mine permit. Mining is done in the 100-year floodplain of West Bijou Creek and a floodplain use permit application with Adams County is being submitted concurrently. The existing vegetation is a mix of a few willow and cottonwood trees and native grasses.

Typical past use of the site had approximately 300 to 400 trips per year, or approximately 30 trucks trips per month. The primary haul route has been south on Calhoun Byers Road to Hwy 36 and I-70. Additional hauling may be done to the north if a suitable roadway is available.

The previous CUP application allowed for importation of inert fill to recontour and reclaim the site. The inert fill is needed on-site to bring grades up to pre-mining elevations. The only inert materials that will be received are those that can be received in accordance with Section 2-02-08-07-04 of the Adams County Zoning Regulations for Conditional Use Permits. No solid waste will be accepted. The imported inert fill will be from jobs controlled by the applicant and will not come from outside sources. A separate CUP application is being submitted for this activity.

This application is a request to extend the CUP for an additional 10 years. The mining permit is current with the Colorado Division of Reclamation Mining and Safety (DRMS). The mining operation conforms to all requirements of Section 11.340 of the Zoning Regulations.

EXPLANATION OF REQUEST – Renewal of CUP
Sand Creek Farms, Byers, CO

A final drainage report and a stormwater management plan has been completed by EME Solutions, Inc, John Jankousky, PE and are included with this permit application. The site is located outside the MS4 Permit area, so an Adams County Stormwater Quality Permit is not required. A Stormwater Discharge Permit has been obtained from CDPHE for the mining activities. The drainage is retained in West Bijou Creek in the mining pit.

A neighborhood meeting was held and all neighbors within the required radius were sent a notice. The list of notices sent and the notice itself is attached to this application. No one objected to the mining activities or were concerned with a permit renewal. Other information concerning the neighborhood meeting is attached to this application.

Mining will be conducted in a similar manner to what was done previously. Groundwater is reportedly encountered at a depth of 65 feet below ground surface (bgs) and the mined depth is planned to be no more than 50 feet bgs. Groundwater in nearby wells should not be impacted by the mining activities because the groundwater is not being used, exposed, or diverted by pumping or cutoff barriers. Sand is dry mined with earthwork equipment, excavator, dozer, or front-end loader and placed into trucks for transport to construction project sites. There is no blasting or retail sales occurring on the mine site. Excavation and loading of the sand is the only activity planned on the mine site. Minor maintenance of greasing and fueling equipment is the only type of servicing to be done on the mine site. All routine or major maintenance will be done off-site at the applicant's trucking yard or a fleet service center.

Loaded transport trucks will use the major haul route on Calhoun Byers Road south to US Highway 36 then west to Interstate 70. The haul route is paved except for a 1.5-mile section of Calhoun Byers Road from the entrance to the mine site. A barbed wire fence surrounding the mine site and a gate is at the entrance on 64th Avenue. There are approximately two rural residential structures west on 64th Avenue where it dead ends.

The property is in an A-3 agricultural zoned district and there are a few rural residential neighbors. Agricultural uses are found in the area in a five mile radius. Byers is the nearest community located approximately 7 miles to the south.

The mine has continued to meet the appropriate engineering standards and will comply with all applicable Adams County engineering regulations. The installation and maintenance of Erosion and Sediment Control Best Management Practices (BMPs) in accordance with the Drainage Plan submitted with the application will be completed. A traffic study has been conducted and the applicant will work to meet the recommendations of the study.

A contract from a porta-let contractor will be provided by the applicant prior to implementing full scale mining operations. Although the property is in the Natural Resource Conservation Overlay (NRCO), wildlife has not known to be impacted by the mining activities. As this site has been operating under a permit approved by Adams County, and the site has previously been disturbed, we believe it to be exempt per Section 4-14-02-03-03. One oil and gas well is located within 200 feet of the mining site. Oil and gas well investigation was completed by reviewing historical aerial photography, and though other public records including the ECMC. Since there

is no development planned, there is no particular hazard associated with the one plugged abandoned oil and gas exploration well.

The applicant will comply with all environmental regulations and best management practices. Engine idling will be kept to a minimum and remain in compliance with State Vehicle and Traffic Idling Standards. Noise levels will not exceed public nuisance standards, and the applicant will consider modifying equipment to mitigate concerns. Mitigation may include alternative backup alarms, vegetative barriers, setbacks, sound walls, operational practices or other similar methods. Trash will be properly controlled by each individual on site, and by providing a receptacle as needed with regular disposal. A commercial disposal company will be employed if necessary. Water will be available for dust mitigation as needed. A wind gauge will be installed with data-logging capabilities.

The height of the fence is lower than all equipment proposed to be used on site and lower than vehicles used to access the site. Typically, chain-link fencing, 72 inches or higher, surround gravel operations. Outdoor storage or stockpile height will not exceed 72 inches (6 feet) elevation at the boundary fence. Equipment will be stored outside on site. Storage containers may be used for onsite locked storage and/or personal warming or cooling rooms.

The existing Conditional Use Permit for the mine site is set to expire on January 27, 2025. The applicant requests a 10-year renewal term.

CONCLUSION

The project is compatible with the Adams County Comprehensive Plan after mining, agricultural uses will be available to surface landowners. The Conditional Use is compatible with the surrounding area, is harmonious with the character of the neighborhood, and not detrimental to the immediate area or the future development of the area. The mine site is not detrimental to the health, safety, or welfare of the inhabitants of the area or Adams County.

Attachment A

Neighborhood Meeting

Sand Creek Mine

Neighborhood Meeting

Location: Shooter's Bar & Grill in Byers, CO

Time & Date: November 20th, 2024, 6 p.m. – 8 p.m.

Owner Representatives: Luke Kelley, Cal Kelley, Jake Barker, Mark Doran, Mark Molen, Steve O'Brian

Attendees: James Johnson, Sheena Johnson, Frank Linnebur

Notes:

The historical use of the site was discussed, as well as proposed continued operations. James Johnson asked if much water would be required for the proposed operations, and was informed water may be required for dust mitigation, but that no washing of material was planned on the site.

Attendees were amenable to the proposed operation, and voiced no major concerns.

SAND CREEK FARM TOWN HALL

When: 11/20/24

Where: Shooters Bar and Grill

25 CO-40

Byers, CO 80103

Time: 6:00 PM

Dear Neighbor,

Sand Creek Farm, formally operated by Jones Fine Sand, located at the corner of E. 64th and Calhoun Byers Rd. is planning to renew its Conditional Use Mining Permit with Adams County and we want to discuss our plans with you. You are invited to a Town Hall meeting beginning at 6:00 pm. at Shooters Bar & Grill located at 25 CO-RD 40, Byers Colorado. Please join us for an open forum discussion!

Questions? Call (303) 888-6479

Cordially,

4K Equipment

We hope to see you there!

Shooters Bar & Grill
25 CO-40,
Byers, CO 80103
(303) 822-5002

www.shootersbargrill.com

SAND CREEK FARMS

Informational Meeting

11/20/2024

Attendance List

Printed Name	Signature
James Johnson	James Johnson 303 518-0141
Sheena Johnson	Sheena Johnson
Mark Molan	Mark A Molan
FRANK LUNNEBURG	Frank Lunneburg
303-748-7028	7487028@gmail.com

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Attachment B

DRMS Mining Permit

SAND CREEK MINE

REVISED MLRB 112 PERMIT APPLICATION
ADAMS COUNTY, COLORADO

(REVISED TO INCLUDE COUNTY AND MLRB CONDITIONS OF APPROVAL)

AUGUST, 1992

Prepared by:

ADCO Consulting
c/o Robert Fleming
2090 E. 104th Avenue, #305
Thornton, Colorado 80233
(303) 450-2204

92007MLR.112

Prepared for:

Sand Creek Farms, Inc.
c/o Allen J. Kincaid
6312 S. Fiddler's Green Circle
Suite #535-N
Englewood, Colorado 80111
(303) 220-8618

Back pages added 4/5/2023 includes adequacy letter and response, Permit letters, Succession of Operator to Jones Fine Sand, 2019 TR and maps - Environment, Inc.

REGULAR OPERATION (112)
RECLAMATION PERMIT
APPLICATION FORM

The application for a Regular Operation Reclamation Permit contains three major parts: (1) the application form; (2) Exhibits A-S; and, (3) the application fee. When you submit your application, be sure to include five (5) signed copies of the application form , five (5) copies of Exhibits A-S, and a check for the application fee described under Section (14) on Page 3. To expedite processing, please provide the information in the format and order described in this form.

GENERAL OPERATION INFORMATION

Type or print clearly, in the space provided, all information described below.

1. Applicant/operator name: SAND CREEK FARMS, INC.

   1.1 Type of organization (corporation, partnership, etc.): Corporation

2. Operation name (pit, mine or site name): SAND CREEK MINE

   2.1 I.R.S. Tax ID No. or Social Security No.: [redacted]

3. Permitted Acres: 40 Permitted acres
   Please indicate acreage to the nearest tenth (10th) acre.

   3.1 Application fee (see Section 14): $1,875.00 Application fee

4. Substance(s) to be mined (e.g., gravel/gold/borrow): SAND

5. Name of owner of surface of affected land: Sand Creek Farms, Inc.

6. Name of owner of subsurface rights of affected land: Sand Creek Farms, Inc.
   If 2 or more owners, refer to Exhibit P.

7. Type of mining operation: X Surface ___ Underground

8. Location Information: the center of the area where the majority of mining will occur lies in:

COUNTY: ADAMS

PRINCIPAL MERIDIAN (check one): X 6th (Colorado) ___ 10th (New Mexico) ___ Ute
TOWNSHIP (write number and check direction): T 3 ___ North X South
RANGE (write number and check direction): R 61 ___ East X West
SECTION (write number): S 3 - South Half
QUARTER SECTION (check one): ___ NE ___ NW ___ SE ___ SW
QUARTER/QUARTER SECTION (check one): ___ NE ___ NW ___ SE ___ SW
GENERAL DESCRIPTION: (miles and direction from nearest town and approximate elevation): Approximately 7 1/2 miles north of Byers, Colorado. Approximate elevation = 5,400.

9. Correspondence Information:

APPLICANT/OPERATOR (name, address, and phone of name to be used on permit)

Individual's Name: _____

Company Name: Sand Creek Farms, Inc.

Street: 6312 S. Fiddler's Green Circle, #535-N

City: Englewood

State: Colorado Zip Code: 80111

Area Code: (303) Telephone: 220-8618

PERMITTING CONTACT (if different from applicant/operator above)

Individual's Name: Allen J. Kincaid

Company Name: Same as above

Street: _____

City: _____

State: _____ Zip Code: _____

Area Code: _____ Telephone: _____

INSPECTION CONTACT

Individual's Name: Wayne A. Pipkin

Company Name: Sand Creek Farms, Inc.

Street: P.O. Box 404

City: Byers

State: Colorado Zip Code: 80103

Area Code: (303) Telephone: 622-9491

CC: STATE OR FEDERAL LANDOWNER (if any)

Agency: N/A

Street: _____

City: _____

State: _____ Zip Code: _____

Area Code: _____ Telephone: _____

CC: STATE OR FEDERAL LANDOWNER (if any)

Agency: N/A

Street: _____

City: _____

State: _____ Zip Code: _____

Area Code: _____ Telephone: _____

10. Primary future (Post-mining) land use (check one):
__ Cropland(CR) X Pastureland(PL) (riverbottom) __ General Agriculture(GA)
__ Rangeland(RL) __ Forestry(FR) __ Wildlife Habitat(WL)
__ Residential(RS) __ Recreation(RC) __ Industrial/Commercial(IC)
__ Developed Water Resources(WR) __ Solid Waste Disposal(WD)

11. Primary present land use (check one):
__ Cropland(CR) X Pastureland(PL) (riverbottom - no grass) __ General Agriculture(GA)
__ Rangeland(RL) __ Forestry(FR) __ Wildlife Habitat(WL)
__ Residential(RS) __ Recreation(RC) __ Industrial/Commercial(IC)
__ Developed Water Resources(WR)

12. Method of Mining: __ Quarry (QR) __ Solution (SO)

12a. Other: Briefly explain mining method (e.g. Placer, truck/shovel). Truck/Shovel

13. On Site Processing: Wash sand with water only.
__ Solution (SO) __ Chemical (CH) __ Thermal (TH)
__ Heap Leach (HL) __ Vat Leach (VL)

14. Application Fee:

The application fee for quarry mining is $2,325.

The application fee for solution mining or any chemical or thermal processing is $3,100.

If none of these methods or processes are to be included in the operation then the application fee is $1,875.

An applicant will not be issued a reclamation permit until notified by the Division that this application and the required performance and financial warranties have been approved. Alternatively, an automatic approval will occur where the Division fails to notify the applicant/operator that the application has been denied. The final agency action must be made within 120 calendar days from the date the application was submitted. However, the performance and financial warranties must be approved by the Division or Board before a permit will be issued even if you receive an automatic approval. NO MINING OPERATIONS SHALL BEGIN UNTIL A PERMIT IS ISSUED (Rule 7.2(2)).

It shall be a provision of this permit that the operations will be conducted in accordance with the terms and conditions listed in your application, as well as with the provisions of the Act and the Mineral Rules and Regulations in effect at the time the permit is issued.

Notice Requirements

Immediately after the first publication of your notice in a newspaper of general circulation in the locality of your proposed mining operation, you must mail a copy of the notice to all owners of record of surface rights to the affected land and all owners of record of lands that are within 200 feet of the boundary of the affected land. Notice requirements are specified in Rule 2.2. A copy of a form which includes all required information for the notice has been attached for your use. You will need to provide the Division proof of notice prior to the decision date, which may be by submitting return receipts of a certified mailing or by proof of personal service (Rule 2.2.2(6)).

NOTE TO COMMENTORS/OBJECTORS: It is likely there will be additions, changes, and deletions to this document prior to final decision by the Mined Land Reclamation Board or Division. Therefore, if you have any comments or concerns, you should contact the applicant or the Division prior to the decision date so that you will know what changes may have been made to the application document.

The Division is not allowed to consider comments, unless they are written, and received prior to the end of the public comment period. You should contact the applicant for the final date of the public comment period.

If you have questions about the Mined Land Reclamation Board and Division's review and decision or hearing process, you should contact the Division at (303) 866-3567.

As an authorized representative of the applicant, I hereby certify that the operation described herein has met the minimum requirements of the following terms and conditions:

1. This mining operation will not adversely affect the stability of any significant, valuable and permanent man-made structure(s) located within two hundred (200) fee of the affected lands. However, where there is an agreement that damage to the structure is be be compensated for by the applicant/operator (C.R.S. 34-32-115(4)(d)), then mining may occur within 200 feet. Proof of an agreement must be submitted to the Division prior to the decision date.

2. No mining operation will be located on lands where such operations are prohibited by law (C.R.S. 34-32-115(4)(f));

3. As the applicant/operator, I do not have any mining/prospecting operations in the State of Colorado currently in violation of the provisions of the Mined Land Reclamation Act (C.R.S. 34-32-120) as determined through a Board finding.

4. I understand that statements in the application are being made under penalty of perjury and that false statements made herein are punishable as a Class 1 misdemeanor pursuant to Section 18-8-503, C.R.S.

Signed and dated this 25th day of March, 1992.

Sand Creek Farms, Inc.
Applicant/Operator

If Corporation Attest (Seal)

By: /s/

Title: Allen J. Kincaid - Vice President

No corporate seal.

By: _____

Corporate Secretary or Equivalent

Town/City/County Clerk

State of Colorado)
) ss.
County of Arapahoe)

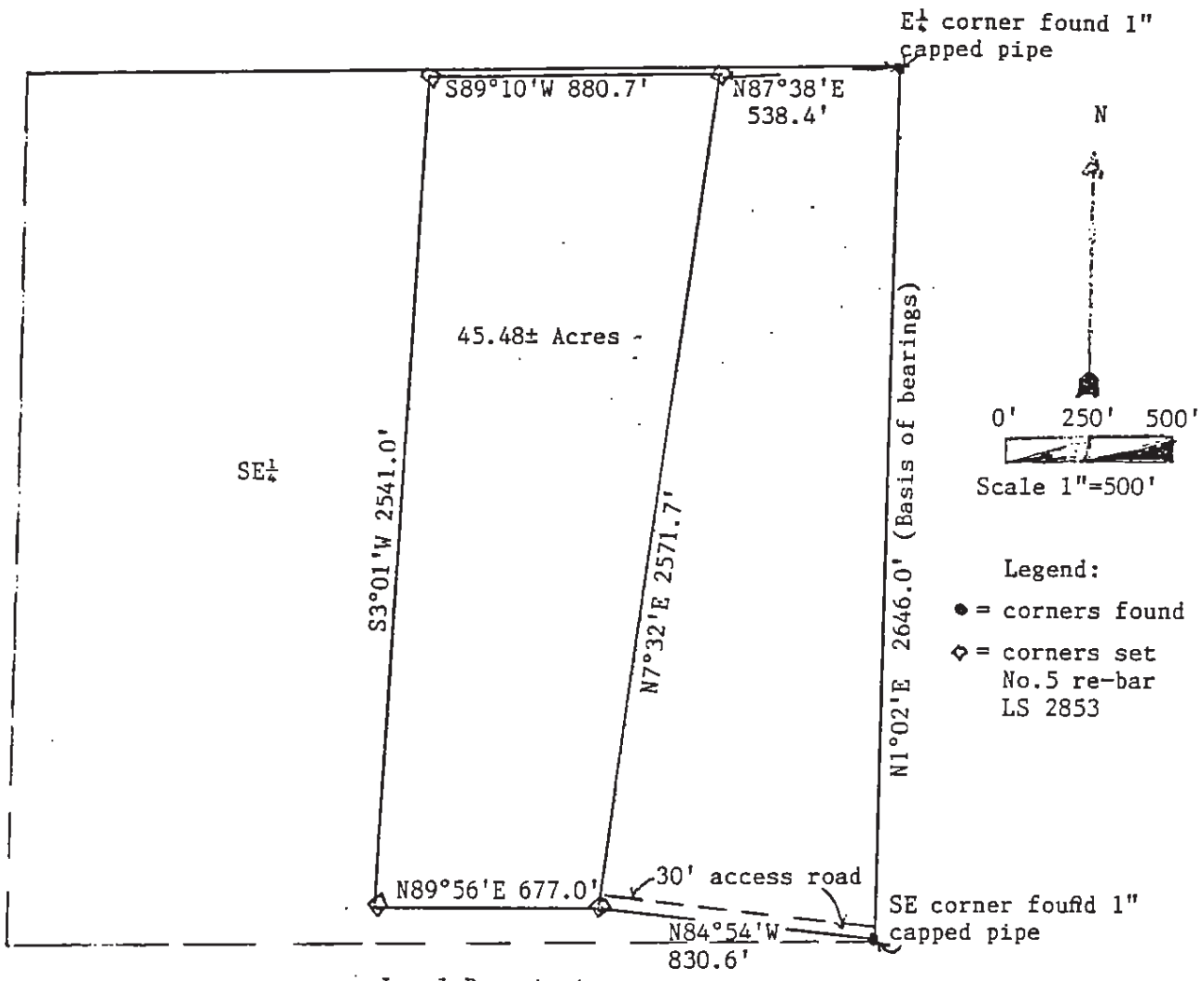
The foregoing instrument was acknowledged before me this 25th day of March, 1992 by Allen J. Kincaid as Vice-President of Sand Creek Farms, Inc.

_____
Notary Public

My Commission Expires: _____

(08/91) 2823F

EXHIBIT A - LEGAL DESCRIPTION



Legal Description

Basis of Bearings: Bearings were determined based upon the East line of the SE¼ of Section 3, T3S, R61W 6th P.M. as bearing N1°02'E taken from Court re-survey notes dated 9-4-1915 with all other bearings as being relative thereto; Commencing at a point which bears N84°54'W 830.6 feet from the Southeast corner of Section 3, T3S, R61W 6th P.M. to the point of beginning, thence N7°32'E 2571.7 feet to a point which bears S87°38'W 538.4 feet from the E¼ corner of Section 3, thence S89°10'W 880.7 feet, thence S3°01'W 2541.0 feet, thence N89°56'E 677.0 feet to the point of beginning.

Surveyor's Certificate

I, Billy G. Holloway, certify that the above plat is correct to the best of my knowledge and belief.

December 15, 1991

Billy G. Holloway

Registered Land Surveyor No. 2853
State of Colorado

BILLY G. HOLLOWAY REGISTERED 2853 LAND SURVEYOR STATE OF COLORADO

EXHIBIT B - INDEX MAP

Location Map

Below is a map showing the location of the property.

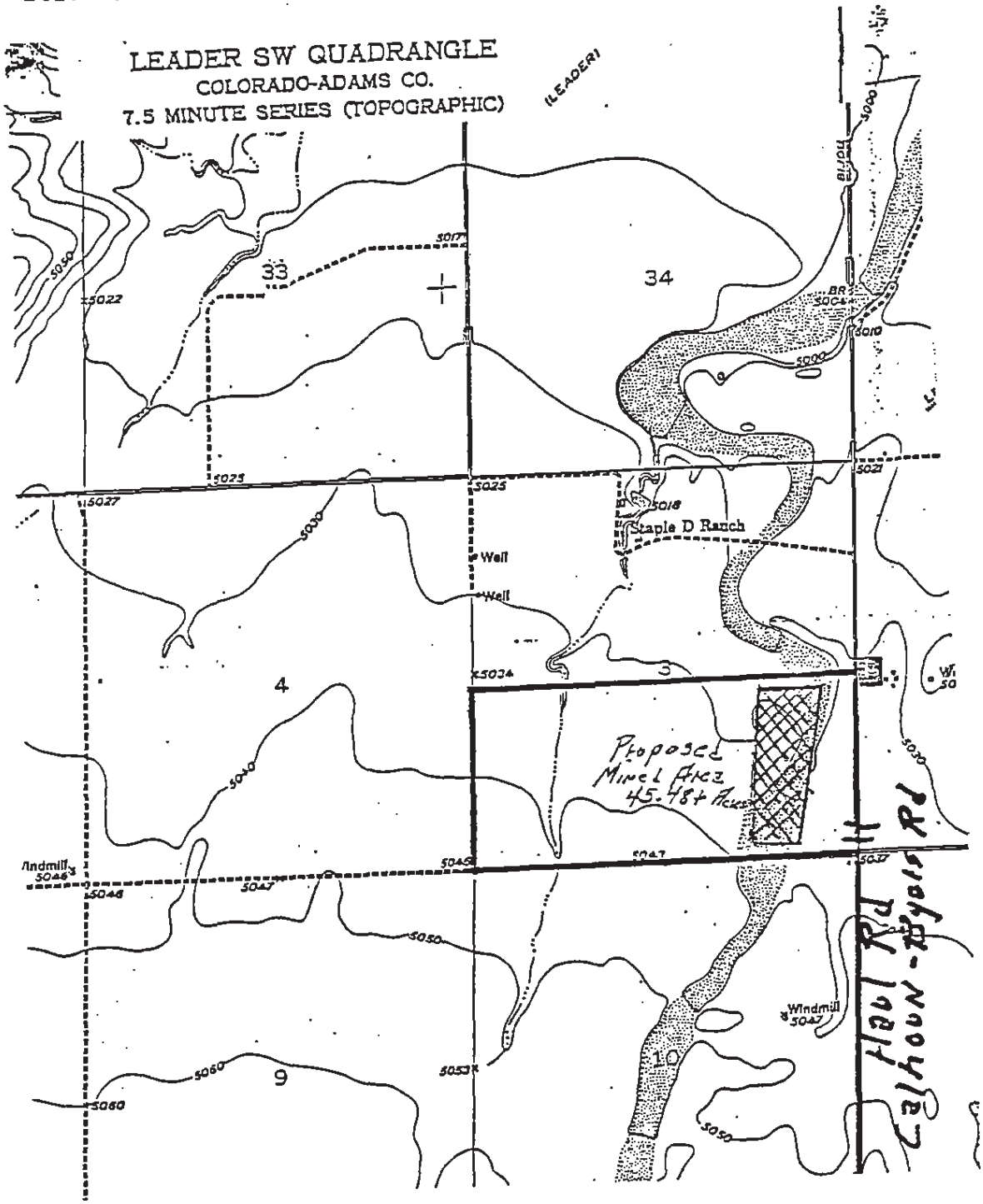


EXHIBIT C

PRE-MINING PLAN AND MINING PLAN MAP OF AFFECTED LAND

(Part of Explanation of Request on County Application)

Overview

The is a request of mine sand material from a 45+ acre parcel located 7 mile north of Byers. The 45+ acres is located along West Bijou Creek, where sand has been deposited. The 45+ acre area is part of a larger 160± acre property owned by the applicant. The permit area has no structures on it, although there is a barn a 1/4± mile to the west located on the same property. In this area was also some miscellaneous junk that the County required to be removed prior to beginning excavation. This junk has been removed.

The material would be exported for use in foundation backfill projects, and County or State Highway projects in the area. There is also the possibly the material could be used in the construction of the two airports to the west (Denver International and Front Range). Since export of material off of the property is involved, County land-use approvals are necessary as in a MLRB permit.

Existing Site Description

The site is located 7± miles north of Byers, 5± miles north of the U.S. 36 (County line), and 1/4± mile west of the County road known as Calhoun-Byers Mile Road. The site is a fairly level one, except for the draw area created by the intermittent flowing of West Bijou Creek which traverses the proposed permit area. The total elevation fall over the distance of the site (1/8± mile east-west x 1/2± mile north south) is approximately 15+ feet. The site is located in the draw which has been formed by the Creek and is not easily visible from the County Road.

The permit area itself can be divided into three basic areas:

1. The south 100' is where a 30' access road from the County road traverses the permit area and previous excavation has been undertaken. The area mined for sand in the past was prior to permits being required, and for uses on the property recently. For instance, sand from the excavation area was used as foundation fill for the barn structure on other portions of the property. This access road will remain after excavation to provide access to the western portion of the property where the barn is located.

2. The second basic area of the permit area, is the bare usually dry West Bijou Creek channel area approximately 100' wide, which traverses the permit area from south to north. The channel is a dry creek bed which only runs after upstream storm events, usually in the spring and early summer. There is no topsoil and the surface is predominantly bare sand with little if any vegetation, except for some volunteer cottonwood trees along the edges.

3. The third basic area of the site, is the areas on both sides of the Creek outside the 100' area dry creek bed. Most of this area also has no topsoil as it is sandy alluvial land surface material. It does support some sparse vegetation, but the soils consultant retained to complete the vegetation inventory did not feel there was enough surface material to worry about stripping and storage. There is a small area (4 - 5 acres) of Heldt clay, HiB, along the western boundary of the permit area.

A detailed soils and existing vegetation description including soil conservation maps are contained in Exhibit I/J.

Adjacent Property Owners

The map includes the owners of the property adjacent to the affected property. These names and addresses area:

Monty Claycomb
2006 S. Newark Way
Aurora, Colorado 80014

Lucille Turecek
P.O. Box 255
Byers, Colorado 80103-0255

Olin Thompson
66751 E. 56th Avenue
Byers, Colorado 80103

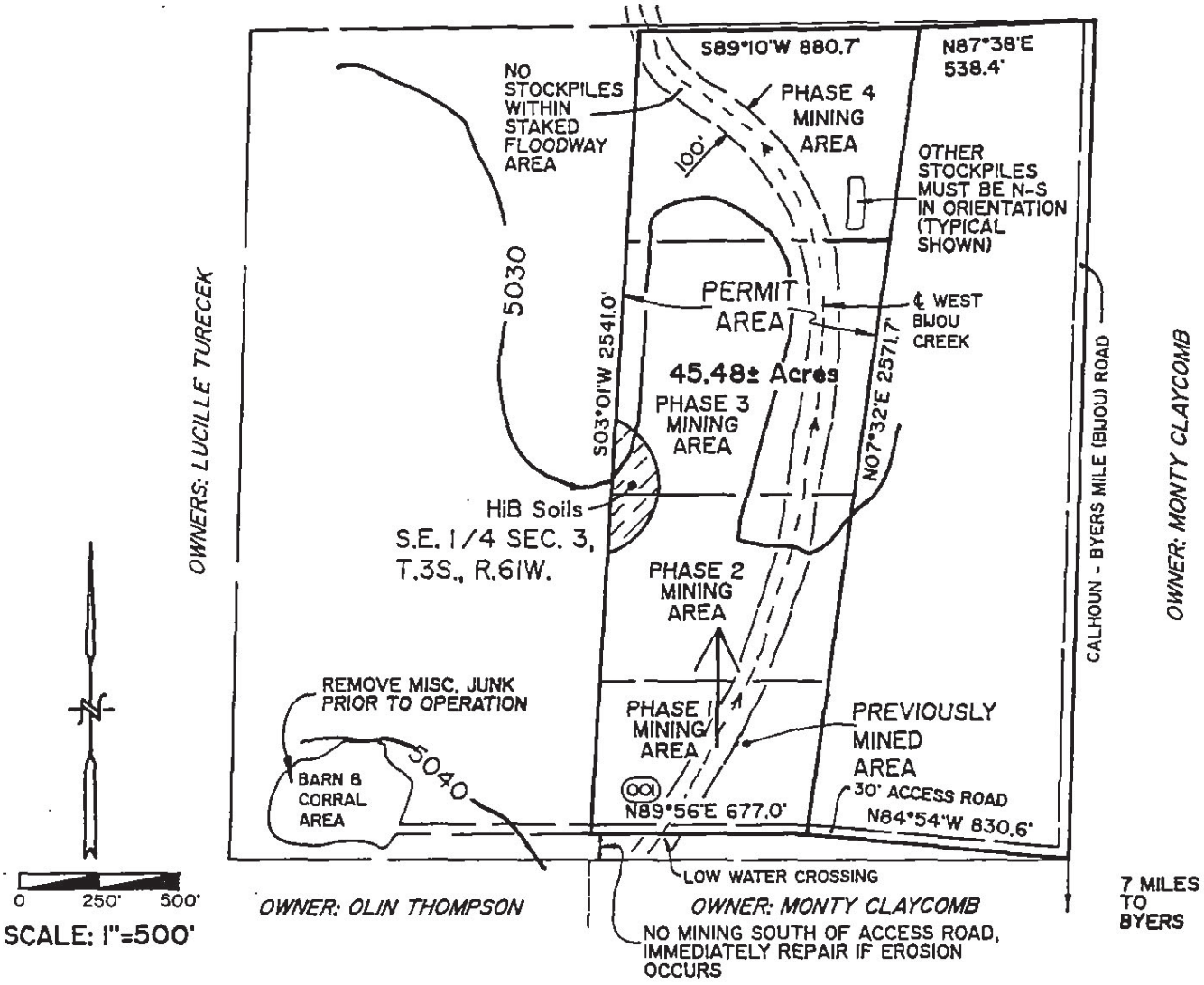
Thomas R. Johnson
67370 E. 72nd Avenue
Byers, Colorado 80103

Location of roads, buildings, etc.

A county road known as Calhoun-Byers Road runs adjacent to the property owned by the applicant approximately 800' east of the proposed permit area. The access road to the permit area runs from this road and also provides access to a barn on the western portion of the property. The barn is more than 200' from the permit area, and no structures except fencing is within 200' of the permit area.

EXHIBIT C - PRE-MINING & MINING PLAN MAP

PART OF THE S.E. 1/4 SEC. 3, T.3S., R.61W., Adams County, CO.
REVISED 7/92 TO INCLUDE COUNTY REQUIREMENTS
OWNER: THOMAS JOHNSON



ALL PROPERTY WITHIN AREA ABOVE OWNED BY SANDCREEK FARMS, INC.

ALL SOILS IN PERMIT AREA - SANDY ALLUVIAL LAND EXCEPT FOR 4 TO 5 AC. HiB

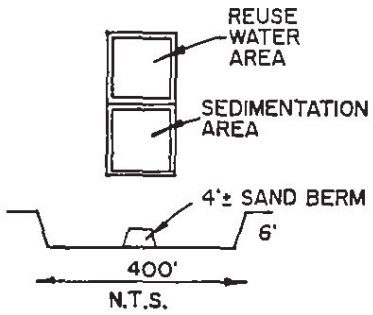
VEGETATIVE COVER - SPARSE (in Bank areas) TO NONE (in Creek Bed 100'±)

WATER INFORMATION - EXCEPT BRIEFLY, AFTER SEVERE UPSTREAM SUMMER STORM EVENTS, CREEK BED IS DRY

→ DIRECTION OF MINING

TYPICAL WASHING - SEDIMENTATION POND

1. 200'X400'X6' DEEP. MAX. CAPACITY 800,000± GALLONS
2. SHALL BE LOCATED OUTSIDE FLOODWAY AREA.
3. ONLY ONE POND SHALL BE OPERATING AT ANY ONE TIME, BUT MAY BE MOVED WITH PHASES.
4. SAMPLING POINT (001) - APPROXIMATE LOCATION INITIAL DISCHARGE POINT (SETTLING POND) NO SURFACE DISCHARGE



FILE NO: 3-3S.61-IS

EXHIBIT D - MINING PLAN
(Part of Explanation of Request on County Application)

The permit area is 45.48 acres in size and will be excavated to provide sand material for off-property projects. The excavation will proceed from south to north in four phases. Except when the Creek runs after storm events, the operation will be a dry pit operation. Equipment is stored outside of the dry creek bed area. When the Creek flows, the operation ceases until the area drys-up so excavation can be continued.

The County has imposed a condition that the operation be completed on or before July 20, 2002. If the operation is not expected to be completed on that date, an extension of the County's approval will be processed during the spring or early summer of 2002. Beginning will be determined by when the two needed permits (MLRB and County) are issued, and an available user desires the material. The operation is expected to last up to 10 years.

Since there is no surface topsoil, no surface material will be stripped for later revegetation. For each phase, excavation will proceed from south to north. Material will be excavated using backhoes and other equipment to a maximum depth of approximately 15-30'. It may be loaded directly into trucks, or stockpiled. The floor of the excavation will have a minimum slope of 2%. The side slopes will not be left steeper than 2 to 1 temporarily, and 4 to 1 for final reclamation. Other restrictions on mining imposed by the County are as follows:

1. No mining will be allowed south of access road (approximately 100± feet, and should any erosion occur from flood events, this area will be immediately restored to its former condition. This requirement has also been added to the "Pre-Mining and Mining Plan Map".

2. No stockpiles of materials shall be allowed within 50 feet of the centerline of West Bijou Creek (100 feet total), and all stockpiles outside of this area shall be orientated in a north-south direction so as to not impede or divert stormwaters. Prior to the start of mining, the 100 foot non-stockpile storage area shall be be staked to provide an indicator for placement of stockpiles.

3. Prior to starting operations and prior to the start of each phase, the County must issue a "Notice to Proceed" so that all applicable County conditions and stipulations, and the reclamation of the previous phase can be verified.

These restrictions were based on the Floodplain/FloodPlain Report required by the County, a copy of which is included in the last section of this submittal titled "Other Information" .

Since this is a dry pit operation, there will be no affect or injury to any water rights. This conclusion is based on a report added to the section titled "EXHIBIT G - WATER INFORMATION". This additional report was prepared at the request of the County to demonstrate there would be no effect.

No processing of material will take place, except possibly washing. Water for washing and dust control will be obtained from a new Laramie Fox-Hills wells that will be drilled. No washing will be undertaken until the a well permit is obtained and the well drilled. The well will also be used to supply water for the watering of stockpiles and the access road to control fugitive dust emissions. In addition to the well permit, an Air Emissions Permit for approval of fugitive dust controls, and an NPDES permit for water discharge will also be obtained. Copies of all well permit application is included in "EXHIBIT G - WATER INFORMATION", and copies of the other two permit applications are included in "Exhibit N - Other Permits and Licenses".

The haul route for transport of material from the site will utilize the existing access road to Calhoun-Byers Mile Road, then south to Byers. That County road is gravel from the entrance south for 1 1/2 miles, then is paved. On the gravel portion, the County has reserved the right to impose dust abatement procedures, if the County Public Works Department feels they are necessary if traffic becomes excessive.

The operation will operate normally from 6:00 A.M until 10:00 P.M. seven days a week. The County has made provision that if extended hours are needed, the Planning Director may allow additional hours of operation.

The "Exhibit C - Pre-Mining and Mining Plan Map" on a previous page shows the pre-mining conditions and the mining plan graphically.

EXHIBIT E - RECLAMATION PLAN
(Part of Explanation of Request on County Application)

Upon completion of the excavation, each phase area out of the dry creek bed area will be reclaimed. After all areas but the creek bed are reclaimed, the creek bed area will be reclaimed.

Reclamation will be undertaken in the following manner for each phase:

1. Level and regrade disturbed areas (and any formerly disturbed areas within the permit area) to form a gradual slope toward the dry creek bed area. Slopes will be a minimum of 2% and maximum of 4 to 1.

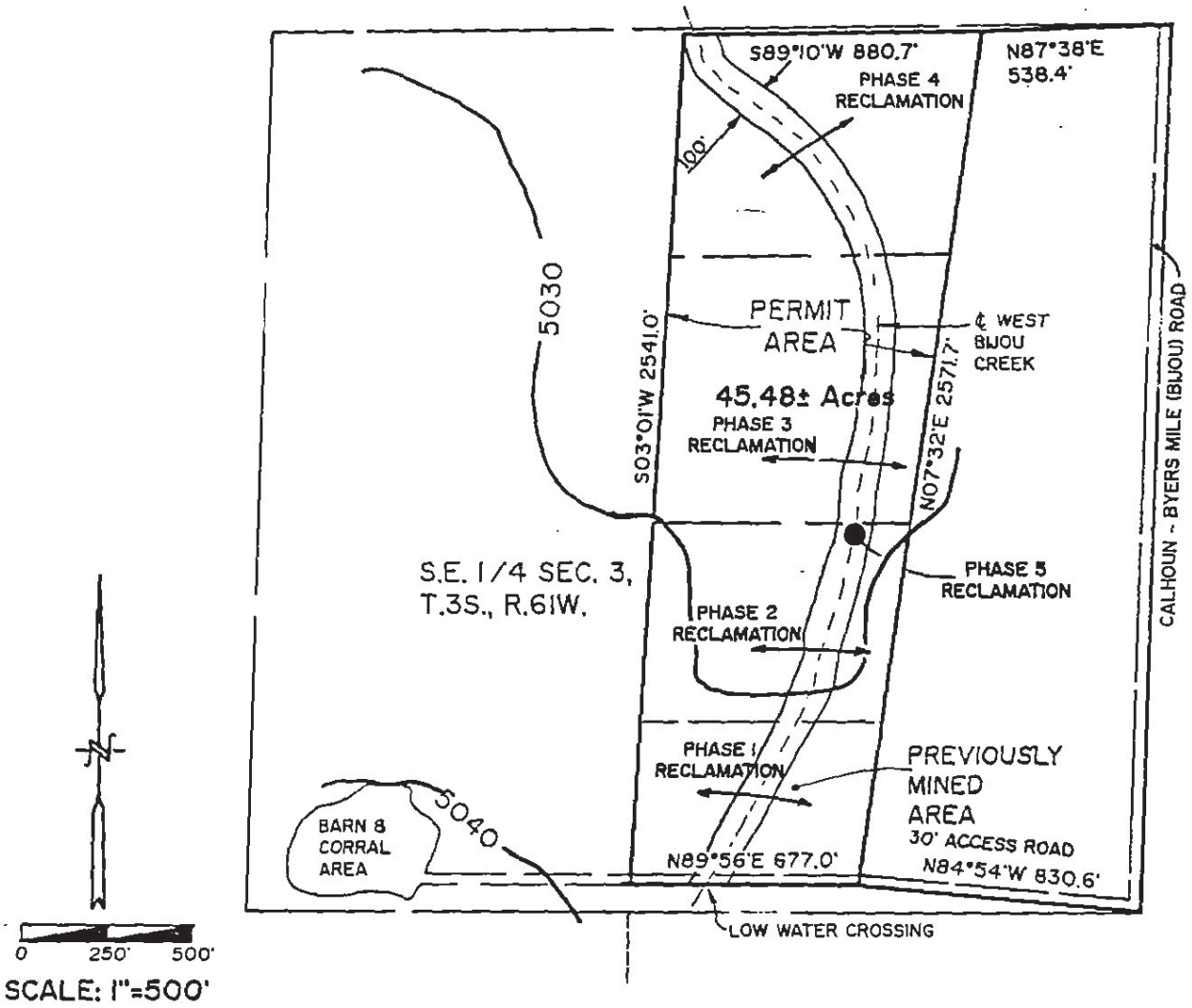
2. Revegetate twice, once in the fall and once in the spring, per the accompanying recommendations in EXHIBIT I/J

Reclamation of the dry creek bed area shall be undertaken after all other reclamation has been completed. It shall consist of simply smoothing out the creek bottom to the revegetated areas on each side. No revegetation is proposed in this area.

The map on the next map "Exhibit F - Reclamation Map" shows the reclamation plan graphically.

EXHIBIT F - RECLAMATION MAP

PART OF THE S.E. 1/4 SEC. 3, T.3S., R.61W., Adams County, CO.



SCALE: 1"=500'

1. RECLAIM & REVEGETATE PHASES 1 - 4, PER REVEGETATION PLAN

2. PHASE 5 (100' Creek Bed) - NO REVEGETATION, REGRADING TO SMOOTH CONDITION ONLY.

3. MAXIMUM SLOPES - 4 TO 1

EXHIBIT G - WATER INFORMATION

Water Report
State Engineer's Letter
Well Permit Application

WATER INFORMATION

The operation for which this application is being made is not expected to directly affect any surface or ground water systems, if the same may exist, at or near the affected property.

JUDITH L. HAMILTON
Consulting Geologist and Engineer

GROUND-WATER AND ENGINEERING GEOLOGY
2220 Julian Street • Denver, Colorado • 80211 • (303) 477-6610

July 24, 1992

Mr. Bob Fleming
ADCO Consulting
2050 E. 104th Ave.
Suite 300
Thornton, CO

Dear Bob:

As you requested, I reviewed the staff report from the Planning Commission Hearing for Sand Creek Farms application for conditional use for sand extraction in the Bijou Creek drainage (Case No. 046-92-C). Concerns of the staff included possible adverse effects to neighboring well owners and water supply for washing and dust control. The site is located in the SE¼ of Section 3, T3S, R61W.

The State Engineer's Office list of registered wells in the area shows that all wells in Sections 2, 3 and 10 are irrigation wells. There are two irrigation wells located in Section 11, and also two stock wells. A windmill is shown on the topographic map in the NE¼ of Section 10. It is probable that this is a stock well but is not registered. The list of wells is attached.

If no mining of sand occurs below the water table, there should be no adverse effect on existing wells.

Since there are no wells listed under the ownership of Sand Creek Farms, the wells which might be used for water supply to the project are not known. The SEO list shows one well located in the SE¼ of Section 3. Owner is William Vanmetre. The well is located in the SW¼SE¼ and is 117 feet deep. Reported water level is 40 feet and reported yield is 800 gal/min.

If this well is to be used for the mine, an application for change of use will need to be made. A make-up supply for consumptive use will also be required. Presently, the State assumes that 4% by weight of sand and gravel removed will be consumptive use for washing operations. Make-up water for consumptive use for dust control will also be necessary.

Another alternative would be to install a Laramie-Fox Hills well. Since the property is in a designated groundwater basin, the permit will need the approval of the management district. Normally the management districts accept the SEO criteria for allowable yield from a well. The SEO maps show the top of the L-FH at the site to be at elevation 4675 feet, the base at elevation 4350 feet, and the saturaded thickness to be 175 feet of sandstone and siltstone. Using a specific yield of .15, water available to the 320 acres from the L-FH is

$$\frac{320 \text{ acres} \times .15 \times 175'}{100 \text{ years}} - 84 \text{ acre-feet per year.}$$

This should be more than sufficient for the needs of the operation.

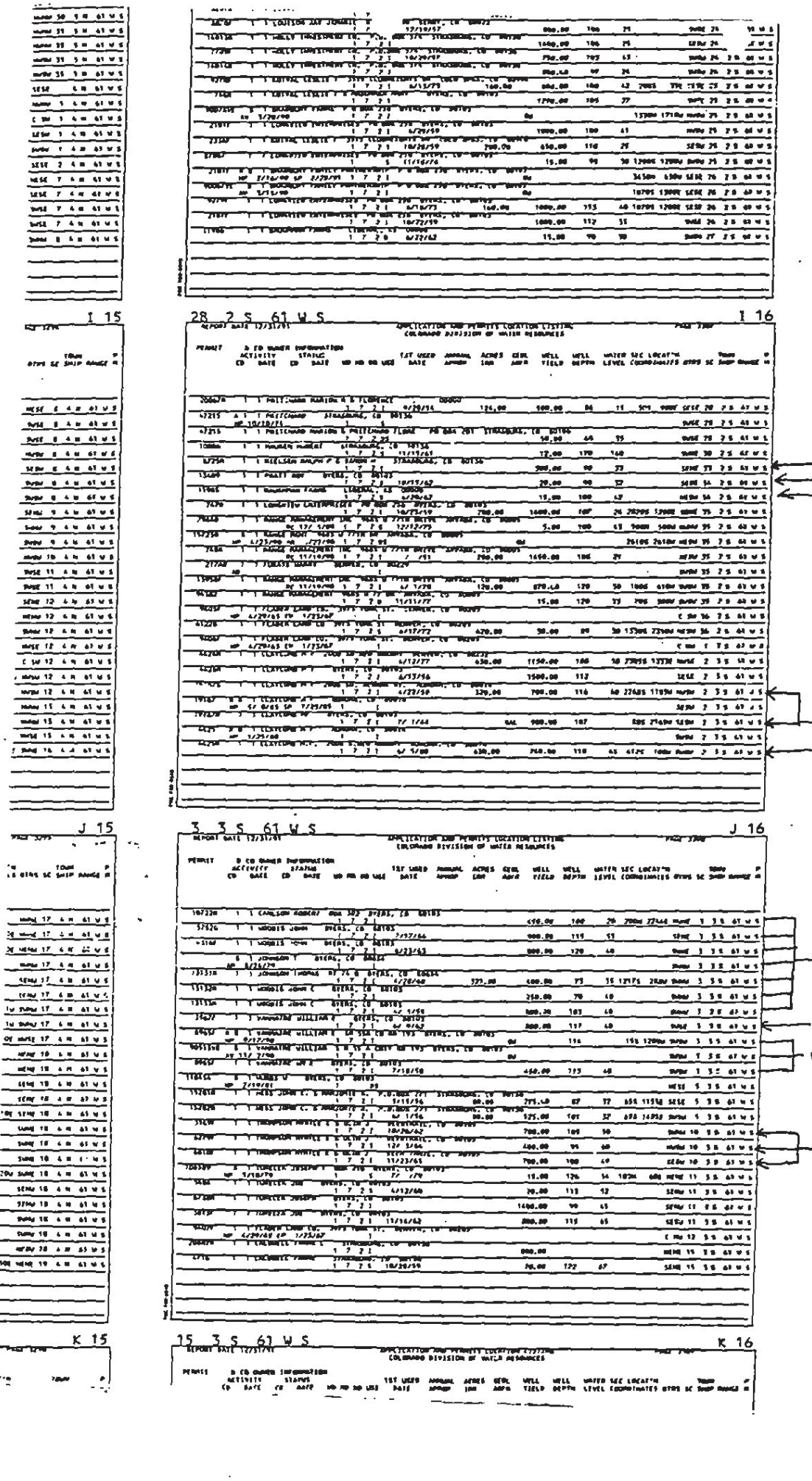
If you have any questions or need additional information, please let me know.

JUDITH L. HAMILTON REGISTERED 9405 PROFESSIONAL ENGINEER STATE OF COLORADO

Sincerely,

Judith L Hamilton

Judith L. Hamilton, P.E.


I 15
28 2 S 61 W S
I 16
NORTH WEST 1 MILE +
NORTH 1/2 MILE +
(DOWNSTREAM)
EAST 1/2 MILE +
EAST 1/4 MILE +
(DOWNSTREAM)
J 15
3 3 S 61 W S
J 16
NORTH 1/4 - 1/2 MILE
(DOWNSTREAM)
WELL ON PROPERTY
WELLS ON OTHER LANDS
SAME OWNERSHIP
SOUTH 1/2 - 1 MILE
(UPSTREAM)
K 15
15 3 S 61 W S
K 16

ROY ROMER
Governor

HAROLD (HAL) D. SIMPSON
Acting State Engineer

file
copy: applicant
Steve Dunn

OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

1313 Sherman Street-Room 818
Denver, Colorado 80203
(303) 866-3581
FAX [303] 866-3589

May 21, 1992

Mr. Mark Geyer
Adams County Planning Department
4955 East 74th Avenue
Commerce City, CO 80022

Re: Sand Creek Farms, 46-92-C
Sec. 3, T3S, R61W, 6TH P.M
W. Division 1, W. District 1

Dear Mr. Geyer:

We have reviewed the above referenced proposal to operate a sand and gravel mining operation on a 45 acre parcel. Although the depth of the proposed excavation was not stated, mining is to be accomplished without exposing ground water. Therefore the requirements of Senate Bill 180 do not apply. Drinking water for on site employees will be provided from bottled water. The application states that water for product washing will be from existing wells on or near the property.

The project is located within the Kiowa Bijou Designated Basin and ground water withdrawals are subject to the District's rules. Our records indicate that the non exempt wells in section 3 are all permitted for irrigation use. A new permit for commercial use is required before any irrigation wells could be used for product washing. Additionally, it appears as though these shallow wells can not operate without a replacement plan.

We have no objection to the mining operation, as long as groundwater is not exposed, and contingent upon product washing being prohibited until the applicant identifies a legal supply for the required water.

If you have any questions in this matter, please contact me.

Sincerely,

John Schurer

John Schurer, P.E.
Senior Water Resource Engineer

JS/sandcr
cc: Alan Berryman, Division Engineer
Bruce DeBrine

WRJ-5-Rev. 76

COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203

PERMIT APPLICATION FORM

Application must be complete where applicable. Type or print in BLACK INK. No overstrikes or erasures unless initialed.

FOR: (X) A PERMIT TO USE GROUND WATER
(X) A PERMIT TO CONSTRUCT A WELL
(X) A PERMIT TO INSTALL A PUMP

( ) REPLACEMENT FOR NO. _____
( ) OTHER _____
WATER COURT CASE NO. _____

(1) APPLICANT · mailing address

NAME Sand Creek Farms Inc
STREET 6345 South Fiddlers Green Cir Suite 550N
CITY Englewood (State) Co 80111 (Zip)
TELEPHONE NO. 303-220-8618

(2) LOCATION OF PROPOSED WELL

County ADAMS
SW ¼ of the SE ¼, Section 3
Twp. 3 S. (N.S) Rng. 64 W. (E.W) 6th P.M.

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 50
Average annual amount of ground water to be appropriated (acre-feet): 50
Number of acres to be irrigated: NONE
Proposed total depth (feet): 300
Aquifer ground water is to be obtained from: Fox Hill
Owner's well designation _____

GROUND WATER TO BE USED FOR:

( ) HOUSEHOLD USE ONLY - no irrigation (0)
( ) DOMESTIC (1)
( ) LIVESTOCK (2)
(X) COMMERCIAL (4)
( ) INDUSTRIAL (5)
( ) IRRIGATION (6)
( ) MUNICIPAL (8)
( ) OTHER (9) _____
DETAIL THE USE ON BACK IN (11)

(4) DRILLER

Name Don Eastwood
Street Box 160
City Deertrail (State) Colo 80105 (Zip)
Telephone No. 769 4531 Lic. No. 489

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. _____ / _____
Basin _____ Dist. _____

CONDITIONS OF APPROVAL

This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.

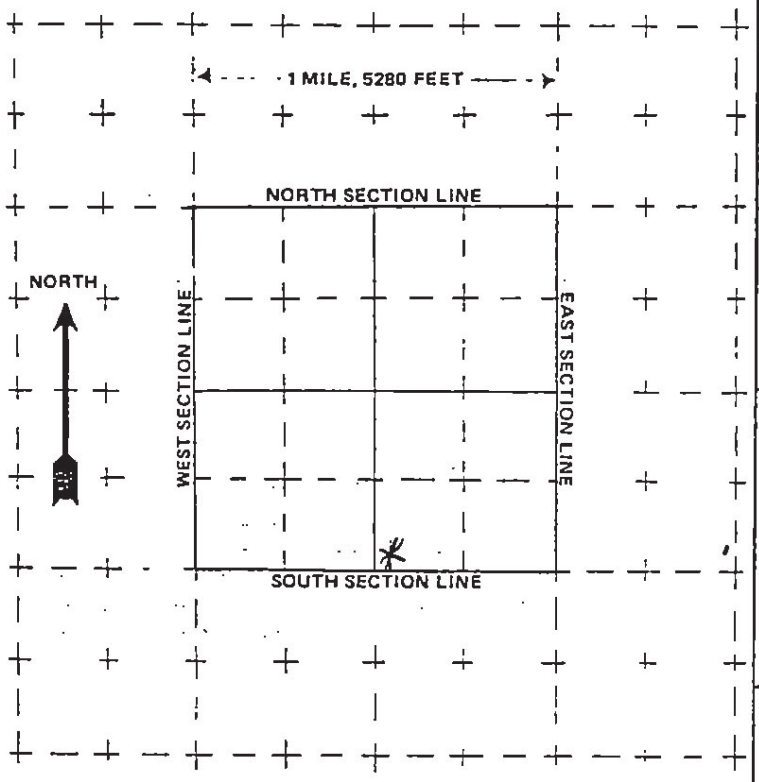
APPLICATION APPROVED

PERMIT NUMBER _____
DATE ISSUED _____
EXPIRATION DATE _____

_____
(STATE ENGINEER)

BY _____
I.D. _____ COUNTY _____

(5) THE LOCATION OF THE PROPOSED WELL and the area on which the water will be used must be indicated on the diagram below. Use the CENTER SECTION (1 section, 640 acres) for the well location.



The scale of the diagram is 2 inches = 1 mile
Each small square represents 40 acres.

WATER EQUIVALENTS TABLE (Rounded Figures)
An acre-foot covers 1 acre of land 1 foot deep
1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm)
A family of 5 will require approximately 1 acre-foot of water per year.
1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.
1,000 gpm pumped continuously for one day produces 4.42 acre-feet

(6) THE WELL MUST BE LOCATED BELOW by distances from section lines.

80 ft. from South (north or south) sec. line

2600 ft. from EAST (east or west) sec. line

LOT _____ BLOCK _____ FILING # _____

SUBDIVISION _____

(7) TRACT ON WHICH WELL WILL BE LOCATED Owner: SCE

No. of acres 320. Will this be the only well on this tract? _____

(8) PROPOSED CASING PROGRAM

Plain Casing

6 in. from 0 ft. to 200 ft.

_____ in. from _____ ft. to _____ ft.

Perforated casing

6 in. from 200 ft. to 300 ft.

_____ in. from _____ ft. to _____ ft.

(9) FOR REPLACEMENT WELLS give distance and direction from old well and plans for plugging it:

(10) LAND ON WHICH GROUND WATER WILL BE USED:

Owner(s): Sand Creek Farms Dlls No. of acres: 320

Legal description: S W 1/4 of SE 1/4 Sect 3 Twp 3 S 61 W

(11) DETAILED DESCRIPTION of the use of ground water: Household use and domestic wells must indicate type of disposal system to be used.

Washing of Sand

(12) OTHER WATER RIGHTS used on this land, including wells. Give Registration and Water Court Case Numbers.

Type or right	Used for (purpose)	Description of land on which used
Ind and Domestic		

(13) THE APPLICANT(S) STATE(S) THAT THE INFORMATION SET FORTH HEREON IS TRUE TO THE BEST OF HIS KNOWLEDGE.

X Wayne Lybbin President
SIGNATURE OF APPLICANT(S)

Use additional sheets of paper if more space is required.

EXHIBIT H - WILDLIFE INFORMATION

WILDLIFE INFORMATION

The affected property involved in this application is mainly that of river bottom land consisting of sandy alluvial soils and therefore supports no wildlife, as there is minimal vegetation on the affected property. No threatened or endangered wildlife species make the affected property their home and the use of this land for mining will have no detrimental effect on any type of wildlife.

STATE OF COLORADO
Roy Romer, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
AN EQUAL OPPORTUNITY EMPLOYER

Perry D. Olson, Director
6060 Broadway
Denver, Colorado 80216
Telephone: (303) 297-1192

NORTHEAST REGION
317 West Prospect
Fort Collins, Colorado 80526

For Wildlife—
For People

May 19, 1992

Mr. Carl B. Mount
Mined Land Reclamation Division
1313 Sherman Street, Room 215
Denver, Colorado 80203

RE: Sand Creek Farms Inc., Sand Creek Mine

Dear Mr. Mount:

The Sand Creek Farm Mine was also reviewed for Adams County, at which time the site was visited.

This project is located in an area of sparse vegetation, which is composed of mostly annuals. As a result, impacts on wildlife is minimal. Basically the mine area is an intermittent stream with a dry channel until a storm of considerable intensity occurs, then the channel reverts to a dry sand plain.

We concur with the reclamation plans as stated in the application.

Sincerely,

Don Bogart
Environmental Biologist

DB/jk

CC: R. Moss
T. Lynch
C. Leonard
File

EXHIBIT I/J - SOILS AND VEGETATION INFORMATION

Soils & Existing Vegetation Inventory
Proposed Revegetation Standards

ROY D. BELL
Consultant
9922 W. 66th Place
Arvada, Colorado 80004
(303) 423-5035

April 27, 1992

Mr. Robert N. Fleming
2090 E. 104th Ave., Suite 305
Thornton, Colorado 80233

RE: Information for Mine Request - Sand Creek Farms

Dear Mr. Fleming:

The following is information you requested on the land in part of the East 1/2, Section 3, Township 3 South, Range 61 West, 6 P.M.

SOIL INFORMATION: Soils for the Area requested, according to the Soil Survey of Adams County, Colorado, issued October, 1974 is as follows:

Sm---Sandy Alluvial Land
HlB--Heldt Clay, 0 to 3 percent slopes

A copy of the detailed soil description is attached.

VEGETATIVE INFORMATION: The vegetation on the requested area is sparse. The majority of the vegetation consists of forbs such as Russian Thistle, Sunflower, Curlycup Gumweed, Bull Thistle, Mustard, Asters, Cocklebur and Ragweed. Small grain, consisting of rye, is also present. Most of the other plants consist of Sweetclover, Cheatgrass, Sand Dropseed and Red Threeawn. Some Blue grama and Western Wheatgrass were growing on the banks and surrounding areas.

RECLAMATION PLAN:

1) SLOPE: A small area has been previously mined, probably for local use or used by the land owner. This is a sandy soil and cutbanks will cave easily. During mining operations, there should be no banks steeper than 2:1 (2 horizontal to 1 vertical). After mining operations are completed, banks should be no steeper than 4:1 slopes. Where possible, present banks should not be disturbed as the vegetation provides some erosion protection.

2) TOP SOIL: There is very little to no top soil on this site. However, after mining has been completed, the area should be left fairly smooth.

3) GRASS SEEDING: Vegetative seeding should be done between November 1 and May 1. The seedbed should be firm and weed free. Seeding should not be done when the soil is frozen or too wet. The desired seeding depth is 1/2 to 3/4 inches deep. Seeding should be done with a grass seed drill, with a legume seeder on the drill. The drill should also have an agitator in the drill box, double disc with depth bands and packer wheels.

Before seeding, packed areas should be chiseled at least six inches deep. If broadcast seeding is used, the area should be packed after the seeding has been completed.

The following vegetative seeding recommendation blends in with the surrounding area. These are Pure Live Seed (PLS) rates, not actual pounds per acre.

VARIETY	SPECIES	DRILLED PLS/AC.	BROADCAST PLS/AC.
*	Sand dropseed	0.2	0.4
	Sweet clover	0.5	1.0
Arriba	Western wheatgrass	1.2	2.4
Lovington	Blue grama	0.2	0.4

*Seed source should come from within 150 miles of the planting area to insure adaptation.

4) FERTILIZER: A soil test should be taken to determine fertilizer needs.

5) WEED CONTROL: With the sparse vegetation on the existing site, any vegetative cover would probably be desirable. The site should be checked in May and June to see if weed control is necessary or desirable.

6) GRAZING: Livestock should not be allowed to graze the area for one to two years after seeding. The vegetation should then be managed to prevent overgrazing.

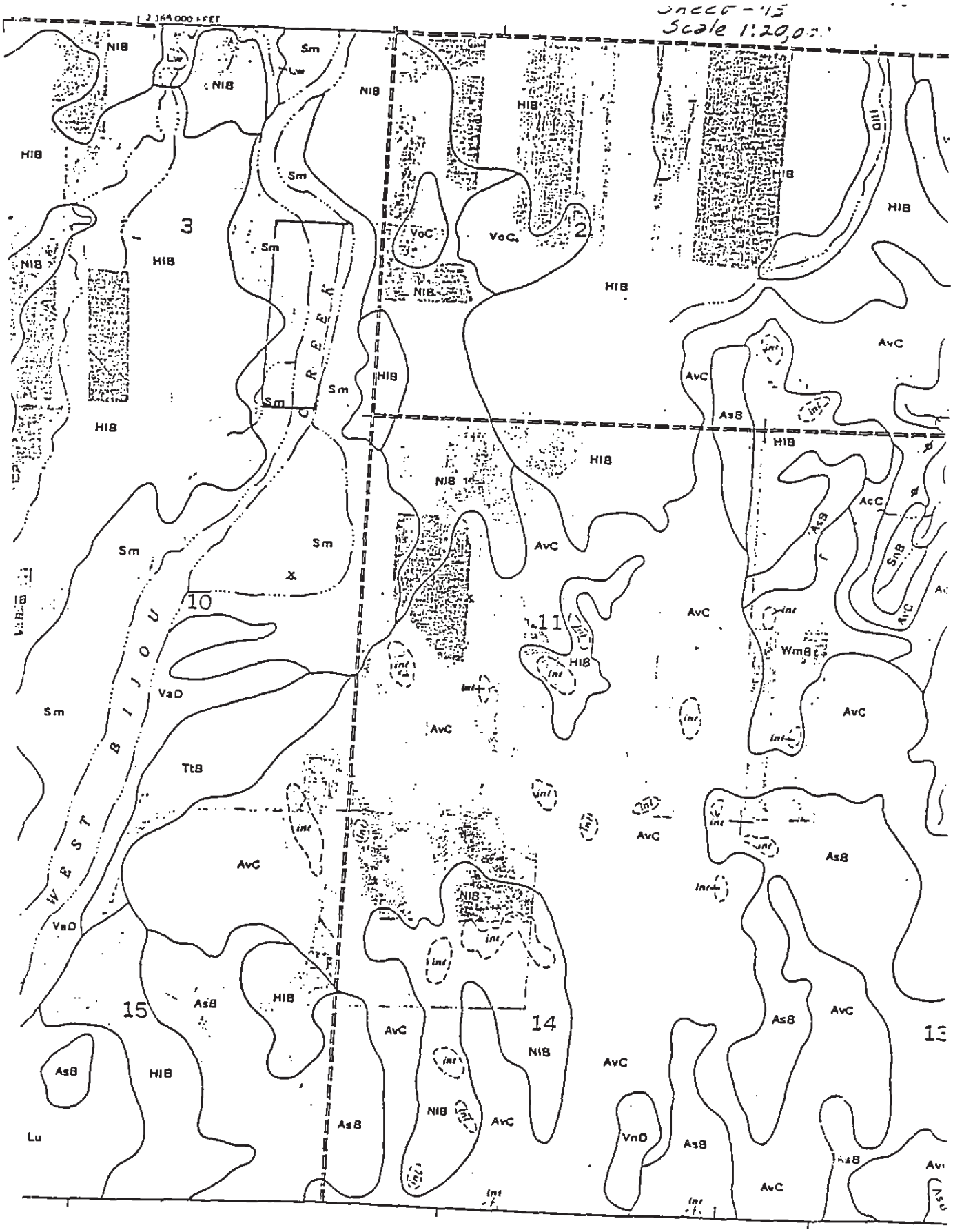
7) EROSION CONTROL: Erosion should be controlled by mulching or other appropriate methods. Should the land start to erode, emergency measures may be needed, such as mulching, silt fences, hay bales or a combination of these or other measures.

8) APPROVAL: All mining operations should be done in accordance with the Colorado Mined Land Reclamation and Adams County regulations.

Sincerely,

Roy D. Bell

Roy D. Bell
Consultant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SOILS DESCRIPTION
ADAMS COUNTY, COLORADO

SANDY ALLUVIAL LAND (Sm) consists of an unstable accumulation of gravelly and sandy alluvium. It is in and adjacent to beds of intermittent streams throughout the eastern three-fourths of Adams County. During periods of heavy rain, the streambeds are subject to flooding, and channels are relocated and sediment is shifted and redeposited at slightly different locations. During dry spells, this land type is extremely droughty.

Sandy alluvial land consists of material that was transported by water from the sand and gravel beds in or adjacent to the area. It is stratified because of periodic flooding. Thin lenses or small pockets of silt, clay, and sand are also mixed with the gravel.

This land type differs from Wet alluvial land primarily in that it is coarser textured throughout and is not affected by a water table.

Sandy alluvial land is either barren or has only a sparse cover of weeds. It is used for grazing along with the better rangeland adjacent to it. Capability unit VIIw-1, nonirrigated; not placed in a range site; tree planting suitability group 4.

SOIL SURVEY OF ADAMS COUNTY, COLORADO; *USDA, Soil Conservation Service in cooperation with Colorado Agricultural Experiment Station, October 1974.*

EXHIBIT K - CLIMATE INFORMATION

s drained by the South Platte River and es. Most of the county is characterized by ling topography, and the major streams gen- in relatively wide valleys. In the western part ounty, the larger stream valleys are from 250 feet below the general level of the nearby up- and the side slopes are moderately steep. Through of the remaining part of the county, the local relief om exceeds 200 feet, and in many places the side pes are so gradual that the limits of the valleys are arely noticeable. Several relatively large areas of ilized dune topography are in the county, mainly in broad area north of Sand Creek and along the valleys Beebe Draw, and the Box Elder, Kiowa, and Bijou eeks.

The farms in Adams County are slowly being consoli- ed into larger, more efficient units, utilizing the latest hnology available. Where underground water re- ces support it, sprinkler irrigation on the sandy soils increasing rapidly. The ranching operations remain at the same, but farming is diminishing rapidly in western part of the county because of the industrial community development.

Production of corn, alfalfa, and small grains is ex- ed to remain fairly stable. The sugar beet industry lowly decreasing. Truck crop farming is decreasing becoming very specialized. Cattle feedlots and hog ing are decreasing and eventually will be eliminated the western part of the county because of zoning nances. Ornamental specialty crops, greenhouses, turf farms are increasing rapidly and are expected nue to do so for some time to come. Poultry is dominated by large commercial enterprises and y will continue to increase.

The supply of water for farming, especially in the western fourth of the county, is being competed for by the metropolitan and suburban areas, and a shortage of water is likely to become acute in the coming years.

Climate *

The climate of Adams County is that of the semiarid high plains. It is modified by the Rocky Mountains to the west and the higher country of the Black Forest area to the south. The effects of the mountains vary considerably with increasing distance from the western end of the county toward the east. The county, 72 miles long and 18 miles wide, ranges in elevation from 5,570 feet at the southwest corner to 4,500 feet at the northeast corner, and is within a plains climate that changes rapidly to a foothills climate just west of the county.

Many features of the climate at Denver, which is representative of the extreme western and southwestern part of Adams County, can be applied with some modification to the entire county. Variations in climate from the western border eastward include increased average windspeed because of the reduced effectiveness of mountain shielding, slightly lower average annual precipitation, lower amounts of precipitation and snowfall in winter and early in spring, increased amounts and variability of summer precipitation, greater average variation in daily and annual temperatures, and somewhat lower cloudiness and higher percentage of sunshine on an annual average. Table 9 gives climatic data compiled from records kept mainly at Byers, Arapahoe County,

* By Joseph W. Berry, climatologist for Colorado, National Weather Service, U.S. Department of Commerce.

TABLE 9.—*Temperature and precipitation data*

[Data for temperature and precipitation from Byers, Arapahoe County. Data on snow cover from Stapleton Airfield at Denver]

Month	Temperature				Precipitation				
	Average daily maximum	Average daily minimum	2 years in 10 will have at least 4 days with—		Average total	2 years in 10 will have—		Average number of days with snow cover	Average depth of snow on days with snow cover
			Maximum temperature equal to or higher than—	Minimum temperature equal to or lower than—		Less than—	More than—		
	°F.	°F.	°F.	°F.	Inches	Inches	Inches		Inches
----	43	14	61	−6	0.43	0.1	0.8	8	2
y----	46	18	64	−2	.47	.2	.7	9	3
----	52	23	70	4	.87	.4	1.6	7	3
----	62	33	79	19	1.86	.7	2.8	3	4
----	71	42	86	32	2.54	.9	3.7	1	3
----	84	51	96	40	1.58	.7	2.6	0	0
----	91	57	99	50	2.01	1.0	3.2	0	0
----	89	56	98	49	1.49	.7	2.1	0	0
ber----	80	47	94	35	1.14	.2	1.7	(1)	4
----	69	36	83	25	.72	.1	1.5	1	2
ber----	54	23	71	7	.54	.2	.9	5	3
er----	46	18	64	2	.40	.1	.6	7	3
r----	66	35	[2] 101	[3] −14	14.05	9.2	18.3	41	3

[1] Less than one-half day.
[2] Average annual highest temperature.
[3] Average lowest annual temperature.

Colorado. These data are representative of most of Adams County.

The average annual temperature is near 50° at an elevation of 5,200 feet, but this can be expected to vary a few degrees from the lower elevations at the eastern end of the county to the higher elevations at the western end. The wide average range in daily temperature of 25° to 35° and a wide average range in annual temperature are typical of the High Plains. As a result of wide variations from day to day or over a period of a few days, extremely hot weather in summer or extremely cold weather in winter is generally of short duration and is followed by more moderate temperature.

The average annual growing season in Adams County is about 150 days. Table 10 gives the probability at Byers, Arapahoe County, of the last freezing temperatures in spring and the first freezing temperatures in fall.

Data for long periods indicate that the average annual precipitation in the county ranges from 12.5 to 14.5 inches. It tends to be higher in the western part. Variations within the county are related to the local terrain, elevation, and slope. Particularly in spring and summer, the extreme variability in the amount of precipitation from year to year and between localities in the same year is so large that even long-period averages are affected by chance occurrences and are not easily interpreted in terms of actual climatic differences. Probable annual precipitation (fig. 19) is particularly significant in showing the expected variation of rainfall from year to year.

When annual precipitation for 2 years in a row is less than about 11 inches, most dryland crops fail. Two or more dry years in a row generally do not occur more than once every 10 years. Figures on the normal average temperature and precipitation by months and year, along with days of snow cover, are given in table 9.

Total precipitation and snowfall in winter are higher in the western part of the county than in the eastern part. Differences are sometimes small but consistent from October into May. The average annual snowfall is about 59 inches at Denver and is about 46 inches at Byers. In summer, however, precipitation generally averages somewhat higher in the eastern part of the county but is highly variable from year to year at different localities.

The average relative humidity is 39 percent through the day and 62 percent during the night. It is slightly higher in winter than in summer. On the average, the sun shines 69 percent of the possible hours of sunlight annually.

Hailstorms that are damaging to crops occur in some parts of the county almost every year. There is no extended pattern to the hailstorms. They generally occur between May 15 and September 1, and they are most likely to occur in June and July. The hail generally falls in strips less than 1 mile wide and 6 miles long. Hail is more common in the eastern part of the county than in the western part.

Literature Cited

(1) American Association of State Highway Officials.
1961. Standard specifications for highway materials and methods of sampling and testing. Ed. 8, 2 v., illus. Washington, D.C.

(2) Baldwin, Mark, Kellogg, Charles E., and Thorp, James.
1938. Soil classification. U.S. Dept. Agr. Ybk.: 978-1001, illus.

(3) Simonson, Roy W.
1962. Soil classification in the United States. Sci. 137: 1027–1034.

(4) Thorp, James and Smith, Guy D.
1949. Higher categories of soil classification: order, suborder, and great soil groups. Soil Sci. 67: 117–126.

(5) United States Department of Agriculture.
1951. Soil survey manual. Agr. Handbook 18, 503 pp., illus. [Supplement issued in May 1962]

(6) ———
1960. Soil classification, a comprehensive system, 7th approximation. 265 pp., illus. [Supplements issued in March 1967 and September 1968]

(7) United States Department of Defense.
1968. Unified soil classification system for roads, airfields, embankments, and foundations. MIL-STD-619B. 30 pp., illus.

Glossary

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates such as crumbs, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali soil. Generally, a highly alkaline soil. Specifically, an alkali soil has so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangable bases), or both, that the growth of most crop plants is low from this cause.

Table 10.—*Probable dates of last freezing temperatures in spring and first in fall*

[Based on data from Byers, Arapahoe County]

Probability	Dates for a given probability at a temperature of—				
	16° F. or lower	20° F. or lower	24° F. or lower	28° F. or lower	32° F. or lower
Spring:					
1 year in 10 later than	April 17	April 23	May 4	May 13	May 29.
2 years in 10 later than	April 11	April 18	April 28	May 7	May 23.
5 years in 10 later than	March 31	April 7	April 17	April 27	May 11.
Fall:					
1 year in 10 earlier than	October 24	October 14	October 3	September 25	September 13.
2 years in 10 earlier than	October 29	October 19	October 8	September 30	September 18.
5 years in 10 earlier than	November 8	October 29	October 13	October 10	September 29.

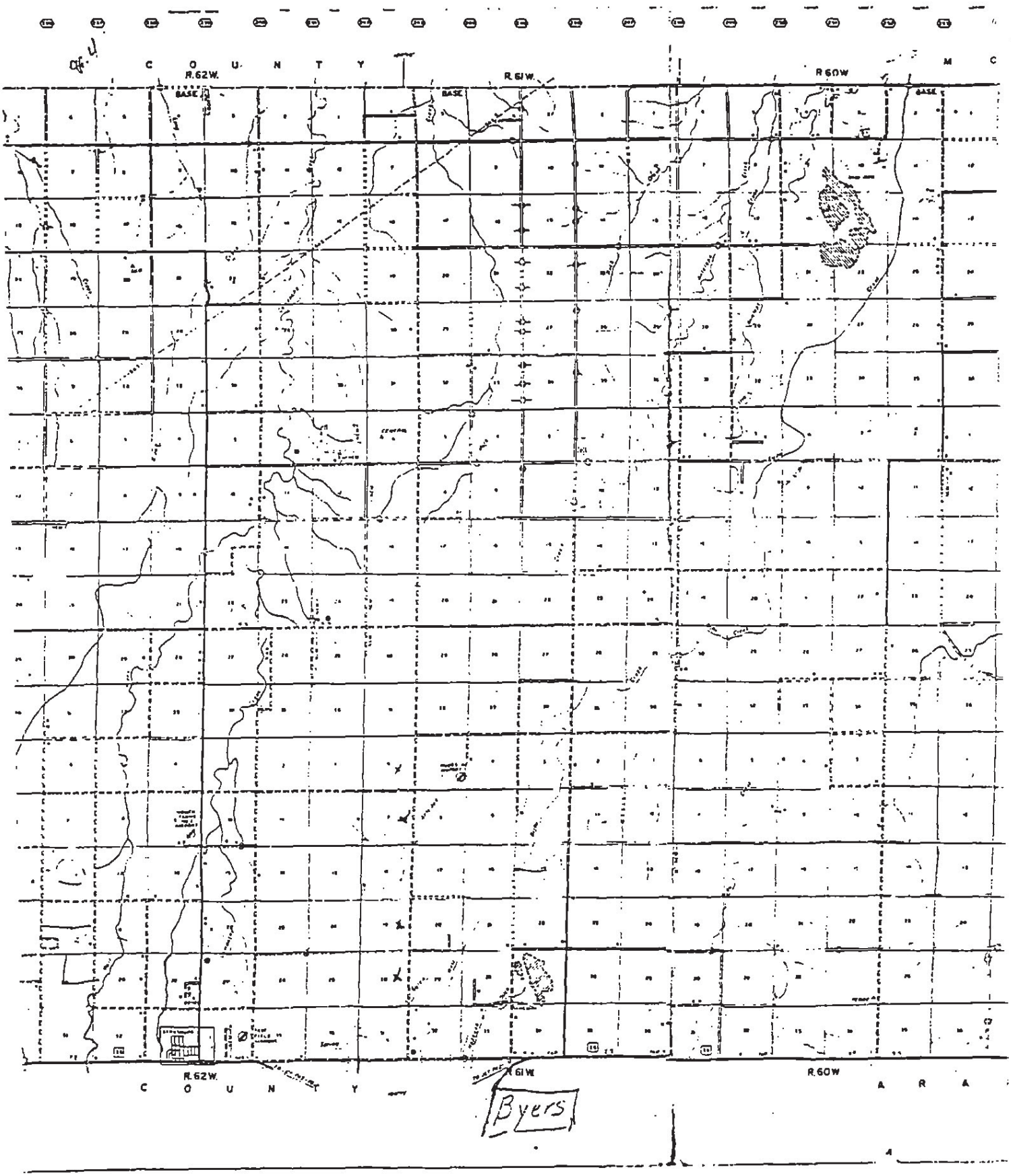

C O U N T Y
R.62W.
R.61W.
R.60W.
BASE
C O U N T Y
R.62W.
R.61W.
R.60W.
Byers

EXHIBIT L - RECLAMATION COSTS

The maximum disturbance at any one time is when 1 phase is being mined and another has yet to be reclaimed. This could not exceed ten acres. Since no surface material is proposed for storage, the only reclamation items needed would be revegetation and some minor grading to smooth the contours. Below is our estimate of such expenses:

Mobilization -	$ 500
Minor Grading, 10 acres @ $100/acre -	$ 1,000
Revegetation, 10 acres @ $150/acre -	$ 1,500
Sub-total	$ 3,000
15% Administration/Contingencies	$ 450
TOTAL BOND REQUIREMENT	$ 3,500

EXHIBIT N - OTHER PERMITS AND LICENSES

Adams County Conditional Use Permit Resolution
APEN (Without attachments)
NPDES (Without attachments)
Well Permit (See Exhibit G)

At a regular meeting of the Board of County Commissioners for Adams County, Colorado, held at the Court House in Brighton on Monday, the 20th day of July A.D. 19 92, there were present:

Elaine Valente, Commissioner Chairman
James M. Nelms, Commissioner
Harold E. Kite, Commissioner
Jim Robinson, County Attorney
Lucy Trujillo, Deputy, Clerk of the Board

when the following proceedings, among others were had and done, to-wit:

ZONING HEARING DECISION - CASE #46-92-C
SAND CREEK FARMS

WHEREAS, on the 20th day of July, 1992, the Board of County Commissioners, held a public hearing on the application of Sand Creek Farms, Inc., Case #46-92-C, requesting Conditional Use for sand extraction in the West Bijou Creek drainage, on the following described property:

> Bearings were determined based upon the East line of the SE¼ of Section 3, Township 3 South, Range 61 West of the 6th P.M. as bearing N1°02'E taken from Court re-survey notes dated 9-4-1915 with Sll other bearings as being relative thereto; Commencing at a point which bears N84°54'W 830.6 feet from the Southeast corner of Section 3, T3S, R61W 6th P.M. to the point of beginning, thence N7°32'E 2571.7 feet to a point which bears S87°38'W 538.4 feet from the E¼ corner of Section 3, thence S89°10'W 880.7 feet, thence S3°01'W 2541.0 feet, thence N89°56'E 677.0 feet to the point of beginning.

APPROXIMATE LOCATION: Northwest corner of Calhoun-Byers Mile Road (46N) and 64th Avenue alignment.

WHEREAS, the Adams County Planning Commission held a public hearing on the 9th day of July, 1992, and forwarded a recommendation of approval to the Board of County Commissioners, based on the following findings of fact:

1. The applicant is proposing to mine a portion of his property that lies within the 100 year floodplain of West Bijou Creek. The property has been previously mined on a small scale, sometime in the past, without a permit.

2. If the applicant can abide by the conditions recommended by the Public Works Department, and obtains all permits associated with floodplain use, stormwater discharge, and fugitive dust, the project would be considered compatible with the surrounding area.

3. The applicant's site is located in a sparsely populated area of the County and is very rural in character. A mine of this type, if operated and reclaimed as proposed, would be compatible with the Zoning Regulations and the Comprehensive Plan.

4. Information concerning approved mining and reclamation plans from the Mined Land Reclamation Division, and well permits from the Division of Water Resources, is required prior to the start of mining, and prior to washing any material. If these permits are obtained, the proposal would be compatible with the Adams County Zoning Regulations.

5. If the applicant can operate within the proposed mining and reclamation plans, as revised, the project would not be detrimental to the health, safety, and welfare of the inhabitants of the area, nor would it deter future quality development of the area.

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners, County of Adams, State of Colorado, that the application of Sand Creek Farms, Inc., requesting Conditional Use for sand extraction in the West Bijou Creek drainage on the above described property, is hereby approved, subject to the following:

Conditions Precedent:

1. Submittal of an approval for mining and reclamation from the Colorado Mined Land Reclamation Division. Evidence of bonding for reclamation shall be included with this approval.

2. Submittal of evidence that the applicant has applied for an NPDES permit from the Colorado Department of Health.

3. Submittal of a fugitive dust permit, if necessary, from the Air Quality Division of the Colorado Department of Health.

Stipulations:

1. All mining and reclamation activities shall be completed on or before July 20, 1992.

2. Washing of materials shall be permitted only if the applicant can obtain the correct well permits from the Colorado Division of Water Resources. Prior to any washing activities the applicant shall submit evidence from the State Engineer that the existing well has been properly permitted.

3. No stockpiles of materials shall be allowed within 50 feet of the centerline of West Bkjou Creek (100' total), and all stockpiles outside of this area shall be oriented in a north-south direction so as to not impede and divert flood events.

4. Prior to starting of operations and prior to start up of each phase, a "Notice to Proceed" shall be obtained from the Adams County Environmental Compliance Agent so that all conditions precedent and applicable stipulations can be verified, and so that reclamation of each previous phase is completed.

5. If traffic becomes excessive on Calhoun-Byers Mile Road, in the opinion of the Traffic Engineer, the applicant will be required to dust abate the two miles of gravel road south of 64th Avenue alignment. The Adams County Public Works Department reserves the right to require dust abatement at their discretion.

6. No excavation shall be allowed within the 100' of the south property line and in the event erosion occurs in this 100' area from flooding events, the operator shall immediately restore said eroded area after said flood event.

7. Hours of operation shall be 6:00 a.m. to 10:00 p.m. seven days per week. If the applicant requires additional hours of operation or hauling, the Director of the Department of Planning and Development shall review such proposals and shall have authority to authorize changes in hours of operation and hauling upon finding of no significant impact to surrounding property owners abutting the site or along the haul route. At the discretion of the Director, the request may be forwarded to the Board of County Commissioners if property owner's concerns are of such significance that a public hearing is warranted.

8. All junk and miscellaneous materials located to the west of the mine site shall be removed prior to the start of mining.

9. Prior to the start of mining, the applicant shall stake out the 100 foot wide floodway area to provide an indicator for the placement of stockpiles.

Upon motion duly made and seconded the foregoing Resolution was adopted by the following vote:

Valente .... Aye
Nelms .... Aye
Kite .... Aye

Commissioners

STATE OF COLORADO }
County of Adams } ss.

I, Robert Sack, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing Order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Brighton, this 20th day of July, A.D. 19 92.

County Clerk and ex-officio Clerk of the Board of County Commissioners

Robert Sack

By [signature] Deputy

SEAL — COUNTY OF ADAMS — STATE OF COLORADO

This application must be ... will be considered incomplete - SEE INSTRUCTIONS ON REVERSE SIDE. Mail completed application APENs, and filing fee to: Stationary Sources Program, Air Pollution Control Division, Colorado Department of Health, 4210 East 11th Avenue, Denver, Colorado 80220.

1. PERMIT TO BE ISSUED TO:

Sand Creek Farms, Inc.

2. MAILING ADDRESS:

6312 S. Fiddler's Green Circle, Suite #535-N

State: Colorado
ZIP CODE: 80111

3. AGENT FOR SERVICE (See No. 3 on reverse):
Allen J. Kincaid

4a. GENERAL NATURE OF BUSINESS:

Sand Excavation and Transport

4b. SIC Code:

312

5a. AIR POLLUTION SOURCE DESCRIPTION:

Extraction of Sand Material and access road
(See attached mining plan narative)

5b. Days per year source will operat

30-120

6a. SOURCE LOCATION ADDRESS: Check if map included:

West Bijou Creek, 7 1/2 miles north of Byers COUNTY Adams

6b. UTM Coordinates (in km):

___ . _ H ____ .

7. ESTIMATED COSTS:

7a. Source, Process Equipment or Project:

Cap. Cost: $ Unk. Annualized: $ _____

Air Pollution Control Procedures or Equipment:

7b. Capital Cost: $ Unk. Annualized: $ ____

7c. Operating Cost $ _____ /yr.

8a. STATUS

☒ New Air Pollution Source

☐ Existing Source Change (Control equipment added, process change, etc.): _____

☐ Other: _____

Projected Dates for Construction to:

8b. Begin: 6/92 8c. End: 6/2002

Projected Source Startup Date:

8d. 6/92

9. Enclose check to cover APEN FILING FEES. One APEN should be filed for each emission point

1 APENs @ $60.00 per APEN = $ 60.00

10. SIGNATURE OF LEGALLY AUTHORIZED PERSON (NOT vendor or equipment manufacturer):

X [signature]

11a. DATE SIGNED: 5/08/92

11b. TELEPHONE NO.: (303) 220-8618

12. Type or print name and official title of person signing item 10.

Allen J. Kincaid, Part-Owner

Agency Use Only
14. DATE RECEIVED

13. Check appropriate box if you want:

a. ☐ Copy of preliminary analysis conducted by Division

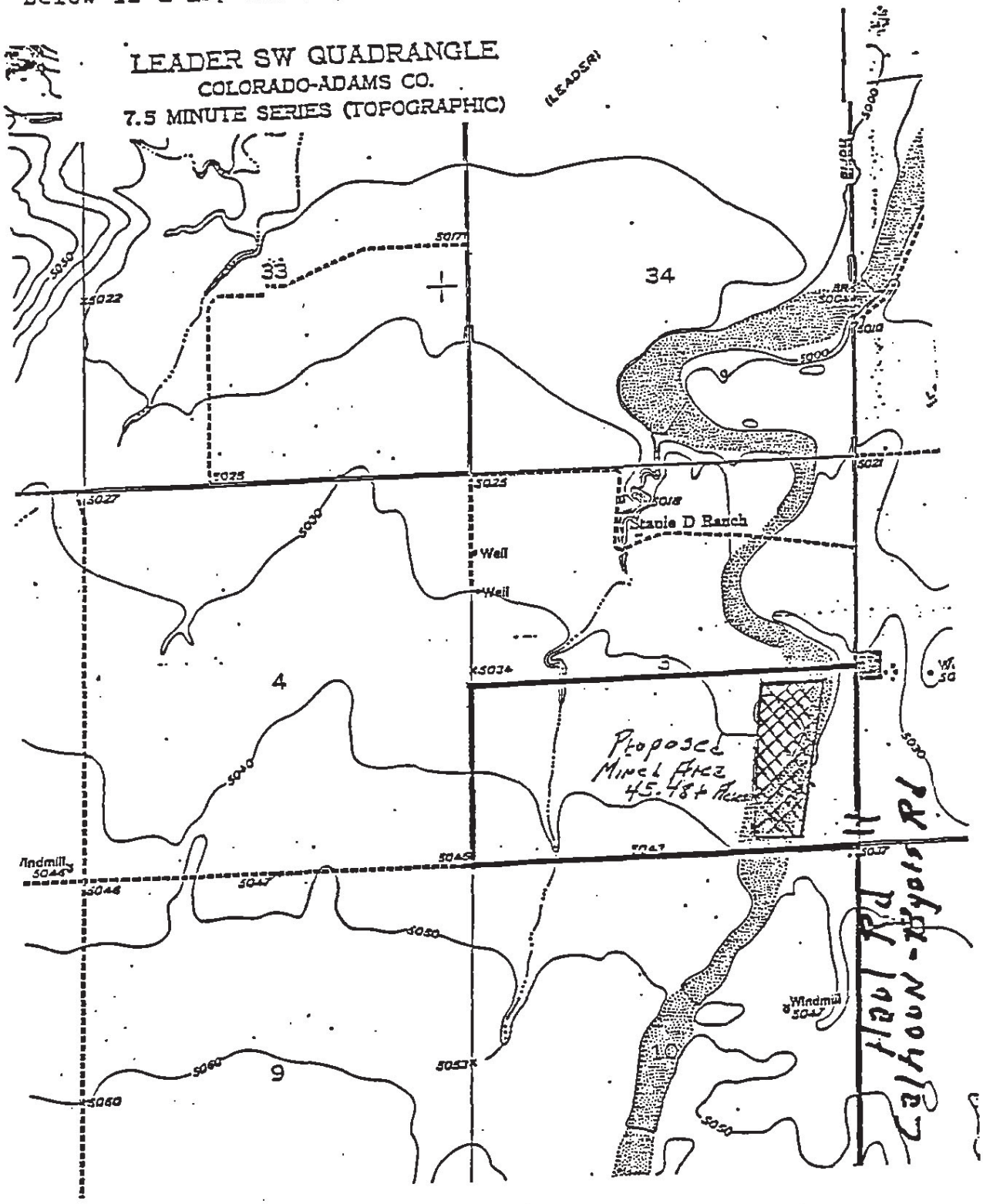
b. ☐ To review a draft of the permit prior to issuance?

NOTE: Checking either item could result in increased fees or processing time. See Reverse.

15. PERMIT NUMBER

APCD:SSP:200C (Rev. 1/84)

Below is a map showing the location of the property.



[redacted]

SAND CREEK FARMS, INC.
PH. 303-220-8618
6312 S. FIDDLER'S GREEN CIR., STE. 535N
ENGLEWOOD, CO 80111

82-244/1070

5-8 19 92

PAY TO THE ORDER OF COLORADO DEPARTMENT OF HEALTH $ 60.00

SIXTY AND NO/100---------- DOLLARS

THE FIRST SECURITY BANK
P.O. BOX 525 (303)842-2844
BRUSH, COLORADO 80723

FOR Air Pollution Emission's Notice [redacted]

PERMIT NO: ____________

AIR POLLUTION EMISSION NOTICE (APEN) AND CONTROL PLAN FOR FUGITIVE PARTICULATE EMISSIONS

Name of Firm Sand Creek Farms, Inc.

Mail Address 6312 S. Fiddler's Green Circle, #535N Zip Code 80111

Contact Person Robert Fleming Phone Number (303 450-2204

Project Location West Bijou Creek 7 1/2 miles north of Byers County Adams

UTM coordinates (if known) _ _ _ . _ , _ _ _ _ . _

Description of Activity Sand Extraction from dry creek bend and export

No. of Employees Varies Property Area 45 Acres

Seasonal Throughput (% of Annual):
Dec-Feb 5 % Mar-May 45 % Jun-Aug 45 % Sep-Nov 5 %

Est. Starting Date 6/92 Est. Date of Completion 6/02

Work Schedule: 8 hours/day, 6 days/week, 4 - 12 weeks/year

Est. Annual Production 5-20,000 tons/yr(circle one) Rock, Coal, Other Sand

Signature of Person Authorized to Supply Data ____________

Typed or Printed Name and Title Robert N. Fleming, Consultant

Date 5/14/92

Company Name ADCO Consulting Telephone No. (303) 450-2204

Mailing Address 2090 E. 104th Avenue, #305 Thorton, Colorado 80233

A site diagram should also be submitted showing the general configuration of operation, and location of site.

(FOR OFFICE USE ONLY)

(For APCD Use)				Date of Record	UTM Zone	UTM Coordinates		SCC Code
County ID	[illegible]	Plant ID	[illegible]			Horizontal	Vertical	
						_ _ _ . _	_ _ _ _ . _	

I. TOPSOIL None

A. REMOVAL:

Cubic Yards Removed Per Year _____ Cubic Yards

Days Per Year Required for Removal _____ Days

Proposed Controls for Topsoil Removal: (check appropriate boxes)

/_/ Moist Material

/_/ Water Spray

/_/ Other (specify) _____

/_/ No Control

B. TOPSOIL STOCKPILE:

Maximum Stored at One Time _____ Cubic Yards

Maximum Stored Per Year _____ Cubic Yards

Length of Time Pile Remains Undisturbed _____

Proposed Controls for topsoil stockpile: (check appropriate boxes)

/_/ Watering _____ Times/Day, or _____ Continuous Sprinkler
(to maintain moist surface)

/_/ Chemical Stabilizer (Type: _____)

/_/ Compacting of Piles, Method _____

/_/ Enclosures: _____ Complete, or _____ Partial (check one)

/_/ Revegetation, (Length of Time Till Revegetation _____)

/_/ Other (specify) _____

/_/ No Control

II. OVERBURDEN None

A. REMOVAL:

Cubic Yards Removed Per Year _____ Cubic Yards

Days Per Year Required for Removal _____ Days

Equipment Used for Removal _____

Proposed Controls for Overburden Removal: (check appropriate boxes)

/_/ Moist Material

/_/ Water Spray

/_/ Other (specify) _____

/_/ No Control

B. OVERBURDEN STOCKPILE:

Maximum Stored at One Time _____ Cubic Yards

Length of Time Pile Remains Undisturbed _____

Proposed Controls for Overburden Stockpile: (check appropriate boxes)

/_/ Watering _____ Times/Day, or _____ Continuous Sprinkler
(to maintain moist surface)

/_/ Chemical Stabilizer (Type _____)

/_/ Compacting of Piles, Method _____

/_/ Enclosures: _____ Complete, or _____ Partial (check one)

/_/ Revegetation, (Length of Time Till Revegetation _____)

/_/ Other (specify) _____

/_/ No Control

III. DRILLING None

(MATERIAL:)	OVERBURDEN	ROCK	COAL	(OTHER)
No. of Holes Drilled Per Year				
No. of Days of Drilling Per Yr.				
Hours of Drilling Per Day				
Proposed Controls				

Controls Include: Water Injection, Chemical Dust Suppressants, Bag Collectors
Other (specify), No Control

IV. BLASTING None

(MATERIAL:)	OVERBURDEN	ROCK	COAL	(OTHER)
Tons Removed By Blasting Per Year				
No. of Blasts Per Year				
No. of Blasting Days Per Year				
Proposed Controls				

Is Seqential Blasting Used ? /_/ Yes, /_/ No (check one)

V. RAW MATERIAL

A. REMOVAL:

(MATERIAL):	ROCK	COAL	(OTHER)
Tons Removed Per Year			5-20,000
Max. Tons Removed Per Day			1,000
Equipment Used for Removal			Front-end Loader Backhoe
Equipment Capacity (in Cubic Yards)			4-6
Est. Hours Per Year Required for Removal			250-1250
Is Material Dry, Moist, or Wet?			Moist
Specify moisture content if known(%)			

B. *LOADING IN TO RAW MATERIAL STOCKPILE:* None Planned

Method of loading in (Truck Bottom Dump, Front-End Loader, etc.)

_____

Loading Schedule: _____ *tons/hr.*, _____ *hrs./day*, _____ *days/year.*

Proposed Controls for Loading to Stockpile : _____

Controls Include: Water Spray, Chemical Suppressants, full enclosure, partial enclosure, Other (specify), No Control

C. *RAW MATERIAL STOCKPILE:* None planned

(MATERIAL):	*ROCK*	*COAL*	*(OTHER)* _____
Maximum Tons Stored At Any One Time	_____	_____	_____
Length of Time Pile Remains Undisturbed	_____	_____	_____

Proposed Control: (check appropriate boxes)

/_/ *Watering* _____ *times/day, or* _____ *Continuous Sprinkler (to maintain moist surface)*

/_/ *Chemical Stabilizer (Type* _____*)*

/_/ *Enclosures:* _____ *Complete, or* _____ *Partial (check one)*

/_/ *Other (specify)* _____

/_/ *No Control*

D. *LOADING OUT FROM RAW MATERIAL STOCKPILE:* None planned

Method of Loading out (Front-End Loader, Conveyor, etc.)

_____

Loading Schedule: _____ *tons/hr.*, _____ *hrs./day*, _____ *days/year.*

Proposed Controls _____

Controls Include: Water Spray, Chemical Suppressants, Other (specify), No control

VI. PROCESSING None

Will processing (i.e., crushing, screening, etc.) occur on site?

/_/ Yes /_/ No (check one)

Note: All process equipment requires a separate permit application and APEN.

Material loaded into processing equipment by:

Conveyor _____ *Front end Loader* _____ *Other* _____

CONTROLS FOR PROCESSING Include: Moist or Wet Materials (Specify moisture % if known), Water Spray Bars, Bag Filters, Other (Specify), No Control

(List Processing Controls in the appropriate spaces below)

A. PRIMARY CRUSHING:

Maximum Tons Crushed Per Year _____ *Tons*

Maximum Tons Crushed Per Hour _____ *Tons*

Hours of Crushing Per Day _____ *Hours*

Proposed Controls (see above) _____

B. SCREENING/CLASSIFYING:

Maximum Tons Screened Per Year _____ *Tons*

Maximum Tons Screened Per Hour _____ *Tons*

Hours of Screening Per Day _____ *Hours*

Proposed Controls (see above) _____

C. SECONDARY CRUSHING:

Maximum Tons Crushed Per Year _____ *Tons*

Maximum Tons Crushed Per Hour _____ *Tons*

Hours of Crushing Per Day _____ *Hours*

Proposed Controls (see above) _____

D. *RESCREENING/CLASSIFYING:* None

Maximum Tons Screened Per Year _____ *Tons*

Maximum Tons Screened Per Hour _____ *Tons*

Hours of Rescreening Per Day _____ *Hours*

Proposed Controls (see top of page 6) _____

VII. CONVEYORS/TRANSFER POINTS None

A. *CONVEYORS:*

Tons of Material Conveyed Per Year _____ *Tons*

Tons of Material Conveyed Per Day _____ *Tons*

Proposed Controls _____

Controls for Conveyors Include: Full Enclosure, Partial Enclosure, Other (specify), No Control

(Indicate on a separate diagram how conveyor system is set up)

B. *TRANSFER POINTS:*

Number of Transfer Points _____

Proposed Controls _____

Controls for Transfer Points Include: Full Enclosure, Partial Enclosure, Water Sprays, Chemical Suppresants, Other (specify), No Controls

A. LOADING IN TO FINISHED PRODUCT STOCKPILE:

Method of Loading In (Front-End Loader, Conveyor, etc.)

_____

If Conveyor is Used, What is Maximum Drop Height? _____ Ft.

Loading Schedule: _____ tons/hr., _____ hrs./day, _____ days/year.

Proposed Controls _____

Controls for Loading to Stockpile Include: Water Sprays, Total Enclosure, Partial Enclosure, Chemical Suppressants, Reduced Drop Height, Telescoping Chute, Other (specify) No Control

B. FINISHED PRODUCT STOCKPILE:

Maximum Tons Stored at One Time _____ Tons

Length of Time Pile Remains Undisturbed _____

Proposed Controls: (check appropriate boxes)

/_/ Watering _____ Times/Day, or _____ Continuous Sprinkler (to maintain moist surface)

/_/ Chemical Stabilizer (Applied According to Manufacturer's Specifications)

/_/ Compacting of Piles, Method _____

/_/ Enclosures: _____ Complete, or _____ Partial (check one)

/_/ Revegetation, (Length of Time Till Revegetation _____)

/_/ Other (specify) _____

/_/ No Control

C. LOADING OUT FROM STOCKPILE FOR FINAL TRANSPORT:

Method of Loading Out (Front-End Loader, Conveyor, etc.)

_____

If Conveyor is Used, What is Maximum Drop Height? _____ Ft.

Loading Schedule: _____ tons/hr., _____ hrs./day, _____ days/year.

Proposed Controls _____

Controls for Final Loadout Include: Water Sprays, Total Enclosure, Partial Enclosure, Moist Material, Other (specify), No Control

CONTROL MEASURES FOR VEHICLE HAUL ROADS:

(do not write in this section)

1. *Watering (specify) _____ times/day to maintain moist surface*

2. *Chemical Stabilization*
   (according to manufacturer's specifications)

   Specify:
   a. *Frequency of application and*
   b. *Type of Stabilizer (Brand Name, or Composition)*

3. *Paving to be completed by _____ (date).*

4. *Gravel*

5. *No Control*

(List Haul Road Controls in the appropriate spaces below)

A. *TRANSPORT OF RAW MATERIAL FROM REMOVAL SITE TO STOCKPILE:*

Distance (one way) _____

If Stockpile is Off Site, Give Distance From Removal Site to Mine Entrance

Haul Vehicle Capacity _____ *No. of Wheels* _____

Average Vehicle Speed _____ *M.P.H. (cannot exceed 30 m.p.h)*

No. of Trips Per Day _____

Haul Road Silt Content (if known) _____%

List Controls For Raw Materials Transport: (See Control Measures Above)

Proposed Controls: _____

B. FINISHED PRODUCT TRANSPORT (ON SITE):

1. Haul Trucks: Maximum

Capacity	Empty Weight	No. of Trucks	No. of Wheels	No. Trips Per Day	Avg. Speed ON SITE
1. 18 yds.	32,000	10	18	30	5 mph
2. yds.					mph
3. yds.					mph
4. yds.					mph

2. Haul Road Information For Final Transport

On-Site Haul Roads Distance (one way) 1000'

Haul Road Silt Content (if known) _____%

List Controls For Finished Product Transport: (See Control Measures Page 9)

Proposed Controls: Water as necessary

C. Other Roads On-Site:

What is Road Used for?	Length of Road?	(Distance) From	To	Controls (See Page 9)
1.				
2.				
3.				

D. OFF SITE UNPAVED ROADS:

Distance (one way) 2.5 miles

Average Vehicle Speed 25 M.P.H.

No. of Trips Per Day 30

Haul Road Silt Content (if known) _____%

List Controls For Off-Site Unpaved Roads: (See Control Measures Page 9)

Proposed Controls: County maintains roads and dust abates as required in front of homes along road.

XI. SITE DISTURBANCE

Estimated Total Disturbed Acreage Subject to Wind Erosion 45 Acres

Maximum at any one time is 10 acres

Proposed Controls: (check appropriate boxes)

/x/ Restrict Traffic to Established Roads Where Practicable

/x/ Minimize Area of Disturbance (explain) 10 acres at any one time

/x/ Revegetation With: Each phase will be reclaimed as phase is completed

Time till Revegetation Within 6 months

/ / Mulch

/x/ Watering _____ Times/Day, or Continuous Sprinkler As needed
(to maintain moist surface)

/ / Chemical Stabilizers

/ / Other (specify) _____

/ / No Control

Comments: The material is mined in a moist conditions and is very sandy.

Mail completed form and $40.00 filing fee to:

Colorado Department of Health
Air Pollution Control Division
4210 East 11th Avenue
Denver, Colorado 80220

(303) 331-8576

(APC-NM/dp-1 5/20/87)

CONSTRUCTION AGGREGATE
INDUSTRIAL WASTEWATER DISCHARGE APPLICATION

FOR AGENCY USE

APPLICATION NUMBER

/ / / / / / / / / / / /

DATE RECEIVED

/ / / / / / / /

YEAR MONTH DAY

Do not attempt to complete this form before reading the accompanying instructions.

PLEASE PRINT OR TYPE

NEW x OR RENEWAL _____ (existing permit No. _____)

1. Name, address, and telephone number of the owner of the facility producing discharge.

Property owner(s) Sand Creek Farms, Inc.

Telephone Number (303) 622-9491 or 220-8618

Mailing Address 6312 Fiddler's Green Circle, #535-N

Street Address Same as above

City Englewood, State Colorado

County Arapahoe Zip Code 80111

Name of operation Sand Creek Mine

Local contact(familiar with process) Bob Fleming

Telephone Number (303) 450-2204

2. Is the facility operated other than by the owner? ____ YES x NO

If YES, complete the following:

Operator _____

Mailing Address _____

Street Address _____

City _____ State _____

County _____ Zip Code _____

Name of Operation _____

Local Contact _____

Telephone Number ( ) _____

Also, on the back side of this page describe the relationship, agreements and time frame of any agreement.

3. Specify whether owner or operator is making application for the permit.

Both are the same.

4. Location of Operation

Legal description: (Township, Range, 1/4 Section) T3S, R61W, Sec.3, SE 1/4

Street 1/4 mile of Calhoun-Byers (Bijou Road) on 64th Ave. alignment

City 7 miles north of Byers State Colorado

County Adams Zip Code

5. Indicate the type of operations at the facility; sand & gravel mining, washing, and/or crushing. List principal products and months of operation. Please specify what type of discharge, if any, will be associated with each operation; pit dewatering, wash waters, transport waters, or other processes used. Sand washing, mainly during summer months. Water from deep well will be used to wash sand extracted from dry creek bed. Water will discharge to settling pond

6. Do you anticipate the need for changing or adding the discharge point(s) as mining progresses? If so, briefly explain. Yes, area will be mined in 10 acre phases. Settling pond may be moved with each phase. There will be no direct discharge into creek bed.

7. A location map designating the facility property and discharge points shall be submitted. The map shall be from a 7-1/2 or 15 minute USGS quad sheet or a map of comparable scale. A north arrow shall be shown. Any public water supply intakes within a 5 mile downstream of the facility shall also be identified, if known.

8. A legible general sketch of the site shall be submitted and include appurtenant facilities (buildings, ponds, diversion ditches, stockpiles, etc.), stream location, numbered discharge points, sampling and flow monitoring points. Sketch shall be on paper 8 1/2 x 11 inches. Please label the outfalls on the sketch to correspond with numbers listed in Table 9A. See MLRB Application Exhibit C - PreMining and Mining Plan Map attached.

9. Do you have bulk storage of diesel fuel, gasoline solvents or other hazardous materials on site? _____ YES __x__ NO If yes, then indicate location on general sketch map (8).

10. Optional: You may attach additional sheets describing any additional water pollution control programs (such as Mined Land Reclamation Stipulations) which may affect your discharge.

A copy of the mining and excavation plan submitted to the MLRB and the County is attached.

11. Will flocculants (settling agents or chemical additives) be used to treat water prior to discharge? ___ YES __x__ NO

If YES, specify chemical used. _____

_____

12. Estimated life of the activity from which the discharge(s) identified in (9) originate. __10__ Years.

13. Please describe all stormwater discharges which are not currently permitted. This includes drainages from plant yards, roads and rail lines used for bringing materials to and hauling materials from plant site, material handling sites, refuse sites, sites where wastewaters and disposed sites used for the storage and maintenance of material handling equipment, sites for residual treatment storage or disposal, shipping and receiving areas, manufacturing building and storage areas. The description should define the drainage area and the receiving stream or stormwater sewer system (if not owned by permittee) receiving the discharge. A map is prefered.

None, the pit is presently not in operation. The only other discharge would be from stormwater coming in contact with the active sand mining area. The material is directly excavated from the dry creek bed with a front-end loader or backhoe. Some of the material will be washed, some not. No other processing is involv

14. Please describe all present and proposed best management practices to be used at the site. Include a map showing the location of structural controls.

The proposed controls consist of small berms around the active mining area and sedimentation ponds to prevent stormwater and wash water from directly entering the stream bed. The stream bed is dry most of the time and only runs occasionally after storm events in the spring and summer months.

15. Please include any existing quality data on stormwater discharges.

None exists to our knowledge.

16. Is this application for stormwater discharges only?

Yes ____ Go to item 21
No __x__ Continue

17. Analytical data for the following parameters unless exempted shall be submitted from at least one sampling of each discharge point. See instructions. If no water is currently available for analysis, so indicate.

_____ Alkalinity (mg/l) _____ pH (s.u.)

_____ Total Dissolved Solids (mg/l) _____ COD (mg/l)

_____ Total Suspended Solids (mg/l) _____

_____ Oil and Grease (mg/l) _____

_____ x _____ No water to analyze at this time.

The Division may request analysis of other parameters once the application has been reviewed.

18. Is or will land application of any wastewater be practiced for purposes other than reclamation or dust control? ___ YES _x_ NO

If YES, identify disposal area, specify acreage, quality and quantity of water, method of application, seasonal operation, pretreatment.

19. Method of flow measurement for each discharge (i.e. 90 v-notch weir, pump capacity, parshall flume, etc.). Designate whether currently installed or proposed.

None is proposed at this time.

20. For each outfall provide, on Table A, a description of: (1) All operations contributing wastewater to the effluent, including water associated with crushing or washing, sanitary wastewater, groundwater and stormwater runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater plus an identification of chemical additives. Continue on additional sheets if necessary.

21. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

1.) Wayne Pipkin President — 7/22/92

A. SIGNATURE OF OWNER(s) — B. DATE SIGNED

Wayne Pipkin — President

C. NAME (PRINTED) — D. TITLE

Sand Creek Farms, Inc.

2.) Wayne Pipkin President — 7/22/92

A. SIGNATURE OF OPERATOR — B. DATE SIGNED

Wayne Pipkin — President

C. NAME (PRINTED) — D. TITLE

Sand Creek Farms, Inc.

TABLE A

1. OUTFALL NUMBER	2. OPERATIONS CONTRIBUTING FLOW		3. TREATMENT			4. RECEIVING WATER
	a. OPERATION	b. AVERAGE	DESCRIPTION	DESIGN FLOW *	MAXIMUM FLOW	
001	50 gallons per minute	4 million gallons per year	Settling	800,000 gallons		Sand Alluvium West Bijou Creek

* IF SEDIMENT POND, APPROXIMATE VOLUME OF WATER

EXHIBIT O - SOURCE OF LEGAL RIGHT TO ENTER

SOURCE OF LEGAL RIGHT TO ENTER

As owner of the affected property and future operator of the mining operation proposed, this applicant has a legal right to enter and initiate a mining operation on the affected land herein.

EXHIBIT P

OWNERS OF RECORD OF AFFECTED LAND AND MINED SUBSTANCE

OWNERS OF RECORD OF AFFECTED LAND
AND
OWNERS OF SUBSTANCE TO BE MINED

The owner of record of the affected land herein is Sand Creek Farms, Inc.

The owner of any and all substances to be mined from the affected land herein is Sand Creek Farms, Inc.

EXHIBIT Q - MUNICIPALITIES WITHIN 2 MILES

MUNICIPALITIES WITHIN TWO MILES

The applicant herein states that there are no municipalities located within a two mile radius of the affected land herein.

EXHIBIT R - PROOF OF MAILING AND RECEIPT OF NOTICES

BOARD OF COUNTY COMMISSIONERS

SOIL CONSERVATION DISTRICT

Allen J. Kincaid

Attorney at Law

Suite 535N
6312 South Fiddler's Green Circle
Englewood, CO 80111
(303) 220-8618

Brush
(303) 842-5806
Loveland
(303) 669-1092
FAX
(303) 220-8675

March 10, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
Board of Adams County Commissioner
450 South 4th Avenue
Brighton, Colorado 80601

Greetings:

RE: Sand Creek Farms, Inc.
Application for
Colorado Mined Land Reclamation Permit

In accordance with the requirements of making an application for a reclamation permit, enclosed please find a Notice of Filing Application directed to your agency.

If any further information is necessary, please do not hesitate to contact the undersigned.

Very truly yours,

ALLEN J. KINCAID

AJK:rb
Enclosure

IDER:
mplete items 1 and/or 2 for additional services.
mplete items 3, and 4a & b.
nt your name and address on the reverse of this form so that we can
this card to you.
tach this form to the front of the mailpiece, or on the back if space
not permit.
ite "Return Receipt Requested" on the mailpiece below the article number.
e Return Receipt Fee will provide you the signature of the person delivered
d the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Board of County
Commissioners
450 South 4th Avenue
Brighton, CO 80601

4a. Article Number
P 733 613 933

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
MAR 16 1992

8. Addressee's Address (Only if requested and fee is paid)

Signature (Addressee)

Signature (Agent)
KB

Form 3811, November 1990 *U.S. GPO: 1991—287-066 **DOMESTIC RETURN RECEIPT**

P 733 613 933
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Board of County Commissioners
Street and No.	450 South 4th Avenue
P.O. State and ZIP Code	Brighton CO 80601
Postage	$ .52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	1.00
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$2.52
Postmark or Date	MAR 16 1992

PS Form 3800, June 1985

LAW OFFICES OF
Allen J. Kincaid
Attorney at Law

Suite 535N
6312 South Fiddler's Green Circle
Englewood, CO 80111
(303) 220-8618

Brush
(303) 842-5806
Loveland
(303) 669-1092
FAX
(303) 220-8675

March 10, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
East Adams Soil
Conservation District
PO Box 331
Byers, Colorado 80103

Greetings:

RE: Sand Creek Farms, Inc.
Application for
Colorado Mined Land Reclamation Permit

In accordance with the requirements of making an application for a reclamation permit, enclosed please find a Notice of Filing Application directed to your agency.

If any further information is necessary, please do not hesitate to contact the undersigned.

Very truly yours,

ALLEN J. KINCAID

AJK:rb
Enclosure

)ER:
plete items 1 and/or 2 for additional services.
plete items 3, and 4a & b.
your name and address on the reverse of this form so that we can this card to you.
ch this form to the front of the mailpiece, or on the back if space ot permit.
"Return Receipt Requested" on the mailpiece below the article number.
Return Receipt Fee will provide you the signature of the person delivered the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

rticle Addressed to:
st Adams Soil
Conservation District
O Box 331
yers, Colorado 80103

4a. Article Number
P 733 613 932

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
MAR 16 1992

inature (Addressee)
inature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

m 3811, November 1990 ★U.S. GPO: 1991—287-066 DOMESTIC RETURN RECEIPT

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	East Adams Soil Conservation District
Street and No.	PO Box 331
P.O. State and ZIP Code	Byers, CO 80103
Postage	$ .52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	1.00
Return Receipt showing to whom Date, and Address of Delivery	
TOTAL Postage and Fees	$ 2.52
Postmark or Date	MAR 1992

PS Form 3800, June 1985

EXHIBIT S - PROOF OF FILING WITH CLERK AND RECORDER

PROOF OF ORIGINAL FILING

PROOF OF FILING REVISED FILING

Allen J. Kincaid
Attorney at Law

Suite 535N
6312 South Fiddler's Green Circle
Englewood, CO 80111
(303) 220-8618

Brush
(303) 842-3206
Loveland
(303) 669-1092
FAX
(303) 220-8675

March 19, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
Robert Sack
Adams County Clerk and Recorder
450 South 4th Avenue
Brighton, Colorado 80601

Dear Ms. Sack:

RE: Sand Creek Farms, Inc.
Application for
Colorado Mined Land Reclamation Permit

In accordance with the requirements involved in the application for a mining/reclamation permit, enclosed please find a copy of the proposed application to be submitted. It is my understanding that your office will hold the application for public inspection until such time as the application has been heard by the Board.

If any further information is necessary, please do not hesitate to contact the undersigned.

Very truly yours,

Allen J. Kincaid

ALLEN J. KINCAID

AJK:rb
Enclosure

DER:
plete items 1 and/or 2 for additional services.
plete items 3, and 4a & b.
your name and address on the reverse of this form so that we can
his card to you.
ch this form to the front of the mailpiece, or on the back if space
t permit.
"Return Receipt Requested" on the mailpiece below the article number.
Return Receipt Fee will provide you the signature of the person delivered
the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

rticle Addressed to:

Bert Sack
Adams County Clerk:
Recorder
450 South 4th Ave
Brighton, CO 80601

4a. Article Number
P 733 613 935

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Deliv MAR 2 0 1992

8. Addressee's Address (Only if requested and fee is paid)

gnature (Addressee)

gnature (Agent) Clerk and Recorder Courier
Adams County

rm 3811, November 1990 ★U.S. GPO: 1991—287-058 DOMESTIC RETURN RECEIPT

P 733 613 935
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Robert Sack, Adams County Clerk: Recorder	
Street and No. 450 South 4th Ave	
P.O. State and ZIP Code Brighton, CO 80601	
Postage	$2.90
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$4.90
Postmark or Date	MAR 19 1992 USPS

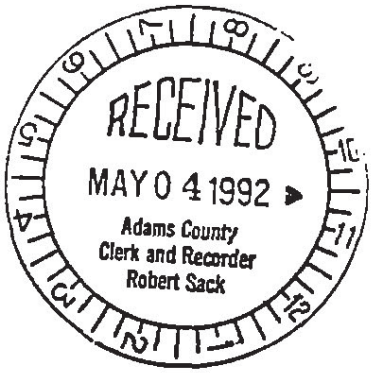
PS Form 3800, June 1985

To Whom It May Concern:

The Revised MLRB 112 application for Sand Creek Farms, Inc. to excavate portions of property located in the SE 1/4 of Section 3, Township 3 South, Range 61 West in Adams County, Colorado has been left in the Office of the Adams County Clerk and Recorder for public inspection.

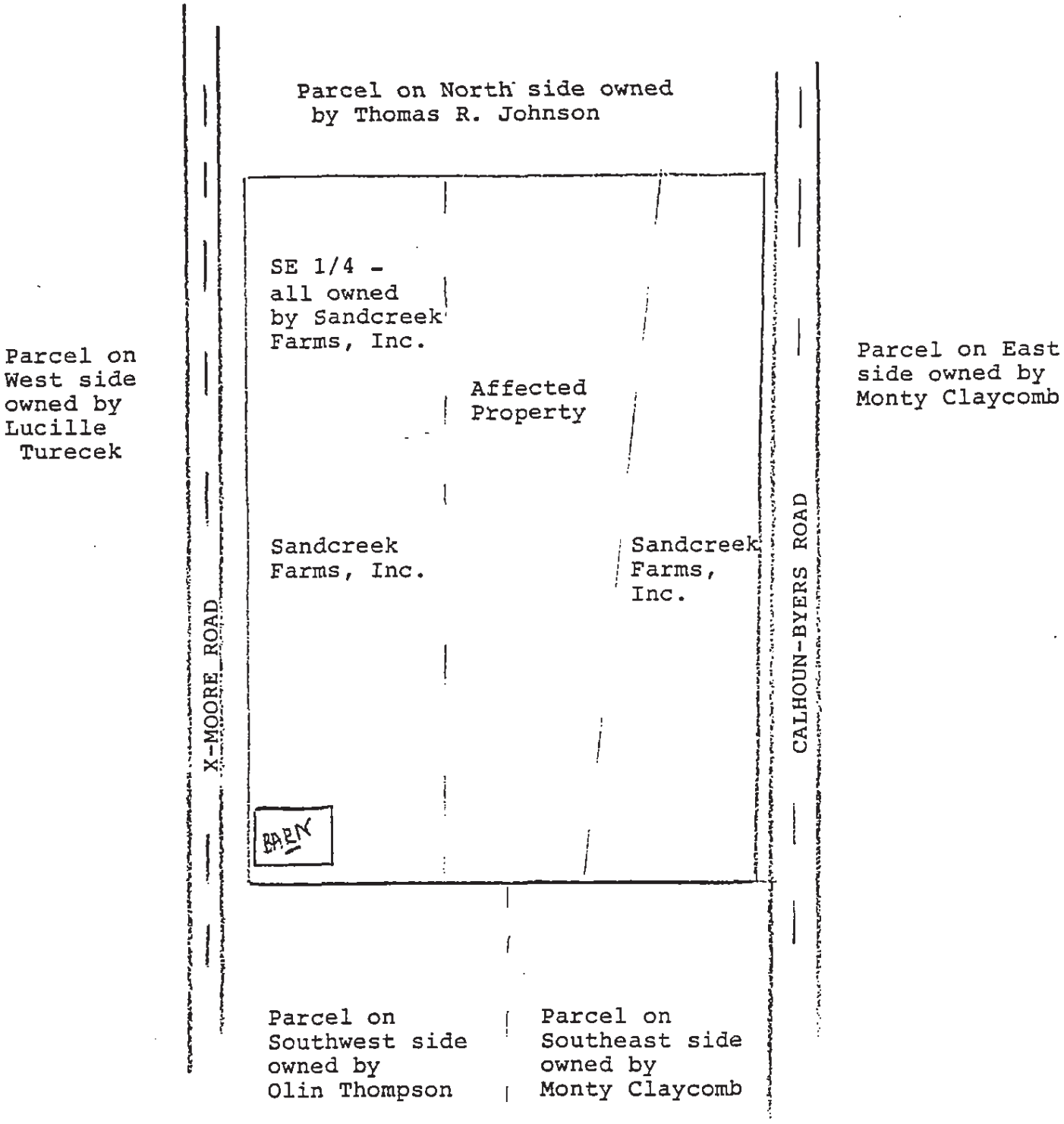
Date: _____

By: _____



PROOF OF NOTICE TO ADJACENT PROPERTY OWNERS

of property to that of affected property.



SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Monty F. Claycomb
2006 S. Newark Way
Aurora CO 80014

4a. Article Number
P 346 004 405

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
4-6-92

5. Signature (Addressee)
Dorothy J. Claycomb

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, November 1990 *U.S. GPO: 1991—287-066 DOMESTIC RETURN RECEIPT

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive following services (for an fee):
1. ☐ Addressee's Add
2. ☐ Restricted Delive

Consult postmaster for fe

3. Article Addressed to:
Olin Thompson
North D Byers
Byers, CO 80103

4a. Article Number
P 733 613 93

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receip Merchandise

7. Date of Delivery
4-06-92

5. Signature (Addressee)

8. Addressee's Address (Only if req and fee is paid)

6. Signature (Agent)
Kathleen K. Thompson

PS Form 3811, November 1990 *U.S. GPO: 1991—287-066 DOMESTIC RETURN RE

P 346 004 405
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Monty F. Claycomb
Street and No.	2006 S. Newark Way
P.O., State and ZIP Code	Aurora CO 80014
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

PS Form 3800, June 1985 U.S.G.P.O. 1989-234-555

P 733 613 939
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Olin Thompson
Street and No.	North D Byers
P.O., State and ZIP Code	Byers CO 80103
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

PS Form 3800, June 1985

), June 1985 ☆U.S.G.P.O. 1989-234-555

P 346 004 406

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Lucille Turecek
Street and No.	East 2 Byers
P.O., State and ZIP Code	Byers Co 80103
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$

PS Form 3800, June 1985

P 733 613 937

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Thomas R. Johnson
Street and No.	
P.O., State and ZIP Code	Byers CO 80103
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Lucille Turecek
East 2 Byers
Byers Co 80103

4a. Article Number
P 346 004 406

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
APR 03 1992

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, November 1990 ☆U.S. GPO: 1991—287-068 **DOMESTIC RETURN RECEIPT**

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Thomas R. Johnson
Byers, Co 80103

4a. Article Number
P 733 613 937

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
APR 8 1992

5. Signature (Addressee)
Tommy Johnson

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, November 1990 ☆U.S. GPO: 1991—287-068 **DOMESTIC RETURN RECEIPT**

PUBLIC NOTICE

Sand Creek Farms, Inc., 6312 South Fiddler's Green Circle, Suite 535-N, Englewood, Colorado 80111, phone: (303) 220-8618, has filed an application for a Mining and Reclamation permit with the Colorado Mined Land Reclamation Board under provisions of the Colorado Mined Land Reclamation Act. The proposed mine is known as the Sand Creek Mine, and is located near the South Half of Section 3, Township 3 South, Range 61, West of the 6th Principle Meridian.

The proposed date of commencement will be upon approval of the application filed with the Division as set forth above and the proposed date of completion will be ten years from the date of the permit which may be issued or sooner in the event the supply of sand to be mined is exhausted. The proposed future use of the land is to return the land to its original state, to-wit, riverbottom land. Additional information and tentative decision date may be obtained from the Mined Land Reclamation Division, 1313 Sherman Street, Room 215, Denver, Colorado 80203, (303) 866-3567, or the Adams County Clerk and Recorder, 450 South 4th Avenue, Brighton, Colorado 80601, or the above-named applicant.

Written comments must be received by the Mined Land Reclamation Board by 5:00 p.m. on May 11, 1992.

Allen J. Kincaid

Attorney at Law

Suite 535N
6312 South Fiddler's Green Circle
Englewood, CO 80111
(303) 220-8618

Brush
(303) 842-5806
Loveland
(303) 669-1092
FAX
(303) 220-8675

April 1, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
Monty F. Claycomb
2006 S. Newark Way
Aurora, Colorado 80014

Dear Mr. Claycomb:

RE: Application for Mining and Reclamation Permit
Sand Creek Farms, Inc.

In accordance with the rules and regulations governing the application for a mining and reclamation permit, it is necessary to give the adjoining landowners notice that such an application has been filed. We are therefore enclosing a copy of the Public Notice which has been sent for publication to the Eastern Colorado News concerning the application recently submitted by Sand Creek Farms, Inc.

If you have any questions or need further information, please do not hesitate to contact the undersigned.

Very truly yours,

ALLEN J. KINCAID

AJK:rb
Enclosure

Allen J. Kincaid

Attorney at Law

Suite 535N
6312 South Fiddler's Green Circle
Englewood, CO 80111
(303) 220-8618

Brush
(303) 842-5806
Loveland
(303) 669-1092
FAX
(303) 220-8675

April 1, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
Lucille Turecek
East of Byers
Byers, Colorado 80103

Dear Ms. Turecek:

RE: Application for Mining and Reclamation Permit
Sand Creek Farms, Inc.

In accordance with the rules and regulations governing the application for a mining and reclamation permit, it is necessary to give the adjoining landowners notice that such an application has been filed. We are therefore enclosing a copy of the Public Notice which has been sent for publication to the Eastern Colorado News concerning the application recently submitted by Sand Creek Farms, Inc.

If you have any questions or need further information, please do not hesitate to contact the undersigned.

Very truly yours,

ALLEN J. KINCAID

AJK:rb
Enclosure

Allen J. Kincaid

Attorney at Law

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6312 South Fiddler's Green Circle
Englewood, CO 80111
(303) 220-8618

Brush
(303) 842-5806
Loveland
(303) 669-1092
FAX
(303) 220-8675

April 1, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
Olin Thompson
North of Byers
Byers, Colorado 80103

Dear Mr. Thompson:

RE: Application for Mining and Reclamation Permit
Sand Creek Farms, Inc.

In accordance with the rules and regulations governing the application for a mining and reclamation permit, it is necessary to give the adjoining landowners notice that such an application has been filed. We are therefore enclosing a copy of the Public Notice which has been sent for publication to the Eastern Colorado News concerning the application recently submitted by Sand Creek Farms, Inc.

If you have any questions or need further information, please do not hesitate to contact the undersigned.

Very truly yours,

ALLEN J. KINCAID

AJK:rb
Enclosure

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(303) 220-8618

Brush
(303) 842-5806
Loveland
(303) 669-1092
FAX
(303) 220-8675

April 1, 1992

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
Thomas R. Johnson
Byers, Colorado 80103

Dear Mr. Johnson:

RE: Application for Mining and Reclamation Permit
Sand Creek Farms, Inc.

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If you have any questions or need further information, please do not hesitate to contact the undersigned.

Very truly yours,

ALLEN J. KINCAID

AJK:rb
Enclosure

PROOF OF LEGAL PUBLICATION

the

EASTERN COLORADO NEWS

A Weekly Community Newspaper

Legal newspaper for Adams County & the Town of Bennett

P.O. Box 555 Strasburg, Colo. 80136 622-4417

PUBLISHER'S AFFIDAVIT

STATE OF COLORADO,)
) ss.
COUNTY OF ADAMS)

"I, **James M. Adkins Sr.**, publisher (or printer) of the ***Eastern Colorado News*** , a weekly newspaper, printed and published in the county of Adams and state of Colorado, do hereby certify that the foregoing notice was published in said newspaper, and that copies of each number of said paper in which said notice and/or list(s) were published were delivered by carriers or transmitted by mail to each of the subscribers of said paper, according to the accustomed mode of business in this office.

James M. Adkins Sr.

Publisher (or Printer) of the ***Eastern Colorado News***

STATE OF COLORADO,)
) ss.
County of Arapahoe)
The above certificate of publication was subscribed and sworn to before me by the above named James M. Adkins Sr., who is personally known to me to be the identical person described in the above certificate, on the

31 day of July, A.D. 1992

Notary Public
P. O. Box 536, Strasburg, Colorado 80136

My commission expires 11-5-93

LEGAL NOTICES

PUBLIC NOTICE

Sand Creek Farms, Inc., 6312 South Fiddler's Green Circle, Suite 535-N, Englewood, Colorado 80111, phone: (303) 220-8618, has filed an application for a Mining and Reclamation permit with the Colorado Mined Land Reclamation Board under provisions of the Colorado Mined Land Reclamation Act. The proposed mine is known as the Sand Creek Mine, and is located near the South Half of Section 3, Township 3 South, Range 61, West of the 6th Principle Meridian.

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Written comments must be received by the Mined Land Reclamation Board by 5 p.m. on May 11, 1992.

Published in the
Eastern Colorado News
April ^, 9,16,23 1992

OTHER INFORMATION

Report on Floodway/Floodplain and Erosion

Letter from Corp of Engineers

Letter from Tri-County Health

MATRIX ENGINEERS, INCORPORATED

Civil Engineering
Structural Engineering
Land Surveying

1066 West 102nd Avenue
Northglenn, Colorado 80221
Phone (303) 452-5516

Member
American Consulting
Engineers Council

June 8, 1992

Mr. Robert Fleming
ADCO Consulting
2090 E. 104th Avenue, #305
Thornton, Colorado 80233

Re: Sand Creek Farms, Adams County Case # 49-92 C
Staff Comments Dated 6/5/92

Dear Bob:

As per your request, I have reviewed your submittal in the above referenced case and the Planning Staff concerns relating to drainage and floodplain issues, and would have the following response to their concerns:

1. Stockpiles of material can occur in the floodplain area of a watercourse. Witness the County's own sand and gravel mining operation at the Adams County Fairgrounds, where stockpiles are obviously in the floodplain area. What is important, is that stockpiles be located outside of the floodway area and in the flood storage area be oriented in such a manner as to not cause diversion of storm water onto other properties during flooding events.

   The floodplain area of West Bijou Creek is delineated on FIRM Map panel 235 for Adams County. This FIRM map does not delineate between the floodway and flood storage area, but the 100'± area you show on your reclamation plan should be more than sufficient to cover the probable floodway area of West Bijou Creek. In this 100' area no stockpiles should be allowed. Outside of this area, stockpiles should be oriented in a north-south alignment, since most of the mining area is located within the delineated floodplain area.

2. In regard to the probability of upstream headcut, there is no logical comparison between the conditions of this application and West Bijou Creek, and those which occur on the South Platte River. West Bijou Creek is an intermittent stream that may only flow once or twice a year, and some years not at all in some locations. Even when it does flow, the maximum water conveyed is probably in the hundreds or low thousands cubic feet per second for a very limited period of time, usually less than a day. The South Platte flows continually and can flow at over twenty to thirty thousand cubic feet per second in the spring time for weeks at a time. Even for the South Platte River, a request for identification of structures, etc. for four miles upstream and downstream would be excessive.

Generally, where headcutting is a concern, identification for a mile upstream only, or to the first structure would be requested. I don't know why downstream features would be requested. Regardless, in this case headcutting, is not a logical concern.

Your plan shows a 100' setback from the south property line, mainly to protect a road that serves other portions of the same property. This setback should be more than sufficient to insure upstream property is not impacted by the operation. If some erosion does occur during the intermittent storm events, the first area to be effected would be the road, which the owner will of course restore for access to other parts of the property.

I hope this letter is sufficient to satisfy the Planning Department. You might also wish to talk with County Engineering Department on their opinion, as I believe they are the more logical County agency to have a relevant opinion on drainage issues to see if they concur with my analyses and recommendations.

Sincerely,

William W. Wilson, P.E.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
TRI-LAKES PROJECT OFFICE, 9307 STATE HWY 121
LITTLETON, COLORADO 80123-6901

REPLY TO
ATTENTION OF

May 18, 1992

Mr. Robert N. Fleming
A D C O Consulting
Cherokee Investments Inc.
2090 East 104th Avenue, Suite 305
Thornton, Colorado 80233

Dear Mr. Fleming:

This letter is to inform you that the proposed activity by Sand Creek Farms, Inc., West Bijou Creek, MLRB Application M-93-038 assigned number 199280215, will not require a Department of the Army (DA) Permit. This activity is located in Section 3, Township 3 South, Range 61 West, Adams County, Colorado.

Although a DA Permit will not be required for the project, this does not eliminate the requirement that other applicable federal, state, and local permits be obtained as required.

If there are any questions concerning this matter, please feel free to contact Mr. Terry McKee of this office at 303-979-4120 or 4121.

Sincerely,

Timothy T. Carey
Project Manager

recycled paper

Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

Hugh Rohrer, M.D., M.P.H.
Director

file
copy; app.

May 28, 1992

Mark E. Geyer
Adams County Department of Planning and Development
4955 East 74th Avenue
Commerce City, Colorado 80022-1535

RE: Sand Creek Farms
Conditional Use for sand extraction in the West Bijou Creek Drainage
Northwest corner of Calhoun-Byers Mile Road (46N) and 64th Avenue Alignment

Dear Mr. Geyer:

We have no objection to this proposal.

Since the site exceeds five acres, an CDPS construction permit for stormwater discharge will be required for construction after October 1, 1992. The Colorado Department of Health has established this deadline for the NPDES permit. The applicant should contact Sarah Plocher with the Colorado Department of Health at 331 4447, regarding this permit.

Sincerely,

Warren S. Brown, P.E.
Public Health Engineer

cc: Ken Conright, TCHD (Commerce City)

Administrative Office □ 7000 East Belleview Avenue □ Suite 301 □ Englewood, Colorado 80111-1628
303/220-9200 □ FAX 303/220-9208

MLRB APPROVAL, FINANCIAL, AND PERFORMANCE GUARANTEES

MINED LAND RECLAMATION DIVISION
Department of Natural Resources

1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor

Michael B. Long,
Division Director

August 19, 1992

Mr. Allen J. Kincaid
Sand Creek Farms, Inc.
6312 S. Fiddler's Green Circle 535-N
Engiewood, CO 80111

Re: File No. M-92-038, Sand Creek Mine, APPROVED WITH CONDITIONS, Decision Letter - Conditions, Financial and Performance Warranty Request

Dear Mr. Kincaid:

On August 11, 1992, the Mined Land Reclamation Board approved with conditions your 112 permit application. The conditions to the approval are noted below:

Stipulation No. 01

DURING FINAL RECLAMATION, SEEDING WILL BE REQUIRED ON ALL AFFECTED AREAS TWICE - ONCE IN THE SPRING AND ONCE IN THE FALL.

Financial warranty set by the Board for this operation is $4,500.00. You must submit a financial warranty in this amount and a performance warranty in order for us to issue a permit. In the event you have requested a financial warranty form, we have enclosed it in this letter. If you have not, please select a type of financial warranty from Rule 7.4. Then contact us so that we can provide you with the appropriate warranty form. We have attached a performance warranty form with this letter for your use.

PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION AFTER RECEIPT OF YOUR FINANCIAL WARRANTY AND PERFORMANCE WARRANTY.

If you have any questions, please contact me.

Sincerely,

William C. York-Fehrn
Reclamation Specialist

WCY/ern

Enclosure(s)

cc: Bob Fleming, ADCO Consulting

8903G

MINED LAND RECLAMATION DIVISION
Department of Natural Resources
1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor
Fred R. Banta,
Division Director

PERFORMANCE WARRANTY

Operator: Sand Creek Farms, Inc.

Operation: Sand Creek Mine

Permit No: M-92-038

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the Colorado Mined Land Reclamation Act, CRS as amended, 34-32-101 et seq. (the "Act"), as amended, provides that no permit may be issued under the Act until the Mined Land Reclamation Board (the "Board") receives a performance warranty (or warranties) that is a written promise to comply with all applicable requirements of the Act.

WHEREAS, Sand Creek Farms, Inc. (the "Operator"), has applied for a permit to conduct a mining operation known as Sand Creek Mine (the "Operation") on certain lands in Adams County, Colorado. These lands are described in the permit application, as amended and supplemented, and are referred to herein as the "Affected Lands".

WHEREAS, in its application for the permit, the Operator has agreed to be bound by all requirements of the Act and all applicable rules and regulations of the Board, as amended from time to time.

WHEREAS, the Board has determined, in accordance with the Act, that the estimated costs of reclamation with regard to those affected lands in Adams County which are now or may become subject to the permit are those amounts for the stated periods of time as set forth in the financial warranty, which may be amended from time to time to reflect revised estimates of said costs of reclamation.

WHEREAS, the Operator hereby gives the Board a performance warranty pursuant to Section 34-32-117(2) of the Act, and herein promises the Board that it will comply with all applicable requirements of the Act with regard to those Affected Lands.

NOW, THEREFORE, the Operator hereby promises the Board that it will comply with all applicable requirements of the Act and rules and regulations of the Board with respect to the Affected Lands.

FURTHER, the Operator hereby promises the Board that it will comply with all of the terms of the application for a permit, as amended and supplemented, as well as any conditions attached to the permit by the Board.

Further, the Operator promises the Board, pursuant to 34-32-112(1)(d) of the Act, that it has the lawful authority to enter upon the Affected Lands to conduct mining operations, including, but not limited to, reclamation. The Operator further recognizes the right of the Board to enter to reclaim lands affected by the operation.

The description of lands herein is for convenience of reference only, and no error in such description, nor any revision of the permitted mining area, nor the disturbance by the Warrantor of lands outside of the permitted mining area shall alter or diminish the Operator's obligation hereunder, which shall extend to the reclamation of all such lands disturbed.

The obligation of the Operator hereunder is such that, if the Operator shall successfully comply with the requirements of the Act, applicable rules and regulations, and the permit, then the Board, upon a finding that the Operator has so complied, shall release this performance warranty, and the Operator from its obligation hereunder, to the extent that the Board determines that such compliance has been accomplished. The obligation of the Operator hereunder shall continue until released in whole or in part by the Board in accordance with applicable law.

In further satisfaction of the requirements of the Act, the Operator has attached hereto its financial warranty, which may be amended from time to time. The Operator agrees that it will maintain a financial warranty (or warranties) for the estimated costs of reclamation in good standing for the entire life of the permit.

If the Board determines that the Operator is in default under this performance warranty and has failed to cure such default, although written notice of such default and ample time to cure such default have been given, the Operator's financial warranty shall be subject to forfeiture.

This performance warranty may be executed in multiple copies, each of which shall be treated as an original, but together they constitute only one agreement, the validity and interpretation of which shall be governed by the laws of the State of Colorado.

The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.

Signed and dated this 20th day of August, 92.

Sand Creek Farms Inc
Operator

By Wayne Rychi

NOTE: Notarization must also be completed on following page.

NOTARIZATION OF OPERATOR'S ACKNOWLEDGMENT

STATE OF Colorado)
) ss.
COUNTY OF Morgan)

The foregoing instrument was acknowledged before me this 20th day of August, 1992, by LeWayne Liptic as President of Sand Creek Farms Inc.

TAMARA LYNN MILLER NOTARY PUBLIC STATE OF COLORADO

Tamara Lynn Miller
NOTARY PUBLIC

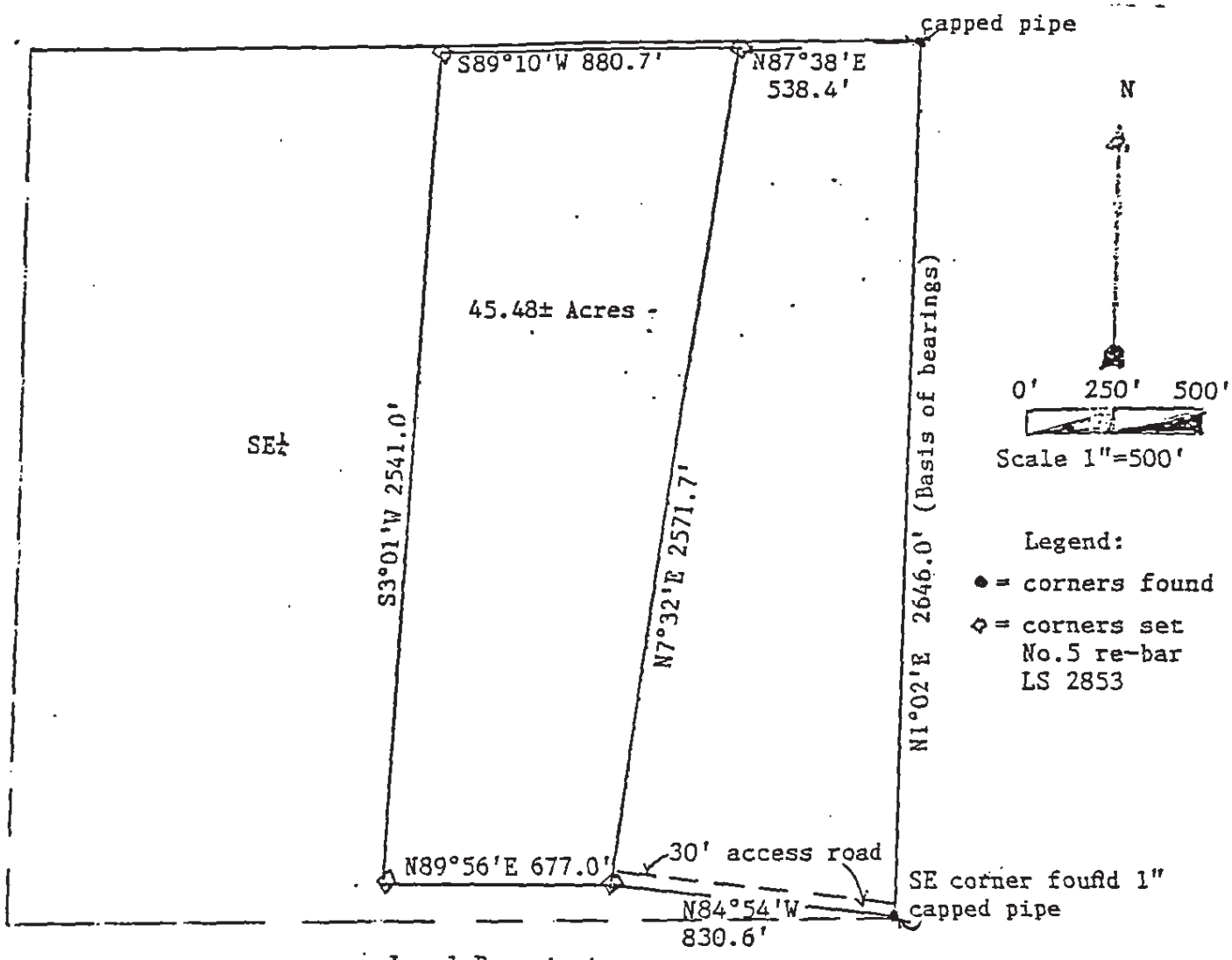
My Commission expires:
Jan. 31 1993

APPROVED:

State of Colorado
Mined Land Reclamation Division
Mined Land Reclamation Board

By _____ Date _____, ____
Director

PW(Rev. 2/86)
6427F



Legal Description

asis of Bearings: Bearings were determined based upon the East line of the SE¼ of Section 3, 3S, R61W 6th P.M. as bearing N1°02'E taken from Court re-survey notes dated 9-4-1915 with l other bearings as being relative thereto; Commencing at a point which bears N84°54'W 0.6 feet from the Southeast corner of Section 3, T3S, R61W 6th P.M. to the point of beginning, ence N7°32'E 2571.7 feet to a point which bears S87°38'W 538.4 feet from the E¼ corner of ction 3, thence S89°10'W 880.7 feet, thence S3°01'W 2541.0 feet, thence N89°56'E 677.0 feet the point of beginning.

Surveyor's Certificate

Billy G. Holloway, certify that the above plat is correct to the best of my knowledge belief.

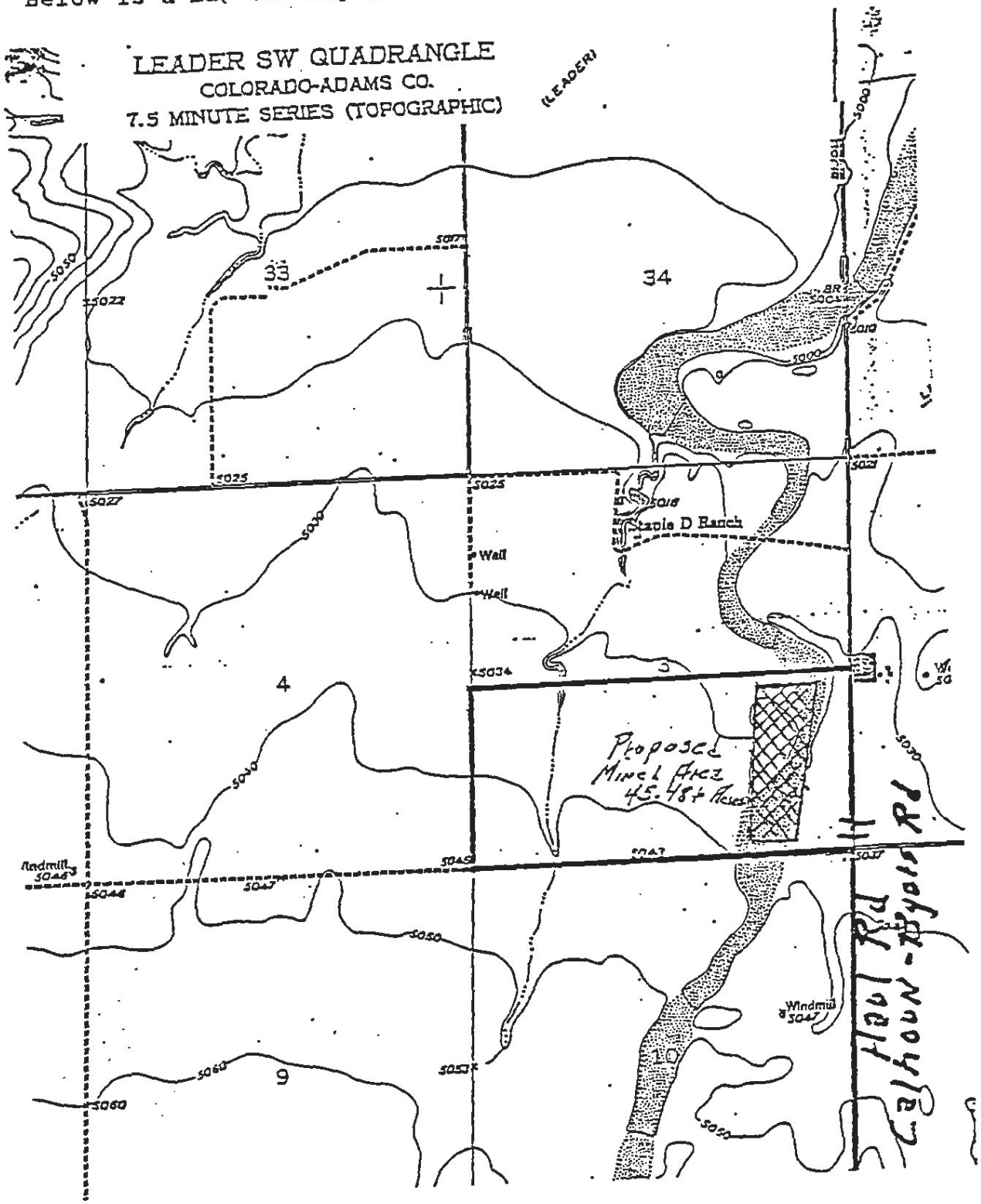
Billy G. Holloway

ember 15, 1991

Registered Land Surveyor No. 2853
State of Colorado

Location Map

Below is a map showing the location of the property.



STATE OF COLORADO

MINED LAND RECLAMATION DIVISION
Department of Natural Resources

1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor

Fred R. Banta,
Division Director

FINANCIAL WARRANTY
CERTIFICATION OF DEPOSIT

Operator Sand Creek Farms, Inc.

Operation Sand Creek Mine

Permit No. M-92-038

Bank First Security Bank - Brush

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the Colorado Mined Land Reclamation Act, C.R.S. 1973, 34-32-101, et seq. (the "Act"), as amended, provides that no permit may be issued under the Act until the Mined Land Reclamation Board (the "Board") receives a Financial Warranty (or Warranties) as described in the Act.

WHEREAS, Sand Creek Farms, Inc. (the "Operator), a Colorado corporation, has applied for a permit to conduct a mining operation known as Sand Creek Mine (the "Operation"), on certain lands in Adams County, Colorado. These lands are described in the permit application, as amended and supplemented, and are referred to herein as the "Affected Lands".

WHEREAS, in the application for the permit, the Operator has agreed to be bound by all requirements of the Act and all applicable rules and regulations of the Board, as amended from time to time.

WHEREAS, in the application for the permit, the Operator has agreed with the Board to provide for reclamation of the Affected Lands that are now, or may become, subject to the permit, as required by law.

WHEREAS, the Board has determined, in accordance with the Act, that the estimated costs of reclamation of the Affected Lands are those amounts for the stated periods of time as set forth herein. Said amount may be amended from time to time to reflect revised estimates of said costs of reclamation.

WHEREAS, the Operator, in accordance with the Act, has promised and hereby promises the Board that it will be responsible for all the estimated costs of reclamation with regard to the Affected Lands.

WHEREAS, the Board has determined that the Financial Warranty by the Operator equals the estimated costs of reclamation, as approved by the Board, with regard to the Affected Lands.

WHEREAS, as proof of its financial responsibility, the Operator has proceeded pursuant to Section 34-32-117(3)(a)(III) of the Act and has caused the First Security Bank of Brush, State of Colorado (the "Bank") to issue a Certificate of Deposit, No. [redacted], dated 8-20-1992, ____, payable to the Board in the amount of Forty-Five Hundred & 00/100 Dollars ($-4,500.00-----) for the period from 8-20-1992, ____ through 8-20-1993, ____, and has delivered it to the State, to be held by the State as proof of the Operator's financial responsibility under this Financial Warranty. The Bank is not a party to this agreement. Its obligations are set forth in its Certificate of Deposit. Nothing in this Financial Warranty diminishes or qualifies the Bank's obligations under its Certificate of Deposit.

NOW, THEREFORE, the Operator is held hereby firmly unto the State of Colorado in the amount of those sums for those periods of time as set forth herein, until this Financial Warranty is amended or released in accordance with applicable law.

The Board may, for good cause shown, increase or decrease the amount and duration of this Financial Warranty. The Operator shall have sixty (60) days after the date of notice of any such adjustment to fulfill all new requirements.

The Operator shall notify the Board immediately of any event which may impair this Financial Warranty. If the Board receives such notice, or otherwise has reason to believe that this Financial Warranty has been materially impaired, it may convene a hearing in accordance with the Act for the purpose of determining whether impairment has occurred.

The obligation of the Bank shall continue until released in writing by the Board in accordance with applicable laws specifying Financial Warranty release procedures.

The Board may present for payment any Certificate of Deposit held hereunder and convert the same to cash if the Board determines that reclamation which ought to have been performed by the Operator, or its successors or assigns, remains unperformed. No other condition precedent need be fulfilled to entitle the Board to receive the amount of any such Certificate. However, if, upon completion of such reclamation by the Board, the cost of reclamation shall be less than the amount received from the Bank, the excess shall be promptly refunded to the Operator.

The obligation of the Operator shall continue until the Board has released this Financial Warranty, or has ordered it forfeited in accordance with applicable provisions of the Act. It is understood that periods of years may necessarily be required before determination can be made that reclamation of the Affected Lands has been satisfactorily completed. It is also recognized that, as reclamation is accomplished, the amount of this Financial Warranty

may be reduced with the approval of the Board so that it reflects the then current estimated cost of the remaining reclamation of the Affected Lands. No revision, extension, or renewal of the permit or of the time allowed to complete reclamation shall diminish the Operator's obligation under this Financial Warranty.

In any single year during the life of the permit, the amount of the Financial Warranty shall not exceed the estimated cost of fully reclaiming all lands to be affected in said year, plus all lands affected in previous permit years and not yet fully reclaimed. Reclamation costs shall be computed with reference to current reclamation costs.

The amount of this Financial Warranty is based upon estimates as to the cost of reclamation, and does not operate to liquidate, limit, enlarge, or restrict the Operator's obligations to complete the reclamation, even though the actual costs thereof may substantially exceed the amount of this Financial Warranty.

This Financial Warranty shall be subject to forfeiture whenever the Board determines that any one or more of the following circumstances exist:

1. A Cease and Desist Order entered pursuant to Section 34-32-124 of the Act has been violated, and the corrective action proposed in such Order has not been completed, although ample time to have done so has elapsed; or

2. The Operator is in default under its Performance Warranty, and such default has not been cured, although written notice and ample time to cure such default has been given; or

3. The Operator has failed to maintain its Financial Warranty in good standing, as required by the Act; or

4. The Operator no longer has the financial ability to carry out its obligations in accordance with the Act.

The description of lands herein is for convenience of reference only, and no error in such description, nor any revision of the permitted mining area, nor the disturbance by the Operator of lands outside of the permitted mining area shall alter or diminish the obligations of the Operator hereunder, which shall extend to the reclamation of all such lands disturbed.

Interest on Certificates of Deposit shall not be credited to the Certificate of Deposit. The Operator shall receive all such interest.

The Operator may, from time to time, withdraw a Certificate of Deposit which is assurance hereunder if and to the extent that a substitute Certificate of Deposit is simultaneously deposited as assurance hereunder in the same amount as the Certificate withdrawn.

If this Financial Warranty applies to National Forest System lands, and if this Financial Warranty is accepted by the United States Forest Service ("U.S.F.S.") as the bond required under 36 C.F.R., 252.13, then the Operator, having requested that the Board and the U.S.F.S. accept this single Financial Warranty in lieu of the separate bonds which would otherwise be required by applicable law, hereby agrees that, notwithstanding any other provision hereof, or of law, this Financial Warranty shall remain in full force and effect until U.S.F.S. has advised the Board by written notice that the Operator's obligations to U.S.F.S., for which this Warranty is executed, have been satisfied and, until its release, has been approved by the Board.

If this Financial Warranty applies to lands under the jurisdiction of the State Board of Land Commissioners ("Land Board"), and if this Financial Warranty, in whole or in part, is accepted by the Land Board as the bond required under its applicable law and procedures, then the Operator, having requested that the State accept this Financial Warranty in lieu of the separate bonds which would otherwise be required by the Colorado Mined Land Reclamation Board or Division and by the Land Board, hereby agrees that, notwithstanding any other provision hereof, or of law, this Financial Warranty shall remain in full force and effect until the Board is notified in writing by the Land Board that the Operator's obligations to the Land Board, for which this Warranty is executed, have been satisfied and, until its release, is approved by the Board.

If all or any part of the Affected Lands are under the jurisdiction of the Bureau of Land Management, United States Department of the Interior (the "BLM"), and if, at the request of the Operator on this Financial Warranty, the BLM has, pursuant to 43 C.F.R., 3809.1-9, accepted this Financial Warranty in lieu of requiring a separate reclamation bond payable to the United States, then, notwithstanding any other provision of this Financial Warranty, or of law, the Operator hereby agrees that this Financial Warranty shall not be released until the Board is advised in writing by the BLM that the Operator's obligations to the BLM, for which this Warranty is executed, have been satisfied and, until its release, is approved by the Board.

This Financial Warranty may be executed in multiple copies, each of which shall be treated as an original, but together they constitute only one agreement, the validity and interpretation of which shall be governed by the laws of the State of Colorado.

The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.

Signed and dated this 20th day of August, 1992.

Date 8-20, 92

Sand Creek Farms Inc
Operator

By Wayne Pipkin

Title President

NOTARIZATION OF OPERATOR'S ACKNOWLEDGEMENT

STATE OF Colorado)
) ss.
COUNTY OF Morgan)

The foregoing instrument was acknowledged before me this 20th day of August, 1992, by Wayne Pipkin as President of Sand Creek Farms Inc.

TAMARA LYNN MILLER NOTARY PUBLIC STATE OF COLORADO

Tamara Lynn Miller
NOTARY PUBLIC

My Commission ~~expires~~:

Jan. 31, 1993

APPROVED:

STATE OF COLORADO
MINED LAND RECLAMATION DIVISION
MINED LAND RECLAMATION BOARD

Date _____, ____

By _____
Division Director

(Rev. 9/83)

Doc. No. 5633

STATE OF COLORADO

MINED LAND RECLAMATION DIVISION
Department of Natural Resources
1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor
Fred R. Banta,
Division Director

ASSIGNMENT OF CERTIFICATE OF DEPOSIT

TO WHOM IT MAY CONCERN:

REFERENCE: Certificate of Deposit Number [redacted]

By submission of this letter, to be attached to the above referenced Certificate of Deposit, I hereby relinquish all title and claim to said certificate, except for accrued interest against the original monies, until such time as the Mined Land Reclamation Division/Board releases the certificate. This assignment of Certificate of Deposit supersedes any signature cards that may already be on file at the bank.

Sand Creek Farms Inc
Wayne Lydia President
Operator/
Depositor of Original Monies

TAMARA LYNN MILLER NOTARY PUBLIC STATE OF COLORADO

ACKNOWLEDGMENT OF BANK
FIRST SECURITY BANK - BRUSH
P. O. Box 525
Brush, Colorado 80723
by [illegible]

Tamara Lynn Miller
NOTARY (Of Operator Signature)
Commission Expires Jan. 31, 1993

cc: Mined Land Reclamation Division
Attn: Deborah Mulloy
1313 Sherman Street, Rm 215
Denver, Colorado 80203

Note to Operator:
In the event that your bank is unwilling or unable to prepare a certificate of deposit made payable only to the Mined Land Reclamation Board, this assignment will need to be executed in the presents of a notary with a copy provided to the bank to allow only Mined Land Reclamation access to these funds.

Doc. No. 8088F

FIRST SECURITY BANK
BRUSH, COLORADO 80723

Time Certificate of Deposit

[redacted]

DEPOSIT THE FIRST SECURITY BANK Four thousand five hundred and no/100 DOLLARS

Sand Creek Farms, Inc. ADDRESS 6312 So. Fiddlers Green Circle Suite 535 N. Englewood, Co. 80111

[redacted]

INTEREST RATE	INTEREST PAYABLE/DAYS PER YEAR	DATE OF ISSUE	MATURITY DATE	AMOUNT DEPOSITED
4.00 % per annum	Quarterly/365	8-20-92	8-20-93	$ 4,500.00

This certificate is payable in current funds at maturity, or at any subsequent maturity upon surrender of this certificate properly endorsed.

☒ This certificate is NOT AUTOMATICALLY RENEWABLE and NO interest will be paid after maturity shown. Present this certificate at maturity date.

☐ This certificate shall be AUTOMATICALLY RENEWED on or within seven days after shown maturity date for an additional period of time equal to the original term unless 1.) the certificate is presented for payment on or within seven days after maturity date or unless 2.) this institution mails written notice not less then at least 10 days to shown address of the intention to redeem this certificate on the maturity date. Interest rate on automatic renewed certificates shall be paid at the rate being paid by the institution on the same category of Certificate of Deposit as, on the date of renewal, and subject to the limitations, if any, implied by Federal Regulations then applicable.

This certificate may be redeemed in whole or in part prior to maturity date only with consent of the institution and subject to EARLY WITHDRAWAL PENALTIES and only in accordance with rules and, regulations of the Federal Deposit Insurance Corporation, the Federal Reserve System, and other banking regulatory authorities.

☐ DEPOSIT INTEREST TO ACCOUNT NO. _____ ☐ MAIL CHECK ☒ ADD TO PRINCIPAL

David L Dalem
AUTHORIZED SIGNATURE

NOTICE: SUBJECT TO PENALTIES AS ON REVERSE.

One year certificate

NFS-815 (Rev. 10/88)

NOT TRANSFERABLE WITHOUT WRITTEN CONSENT OF THIS INSTITUTION

STATE OF COLORADO

MINED LAND RECLAMATION DIVISION
Department of Natural Resources

1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor

Michael B. Long,
Division Director

July 31, 1992

Mr. Allen J. Kincaid
Sand Creek Farms, Inc.
6312 S. Fiddler's Green Circle
#535-N
Englewood, Colorado 80111

RE: Sand Creek Mine, File No. M-92-038 - Adequacy Letter

Dear Mr. Kincaid:

The application for a 112 Mining and Reclamation Permit, File No. M-92-038 was deemed complete on May 12, 1992. Your application has been scheduled for a decision by the Division on August 12, 1992.

I have reviewed the application to determine whether it is adequate to meet the requirements of the Act and Regulations. The attached list details items that need clarification before the application will satisfy the applicable requirements. Please provide a response to each item prior to August 5, 1992.

The following items must be addressed by the applicant in order to satisfy the applicable requirements of C.R.S. 34-32-101 et seq. and the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board.

Adequacy Items

1. Exhibit D - You state during mining activity that the side slopes of the excavation will be no steeper than 2:1. Since the pit walls are composed of sand, how can they be stable at a 2:1 slope? How deep will you be mining and what is the thickness of the unit to be mined? How deep is the water table in the permit area?

   Have you obtained a Stormwater Discharge Permit form the Colorado Department of Health?

   How will the site be protected from erosion and sedimentation during storm water events?

2. Exhibit E - Why is no revegetation planned at the site even though the Soil Conservation Service recommends revegetation, a seed mix, seed rate, etc.?

Exhibit H - have you contacted the Division of Wildlife concerning the effects on wildlife in the area?

To adequately review your responses to the adequacy review, the Division must receive the required information by August 5, 1992. If we do not receive all the required information by that date, a new date may be set for consideration of the application as provided for under Rule 1.5(2). Also, as provided for under Rule 1.5.1 all changes and additions to the permit application must be filed with the Division, and with the County Clerk and Recorder. The applicant shall also provide the Division with an affidavit or receipt demonstrating that the change was filed with the County Clerk and Recorder not later than the close of business on the day the change was filed with the Division. Any change or addition to an application shall constitute an amended filing for purposes of determining the date for the consideration of the application by the Division, and for the deadline for a final decision on the application. Within five (5) working days of an amended filing, the Division shall set a new date for the consideration of the application.

If you have any questions, please feel free to contact me.

Sincerely,

William C. York-Feirn
Reclamation Specialist

WCY/yjb

cc: ADCO Consulting

4302F

WCY

999

ADCO Consulting

RECEIVED
AUG 05 1992
DIVISION OF
MINERALS & GEOLOGY

CHEROKEE INVESTMENTS INC.
2090 EAST 104TH AVENUE SUITE 305
THORNTON, COLORADO 80233
(303) 450-2204

July 31, 1992

Mr. Carl Mount, Reclamation Specialist
Mined Land Reclamation Division
1313 Sherman Street, #215
Denver, Colorado 80203

Re: M-92-038, Response to York-Feirn Letter of July 31, 1992

Dear Carl:

Below is the response to the questions raised in the above referenced letter:

Exhibit D

1. Per the recommendation of Roy Bell, slopes may be temporarily 2 to 1, but final slopes will be no steeper than 4 to 1. Your Department has previously received a copy of his report with its recommendations along with a revised Exhibit F (Reclamation Map), which stated the 4 to 1 maximum final slopes for reclamation.

2. The mining depth with be between 15' and 30'.

3. The depth to the water table is 40'+. I have attached a report by Judy Hamilton that was submitted to the County on water issues. This report also outlines the proposed water source for washing, as a Laramie-Fox Hills well and I have included a copy of the well permit.

4. We have obtained a copy of the Discharge permit form, and the application for a discharge permit is in process. A copy of the application is attached.

5. Erosion controls as recommended by Roy Bell will be followed. A sedimentation pond will also be constructed and its use has also been applied for in the above referenced discharge permit.

Exhibit E

1. Revegetation is proposed in accordance with Roy Bell's recommendations, outside of the 100'± dry stream bed area. This was previously stated in the previously submitted revised Exhibit F.

Exhibit H

1. The Division of Wildlife's comments, which you already have in you file, should be sufficient to demonstrate that there are no unique wildlife resources in the permit area, and that operation will have negligible effort on wildlife in the area.

I believe this adequately answers all of the concerns expressed in the July 31st letter. I also don't believe that it is necessary to re-file at the Clerk and Recorder's Office, since all of the preceding responses are simply clarifications and are more restrictive conditions than in the original submittal. Most were covered in my May resubmittal, where I did re-file in the Clerk's Office and have already submitted proof of that filing to your office.

With my letter of July 31st I submitted proof of legal publication and outlined the additional conditions the County imposed, most of which are either not under MLRB jurisdiction, or like the clarifications in this letter, are more restrictive than either the original submittal or the revised application that I submitted in May. Once again, as I mentioned in my July 31 letter, once the MLRB has approved the application the County has asked for me to provide a revised booklet incorporating all changes that took place in the process. If you'd like, I can also provide such a combined booklet to the MLRB. In this way all the involved parties would have one document that shows all of the conditions necessary for operation, which is what the County wants.

I'm addition to mailing this letter, I'm faxing a copy of it with attachments for you to review, since the July 31st letter imposed an August 5th deadline on response. I'll call you this afternoon to see if you need anything else before the 5th.

Sincerely,

Robert N. Fleming

cc: Sand Creek Farms, Inc. c/o Allen Kincaid and Wayne Pipkin (without attachments)

STATE OF COLORADO

MINED LAND RECLAMATION DIVISION
Department of Natural Resources

1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor

Michael B. Long,
Division Director

August 19, 1992

Mr. Allen J. Kincaid
Sand Creek Farms, Inc.
6312 S. Fiddler's Green Circle 535-N
Englewood, CO 80111

Re: File No. M-92-038, Sand Creek Mine, APPROVED WITH CONDITIONS, Decision Letter - Conditions, Financial and Performance Warranty Request

Dear Mr. Kincaid:

On August 11, 1992, the Mined Land Reclamation Board approved with conditions your 112 permit application. The conditions to the approval are noted below:

Stipulation No. 01

DURING FINAL RECLAMATION, SEEDING WILL BE REQUIRED ON ALL AFFECTED AREAS TWICE - ONCE IN THE SPRING AND ONCE IN THE FALL.

Financial warranty set by the Board for this operation is $4,500.00. You must submit a financial warranty in this amount and a performance warranty in order for us to issue a permit. In the event you have requested a financial warranty form, we have enclosed it in this letter. If you have not, please select a type of financial warranty from Rule 7.4. Then contact us so that we can provide you with the appropriate warranty form. We have attached a performance warranty form with this letter for your use.

PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION AFTER RECEIPT OF YOUR FINANCIAL WARRANTY AND PERFORMANCE WARRANTY.

If you have any questions, please contact me.

Sincerely,

William C. York-Fehrn
Reclamation Specialist

WCY/ern

Enclosure(s)

cc: Bob Fleming, ADCO Consulting

8903G

999

STATE OF COLORADO

MINED LAND RECLAMATION DIVISION
Department of Natural Resources

1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor

Michael B. Long,
Division Director

September 1, 1992

Mr. Allen J Kincaid
Sand Creek Farms, Inc.
6312 S. Fiddler's Green Circle 535-N
Englewood, CO 80111

Re: M-92-038, Sand Creek Mine, Permit Issuance

Dear Mr. Kincaid:

On September 01, 1992, the Mined Land Reclamation Division found Sand Creek Farms, Inc to have satisfied the applicable requirements of C.R.S. 34-32-101 et seq. for obtaining a mining and reclamation permit. Therefore, a permit is being issued. Two signed originals of the permit have been executed. We have kept one copy for our files and are enclosing one copy for your use. Please read the terms of the permit. It is your responsibility to comply with all of the terms of the permit. As a reminder, here are a few things we feel are important.

1. All of the original application materials, as amended and supplemented, are an integral part of your permit. They have been incorporated into the permit by reference. We presume that you have a copy of all of these materials; therefore, none has been enclosed with this mailing. We suggest that you keep a copy of the permit and the permit application at the mining operation as a reference for operating personnel, to help ensure compliance with the terms of the permit.

2. Changes in the mining and reclamation operations that differ from those described in the permit may require a revision to the permit. We suggest consulting the Minerals Rules and Regulations and/or contacting us to determine if a revision to the permit is necessary. Rule 1.8 pertains to Amendments, Rule 1.9 to Technical Revisions, and Rule 1.10 to Conversions.

3. On your permit anniversary date each year, September 1, you must submit an annual fee and an annual report to us. The annual fee for this permit is $550.00. Please consult Rule 3.4 for 110 Permits, and Rule 2.4 for 112 Permits, and Statute Section 34-32-116(1)(a) for 111 Permits, for the specific annual report requirements applicable to your mine.

If you have any questions, please contact me.

Sincerely,

MICHAEL B. LONG
Division Director

MBL/WCY/ern
Enclosure 9185G

STATE OF COLORADO

MINED LAND RECLAMATION DIVISION
Department of Natural Resources

1313 Sherman St., Room 215
Denver, CO 80203
303 866-3567
FAX: 303 832-8106

Roy Romer,
Governor

Michael B. Long,
Division Director

MINING AND RECLAMATION PERMIT - MINERALS OTHER THAN COAL

Permit Number: M-92-038
Type of Permit: 112

Permit Date: September 1, 1992
(Anniversary date for
annual report and fees
purposes)

THIS PERMIT is issued by the Mined Land Reclamation Board, Department of Natural Resources, State of Colorado.

RECITALS

A. Sand Creek Farms, Inc. (the "Operator") desires to conduct a mining operation known as Sand Creek Mine, for the purpose of extracting sand.

B. On August 11, 1992, the Mined Land Reclamation Board (the "Board") approved the Operator's application for this permit, fixed the amount of the financial warranty and directed that this permit be issued upon the filing with the Mined Land Reclamation Division (the "Division") of performance warranty and financial warranty (or warranties) in the amount so fixed in form and substance approved by the Division. Said warranties have been filed with the Division.

C. On August 11, 1992, the Board made the following findings:

1. The application for this permit complies with the requirements of the Colorado Mined Land Reclamation Act, C.R.S. 34-32-101 et seq., as amended, and with all applicable local, state and federal laws;

2. The operation will not adversely affect the stability of any significant, valuable, and permanent man-made structure located within two hundred feet of the Affected Land, except where there is an agreement between the Operator and the persons having an interest in the structure that damage to the structure is to be compensated for by the Operator; and

3. The proposed mining and reclamation operations can be carried out in conformance with the requirements of the Act.

D. The Operator has made a showing satisfactory to the Board: 1) that it will employ, during and after its underground mining and/or surface operations, procedures designed to minimize environmental disturbance from such operation; 2) that it will provide for reclamation of the Affected Lands appropriate to the subsequent beneficial use of such lands; and 3) that, in the event of the failure of its proposed reclamation plan, it will take whatever measures may be necessary to assure the success of reclamation of the lands affected by such operations in accordance with the Act.

E. A copy of the Operator's application, as amended and supplemented, has been approved by the Board and is, by this reference, incorporated herein.

F. The Mined Land Reclamation Board advises the Permittee that all mining operators must comply with all applicable Federal, State and County statutes, including State water law.

GRANTS, CONDITIONS AND AGREEMENTS

The Board, in reliance upon the representations and promises made in the permit application, as amended and supplemented, and the performance warranty, hereby issues a life of the mine permit to the Operator, to engage in the operations described in the application on certain lands lying in the County of Adams, State of Colorado. These lands are described in the permit application, as amended and supplemented, and are referred to herein as the "Affected Lands".

This permit is issued subject to the following conditions and agreements:

1) The Operator will be bound by all applicable requirements of the Act, and all applicable rules and regulations of the Board, as amended from time to time, the terms of the permit application, the terms of the performance warranty, and the terms of the financial warranty filed with the Division.

2) The Operator will file with the Division its annual report and fees on each anniversary date of this permit.

3) If analyses of the mining and reclamation operation and the data collected through monitoring and experimentation by the Operator or monitoring by the Division indicate that the operation will not be able to comply with the requirements of the Act and applicable rules and regulations of the Board, the Operator hereby agrees to exercise its best efforts, after consulting with the Division, to modify the plans to correct such deficiencies in the future. Such modifications may require technical revisions or amendments to the permit.

4) The Board, or its authorized representative may enter upon the lands of the operator at all reasonable times for the purpose of inspection to determine whether the provisions of the Act have been complied with pursuant to C.R.S. 34-32-121.

5) This permit may be revoked or suspended for non-compliance with the Act or applicable rules or regulations promulgated by the Board.

6) a) Pursuant to 34-32-118(5) of the Act, the Board has a right of entry to reclaim the lands affected by the operation.

b) The Board will enter the lands to perform reclamation only if the Board has determined:

i. that reclamation required by law to have been performed upon such lands has not been performed, and

ii. that financial warranty forfeiture proceedings described in the Act or similar provisions of subsequent laws, if any, have been initiated.

7) The additional stipulations set forth in the attached rider, if any, are incorporated herein by reference.

/XX/ a) Rider is attached.

/__/ b) No rider is attached.

MINED LAND RECLAMATION BOARD
COLORADO DEPARTMENT OF NATURAL RESOURCES

MICHAEL B. LONG
Division Director

MBL/WCY/ern

9185G

RIDER TO MINING PERMIT

Permit Date: September 1, 1992

Permit No: M-92-038

The following additional stipulations and conditions form an integral part of the foregoing permit:

Stipulation No. 01

DURING FINAL RECLAMATION, SEEDING WILL BE REQUIRED ON ALL AFFECTED AREAS TWICE - ONCE IN THE SPRING AND ONCE IN THE FALL.

MINED LAND RECLAMATION BOARD
COLORADO DEPARTMENT OF NATURAL RESOURCES

MICHAEL B. LONG
Division Director

MBL/WCY/ern

9185G

M-1992-038

STATE OF COLORADO

DIVISION OF MINERALS AND GEOLOGY
Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106

RECEIVED
FEB 2 2 2005
Division of Minerals and Geology

DEPARTMENT OF NATURAL RESOURCES

Roy Romer
Governor

James S. Lochhead
Executive Director

Michael B. Long
Division Director

TRANSFER OF PERMIT AND SUCCESSION OF OPERATORS APPLICATION FORM

The application for a Transfer of Permit and Succession of Operators must contain four (4) major parts: 1) an Application Form; 2) an Application Fee; 3) a Performance Warranty (attached as part of the Application Package) bearing the original notarized signature of the Successor Operator; and, 4) a replacement Financial Warranty provided by the Successor Operator, bearing an original notarized signature. To expedite processing, please provide the information in the format and order described below.

Permit #: **M-1992-038** Confidential?: **N**
Class: **Revision** Type/Seq.: **SO-1**
From: **Jones Fine Sand** TO: **DMG**
Doc. Name: **SO Sand Creek Farms, Inc. to Jones Fine Sand**
Date: **02/22/2005**
Specialist: **HHP/BDC**

I. FINANCIAL WARRANTY INFORMATIO

1. **Option A**: __X__ (Initial & Date)

I wish to WAIVE MY RIGHT to a 30-day processing time to allow the Division of Minerals and Geology to recalculate the Financial Warranty requirements.

2. **Option B**: _____ (Initial & Date)

I DO NOT WISH TO WAIVE MY RIGHT to a 30-day processing time. I hereby submit a replacement Financial Warranty for the same dollar amount as the Financial Warranty maintained by the current operator. I understand that the Division of Minerals and Geology will recalculate the required reclamation bond within 60-days from the date that the transfer is completed and the required FINANCIAL WARRANTY COULD BE SUBSTANTIALLY INCREASED at that time. As the new operator, I agree to be responsible for posting any required increase to the financial warranty for good cause shown, in a form acceptable to the Board, within 60-days of such notice.

NOV = NONE
AF Due - 09/01/2005

JONES FINE SAND CO.

Masonry Sand Hauled Anywhere at Reasonable Rates

RECEIVED
FEB 2 2 2005
Division of Minerals and Geology

February 21, 2005

Ms. Barb Chiappone
Division of Minerals & Geology
Dept. of Natural Resources
1313 Sherman St. Room 215
Denver, CO 80203

Dear Ms. Chiappone:

Jones Fine Sand is submitting, contemporaneous with this letter, a Transfer Permit and Succession of Operators Application Form concerning the Sand Creek Mine located in Adams County. A copy of the Form has been signed and notarized by a Jones Fine Sand representative and the prior owner of the property and current permittee, Sand Creek Farms Inc. As you will note from the Form, Option A under Section I, Financial Warranty Information, has been selected. It is my understanding, based on conversations between you and a Jones Fine Sand representative, that Option B is the preferred alternative in order to obtain a prompt review of the financial warranty. (The property was last inspected in October 2004 and, accordingly, it appears unlikely that any change in the financial assurance for the property would be warranted.) Accordingly, by this letter, I am advising you that Jones Fine Sand does not wish to waive its right to a 30-day processing time and requests you proceed pursuant to Option B. It is also my understanding that submittal of this letter to change our selection of options, rather than submitting a revised application form, is acceptable to the Division.

If you have any questions, please do not hesitate to call me.

Very truly yours,

Daren Palizzi

Daren Palizzi

RME:lw
Enclosure
cc: Ms. Susie Erickson
Ronald M. Eddy, Esq.

5400 Forest Street • Commerce City, Colorado 80022 • 303-289-1428

II. ADMINISTRATIVE INFORMATION:

1. Permit Number: M-92-038

2. Operation Name: Sand Creek Mine

3. **Current Permitted Operator:**

Contact Person: Wayne Pipkin

Company Name: Sand Creek Farms, Inc.

Street: P.O. Box 404

City: Byers

State: CO Zip Code: 80103

Area Code: 303 Telephone: 622-9491

4. **Successor Operator:**

Contact Person: Daren Palizzi

Company Name: Jones Fine Sand

Street: 5400 Forest St.

City: Commerce City

State: CO Zip Code: 80022

Area Code: 303 Telephone: 289-1428

IRS Tax ID No. or Social Security No.: [redacted]

5. **Application Fee:** $100.00 for Hard Rock operations; $125.00 for Construction Materials operations

Make check payable to the Division of Minerals and Geology

III. 1. Yes: X

No: _____

As the successor operator do you have a complete copy, as is available, of the approved reclamation application to include any permit modifications?

A copy of the approved application and any modifications to the permit may be purchased through the Division. Unless you specify which portions of the permit file you want copied the entire file will be copied. The Division will send the entire file, or portions you specify, to an outside vendor and you will be billed accordingly.

2. Yes: X

No: _____

Have you verified that the permit area you are assuming reclamation responsibility for is the area described in the approved permit application?

3. Yes: X

No: _____

Have you verified that you have legal right of entry to conduct mining and reclamation?

IV. RECITALS

1. On September 1, 1992 Permit Number M-92-038 was granted to Sand Creek Farms, Inc. (existing operator) ("Permittee"), pursuant to which Permittee has been conducting a mining operation in the County of Adams, State of Colorado.

2. Permittee wishes to assign the permit to Jones Fine Sand (new operator), as Successor Operator ("Successor") and Successor wishes to become Successor Permittee under the permit.

3. Successor understands that the reclamation plan (the "Plan") required by the permit and by applicable State laws and regulations has not been completed and is willing to assume full responsibility for the completion of the Plan.

V. AGREEMENTS

Permittee and Successor hereby agree, for their own benefit and for the benefit of the State, such agreements to be effective ipso facto upon the approval by the State of the transfer of the Permit from Permittee to Successor, as follows:

1. Successor has inspected the mining and reclamation operations to its entire satisfaction and is fully aware of the conditions thereof. Successor understands and accepts all of the conditions of the Permit.

2. Successor will complete the reclamation plan, and hereby assumes liability for completing such plan as to all areas heretofore disturbed, as well as to all areas hereafter disturbed. Successor will perform all of the obligations of the Permittee under the Permit which have not heretofore been performed by Permittee.

3. Successor hereby tenders to the State its attached Performance and Financial Warranties*, which are to be substituted for the Performance and Financial Warranties heretofore filed by the Permittee, effective upon the release of the latter Warranties.

4. Successor represents to the State that, to the best of its knowledge, information and belief, it is not in violation of any of the provisions of the Colorado Mined Land reclamation Act with respect to any other operation conducted by it in the State of Colorado.

Permittee and Successor hereby request the State to consent to the assignment of the Permit, to recognize Successor as Successor Operator under the Permit, and to accept the tendered substitute Performance and Financial Warranties in place of the Warranties presently on file with the State.

PERMITTEE

Sand Creek Farms, Inc.
Name of Permittee

By Wayne Pipkin
Signature of Officer

President
Title of Officer

SUCCESSOR OPERATOR

Jones Fine Sand
Name of Successor

By Daren Palizzi
Signature of Officer

V.P.
Title of Officer

NOTARY FOR PERMITTEE

State of Colorado)
)
County of Arapahoe)

The foregoing instrument was acknowledged before me this 7th day of January 2005 by Wayne Pipkin as President of Sand Creek Farms, Inc.

MARIE SCHULTZ NOTARY PUBLIC STATE OF COLORADO

Notary Public Marie Schultz
NOTARY PUBLIC
P.O. BOX 536
STRASBURG, CO 80136
My Commission Expires 11/17/08
MY COMMISSION EXPIRES

NOTARY FOR SUCCESSOR

State of Colorado)
)
County of Denver)

The foregoing instrument was acknowledged before me this 31st day of January, 2005, by Daren Palizzi as vice President of Jones Fine Sand.

MARY B. NAVRIDES NOTARY PUBLIC STATE OF COLORADO

Notary Public Mary B. Navrides
My Commission Expires
MY COMMISSION EXPIRES 08/22/2006

CONSENT OF STATE

(a) Consent is hereby granted to the transfer of the Permit referred to from **Sand Creek Farms, Inc.** to **Jones Fine Sand**.

(b) **Jones Fine Sand** is hereby recognized as Successor Operator under such Permit.

(c) The Performance and Financial Warranty substitution above proposed is hereby accepted and approved.

STATE OF COLORADO
DEPARTMENT OF NATURAL RESOURCES
MINED LAND RECLAMATION BOARD
DIVISION OF MINERALS AND GEOLOGY

By _____
Division Director

Date Executed March 3, 2005

Colorado Division of Minerals & Geology

1313 Sherman Street, Room 215
Denver, CO 80203

Sales Receipt

DATE	SALE NO.
02/22/2005	13777

SOLD TO
Jones Fine Sand Co.

CHECK# / CASH
36601

DESCRIPTION	NOTE	AMOUNT
Min: Succ of Operator	M-1992-038	125.00

Total $125.00

STATE OF COLORADO

DIVISION OF MINERALS AND GEOLOGY
Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106

COLORADO DIVISION OF MINERALS & GEOLOGY
RECLAMATION·MINING SAFETY·SCIENCE

March 3, 2005

Mr. Daren Palizzi
Jones Fine Sand
5400 Forest St.
Commerce City, CO 80022

Re: Sand Creek Mine, Permit No. M-1992-038, Succession of Operators Approval, Revision No. SO-1

Dear Mr. Palizzi:

On March 3, 2005, the Division of Minerals and Geology approved the succession of operators from Sand Creek Farms, Inc. to Jones Fine Sand for the Sand Creek Mine, Permit No. M-1992-038. Jones Fine Sand is now the permitted operator of the Sand Creek Mine, and as such, is responsible for all provisions in M-1992-038, as well as those specified in the Rules and Regulations. Sand Creek Farms, Inc. is relieved of all responsibilities concerning this operation.

Please Note:

1. All of the application materials, as amended and supplemented, are in integral part of your permit. They have been incorporated into the permit by reference. We presume that you have a copy of all of these materials, therefore, none have been enclosed with this mailing. We suggest that you keep a copy of the permit and the permit application at the mining operation as a reference for operation personnel, to help ensure compliance with the terms of the permit.

2. Changes in the mining and reclamation operations that differ from those described in the permit may require a modification to the permit. We suggest consulting the Rules and Regulations and/or contacting us to determine if a modification to the permit is necessary. Rule 1.10 pertains to Amendments, Rule 1.9 to Technical Revisions, and Rule 1.11 to Conversions.

3. On your permit anniversary date (September 1st) each year, you must submit an annual fee ($688.00) and annual report to us. Please consult the Rules, Act, and your permit for specific requirements.

The transfer of this permit does not result in the transfer of any other permit or license, with this Division, the State, or Federal Agency, which might be associated with this operation.

If you have any questions, contact me.

Sincerely,

Barbara D. Chiappone

Harry H. Posey
Senior Environmental Protection Specialist

COLORADO D MATION, MINING AND SAFETY
1313 Sherman lorado 80203 ph(303) 866-3567

TR01
JLE/mac

RECEIVED
APR 29 2019
DIVISION OF RECLAMATION MINING AND SAFETY

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- 1992-038 Site Name: Sand Creek Mine

County Adams TR# *(DRMS Use only)*

M-1992-038
Complied!
2 Minor Infractions

Permittee: Jones Fine Sand

Operator (If Other than Permittee):

Permittee Representative: Daren Palizzi

Please provide a brief description of the proposed revision:

This Technical Revision to make a minor change to the Reclamation Plan to allow backfilling a portion of the mine area that is outside the main flow channel of West Bijou Creek with inert material imported from our Commerce City sand processing facility. Also provided is the Inert Material Affidavit and Inert Fill Notice that provides more detail on the types of material and a map showing the location of the proposed fill area.

TR01
0 Violations!
JLE/mac

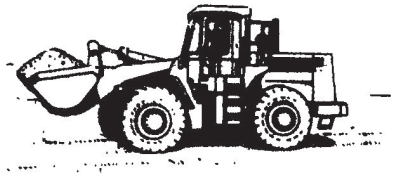
As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets 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.

Permit Type	**Required TR Fee**	**Submitted** (mark only one)
110c, 111, 112 construction materials, and 112 quarries	$216	☑
112 hard rock (not DMO)	$175	☐
110d, 112d(1, 2 or 3)	$1006	☐



INERT FILL NOTICE (RULE 3.1.5(9))

Sand Creek Pit- Permit # M-1992-038

During the life of the mine Jones Fine Sand will import inert materials as defined in Rule 1.1(20), into this mining operation. Reclamation activities at this mine involve operation as a sand mine where the imported material will be hauled to the site for use in reclaiming mined areas adjacent to and on the west side of West Bijou Creek. This will not be an open inert land fill operation and the material will only come from our sand processing facility in Commerce City Colorado. The material generated by this facility contains dirt, reject sand and dirt mix generated during screening, clay balls, smaller pieces of brick, or concrete, and dirt mixed with the finer material. At the current time the plant generates approximately 4 truck loads of this material per month. The amount of material to be imported over the life of the mine is estimated to be 130,000 Yards ±.

No specific compaction rates are proposed for the fill. We run heavy equipment over the material during the filling process and it is compacted as a result. Stabilization of this fill material is not a concern because of the way it is placed below the normal surrounding surface. The backfilled area will be used for pasture /and there is no need to compact it of a specific rate other then what happens during the placement of the material.

All filling will be confined to the old plant site on the upland areas along West Bijou Creek. We will record the volume imported each year and keep a running total, so if needed, the Division will know how much and how it as disposed of. We will continue to import inert material until we no longer producing it or no longer have a location to put it. If the supply of suitable fill

drys up and filling is not completed the side slopes of the old mined area and filling face will be graded according to the approved Reclamation Plan resoiled and seeded. The depth of the fill will not be so great as to affect offsite lands if settling occurred. Once filling is completed, the area will be graded and used as an equipment parking areas adjacent to the active mine area. Final reclamation calls for it to be resoiled and seeded with the approved seed mixture.

JONES FINE SAND CO.
Masonry Sand Hauled Anywhere at Reasonable Rates

STATE OF COLORADO)
) ss. AFFIDAVIT
COUNTY OF ADAMS)

Daren Palizzi, as the Vice President Jones Fine Sand being first duly sworn, deposes and says that the material to be imported into the mining operation known as the Sand Creek Mine-M-1992-038, will be inert material as defined in Mined Land Reclamation Board rule 1.1(20) listed below. At no time will material that does not meet this definition be imported to this site.

M.L.R.B. Rule 1.1(20)

"Inert Material" means non-water soluble and non-putrescible solids together with such minor amounts and types of materials, unless such materials are acid or toxic producing, as will not significantly affect the inert nature of such solids. Terms included, but not limited to, earth, sand, gravel, rock, and concrete which has been in a hardened state for at least sixty days, masonry, asphalt paving fragments and other inert solids.

Daren Palizzi
Daren Palizzi, Vice President

SUBSCRIBED and sworn to before me this 25, day of April, 2019 by Daren Palizzi, as the Vice President of Jones Fine Sand.

CARRIE STETSON-CALVO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 19994011912
MY COMMISSION EXPIRES MAY 19, 2019

Carrie Stetson-Calvo
Notary Public

(notarial seal)

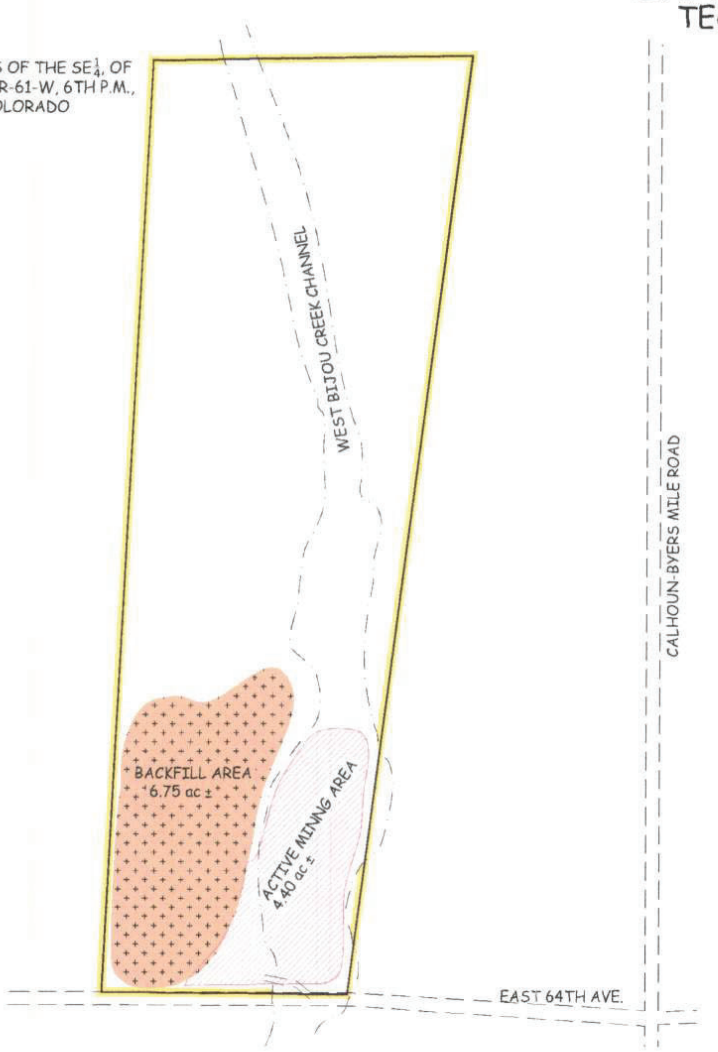
5400 Forest Street • Commerce City, Colorado 80022 • 303-289-1428

JONES FINE SAND
SAND CREEK MINE - M-1992-038
TECHNICAL REVISION MAP - 2019

OWNERSHIP AFFECTED LANDS

JONES FINE SAND
5400 FOREST ST.
DENVER, CO 80022

LOCATED IN PARTS OF THE SE¼, OF SECTION 3, T-3-S, R-61-W, 6TH P.M., ADAMS COUNTY COLORADO



L E G E N D

- PERMIT LINE/AFFECTED LANDS
- OLD PLANT SITE AREA
- BACKFILL AREA – 6.75 AC
- ACTIVE MINING AREA – 4.40 AC
- INTERNAL ROAD

*small map!

RECEIVED
APR 29 2019
DIVISION OF RECLAMATION MINING AND SAFETY

N
W E
S

DATE: APR 11, 2019 – 14:46:11

0 200 400 800

SCALE 1"=400'

PREPARED BY: *ENVIRONMENT, INC.*
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423-7297

JONES FINE SAND CO.
Masonry Sand Hauled Anywhere at Reasonable Rates

April 11, 2019

Division of Reclamation, Mining and Safety
Mr. Jared Ebert
Minerals Section
1313 Sherman St Room 215
Denver, CO 80203

Dear Mr. Ebert;

RE: Technical Revision
Sand Creek Pit - M-1992-038

Please find attached a Technical Revision form and Technical Revision fee to allow importation of Inert Fill materials into this mine and make a minor change to the Reclamation Plan. The material will be used to backfill areas outside the normal flow channel of West Bijou Creek that was mined and used as wash ponds by the original permittee. This will allow us to return the surface back to its original level.

Included is the Inert Materials Affidavit, and Inert Fill Notice, as required in Rule 3.1.5(9) regarding importing Inert Fill at this mining operation. This site will not be open to the general public and the material will only come from sources we control, generally it is dirt, sand fines, clay balls, broken concrete, and masonry fragments that accumulate at our sand processing facility in Commerce City.

If you have any questions or need more information please call me.

Respectfully submitted,

Daren Palizzi

Daren Palizzi
Vice President

enclosures

cc Environment, Inc. - Steve O'Brian
File

5400 Forest Street • Commerce City, Colorado 80022 • 303-289-1428

Division of Reclamation, Mining, and Safety

Fee Receipt for M1992038

Jones Fine Sand
Daren Palizzi
5400 Forest St.

Commerce City CO 800220000

Receipt #: 28558
Date: 04/29/2019
Permit: M1992038

Payment Method	Revenue Code	Fee Description/Notes	Amount
Check #23505	4300-MTR0	Minerals Technical Revision User: sdt Payer: Jones Fine Sand Company TR01	$216.00
		Receipt Total:	**$216.00**

Jones Sand
5400 Forest Street
Commerce City CO 80022

CERTIFIED MAIL

7018 1130 0001 9770 8227

UNITED STATES POSTAL SERVICE

1000

80203

Colorado Division of Reclamation
Mining and Safety
1313 Sherman Street Room 215
Denver, CO 80203

RECEIVED

APR 29 2019

DIVISION OF RECLAMATION
MINING AND SAFETY

COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

May 10, 2019

Mr. Daren Palizzi
Jones Fine Sand
5400 Forest St.
Commerce City, CO 80022

Re: Sand Creek Mine, Permit No. M-1992-038, Technical Revision Approval, Revision No. TR-1

Dear Mr. Palizzi:

On May 10, 2019 the Division of Reclamation, Mining and Safety approved the Technical Revision application submitted to the Division on April 29, 2019, addressing the following:

> *Revision to reclamation plan to allow backfilling of inert structural fill generated outside of the permit area within the current excavation.*

The terms of the Technical Revision No. 1 approved by the Division are hereby incorporated into Permit No. M-1992-038. All other conditions and requirements of Permit No. M-1992-038 remain in full force and effect.

If you have any questions, please contact me.

Sincerely,

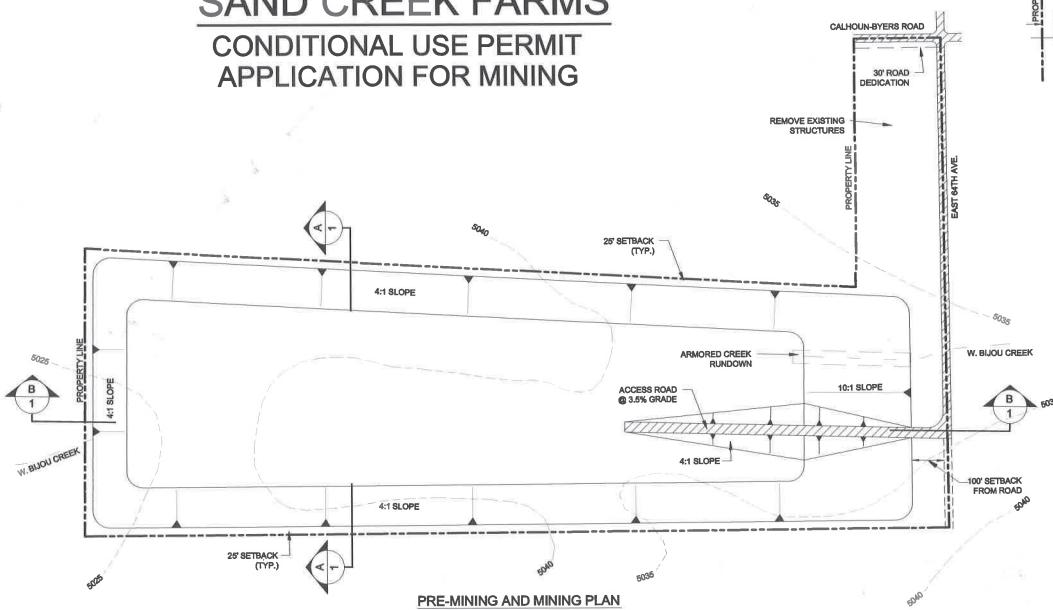
Jared L. Ebert
Environmental Protection Specialist

EC: Steve O'Brian, Environment, Inc. Environment-inc@outdrs.net

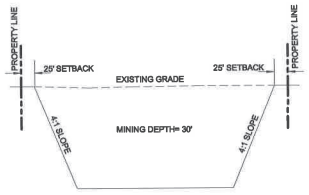
August 2018 photo

SAND CREEK FARMS

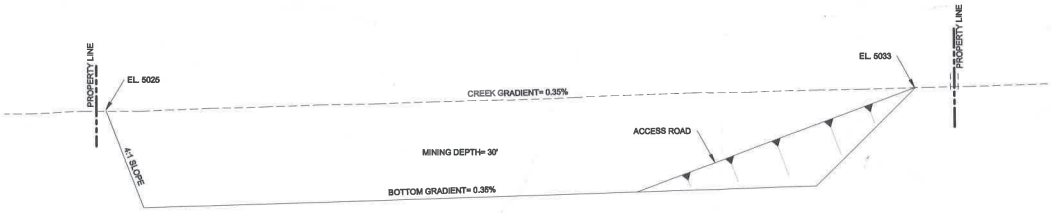
CONDITIONAL USE PERMIT APPLICATION FOR MINING



PRE-MINING AND MINING PLAN
HOR.: 1"=300'



SECTION A-A
HOR.: 1"=300' VERT.: 1"=30'



SECTION B-B
HOR.: 1"=300' VERT.: 1"=30'

MINING PLAN NOTES:

1. Minimum mining setback from property line = 25 ft.
2. Minimum mining setback from E 64th Ave = 100 ft.
3. Depth of mining = 30 ft.
4. Depth to groundwater = 65 ft.
5. Existing vegetation is a mix of grasses, perennials, annuals, willow trees, and cottonwood trees.
6. Dry mining operation using dozer and loader to excavate sand. No blasting.
7. Dozer on site for four months per year and loader on site for seven months per year.
8. Excavated sand is loaded on trucks and hauled off site. No sand processing equipment on site.
9 No outside retail sales of sand occur.
10. Annualized average daily truck trips =
11. Haul route is south on Calhoun Byers Rd, east on US 36, east on I-70, to Commerce City.
12. In the ten years this operator has been on site, no water flows in W. Bijou Creek. Inside the mine pit, a channel for possible water flows will be periodically relocated as mining progresses.
13. The operator will utilize the site to locate the proper sand to meet project specifications.
14 Pit features such as the access road and armored creek rundown will be gradually built as mining progresses deeper.
15. No buildings or structures.
16. This mining operation is also covered by DRMS permit M-1992-038.
17. This CUP expires on December 31, 2034.

OWNER:

SAND CREEK SAND, LLC
5400 FOREST STREET
COMMERCE CITY, CO 80022

PARCEL NO:

S0181103400002

ZONING:

A-3

N

SCALE: 1"=300'

0 300
150 600

REVISION:	DATE:

RENEWAL CUP
#46-92-C
ADAMS COUNTY

SAND CREEK FARMS
MINING PLAN

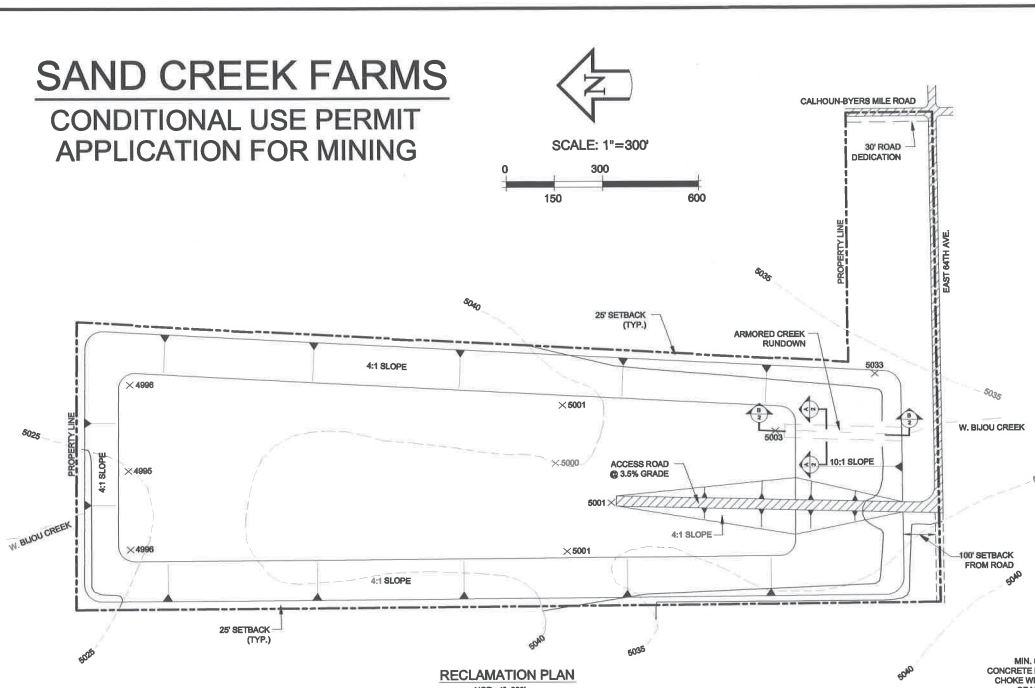
PREPARED BY:
Tuttle & Associates
Planning and Permitting Services
PO BOX 485
Broomfield, Co 80038-0485
Phone: 303.853.3564
garytuttle@gmail.com

Project No.
SCF001-2014

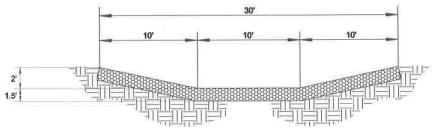
Date: 7-31-2014
Sheet: 1 OF 3

SAND CREEK FARMS

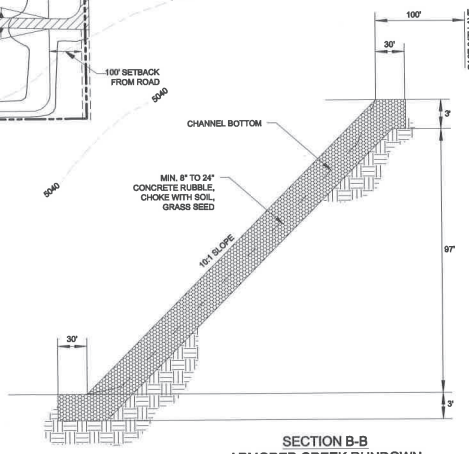
CONDITIONAL USE PERMIT APPLICATION FOR MINING



RECLAMATION PLAN
HOR.: 1"=300'



SECTION A-A
ARMORED CREEK RUNDOWN
1"=10'



SECTION B-B
ARMORED CREEK RUNDOWN
HOR.: 1"=100' VERT.: 1"=10'

RECLAMATION PLAN NOTES:

1. Existing trees and vegetation not in disturbed area will be preserved.
2. Concurrent reclamation will be utilized to backfill final slopes and grass seed as mining progresses deeper.
3. Inflow and outflow points of W. Bijou Creek will be preserved.
4. Final mining depth is higher than surrounding water wells and no impacts to wells is expected.
5. A significant porous sand aquifer exists under the mining pit. Rainfall quickly soaks into the ground and no long term ponding will result.
6. The access road and armored creek rundown will remain as features of the reclamation.
7. Owner will dedicate an additional 30 feet of Right-of-Way for the adjoining Calhoun Byers Mile Road.
8. No buildings or structures.
9. This mining operation is also covered by DRMS permit M-1992-038.
10. This CUP expires on December 31, 2034.

LEGAL DESCRIPTION:

Section 3, T3S, R61W
Part of the SE 1/4 of section 3 described as follows:
Beginning at the SE corner of section 3;
Thence West 30.01 Feet to the West Right-of-Way line of Calhoun-Byars Mile Road being the Point of Beginning;
Thence continuing West 1,479.26 Feet;
Thence North 03°, 01' East 2,649.38 Feet;
Thence East 681.79 Feet;
Thence South 07°, 31' West 2,400.10 Feet;
Thence East 777.53 Feet to the West Right-of-Way line of Calhoun-Byars Mile Road;
Thence South 268.43 Feet to the Point of Beginning.
Area - 52.01 acres more or less.

REVISION:

DATE:

RENEWAL CUP
#46-92-C
ADAMS COUNTY

SAND CREEK FARMS
RECLAMATION PLAN

PREPARED BY:
Tuttle & Associates
Planning and Permitting Services
PO BOX 4485
Broomfield, Colorado 80038-0485
Phone: 303.653.5564
garytuttle@gmail.com

Project No.
SCF001-2014

Date
7-31-2014

Sheet
2 OF 3

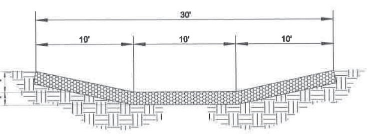
SAND CREEK FARMS

CONDITIONAL USE PERMIT APPLICATION FOR MINING LEVEL 1 STORM DRAINAGE PLAN

OWNER:	PARCEL NO.:	ZONING:
SAND CREEK SAND, LLC 5400 FOREST STREET COMMERCE CITY, CO 80022	0181103400002	A-3

LEGAL DESCRIPTION:

Section 3, T3S, R61W
Part of the SE 1/4 of section 3 described as follows:
Beginning at the SE corner of section 3;
Thence West 30.01 Feet to the West Right-of-Way line of Calhoun-Byers Mile Road being the Point of Beginning;
Thence continuing West 1,479.26 Feet;
Thence North 03°, 01' East 2,649.38 Feet;
Thence East 881.79 Feet;
Thence South 07°, 31' West 2,400.10 Feet;
Thence East 777.53 Feet to the West Right-of-Way line of Calhoun-Byers Mile Road;
Thence South 268.43 Feet to the Point of Beginning.
Area - 52.01 acres more or less.



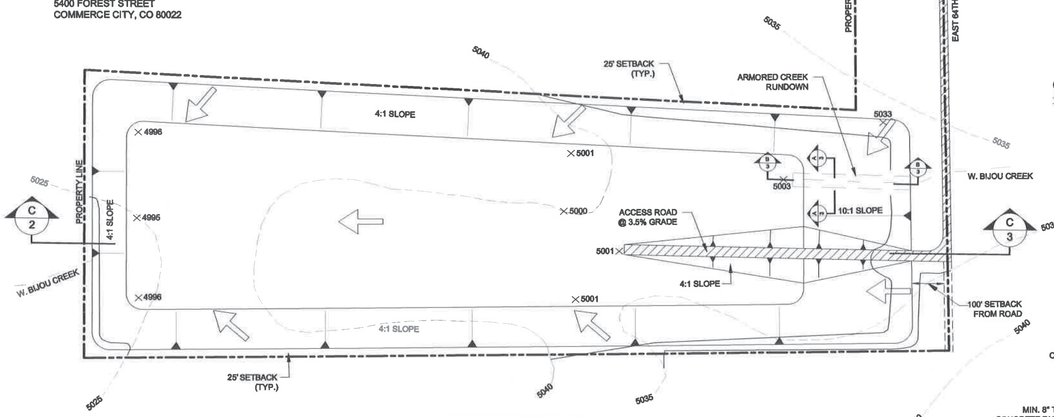
SECTION A-A
ARMORED CREEK RUNDOWN
1"=10'

0 150 300 600
SCALE: 1"=300'

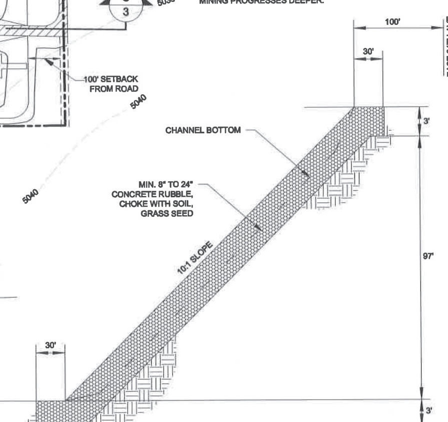
LEGEND AND NOTES:

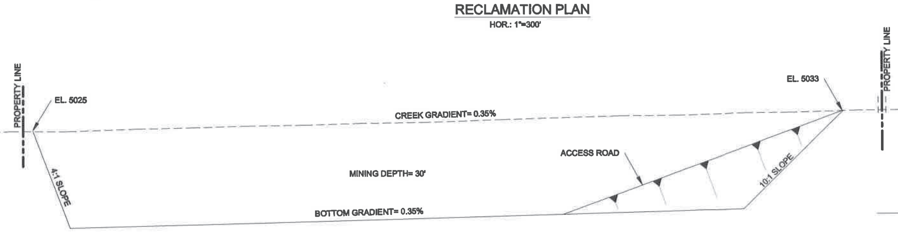
RUNOFF FLOW

1. NO UTILITIES ON SITE.
2. CONCURRENT RECLAMATION WILL BE UTILIZED TO BACKFILL FINAL SLOPES AND GRASS SEED AS MINING PROGRESSES DEEPER.



RECLAMATION PLAN
HOR.: 1"=300'





SECTION C-C
HOR.: 1"=300' VERT.: 1"=30'

SECTION B-B
ARMORED CREEK RUNDOWN
HOR.: 1"=100' VERT.: 1"=10'

REVISION:
DATE:

RENEWAL CUP #46-92-C ADAMS COUNTY

SAND CREEK FARMS LEVEL 1 STORM DRAINAGE PLAN

PREPARED BY:
Tuttle & Associates
Planning and Permitting Services
PO BOX 485,
Broomfield, Co 80038-0485
Phone: 303.653.5584
garytuttle@gmail.com

Project No.	
SCF001-2014	
Date	Sheet
7-31-2014	3 OF 3

Attachment C

CDPHE Discharge Permit

COLORADO
Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Luke Kelley, Managing Partner
4K Equipment, LLC
6201 McIntyre St.
Golden, CO 80403

Memorandum

TO: 4K Equipment, LLC

FROM: Kontessa Rodriguez Chavez, Administrative Assistant, Kontessa.rodriguez-chavez@state.co.us

DATE: 2024-03-14

RE: **Transfer Modification Certification, Colorado Discharge Permit System – Certification Mod or Transfer Fact sheet template**
Fact Sheet and Information for Certification Number: COG501756
Permittee-Facility: 4K Equipment, LLC - Sand Creek Mine

ATTACHMENTS:
Certification COG501756

TRANSFER REQUEST
On 1/18/2024 the Water Quality Control Division received a modification application requesting the above certification be transferred from Jones Fine Sand Co Inc to 4K Equipment, LLC.

Attached is the modified certification to discharge under the CDPS general permit Certification Mod or Transfer Fact sheet template. This certification authorizes discharges in accordance with the conditions of the general permit and provides site-specific monitoring requirements consistent with the general permit. The permittee is required to comply with the requirements included in the general permit as well as the certification.

FEE INFORMATION

There is no fee for this **Modification**.

CERTIFICATION RECORDS INFORMATION:

The following information is what the division records show for this certification.
For any changes to Contacts – Legal, Local, Billing, or DMR – a "Notice of Change of Contacts form" must be submitted to the division. This form is also available on our web site and must be signed by the legal contact.

Facility: Sand Creek Mine
Activity Description: Sand mining.
County: Adams
SIC Code: 1442

Legal Contact *Receives all legal documentation, pertaining to the permit certification. [including invoice; is contacted for any questions relating to the facility; and receives DMRs as appropriate*
Luke Kelley, Managing Partner
4K Equipment, LLC
6201 McIntyre St.
Golden, CO 80403
Phone number: 303-279-4150
Email: lkelley@kti-usa.com

Facility Contact *(contacted for general inquiries regarding the facility):*
Mark Doran, Project Manager
4K Equipment, LLC
6201 McIntyre St.
Golden, CO 80403
Phone number: 303-279-4150
Email: mdoran@kti-usa.com

Billing Contact *(receives the invoice pertaining to the permit certification):*

Luke Kelley, Managing Partner
4K Equipment, LLC
6201 McIntyre St.
Golden, CO 80403

Phone number: 303-279-4150
Email: lkelley@kti-usa.com

DMR Contact :

Calvin Kelley, Member
4K Equipment, LLC
6201 McIntyre St.
Golden, CO 80403

Phone number: 303-279-4150
Email: ckelley@kti-usa.com

CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG500000
DISCHARGES ASSOCIATED WITH SAND & GRAVEL MINING AND PROCESSING
(and other Nonmetallic Minerals except fuel)

Certification Number: **COG501756**

This Certification to Discharge specifically authorizes:

Jones Fine Sand
to discharge from the facility identified as

Sand Creek Mine
to:
West Bijou Creek - Bijou Creek

Facility Located at:	64 Ave and Xmore Rd SWC, uninc, Adams County, CO 80022
	Center Point Latitude 39.8, Longitude -104.216666

Defined Discharge Outfall(s) to Surface Water	Outfall(s) Lat, Long	Discharge Outfall(s) Description	Receiving Stream
Outfall Number 001-A	39.746685, -104.192264	Stormwater discharge	**West Bijou Creek Bijou Creek**

All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.

<u>Stormwater Monitoring Requirements</u>

Permit Limitations and/or Monitoring Requirements apply to outfall 001A as outlined in the Permit in Part I.C.2 and Parts I.G through I.Q.

On the effective date of this certification, the Sand Creek Mine is subject to the monitoring requirements identified below at each discharge point of stormwater from the facility.

A. *Visual monitoring, Part I.I.1*

Per Part I.I.1 of the permit, the permittee must collect a stormwater sample from each outfall (or a substantially identical outfall pursuant to Part I.H.1 of the permit) and conduct a visual assessment of each of these samples once each **quarter** for the entire permit term.

B. *WQBEL/Water Quality Standards, Part I.I.4*

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.

4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe/wqcd
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

Stormwater Reporting Requirements

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31.	February 28	Annual(10)

Certification issued: 4/17/2017 Effective: 7/1/2017 Expiration Date: 12/31/2021

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Approved by
Kathleen Rosow
Permits Unit 3 Work Group Leader
Water Quality Control Division

4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe/wqcd
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

Attachment D

Traffic Impact Letter

Please use the following link to access the signed Traffic Impact letter:

https://www.dropbox.com/scl/fi/6xj2nv23gpbkc1gdalv44/005-Attachment-D-Trip-Generation-Letter-signed-240109.pdf?rlkey=vc4qp1a5rwivjs7oj8cv3lt90&st=syqnpru4&dl=0

Attachment E

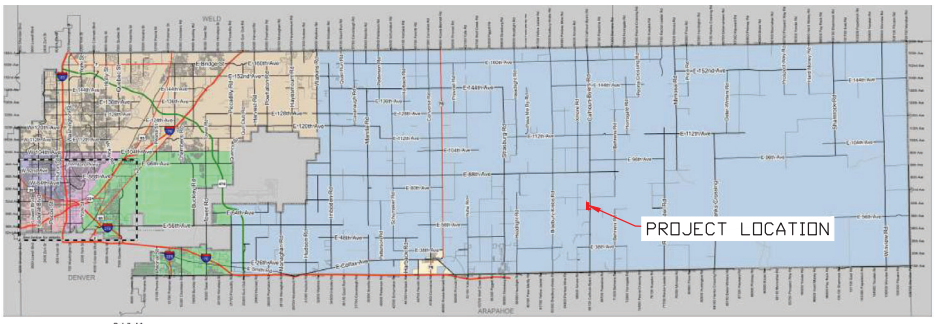
Final Drainage Report

Please use the following link to access the Final Drainage Report:

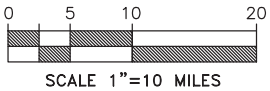
https://www.dropbox.com/scl/fi/c8chhwy4ulvrunp9ycv8i/006-Attachment-E-Final-Drainage-Report-240109.pdf?rlkey=ansradyaee68c07o51hkzfhv3&st=8cw3ctqf&dl=0

Attachment F

Erosion and Sediment Control Plan



PROJECT LOCATION IN ADAMS COUNTY
VICINITY MAP SHOWN ON FIGURE 2



DEVELOPER INFORMATION:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403
CALVIN KELLEY
PHONE: 303-279-4150

PROJECT ENGINEER INFORMATION:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DRIVE
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.
PHONE: 303-905-3635

INDEX TO DRAWING SHEETS

FIGURE 1 - PROJECT TITLE SHEET
FIGURE 2 - VICINITY MAP
FIGURE 3 - ADAMS COUNTY STANDARD EROSION & SEDIMENT CONTROL NOTES - 1 OF 2
FIGURE 4 - ADAMS COUNTY STANDARD EROSION & SEDIMENT CONTROL NOTES - 2 OF 2
FIGURE 5 - SAND CREEK FARM SITE-SPECIFIC NOTES
FIGURE 6 - INITIAL CONDITIONS MAP
FIGURE 7 - PROPOSED MINE PIT (INTERIM CONDITIONS)
FIGURE 8 - FINAL CONDITIONS MAP
FIGURE 9 - SILT FENCE AND EROSION LOG DETAILS
FIGURE 10. ARMORED CREEK RUNDOWN

NOTES:

1. PUBLIC IMPROVEMENTS SHALL CONFORM TO ADAMS COUNTY STANDARDS AND SPECIFICATIONS AND LATEST EDITION OF COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
2. SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN
3. PROJECT BENCHMARK: (AZTEC #400). ADAMS COUNTY BENCHMARK NUMBER 2023 BEING A 3-1/4" ALUMINUM ALLOY CAP SET IN CONCRETE STAMPED "ADAMS COUNTY COLORADO 1999 GOMEZ SURVEY MARK" LOCATED AT 5.9 MI (9.5 KM) NORTHEAST OF STRASBURG IN THE ROW OF BRADBURY-KREBS ROAD IN THE SOUTHWEST 1/4 OF SECTION 8, T 3 S, R 61 W, 6TH P.M, 29.0 FEET EAST OF THE CENTER OF BRADBURY-KREBS ROAD, 43.0 FEET NORTH OF THE CENTER OF A DIRT ROAD TO THE SOUTH, 3.0 FEET NORTH OF A FIBERGLASS WITNESS POST, 3.1 FEET SOUTH OF A FIBERGLASS WITNESS POST AND AT THE SAME LEVEL AS BRADBURY-KREBS ROAD.
   ELEVATION = 5070.45' (NAVD88)

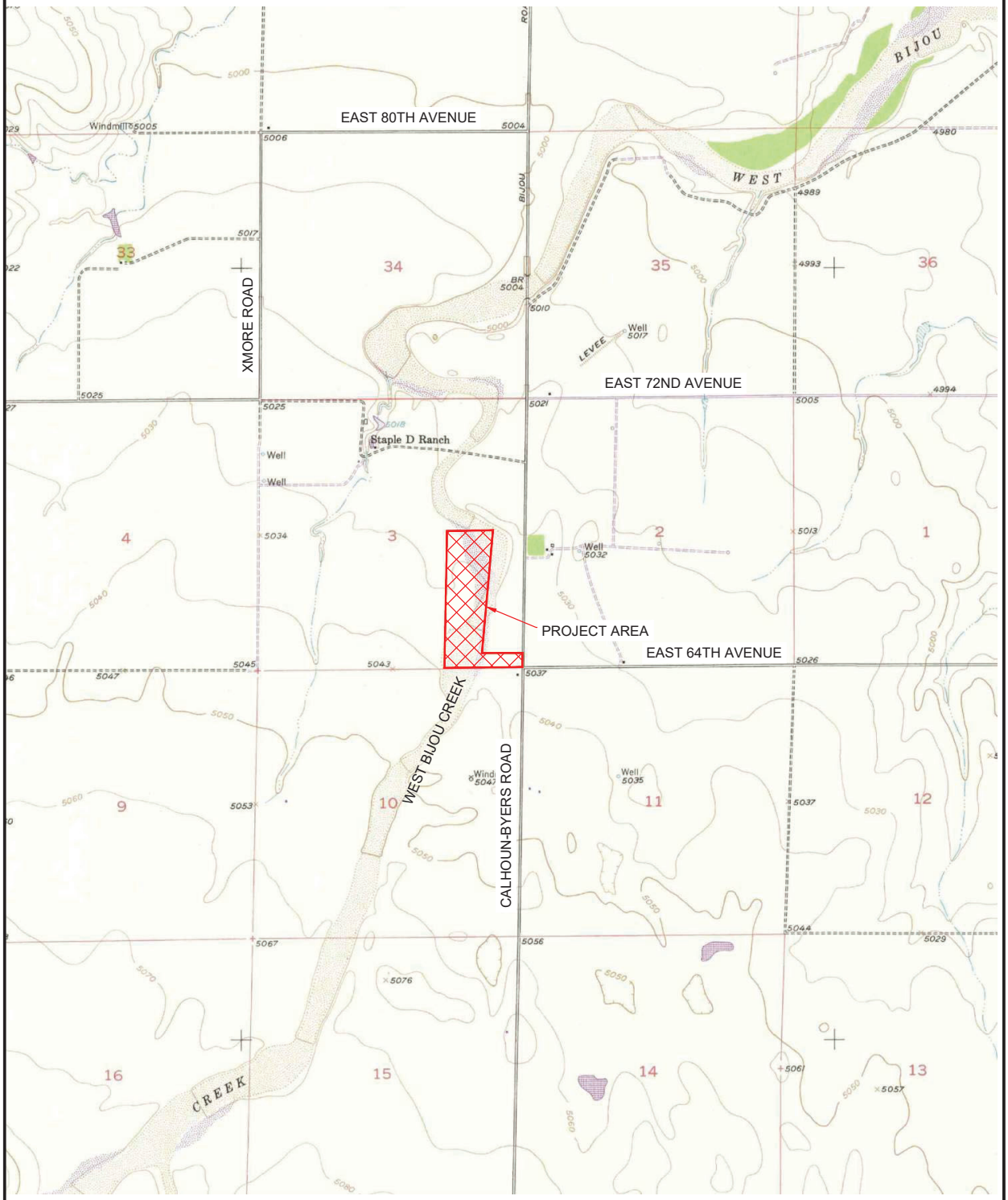
   PROJECT CONTROL STATEMENT: PROJECT COORDINATES ARE MODIFIED COLORADO STATE PLANE NORTH ZONE 83(2011) COORDINATES. PROJECT COORDINATES ARE DERIVED FROM STATE PLANE COORDINATES USING THE FOLLOWING FORMULAS:
   - PROJECT NORTHING = (STATE PLANE NORTHING * 1.0002529622) - 1000000.00'
   - PROJECT EASTING = (STATE PLANE EASTING * 1.0002529622) - 3000000.00'
4. ADDITIONAL SURVEY INFORMATION IS PRESENTED IN ATTACHMENT 3, LAND SURVEY PLAT. HORIZONTAL LOCATIONS BASED ON NAD 83 AND VERTICAL ELEVATION ON NAVD 88.
5. UTILITY LOCATE PHONE NUMBER: COLORADO811.
   DIAL 811 OR 800-922-1987 FOR ALL LOCATE REQUESTS OR
   ON WEB SITE WWW.COLORADO811.ORG
6. INDEX OF PUBLIC UTILITIES AND UTILITIES COMPANIES PHONE NUMBER: THERE ARE NO PUBLIC UTILITIES ON THE SAND CREEK FARM SITE.

EROSION AND SEDIMENT CONTROL
FIGURE 1 - PROJECT TITLE SHEET

REVISIONS:	DATE:
ADDITIONAL BENCHMARK INFORMATION	12-2-2024

PROJECT:	PREPARED FOR:	PREPARED BY:
SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

Sand-Creek-Site-Plan-JLJ.dwg



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

N

0 1000 2000 4000

SCALE 1"=2000'

SOURCE:
USGS 7.5–MINUTE QUADRANGLE
LEADER SW, CO REVISED 1979

EROSION AND SEDIMENT CONTROL
FIGURE 2 - VICINITY MAP AND TOPOGRAPHIC MAP

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

General Notes – to be included on plan set:

"The general notes for erosion and sediment control work shall be as follows:

1. Owner/Contractor is responsible for obtaining a State of Colorado, Colorado Department of Public Health and Environment (CDPHE) General Permit for Stormwater Discharges Associated with Construction Activity COR-030000 prior to construction (CDPS Stormwater Construction Permit).
2. The Owner/Contractor shall provide Adams County with a copy of this CDPS Stormwater Construction Permit letter of approval and Certification from the State prior to receiving a County Construction/Building Permit. The Owner/Contractor is responsible for all fees associated with this CDPS Stormwater Construction Permit.
3. A copy of the CDPS Stormwater Construction Permit from CDPHE and the approved Stormwater Management Plan (SWMP) with an Erosion and Sediment Plan shall be kept on site and updated at all times in compliance with the CDPS Stormwater Construction Permit.
4. Owner/Contractor is responsible for filing a CDPHE Inactivation Notice – Construction Stormwater Discharge General Permit Certification; once the construction site has been finally stabilized in compliance with the CDPS Stormwater Construction Permit.
5. The Owner/Contractor shall provide Adams County with a copy of this Inactivation Notice. There will be no fee charged to Adams County for the Inactivation Notice or if the Contractor neglects to file this Notice.
6. The SWMP Administrator is responsible for implementing and maintaining erosion and sediment control measures at all times during construction. The SWMP shall be modified in compliance to the CDPS Stormwater Construction Permit.
7. Standard Inspections - A thorough inspection of the Best Management Practices (BMPs) shall be performed every fourteen (14) calendar days and within twenty-four (24) hours after any precipitation or snowmelt event that causes surface erosion.
8. Use biodegradable erosion control blankets on slopes 3:1 or steeper and in swales or long channels.
9. All soil imported to or exported from the site shall be properly covered to prevent the loss of material during transport. Haul routes must be permitted by the County. No material shall be transported to another site without first obtaining a Hauling Permit from Adams County Planning.
10. The concrete washout containment structure shall contain all concrete washout water. Stormwater shall not carry wastes from the designated concrete washout location and shall be located a minimum of fifty (50) feet horizontal from waters of the State.
11. The actual schedule for implementing erosion and sediment control measures will be determined by project construction progress. Down slope protective measures (i.e. sediment control barriers) must always be in place before soil is disturbed.
12. Install sediment control barriers down slope from construction that disturb site soil. Sediment control barriers should be installed in the locations shown on the Erosion and Sediment Control Drawings, as well as other locations as deemed necessary by the contractor, inspector or owner."

Performance Standard Notes – to be included on plan set:

"The general performance requirements for erosion control work shall be as follows:

1. Temporary and/or permanent BMPs intended to control erosion of an earth disturbance operation shall be installed before any earth disturbance operations take place in sequence with proper phasing.
2. Earth disturbances shall be conducted in such a manner so as to minimize disturbed area and protect natural features, soil and vegetation.
3. Persons engaged in earth disturbances shall implement and maintain acceptable soil erosion and sedimentation control measures, in conformance with the erosion control technical standards adopted by Adams County and in compliance with the CDPS Stormwater Construction Permit.
4. Earth disturbances shall be designed, constructed and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest possible period of time.
5. Sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the earth disturbance.
6. Excavated material and other construction debris shall not be stockpiled within the roadway section. Backfill materials up to a maximum of 130 CY may be stockpiled, with appropriate erosion control measure, but must be removed or placed by the end of each work week.
7. Any construction areas, not graded to final grade, require temporary BMPs for site stabilization.
8. As necessary, construct a temporary facility designated for conveyance of stormwater around, through, or from the construction site.
9. Permanent erosion and sediment control measures for all slopes, channels, ditches, or any disturbed land area shall be stabilized immediately after final grading.
10. All spills shall be cleaned up immediately after discovery, or contained until appropriate cleanup methods can be employed. Manufacture's recommended methods for spill cleanup shall be followed, along with proper disposal methods.
11. Concrete washouts shall not be placed in low areas, ditches or adjacent to state waters.
12. The Owner/Contractor shall check the capacity for all concrete washout areas. Waste materials must be removed by the contractor and legally disposed of when accumulations amount to two-thirds (⅔) of the wet storage capacity of the structure.
13. All concrete washout areas shall be clearly marked. The concrete washout containment structure will include a 2'x3'sign posted with the words "Concrete Washout". The concrete washout Area shall be repaired and/or enlarged as necessary to maintain capacity for wasted concrete.
14. At the end of construction, all concrete shall be removed from the site and legally disposed of. Concrete washout waste must not be buried.
15. Disturbed areas and stockpiles which are not at final grade shall be temporarily stabilized immediately after interim grading.

FIGURE 3 - ADAMS COUNTY STANDARD EROSION & SEDIMENT CONTROL NOTES - 1 OF 2

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

16. Final stabilization is reached when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least seventy percent (70%) of pre-disturbance levels or equivalent permanent, physical erosion reduction methods has been employed.
17. Records of spills, leaks, or overflows that result in the discharge of pollutants must be documented and maintained. Some spills may need to be reported to the Division immediately: specifically, a release of any chemical, oil, petroleum product, sewage, etc., which may enter Waters of the State, must be reported. More guidance is available on the web at www.cdphe.state.co.us/emp/spillsandreleased.htm.The Division's toll free 24-hour environmental emergency spill reporting line is 1-877-518-5608. Also immediately call Adams County at 303-.453-8787 and the Tri-County Health Department at 303-220-9200"

July 2008
Revised 2/10; 3/11

BMP Maintenance Notes – to be included on plan set:
"The general maintenance requirements for BMPs shall be as follows:

1. It is anticipated that the BMPs implemented at the site will have to be modified to adapt to changing conditions or to ensure that potential pollutants are being properly managed at the site. When BMPs are modified, the SWMP must be modified to accurately reflect the actual field conditions.
2. The Owner/Contractor shall continuously maintain all silt fencing so that it functions properly during construction and work suspensions. All silt fencing shall be removed by the Contractor upon substantial permanent stabilization unless otherwise directed by authorized Adams County personnel.
3. Silt fence shall be installed along contours and prior to any grubbing or grading activity. It shall be located to capture overland, low-velocity sheet flows in which it shall be installed at a fairly level grade.
4. It is recommended that silt fence shall be installed five (5) feet away from the toe of the slope or stockpile, and every seventy five (75) to one hundred twenty five (125) feet apart on long slopes.
5. Do not place silt fence in or adjacent to existing wetlands where trenching impacts wetlands.
6. All inlet/outlet protection will be checked for maintenance and failure daily. Sediment shall be removed and properly disposed of once it has accumulated to half the design of the trap or daily during periods of consistent precipitation.
7. The Owner/Contractor shall be responsible for maintaining the Vehicle Tracking Control during construction. The Vehicle Tracking Control shall be removed at the completion of this project unless otherwise directed by authorized Adams County personnel.
8. Temporary sediment traps and basins shall be installed before any land disturbance takes place in the drainage area. The area under the embankment shall be cleared, grubbed, and stripped of all vegetation and root mat. Sediment shall be removed when no longer functional and disposed of at an approved location.
9. All sediment from stormwater infrastructure (i.e. detention ponds, storm sewer pipes, outlets, inlets, roadside ditches, etc.) shall be removed prior to initial acceptance. This sediment shall not be flushed off-site, but shall be captured on-site and disposed of at an approved location.
10. Temporary Rock Check Dam – The maximum height of the check dam at the center should not exceed one half the depth of the ditch or swale. The maximum spacing between dams should be such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.
11. Construction Safety Barrier Fencing (orange construction fence) must be used to protect wetlands and other sensitive areas and to prevent access.
12. Water from dewatering operations shall not be directly discharged into any waters conveyance systems including wetlands, irrigation ditches, canals, rivers, streams or storm sewer systems, unless allowed by a State Construction Dewatering Permit.

FIGURE 4 - ADAMS COUNTY STANDARD EROSION & SEDIMENT CONTROL NOTES - 2 OF 2

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

SAND CREEK FARM PROJECT SITE-SPECIFIC NOTES

1. THE OWNER/CONTRACTOR HAS OBTAINED STORMWATER PERMIT COVERAGE UNDER THE CDPHE GENERAL PERMIT COG500000 FOR DISCHARGES ASSOCIATED WITH SAND & GRAVEL MINING AND PROCESSING (CERTIFICATION NUMBER COG501756).
2. THE OWNER/CONTRACTOR WILL COMPLY WITH THE REQUIREMENTS OF THIS STORMWATER PERMIT, INCLUDING THE PREPARATION OF A STORMWATER MANAGEMENT PLAN (SWMP), IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES, AND REQUIRED INSPECTIONS.
3. THE SOIL ON THE SITE IS SAND TO A DEPTH OF MORE THAN 80 INCHES WITH RUNOFF CLASS DEFINED AS NEGLIGIBLE.
4. THE MAIN ACTIVITY ON THE SITE WILL BE SAND MINING, WITH AN EXCAVATOR OR LOADER LOADING DIRECTLY INTO HAUL TRUCKS (NO STOCKPILING IS PLANNED).
5. EQUIPMENT AND PERSONAL VEHICLES WILL BE PARKED IN DESIGNATED AREAS OUTSIDE OF THE EXISTING SAND CHANNEL OF WEST BIJOU CREEK.
6. ONCE THE MINE PIT IS ESTABLISHED, EQUIPMENT MAY BE PARKED IN THE MINE PIT.
7. THERE WILL BE NO FUEL STORAGE ON SITE. EQUIPMENT WILL BE FUELED USING A MOBILE FUEL TANK ON A TRUCK.
8. THERE WILL BE A CONEX FOR STORAGE AND A PORTABLE TOILET PLACED IN A DESIGNATED AREA OUTSIDE OF THE EXISTING SAND CHANNEL.
9. THERE WILL BE NO CONCRETE WASHOUT ON THE SITE.
10. THE MAIN EROSION AND SEDIMENT CONTROL WILL BE THE MINE PIT ITSELF. THE PIT OR PITS WILL ACT AS SEDIMENT CONTROL / DETENTION BASINS.
11. NO SILT FENCE IS PROPOSED AT THIS TIME. SILT FENCE WILL BE IMPLEMENTED IF THE INSPECTIONS INDICATE THAT IT IS NEEDED.

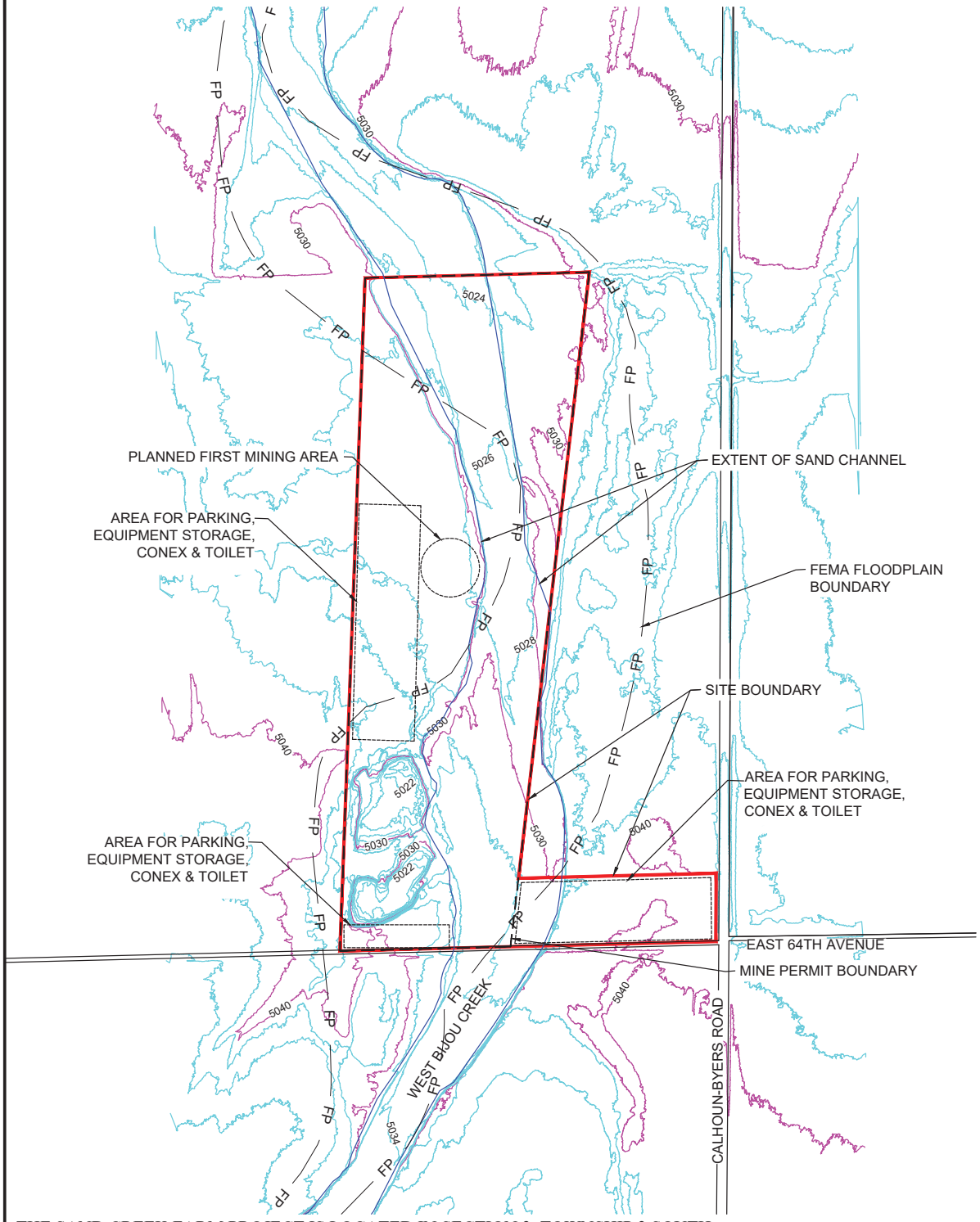
ENGINEER'S CERTIFICATION

"I hereby certify that this Erosion Control Drawing for Sand Creek Farms was prepared by me (or under my direct supervision) in accordance with the provisions of Adams County Storm Drainage Design and Stormwater Quality Regulations for the Owners thereof."

Registered Professional Engineer
State of Colorado No. 30491

EROSION AND SEDIMENT CONTROL
FIGURE 5 - SAND CREEK FARM SITE-SPECIFIC NOTES

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

KEY

- EXTENT OF MINE PIT & BASIN BOUNDARY
- SITE BOUNDARY
- MINE PERMIT BOUNDARY
- EXTENT OF SAND CHANNEL
- FP — FEMA FLOODPLAIN LINE
- 5040 — EXISTING 10-FOOT CONTOUR
- EXISTING 2-FOOT CONTOUR
- 5010 — PROPOSED 10-FOOT CONTOUR
- PROPOSED 2-FOOT CONTOUR

0 200 400 800

SCALE 1"=400'

N

SOURCE:
4K EQUIPMENT, LLC

EROSION AND SEDIMENT CONTROL
FIGURE 6 - INITIAL CONDITIONS MAP

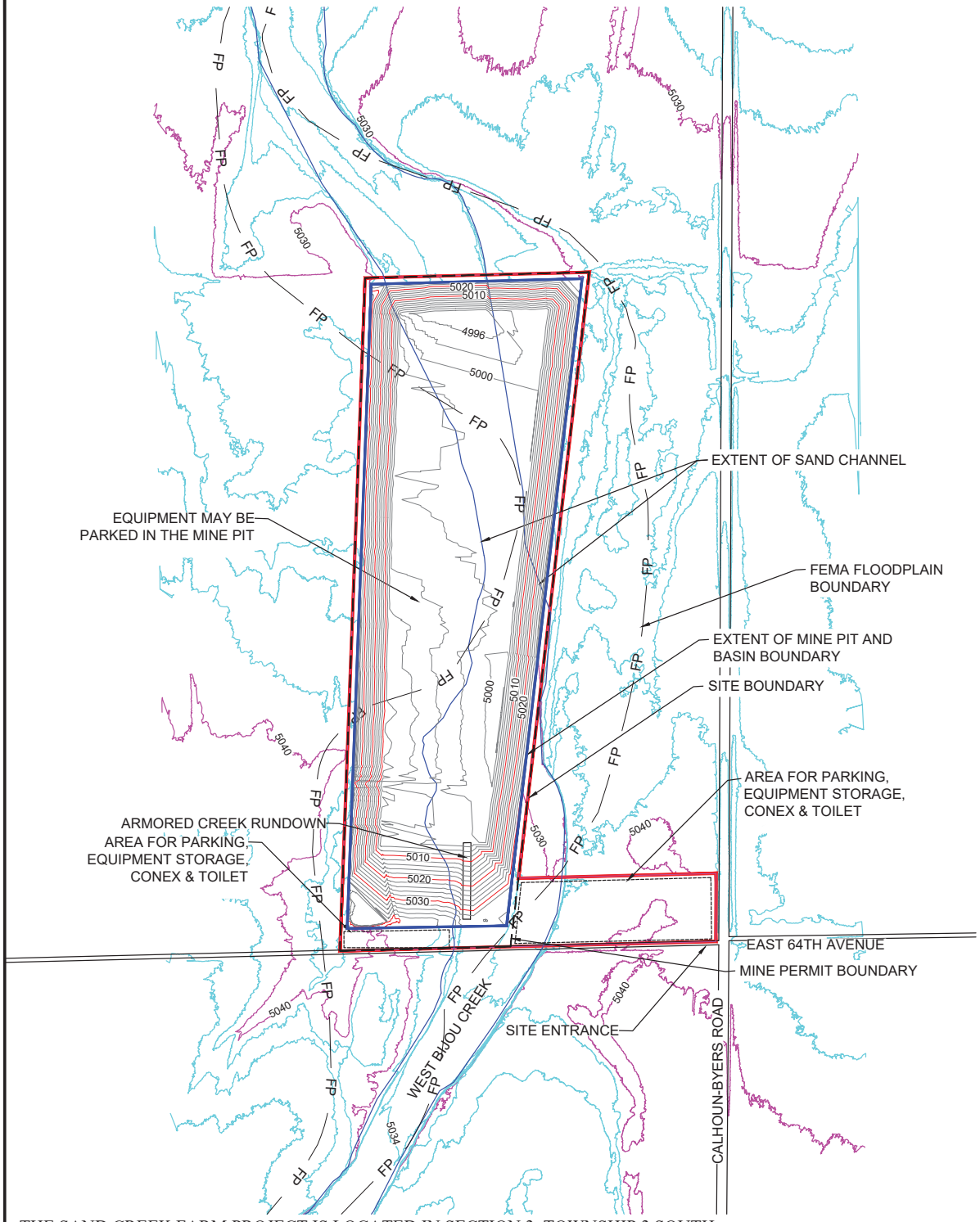
REVISIONS:	DATE:

EXISTING-TOPO-JLJ.dwg

PROJECT:
SAND CREEK FARM
64TH AVENUE &
CALHOUN-BYERS ROAD
UNINCORP. ADAMS COUNTY
BYERS, CO 80103

PREPARED FOR:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403

PREPARED BY:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DR
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

KEY

- EXTENT OF MINE PIT & BASIN BOUNDARY
- SITE BOUNDARY
- MINE PERMIT BOUNDARY
- EXTENT OF SAND CHANNEL
- FP — FEMA FLOODPLAIN LINE
- 5040 — EXISTING 10-FOOT CONTOUR
- EXISTING 2-FOOT CONTOUR
- 5010 — PROPOSED 10-FOOT CONTOUR
- PROPOSED 2-FOOT CONTOUR

0 200 400 800

SCALE 1"=400'

N

SOURCE:
4K EQUIPMENT, LLC

EROSION AND SEDIMENT CONTROL

FIGURE 7 - PROPOSED MINE PIT (INTERIM CONDITIONS)

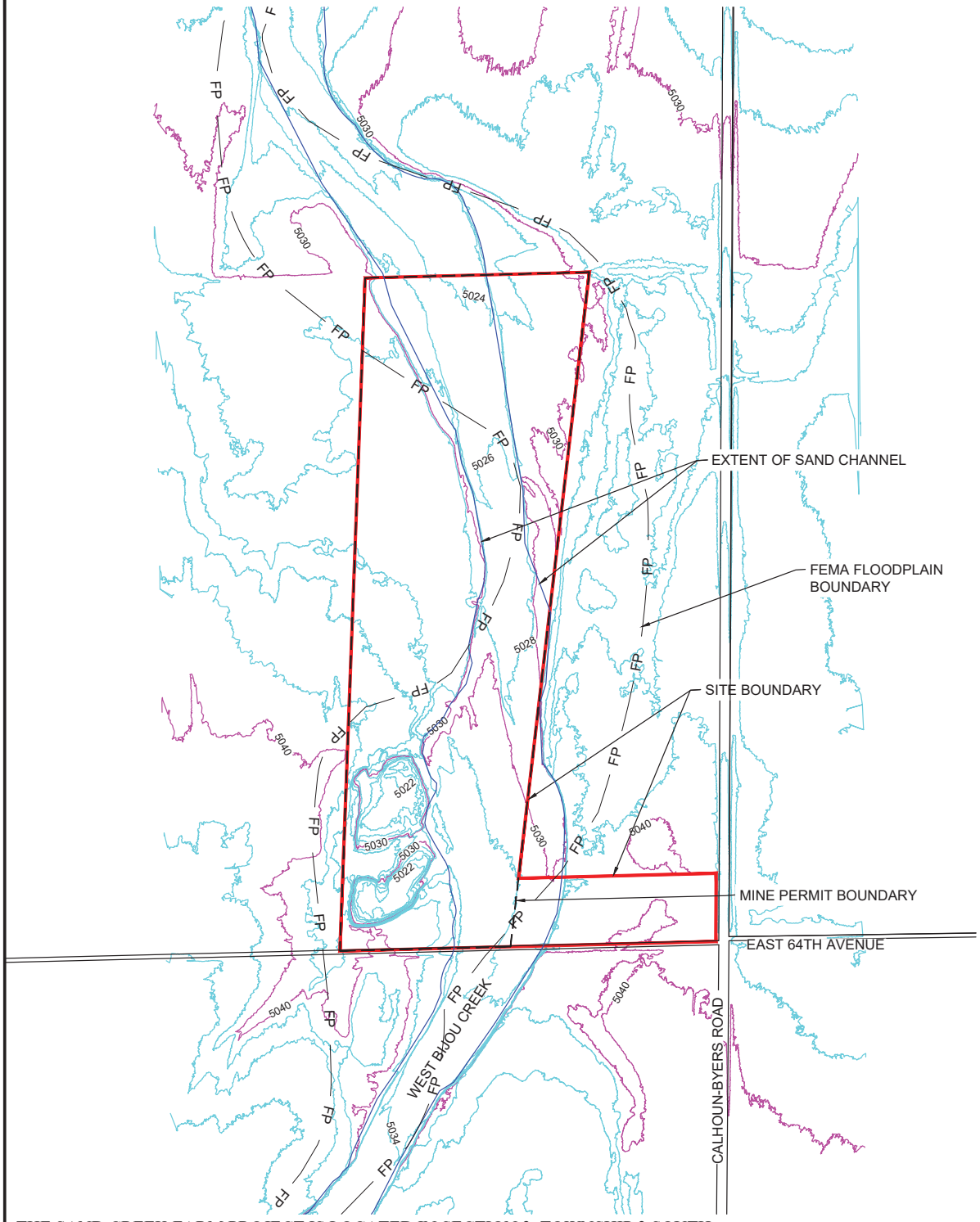
REVISIONS:	DATE:

PROJECT:
SAND CREEK FARM
64TH AVENUE &
CALHOUN-BYERS ROAD
UNINCORP. ADAMS COUNTY
BYERS, CO 80103

PREPARED FOR:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403

PREPARED BY:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DR
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.

PROPOSED-TOPO-JJ.dwg



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

KEY

- EXTENT OF MINE PIT & BASIN BOUNDARY
- SITE BOUNDARY
- MINE PERMIT BOUNDARY
- EXTENT OF SAND CHANNEL
- FP — FEMA FLOODPLAIN LINE
- 5040 — EXISTING 10-FOOT CONTOUR
- EXISTING 2-FOOT CONTOUR
- 5010 — PROPOSED 10-FOOT CONTOUR
- PROPOSED 2-FOOT CONTOUR

FOR THE FINAL CONDITIONS, THE SITE WILL BE RETURNED TO THE ORIGINAL CONTOURS.

0 200 400 800

SCALE 1"=400'

N

SOURCE:
4K EQUIPMENT, LLC

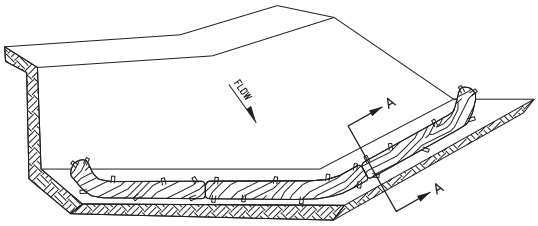
EROSION AND SEDIMENT CONTROL
FIGURE 8 - FINAL CONDITIONS MAP

REVISIONS:	DATE:

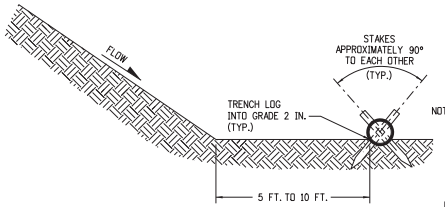
PROJECT:
SAND CREEK FARM
64TH AVENUE &
CALHOUN-BYERS ROAD
UNINCORP. ADAMS COUNTY
BYERS, CO 80103

PREPARED FOR:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403

PREPARED BY:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DR
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.



ISOMETRIC VIEW



NOTE: THE TOPS OF ALL STAKES SHALL NOT EXTEND MORE THAN 2 INCHES ABOVE THE TOPS OF EROSION LOGS.

SECTION A-A

NOTES:

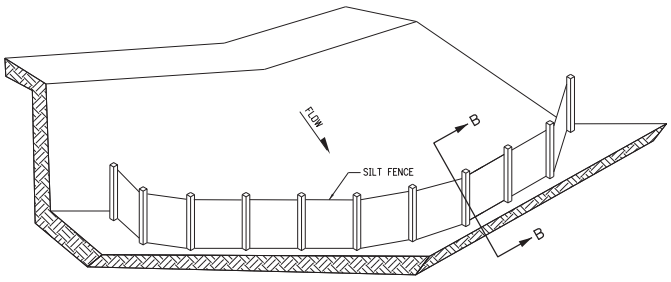
1. EROSION LOGS USED AT TOE OF SLOPE SHALL BE PLACED 5 TO 10 FEET BEYOND TOE OF SLOPE TO PROVIDE STORAGE CAPACITY.
2. EROSION LOGS SHALL BE PLACED ON THE CONTOUR WITH ENDS FLARED UP SLOPE.
3. SEE SHEET 2 OF 11 FOR JOINING LOGS DETAIL.

EROSION LOGS PAY ITEMS	
NUMBER	DESCRIPTION
208-00012	TYPE 1 (9 IN.)
208-00002	TYPE 1 (12 IN.)
208-00013	TYPE 1 (20 IN.)
208-00007	TYPE 2 (8 IN.)
208-00008	TYPE 2 (12 IN.)
208-00009	TYPE 2 (18 IN.)
208-00022	TYPE 3 (9 IN.)
208-00023	TYPE 3 (12 IN.)
208-00024	TYPE 3 (20 IN.)

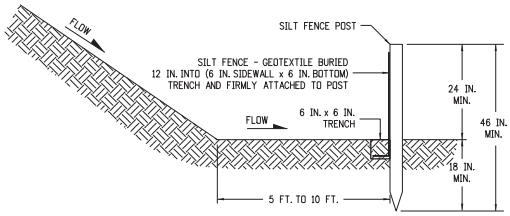
EROSION LOG TOE OF SLOPE PROTECTION

NOTES

1. SILT FENCE SHALL HAVE A MAXIMUM DRAINAGE AREA OF ONE-QUARTER ACRE PER 100 FEET OF SILT FENCE LENGTH; MAXIMUM SLOPE LENGTH BEHIND BARRIER IS 100 FEET.
2. SILT FENCE USED AT TOE OF SLOPE SHALL BE PLACED 5 TO 10 FEET BEYOND TOE OF SLOPE TO PROVIDE STORAGE CAPACITY.
3. SILT FENCE SHALL BE PLACED PARALLEL TO THE CONTOUR WITH ENDS FLARED UP SLOPE.
4. THE MAXIMUM LENGTH OF EROSION LOGS OR SILT FENCES WITHOUT A FLARED END TURNING UPSLOPE IS 150 FEET.



ISOMETRIC VIEW



SECTION B-B

SILT FENCE TOE OF SLOPE PROTECTION

NOTE: THE PAY ITEM NUMBER FOR SILT FENCE (LF) IS 208-00020.

TOE OF SLOPE PROTECTION APPLICATIONS

FIGURE 9. SILT FENCE AND EROSION LOG DETAILS

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: DK	(R-X)		
Last Modification Date: 05/16/24	(R-X)		
Detailer Initials: LTA	(R-X)		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Construction Engineering Services DK

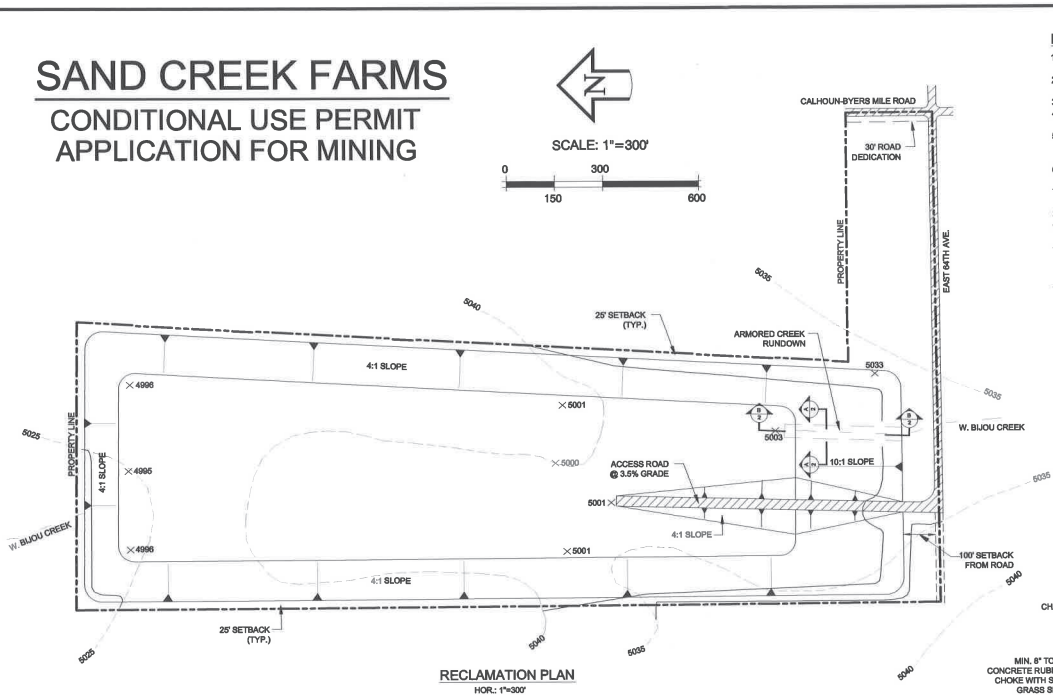
TEMPORARY EROSION CONTROL

Issued by the Project Development Branch: July 31, 2019

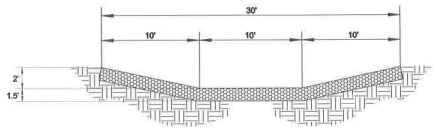
STANDARD PLAN NO.
M-208-1
Standard Sheet No. 3 of 11
Project Sheet Number:

SAND CREEK FARMS

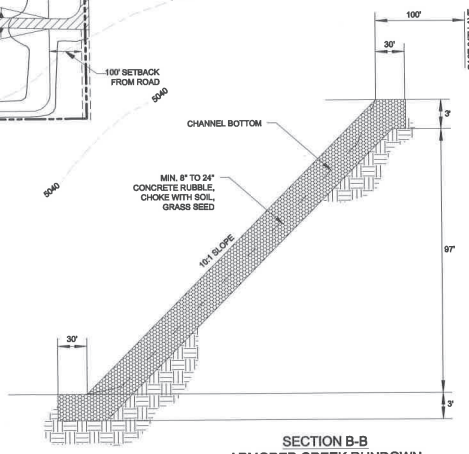
CONDITIONAL USE PERMIT APPLICATION FOR MINING



RECLAMATION PLAN
HOR.: 1"=300'



SECTION A-A
ARMORED CREEK RUNDOWN
1"=10'



SECTION B-B
ARMORED CREEK RUNDOWN
HOR.: 1"=100' VERT.: 1"=10'

RECLAMATION PLAN NOTES:

1. Existing trees and vegetation not in disturbed area will be preserved.
2. Concurrent reclamation will be utilized to backfill final slopes and grass seed as mining progresses deeper.
3. Inflow and outflow points of W. Bijou Creek will be preserved.
4. Final mining depth is higher than surrounding water wells and no impacts to wells is expected.
5. A significant porous sand aquifer exists under the mining pit. Rainfall quickly soaks into the ground and no long term ponding will result.
6. The access road and armored creek rundown will remain as features of the reclamation.
7. Owner will dedicate an additional 30 feet of Right-of-Way for the adjoining Calhoun Byers Mile Road.
8. No buildings or structures.
9. This mining operation is also covered by DRMS permit M-1992-038.
10. This CUP expires on December 31, 2034.

LEGAL DESCRIPTION:

Section 3, T3S, R61W
Part of the SE 1/4 of section 3 described as follows:
Beginning at the SE corner of section 3;
Thence West 30.01 Feet to the West Right-of-Way line of Calhoun-Byars Mile Road being the Point of Beginning;
Thence continuing West 1,479.26 Feet;
Thence North 03°, 01' East 2,649.38 Feet;
Thence East 681.79 Feet;
Thence South 07°, 31' West 2,400.10 Feet;
Thence East 777.53 Feet to the West Right-of-Way line of Calhoun-Byars Mile Road;
Thence South 268.43 Feet to the Point of Beginning.
Area - 52.01 acres more or less.

REVISION:
DATE:

RENEWAL CUP
#46-92-C
ADAMS COUNTY

SAND CREEK FARMS
RECLAMATION PLAN

PREPARED BY:
Tuttle & Associates
Planning and Permitting Services
PO BOX 4485
Broomfield, Colorado 80038-0485
Phone: 303.653.5564
garytuttle@gmail.com

Project No.
SCF001-2014

Date
7-31-2014

Sheet
2 OF 3

FIGURE 10. ARMORED CREEK RUNDOWN

Attachment G

Stormwater Management Plan

STORMWATER MANAGEMENT PLAN
Sand Creek Farm Sand Mine
Calhoun-Byers Road and East 64th Avenue
Byers, Colorado 80103

Prepared for:
4K Equipment, LLC
6201 McIntyre Street
Golden, CO 80403

Prepared by:
EME Solutions, Inc.
John Jankousky, P.E.
15248 W. Ellsworth Drive
Golden, CO 80401

December 9, 2024
Revised December 20, 2024

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Attachments

1. Certification Allowing Discharge
2. General Permit for Stormwater Discharges Associated with Sand and Gravel Mining and Processing Operations, Permit No. COG-500000
3. Control Measures Installation, Implementation, and Maintenance Requirements

4. List of Required Sampling, Recordkeeping, and Reporting
5. Quarterly Visual Monitoring Form
6. Quarterly Inspection and Maintenance Report Form
7. Annual Report Form
8. Annual Training Form

1 SITE AND STORMWATER PERMIT INFORMATION

This Stormwater Management Plan (SWMP) has been prepared for the Sand Creek Farms Sand Mine (the Site or the Facility) at Calhoun-Byers Road and East 64th Avenue, Byers, Colorado. The Site is owned and operated by 4K Equipment, LLC (4K Equipment or Owner). This SWMP has being prepared as part of the requirements for coverage under Colorado Discharge Permit System (CDPS) General Permit for Stormwater Discharges Associated with Sand and Gravel Mining and Processing Operations, Permit No. COG-500000, Certification COG-501713. This plan fulfills the requirements for an SWMP under the permit.

Owner:
4K Equipment, LLC
6201 McIntyre Street
Golden, CO 80403

The following sections describe the Facility, on-site industrial activity, and other information related to permitting the site under the permit referenced above.

Text from the permit regarding SWMP requirements is presented in italics. The SWMP text that addresses the permit requirements is in plain text.

2 GENERAL SWMP REQUIREMENTS (PERMIT SECTION L.)

An existing permittee authorized under the previous versions of this permit shall modify the existing SWMP to comply with the requirements of this permit within 180-days of the facility permit certification effective date.

1. SWMP requirement
The permittee must develop, implement, and maintain a SWMP for each facility authorized by this permit. The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control practices (the SWMP need not be prepared by a registered engineer). The permittee must modify the SWMP to reflect current site conditions (see Part I.L.7 below).

2. Preparation, Submission and Implementation
The permittee must complete a SWMP prior to submitting the permit application for authorization to discharge industrial stormwater from a facility, and submit it to the Division if requested. The permittee must implement the SWMP when the facility begins industrial activities, which includes installation of control measures.

The SWMP has been modified within 180 days of the Facility permit certification effective date (in this case, within 180 days of becoming the Owner of the Permit certification). The SWMP has been prepared in accordance with good engineering, hydrologic and pollution control practices. The permittee will, as necessary, modify the SWMP to reflect current site conditions.

The permittee has prepared the SWMP as required by the permit certification and will implement the provisions of SWMP required by the permit.

3. Signatory Requirements

The permittee must sign and certify all SWMPs in accordance with Part I.F.4 (Reporting and Recordkeeping); this requirement applies to the original SWMP prepared for the facility, and each time the permittee modifies a SWMP as required by Part I.L.7.a and b below.

I.F.4. Signatory and certification requirements

a. All reports and other information required by the Division, shall be signed and certified for accuracy by the permittee in accord with the following criteria:

i. In the case of corporations, by a responsible corporate officer. For purposes of this section, the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the form originates;

ii. In the case of a partnership, by a general partner;

iii. In the case of a sole proprietorship, by the proprietor;

iv. In the case of a municipal, state, or other public facility, by either a principal executive officer, or ranking elected official. For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates;

v. By a duly authorized representative of a person described above, only if:

a) The authorization is made in writing by a person described in i, ii, iii, or iv above;

b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,

c) The written authorization is submitted to the Division.

b. If an authorization as described in this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

The permittee, or the duly authorized representative shall make and sign the following certification on all such documents:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

See signature and certification below.

Owner Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the nonstormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with CDPS requirements or are recycled.

"I certify that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are recycled using concrete washout ponds that do not discharge to stormwater."

_____ _____

Signed by Title

_____

Date

4. Permit Retention

The permittee must maintain a copy of this permit and the permit certification issued to the permittee with the SWMP.

A copy of the permit and the permit certification are included in the Attachments.

5. SWMP Retention

The permittee must retain a copy of the SWMP at the facility unless another location, specified by the permittee, is approved by the Division.

A copy of this SWMP shall be maintained at the Facility.

6. Consistency with Other Plans

The permittee may incorporate, by reference, applicable portions of plans prepared for other purposes at their facility. Plans or portions of plans incorporated by reference into a SWMP become enforceable requirements of this permit and must be available along with the SWMP as required in Part.I.L.5 above.

Currently, no other plans are included by reference.

7. Required SWMP Modifications

a. Division initiated Modifications

i. The permittee must modify the SWMP when notified by the Division that it does not meet one or more of the requirements of this permit. Unless otherwise provided by the Division, the permittee shall have 30 days after notification to make the necessary changes to the SWMP and implement them.

ii. The Division may require the permittee to submit the modified SWMP to the Division.

iii. If the Division determines that the permittee's stormwater discharges do not, or may not, achieve the effluent limits required by this permit, the Division may require the permittee, within a specified time period, to develop and implement a supplemental control measure action plan, which describes additional SWMP modifications to adequately address the identified water quality concerns.

b. Permittee initiated Modifications

i. The permittee must modify the SWMP whenever necessary to address any of the triggering conditions for corrective action in Part I.K (Corrective Actions) to ensure that they do not reoccur.

ii. The permittee must modify the SWMP whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, significantly increases the quantity of pollutants discharged, or that requires the permittee to implement new or modified control measures.

iii. The SWMP modifications may include a schedule for control measure design and implementation, provided that interim control measures needed to comply with the permit are documented in the SWMP and implemented during the design period.

iv. The permittee must make all SWMP modifications in accordance with the corrective action deadline in Part I.K (Corrective Actions).

The SWMP shall be modified as required by CDPHE or as initiated by the Owner. The Owner shall revise the SWMP whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to the waters of the State, or if the SWMP implementation proves to be ineffective in controlling pollution. The plan changes and implementation shall be completed before the next anticipated storm, or not more than 60 days after the inspection.

3 SPECIFIC SWMP REQUIREMENTS (PERMIT SECTION M.)

3.1 SWMP Administrator

M. SPECIFIC SWMP REQUIREMENTS – Stormwater only
1. SWMP Administrator
The SWMP shall identify a specific individual(s) by name or by title whose responsibilities include: SWMP development, implementation, maintenance, and modification.

The SWMP Administrator shall be:

Mark Doran, Project Manager
Office: (303)279-4150
Cell: (720)951-1301
Email: mdoran@kti-usa.com

3.2 Facility Description

2. Facility Description
The facility description shall include:
a. A narrative description of the industrial activities conducted at the facility;
b. The total size of the facility property in acres;
c. The general layout of the facility including mining areas, revegetated areas, buildings, raw material storage areas, and the flow of goods and materials through the facility.

Sand Creek Farm has been used as a sand mine for many years. Mining has been permitted at this site since at least 1992, with the mining permit M-1992-038. The mining site maintains a minimum of 25 feet of setback from all property lines and a 100-foot setback from E 64th Avenue. Excavation has generally proceeded from the south to the north. The Site has no water wells, septic or sewer service available. At the present time, there are two small mine pits in the southwest portion of the Site. In the past, there were larger mine pits in the East Bijou Creek channel. These larger mine pits in the channel have refilled with sand during stormwater runoff events.

Industrial activities at the Site include aggregate (sand) mining and placement of inert fill. No aggregate processing is planned on the Site. There will be little or no stockpiling of materials. Sand loading directly into haul trucks by excavator or loader will be the major activity. Equipment will be stored on-site and there will be minor equipment maintenance using mobile services. There will be vehicle fueling using mobile services. Haul roads will be developed as necessary to conduct sand mining. There is the potential for multiple disturbed areas. The entire Site is unpaved. There will be a portable toilet and a Conex container for storage.

The Site is approximately 52 acres in size.

See Figures 1 and 2 for the Project Title Sheet and the Vicinity Map and Topographic Map. Figures 3, 4, and 5 contain general and site-specific notes. Figure 6 presents the initial conditions map. Figure 7 shows the interim conditions with the mine pit. Figure 8 shows the final conditions with the mine pit filled in and the Site returned to the approximate original contours.

The Site is one drainage basin, with the outfall, Outfall 001-A, at the northern end of the Site, within the channel of West Bijou Creek. For the interim conditions with the mine pit, under most circumstances there will be no flow from the Site. Any flows will stay in the mine pit, which will act as a detention basin. For certain conditions, the mine pit will fill up and there will be a flow exiting the Site at its northern edge. See Figures 6, 7, and 8.

3.3 Facility Map

3. Facility Map
The SWMP shall include a legible site map(s), showing the entire facility, and vicinity as appropriate, identifying:

a. The boundary of the mining and processing operation.
b. The location of the facility in relation to surface waters that receive industrial stormwater discharges from the facility (including the name of the surface water; if the name is not known, indicate that on the map); a separate vicinity map may be necessary to comply with this requirement.
c. The location of significant impervious surfaces within the facility property boundaries, including paved areas and buildings.
d. The locations of all facility stormwater conveyances including ditches, pipes, and swales.
e. The locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 001, No.002, etc.), and indicating whether one or more outfalls are "substantially identical" under Part I.H (General Monitoring Requirements); and an approximate outline of the areas draining to each outfall.
f. The directions of stormwater flow indicated by arrows;
g. The areas where mining and processing activities are currently or have previously been conducted, where such activities are exposed to precipitation. This includes all areas of soil disturbance and reclamation/revegetation.
h. The locations of all actual or potential pollutant sources (including sediment) associated with mining and processing activities, including but not limited to those identified in the Facility Inventory and Assessment of Pollutant Sources (below) and the following:

- *i. Vehicle fueling areas;*
- *ii. Fertilizer or chemical storage areas;*
- *iii. Areas used for storage or disposal of overburden, materials, soils or wastes;*
- *iv. Areas used for mineral milling and processing;*
- *v. All access and haul roads; and*

vi. All asphalt or concrete batch plants, or areas used for recycling of asphalt or concrete.

i. The location of any and all process water discharge outfalls, including specified locations of mine dewatering operations.
j. The location of all structural and applicable non-structural control measures used to meet the effluent limits required by this permit.
k. The locations where significant spills or leaks identified under Part I.L.4.b have occurred.
l. The locations of all stormwater monitoring points applicable to the facility (visual monitoring; benchmark monitoring, water quality-based monitoring).
m. Location and description of any non-stormwater discharges authorized in Part I.A.1.c or authorized by separate permit coverage.
n. Locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants.
o. The date that the facility site map was prepared and/or amended.

Additional requirements for Concrete Batch Plants – Drainage Area Site Map. Document in the SWMP the locations of the following, as applicable: dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

See the attached Figure 6, Initial Conditions Map, and Figure 7, Interim Conditions Map, which contains the items listed above as necessary.

3.4 Facility Inventory and Assessment of Pollutant Sources

4. Facility Inventory and Assessment of Pollutant Sources
The facility inventory and assessment shall include the following:

See the following sections.

Inventory of Facility Activities and Equipment

a. Inventory of facility activities and equipment
The inventory shall identify all areas (except interior areas that are not exposed to precipitation) associated with industrial activities that have been, or may potentially be, sources of pollutants, that contribute, or have the potential to contribute, any pollutants to stormwater, including but not limited to the following:

i. Loading and unloading of materials, including solids and liquids.
ii. Outdoor storage of materials or products, including solids and liquids.
iii. Outdoor manufacturing and processing.
iv. On-site dust or particulate generating processes, including dust collection devices and vents.
v. On-site waste treatment, storage, or disposal, including waste ponds and solid waste management units.
vi. Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).

vii. Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
viii. Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area.
ix. Roofs and associated surfaces composed of galvanized materials that may be mobilized by stormwater (e.g., roofs, ducts, heating/air conditioning equipment, gutters and downspouts).

The following activities and equipment are present on the Site:

- Loading and unloading of materials (loading of sand)
- Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing)
- Haul roads
- No roofs or other surfaces exposed to air emissions from a manufacturing building or a process area
- No roofs composed of galvanized materials

Inventory of Materials

b. Inventory of materials
The inventory shall list materials that contribute, or have the potential to contribute, pollutants to stormwater, including but not limited to the following:

i. The types of materials handled at the facility that may be exposed to precipitation or runoff and could result in stormwater pollution.
ii. The types of materials handled at the facility that may leak or spill, and be exposed to precipitation or runoff and
result in stormwater pollution.
iii. A narrative description of any potential sources of pollutants from past activities, materials and spills that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The description shall include the method and location of any on-site storage or disposal; and documentation of all significant spills and leaks of oil or toxic or hazardous pollutants that occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the SWMP preparation date.

The following materials are present on the Site.

Materials that may be exposed to precipitation or runoff:

- Aggregates (sand)

The types of materials handled at the facility that may leak or spill, and be exposed to precipitation or runoff:

- Petroleum products

- Small amounts of petroleum products and chemicals used in vehicle fueling and maintenance activities

The potential sources of pollutants from past activities, materials and spills that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks:

- None. No known significant spills or leaks in the past 3 years

Assessment of Potential Pollutant Sources

c. Assessment of potential pollutant sources
The assessment of potential pollutant sources shall provide a short narrative or tabulation describing the potential of a pollutant to be present in stormwater discharges for each facility activity, equipment and material identified above. The permittee shall update this narrative when data become available to verify the presence or absence of these pollutants.

Potential pollutant sources include:
i. Loading and unloading operations;
ii. Outdoor storage of chemicals or equipment;
iii. Crushing facilities or significant dust and particulate generating activities;
iv. On site waste disposal practices;
v. Stockpiles of overburden, raw material, intermediate products, byproducts, finished products or waste products;
vi. Asphalt or concrete batch plants or areas used for recycling of asphalt or concrete;
vii. Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.;
viii. Haul roads; and
ix. Disturbed and revegetated areas.

The following potential sources have been evaluated for the reasonable potential for contributing pollutants to runoff:

- Loading and unloading operations – in the mining areas in Basin 1, sand will be loaded by excavator or loader directly into haul trucks. No stockpiling of materials is planned. The mine pit itself will act as a detention basin. Loading and unloading operations in the mining areas have minimal potential to impact runoff.

- No petroleum products will be stored on the Site. There are fuels and oil within the equipment that will be stored on-site. Fueling and lubrication will be done by mobile service equipment. The storage and use of petroleum products has minimal potential to impact runoff. Mobile fueling will occur either in the mine pit or upgradient of the mine pit. There will be opportunities to clean up any spills before there are impacts to surface water.

- Outdoor storage of chemicals or equipment – no petroleum products or chemicals are stored outdoors. Trucks and equipment will be parked on-site. The storage of petroleum products, chemicals, and equipment has minimal potential to impact runoff.

- No processing of aggregates will occur on the Site.

- On site waste disposal practices – on site wastes consist of small amounts of solid waste. Solid waste will be stored in containers and disposed of off-site. These wastes have minimal potential to impact runoff because the wastes have minimal contact with rainwater.

- Stockpiles of overburden, raw material, intermediate products, byproducts, finished products or waste products –Stockpiles would have little to no potential to impact runoff; however, no stockpiling of materials is planned.

- Dedicated asphalt or concrete batch plants – there are no dedicated asphalt or concrete batch plants on the Site.

- Areas used for recycling of asphalt or concrete – No recycling of asphalt or concrete takes place on the Site.

- Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc. – Only minor equipment maintenance activities will take place on the Site. There is ample opportunity to prevent the release of a spill to waters of the State. Routine maintenance activities have minimal potential to impact runoff.

- Haul roads – haul roads will be located as necessary between the mine pits and the site exit at Calhoun-Byers Road and East 64th Avenue. Any runoff from these haul roads will flow to the mine pits. The haul roads have minimal potential to impact runoff.

- Disturbed and revegetated areas – Most of the site will be disturbed, with only small amounts of vegetated areas. Flows from disturbed areas will flow to the mine pits. Flows from disturbed areas have minimal potential to impact runoff.

3.5 Description of Control Measures

5. Description of Control Measures
a. The permittee shall document the location, installation date, type, and implementation specifications of each nonstructural and structural control measure implemented at the facility to achieve meet the effluent limitations contained in this permit. Documentation must include those control measures implemented for stormwater run-on that commingles with any discharges covered under this permit.

b. Installation and implementation specifications for each control measure used by the permittee to meet the effluent limitations contained in this permit must be retained with the SWMP.

6. Additional Control Measure Requirements

The permittee shall document the schedules, procedures, and evaluation results for the following subset of practice-based effluent limitations.

a. Good Housekeeping (see Part I.C.2.a.ii) - A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

b. Maintenance (see Part I.C.2.a.iii) - Preventative maintenance schedules for industrial equipment and systems; control measures; and any back-up practices in place should a runoff event occur while a control measure is off-line.

c. Spill Prevention and Response Procedures (see Part I.C.2.a.iv) - Procedures for preventing, responding to, and reporting spills and leaks. The permittee may reference other plans (e.g., a Spill Prevention Control and Countermeasure (SPCC) plan) otherwise required by a permit for the facility, provided that a copy of the other plan is kept onsite with the SWMP, and made available for review consistent with Part I.L (SWMP—General SWMP Requirements).

d. Employee Training (see Part I.C.2.a.viii) - A schedule for all types of training required by this permit, content of the training, and log of the dates on which specific employees received training.

e. Non-Stormwater Discharges (see Part I.C.2.a.ix) - Documentation of the stormwater conveyance system evaluation for the presence of non-stormwater discharges not authorized in Part.I.A.1.c, and the elimination of all unauthorized discharges. Documentation of the evaluation must include:

i. The date of any evaluation;

ii. A description of the evaluation criteria used;

iii. A list of the outfalls or onsite drainage points that were directly observed during the evaluation;

iv. The different types of non-stormwater discharge(s) and source locations; and

v. The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified.

Additional Requirements for Concrete Batch Plants:

Good Housekeeping Measures. With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in the facility SWMP the frequency of sweeping or equivalent measures.

Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a month if cement, aggregate, or settled dust are being handled or processed. The permittee must also prevent the exposure of fine granular solids (e.g., cement, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering.

From Part C 2 a of the Permit entitled Stormwater Discharge Effluent Limitations

i. Minimize exposure
The permittee must minimize the exposure of pollutant sources associated with manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff. Minimizing exposure may include locating these industrial materials and activities inside or protecting them with storm resistant coverings.

x. Waste, Garbage and Floatable Debris
The permittee must minimize the discharge of waste, garbage, and floatable debris from the site by keeping exposed areas free of such materials or by intercepting them before they are discharged.

xi. Dust generation and vehicle tracking of industrial materials
The permittee must minimize generation of dust and off-site tracking of raw, final, or waste materials.

The following control measures are in place on the Site.

Schedule for Implementing Controls

Item	**When Implemented**
SWMP Administrator	This control has been implemented for at least five years.
Erosion and Sediment Controls	These controls have been implemented for at least five years.
Materials Handling and Spill Prevention	This control has been implemented for at least five years.
Other Pollution Prevention Measures	These controls have been implemented for at least five years.
Preventive Maintenance	These controls have been implemented for at least five years.
Good Housekeeping	These controls have been implemented for at least five years.
Employee Training	This control has been implemented for at least five years.
Identification of Discharges other than Stormwater	Controls for discharges other than stormwater have been implemented for at least five years.

Erosion and Sediment Controls

Sand materials are excavated in the mining areas and are trucked off-site. Sediment is the pollutant most associated with sand and gravel mining. Off-site discharges of sediment are prevented by the site drainage which will be directed to the mining pit(s). The mine pits provide an opportunity to prevent the release of a spill to waters of the State.

The mining areas are planned to be refilled with inert fill. The final three feet of fill will be native sand materials. This will allow the Site to retain the same very low runoff characteristics that it has currently.

The installation, implementation, and maintenance requirements for all Control Measures are defined in the attachments.

Materials Handling and Spill Prevention

Sand materials are excavated in the mining areas and are trucked off-site. Sediment is the pollutant most associated with sand and gravel mining. Off-site discharges of sediment are prevented by the site drainage which will be directed to the mining pit(s).

The mobile equipment and vehicle fueling is the activity that is most likely to cause a spill. Personnel performing mobile fueling must follow Department of Transportation (DOT) regulations and recommendations. The driver must attend the fuel loading at all times. The personnel who are fueling equipment and vehicles must attend the process at all times. A spill kit is available on Site in the Conex storage. The mine pits provide an opportunity to prevent the release of a spill to waters of the State.

Petroleum products and other chemicals will not be stored on-site. The storage of the petroleum products and chemicals is not expected to impact runoff.

Spills of petroleum products or chemicals other than petroleum products will be cleaned up using materials from the spill kit mentioned above or by other equipment or spill cleanup equipment on Site.

Spill prevention and clean-up procedures include the following:

Personnel shall be observant of the potential for leaks when working around equipment and vehicles, particularly during the mobile fueling process. This awareness will help catch spills early and may enable personnel to prevent some spills.

Personnel shall be aware of the location and contents of the spill kit(s). The spill kit(s) shall be placed in areas that are most likely to have a spill.

Initial control of a petroleum or chemical discharge should focus on minimizing the quantity discharged and minimizing the extent of the spill.

DO:	DON'T
Shut off supply, stop leak if possible	Smoke
Shut off ignition sources	Risk personal injury
Contain spill or dike ahead of spill	Wash down spill area with water
Call your supervisor	Try to hide the spill
Protect nearby people, property, surface waters and equipment.	Attempt to clean up the spill if you are not properly trained and equipped
Follow SDS for spill cleanup advice	

Absorbents, dirt, or other materials used to clean up spills shall be isolated from stormwater runoff in non-leaking containers, on a liner, or in a bermed area. These materials shall be disposed of in accordance with all federal, state, and local laws and regulations. This disposal may be off-site disposal on on-site land farming.

A spill report should be written that includes, at a minimum, the following information:

- The cause of the spill
- Clean-up activities
- Measures that will be taken to ensure that a similar spill does not occur in the future.

The contents of this report will be discussed at the next safety meeting at the site.

The SWMP Administrator should be notified as soon as the spill is discovered, contained and/or cleaned up. Depending on the nature of the spill and the material involved, downstream water users, or other agencies may also need to be notified. The SWMP Administrator or his designee shall be responsible for contacting outside agencies.

Table 1 presents the hierarchy of personnel to call in the event of a spill. Attempt to notify the first person in the table. If unable to notify the first person, work down the list.

Table 1. Personnel to Notify in Event of a Spill

Name	Title	Telephone Number(s)
Mark Doran	Project Manager & SWMP Administrator	Ofc: (303)279-4150 Cell: (720)951-1301
Rick Hughes	General Superintendent	Ofc: (303)279-4150 Cell: (303)356-5926
Thomas Doran	Safety Manager	Ofc: (303)279-4150 Cell: (303)598-8206
Cal Kelley	Vice President	Ofc: (303)279-4150 Cell: (303)888-6479

For the chemicals stored on the Site, the following reporting requirements are in effect:

For petroleum products, a spill of greater than 25 gallons to the environment must be reported to the Division of Oil and Public Safety, the local fire department, Colorado Department of Public Health and Environment, and National Response Center. In addition, a petroleum spill of ANY size which causes a "film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines."

For other chemicals, immediately report a release to the environment at or above the "reportable quantity" within a 24-hour period. For the non-petroleum chemicals at the Site, the reportable quantity is 10,000 pounds, which for most chemicals is approximately 1200 gallons. Report these spills to the local fire department, Colorado Department of Public Health and Environment, and National Response Center.

When in doubt, it is better to report. There are no penalties for over-reporting, while there are penalties for failing to report.

Regulatory Agency Contact Information:

Colorado Department of Public Health and Environment
Toll-Free 24-hour Environmental Emergency Spill Reporting Line
1-877-518-5608

National Response Center
Washington, DC
1-800-424-8802 (24-hour phone)

Division of Oil and Public Safety (Dept. of Labor and Employment)
(303) 318-8547 (petroleum spills only)

Local fire department
911

The Permittee shall provide oral and written notice to CDPHE as indicated in Section 5 below if there is a change in the stormwater discharge or an incidence of noncompliance.

Pollution Incident History

While under the current ownership, there have been no reportable discharges or spills.

Other Pollution Prevention Measures

On-Site Management of Portable Toilets

This section applies to all in-service portable toilets.

(1) Site Selection

- Portable toilets should be located away from high-traffic vehicular areas.
- Portable toilets must be placed at least 20 feet away from all storm drains and streets.
- Portable Toilets **MUST NOT EVER** be sited on top of storm drain inlets or on a street.

- Portable toilets shall be placed on a level ground surface that provides unobstructed access to users and servicing pump trucks.
- Portable toilets should, wherever possible, be located on natural ground and not on or within 5 feet of a paved surface such as asphalt, concrete or similar.
- If portable toilets must be placed on a paved surface exposed to rainwater or stormwater runoff, extra care must be taken during servicing to ensure any wastewater spilled onto the paved surface is rinsed and adequately collected so as not to leave any residue. A wet shop vacuum or similar would provide for adequate collection.
- As a minimum, portable toilets should not be located within the 75-foot buffer of any stream or lake, or within any other larger stream/lake buffer that may have been established. With respect to portable toilets used at construction sites, see site plans for details regarding buffers.

(2) Servicing

- Maintain all portable toilets in good condition to prevent leaks or spills.
- Owner identification and contact information must be effectively displayed in a prominent location on the exterior of each unit.
- Wastewater from washing of vehicles, portable toilets or other equipment must not be disposed of to the ground or to a storm drain.
- All wastewater must be disposed of in the sanitary sewer in accordance with all pretreatment requirements or to an approved on-site wastewater treatment system (i.e. septic tank).
- Portable toilets must be cleaned and have waste removed at least weekly. Additional servicing and/or portable toilets may be necessary depending on the volume of use the toilets receive.
- Damaged portable toilets must be repaired/replaced immediately.
- Rinsing of portable toilets (excluding the inside of portable toilet waste tank) may be completed on site when the following conditions are met:
    - Rinse water is controlled to prevent it from entering into a storm drain;
    - No more than one (1) gallon of rinse water is used per portable toilet (i.e. low volume high-pressure cleaners, or bucket and rag. No common household hoses.);
    - Rinsing is completed at least 20 feet away from a street or storm drain
    - Where the portable toilet must be located on a paved surface: any rinse water that comes in contact with the paved surface must be adequately collected.
    - Where the portable toilet is located on a non-paved surface:
        - rinsing should be completed at least 5 feet away from a paved surface;
        - rinsing wastewater is drained to the ground at a rate that allows it to immediately soak into the ground;
- In the event of a spill or discharge to a storm drain or waterway, proper regulatory authorities must be contacted immediately.
- Portable toilet wastewater (human waste/sewage) must never be disposed of on-site.

- Properly store and handle chemical materials to prevent any spills or discharges onto the ground or into a storm drain.

(3) End User Responsibilities

- Users of portable toilets should make all reasonable efforts to ensure that the waste hauler is disposing of waste at a permitted location.
- At a minimum there must be at least one portable toilet on-site for every ten people. Additional toilets may be necessary depending on the volume of usage.
- To prevent spills, portable toilets should not be moved more often than is necessary.
- Portable toilets must be cleaned and have waste removed at least weekly. Additional servicing and/or toilets may be necessary depending on the volume of use the units receive.
- Providing an adequate number of portable toilets and frequent servicing (at least weekly) is an effective method of maintaining the cleanliness of toilets. It will encourage use and assist in minimizing employee or patron discontent with unsanitary portable toilets, which is often expressed by pushing toilets over.

Source: Gwinnett County, GA, Storm Water Management Division. BMP WQ-4. January 2006.

Preventive Maintenance

The mine pits are informally inspected during and after each runoff event. Abnormal conditions are noted and corrected. Storage containers for petroleum and chemicals, trucks, and equipment are informally inspected each day.

Good Housekeeping

Good housekeeping measures include waste management practices (collecting, containerizing, and removal of solid wastes), grading and sediment cleanup as necessary, and keeping an orderly site. Chemical and petroleum storage is confined to indoor locations or areas with double containment to the extent practicable.

As a part of Good Housekeeping, the Owner minimizes exposure of pollutant sources associated with manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff. To the extent possible, these materials are stored in buildings (for this Site, the storage Conex). Additionally, the Owner minimizes the discharge of waste, garbage, and floatable debris from the site by keeping exposed areas free of such materials or by intercepting them before they are discharged. The Owner also minimizes generation of dust and off-site tracking of raw, final or waste materials.

Identification of Discharges other than Stormwater

7) Identification of Discharges other than Stormwater: The stormwater conveyance system on the Site shall be evaluated for the presence of discharges other than

stormwater, such as mine drainage, spoil springs, sanitary waste, or process water of any kind. The SWMP shall include a description of the results of any evaluation for the presence of discharges other than stormwater, the method used, the date of the evaluation, and the on-site drainage points that were directly observed during the evaluation.
A number of discharges other than stormwater may not require a CDPS Industrial Wastewater Discharge permit and are considered Allowable Non-Stormwater Discharges. Any of these discharges that exist at the site must be identified in the SWMP. See the permit for the list of such allowable discharges.

The stormwater conveyance system was evaluated for the presence of discharges other than stormwater by Mark Doran of 4K Equipment and John Jankousky of EME Solutions, Inc. on October 22, 2024. The methods for evaluating were visual inspection and process knowledge. During the evaluation, the following on-site drainage points were directly observed:

- There are no process water sources on the site.
- West Bijou Creek was dry.
- There was no flow at Outfall 001-A.
- There are no non-stormwater discharges to State waters.

3.6 Inspection Procedures and Documentation

7. Inspection Procedures and Documentation
The permittee shall document inspection procedures, and maintain such procedures and other documentation with the SWMP, as follows:

a. The permittee shall document procedures for performing the facility inspections required by Part I.J (Facility Inspections) of the permit. Procedures must identify:

i. Person(s) or positions of person(s) responsible for inspection;
ii. Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular stormwater runoff discharges; and
iii. Specific items to be covered by the inspection, including inspection schedules for specific outfalls.

b. The permittee shall maintain inspection documentation with the SWMP as required by Part I.J (Facility Inspections) of this permit.
c. Permittees that invoke the exception to quarterly inspections for inactive and unstaffed facilities must include in the SWMP the signed and certified documentation to support this claim as required in Part I.J (Facility Inspections).

J. FACILITY INSPECTIONS – Stormwater only
1. Inspection frequency and personnel

a. The permittee shall conduct and document visual inspections of the facility at least quarterly (i.e., once each calendar quarter). Inspections shall be conducted at least 20 days apart.
b. The permittee shall conduct a minimum of one (1) of the annual quarterly inspections during a runoff event, which for a rain event means during, or within

24 hours after the end of, a measureable storm event; and for a snowmelt event, means at a time when a measurable discharge occurs from the facility.

c. The permittee shall ensure that qualified personnel conduct inspections.

2. Inspection scope

Each inspection shall include:

a. Observations made at stormwater sampling locations and areas where stormwater associated with mining and processing is discharged off-site, to waters of the state, or to a storm sewer system that drains to waters of the state.

b. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).

c. Observations of the condition of and around stormwater outfalls, including flow dissipation measures to prevent scouring.

d. Observations for the presence of illicit discharges or other non-permitted discharges.

e. A verification that the descriptions of potential pollutant sources required under this permit are accurate.

f. A verification that the site map in the SWMP reflects current conditions.

g. An assessment of all control measures used to comply with the effluent limits contained in this permit, noting all of the following:

i. Effectiveness of control measures inspected.

ii. Locations of control measures that need maintenance or repair.

iii. Reason maintenance or repair is needed and a schedule for maintenance or repair.

iv. Locations where additional or different control measures are needed and the rationale for the additional or different control measures.

3. Inspection documentation

The permittee shall document the findings for each inspection in an inspection report or checklist, and keep the record onsite with the facility SWMP. The permittee shall ensure each inspection report documents the observations, verifications and assessments required in Part I.J.2 above, and additionally includes:

a. The inspection date and time;

b. Locations inspected;

c. Weather information and a description of any discharges occurring at the time of the inspection;

d. A statement that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Part I.F.4 (Reporting and Recordkeeping), the site is either in compliance or out of compliance with the terms and conditions of this permit, with respect to Part I.J.2 (Inspection Scope);

e. A summary report and a schedule of implementation of the corrective actions that the permittee has taken or plans to take if the site inspection indicates that the site is out of compliance;

f. Name, title, and signature of the person conducting site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

g. Certification and signature of the person described in Part I.F.4 (Reports and Recordkeeping), or a duly authorized representative of the facility thereof.

The owner will complete the inspections as defined by Part I.J (shown above). The person in charge of the inspections shall be Mark Doran, Project Manager, or his

designee. Inspections shall be quarterly, at least 20 days apart, with a minimum of one (1) of the annual quarterly inspections during a runoff event.

See the inspection form in the Attachments for the items to be covered in the inspection.

The Owner shall maintain inspection documentation for a minimum of 3 years.

3.7 Monitoring Procedures and Documentation

8. Monitoring Procedures and Documentation

The permittee shall document monitoring procedures, and maintain such procedures and other documentation with the SWMP, as follows:

a. The permittee shall document procedures for performing any applicable types of monitoring required by Part I.I (Specific Monitoring Requirements) of the permit, including:

i. Visual assessment monitoring (see Part I.I.1)
ii. Benchmark monitoring (see Part I.I.2)
iii. Water Quality Standards monitoring (see Part I.I.3); and
iv. Additional monitoring as required by the Division (see Part I.I.4).

b. For each type of monitoring, procedures must identify:

i. Locations where samples are collected, and outfall identification by its unique identifying number;
ii. Staff responsible for conducting stormwater sampling;
iii. Procedures for sample collection and handling, including any deviations from sampling within the first 30 minutes of a measurable storm event;
iv. For any parameters requiring analysis, the name of the parameter, the holding times and preservatives, the analytical methods used, and the laboratory quantitation levels;
v. Procedures for sending samples to a laboratory, as applicable;
vi. Monitoring schedules, including any deviations from the monitoring schedule for alternate monitoring periods for climates with irregular stormwater runoff (see Part I.H.5);
vii. The numeric control values (benchmarks, TMDL-related requirements, or other requirements) applicable to discharges from each outfall.

c. Permittees must maintain Quarterly Visual Assessment documentation (see Part I.I.1.c) with the SWMP.

d. Permittees that invoke the Monitoring Exceptions for Inactive and Unstaffed Sites and for Completed and Finally Stabilized Areas, must include in the SWMP the signed and certified documentation to support this claim.

e. Permittees that use the substantially identical outfall monitoring exception (Part I.H.1) must document the following in the SWMP:

i. Location of each of the substantially identical outfalls, and the outfall sampled;
ii. Description of the general industrial activities conducted in the drainage area of each outfall;
iii. Description of the control measures implemented in the drainage area of each outfall;

iv. Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
v. Impervious surfaces in the drainage area that could affect the percolation of stormwater runoff into the ground (e.g., asphalt, crushed rock, grass, etc.);
vi. Why the permittee expects the outfalls to discharge substantially identical effluents.

Required Monitoring

The Owner shall perform **visual monitoring** as described in Part I.1. of the permit (shown below) for **Outfall 001-A**.

No sampling is required for Water Quality Standards Monitoring. No additional monitoring is required.

Procedure for Visual Assessment Monitoring:

I. SPECIFIC MONITORING REQUIREMENTS – Stormwater only
1. Visual Monitoring
*Once each **quarter** for the entire permit term, the permittee must collect a stormwater sample from each outfall (or a substantially identical outfall pursuant to Part I.H.1 above) and conduct a visual assessment of each of these samples.*

a. These samples should be collected in such a manner that the samples are representative of the stormwater discharge.
b. The visual assessment must be made of a sample in a clean, clear glass or plastic container, and examined in a well-lit area. The permittee must visually inspect the sample for the presence of the following water quality characteristics:
i. Color;
ii. Odor;
iii. Clarity;
iv. Floating solids;
v. Settled solids;
vi. Suspended solids;
vii. Foam;
viii. Oil sheen; and
ix. Other obvious indicators of stormwater pollution.

c. Quarterly Visual Assessment Documentation. The permittee must document the visual assessment results and maintain this documentation onsite with the facility SWMP as required in Part I.M.8. The permittee is not required to submit visual assessment findings to the Division, unless specifically requested to do so. At a minimum, visual assessment documentation of the must include:
i. Sample location(s);
ii. Sample collection date and time, and visual assessment date and time for each sample;
iii. Personnel collecting the sample and performing visual assessment, and their signatures;

iv. Nature of the discharge (i.e., runoff or snowmelt);
v. Results of observations of the stormwater discharge;
vi. Probable sources of any observed stormwater contamination; and
vii. If applicable, why it was not possible to take samples within the first 30 minutes.

d. Quarterly Visual Assessment Corrective Actions: If the visual assessment indicates the control measures for the facility are inadequate or are not being properly operated and maintained, the permittee must conduct corrective actions consistent with Part I.K (Corrective Actions) of this permit.
e. The permittee shall maintain visual monitoring procedures in the SWMP as required in Part I.M.8.

See visual monitoring form in the Attachments.

c. Permittees must maintain Quarterly Visual Assessment documentation (see Part I.I.1.c) with the SWMP.

4K Equipment shall maintain records of the Quarterly Visual Assessment with the SWMP.

d. Permittees that invoke the Monitoring Exceptions for Inactive and Unstaffed Sites and for Completed and Finally Stabilized Areas, must include in the SWMP the signed and certified documentation to support this claim.

At the present time, the facility is active.

e. Permittees that use the substantially identical outfall monitoring exception (Part I.H.1) must document the following in the SWMP:
i. Location of each of the substantially identical outfalls, and the outfall sampled;
ii. Description of the general industrial activities conducted in the drainage area of each outfall;
iii. Description of the control measures implemented in the drainage area of each outfall;
iv. Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
v. Impervious surfaces in the drainage area that could affect the percolation of stormwater runoff into the ground (e.g., asphalt, crushed rock, grass, etc.);
vi. Why the permittee expects the outfalls to discharge substantially identical effluents.

The facility is not expected to use the substantially identical outfall monitoring exception.

3.8 Corrective Action Documentation

9. Corrective Action Documentation
The permittee must maintain a copy of all Corrective Action reports that document corrective actions taken by the permittee consistent with Part I.K (Corrective Actions) of this permit, with the facility SWMP.

As necessary, the Owner will implement corrective actions and maintain Corrective Action reports that document these corrective actions. These records will be kept a minimum of 3 years.

4 STORMWATER SPECIFIC REPORTING AND RECORDKEEPING – STORMWATER ONLY

N. STORMWATER SPECIFIC REPORTING AND RECORDKEEPING – Stormwater only
1. Routine Reporting of data – DMRs In addition to the Reporting and Recordkeeping requirements provided at Part I.F of this permit, the required DMR reporting conventions for stormwater discharges are as follows:

a. If no discharge occurs during the reporting period, "No Discharge" shall be reported on the DMR.
b. If the permittee's benchmark sampling frequency is reduced consistent with Part I.I.2.d of this permit (Benchmark Monitoring Actions – Data not exceeding benchmarks), the permittee must submit quarterly DMRs and indicate "Benchmark Met" in the result field on the DMR for each parameter that meets the sampling frequency reduction criteria.
*c. If the permittee's monitoring is excepted consistent with Parts I.H.7 and I.H.8 of this permit, the permittee must submit quarterly DMRs and indicate "**General Permit Exemption**" in the result field on the DMR for each parameter for the period the site meets the monitoring exception criteria.*

The Owner shall report using DMRs as required by the permit. At the present time, DMRs are not required by the permit certification.

2. Annual report

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31.	February 28	Annual

a. The annual report shall include:
i. Name of permittee, address, phone number
ii. Permit certification number
iii. Facility name and physical address
iv. Contact person name, title, and phone number
v. Summary of inspection dates
vi. Summary of visual monitoring
vii. Corrective action documentation as required in Part I.J., and status of any outstanding corrective action(s).
b. The signed copy of each annual report shall be submitted to the Division at the address below, and a copy maintained with the SWMP.

Attn: Annual Report
Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

The Owner shall submit an annual report as required by the permit.

3. SWMP records
The permittee shall retain copies of the facility SWMP, including any modifications made during the term of this permit, documentation related to corrective actions taken, all reports and certifications required by this permit, monitoring data, and records of all data used to complete the application to be covered by this permit, for a period of at least 3 years from the date that coverage under this permit expires or is terminated.

The Owner shall retain records for at least 3 years as required by the permit.

O. SECTOR-SPECIFIC REQUIREMENTS FOR ASPHALT BATCH PLANTS – Stormwater only
The requirements of this Part apply to stormwater discharges associated with industrial activity from asphalt batch plants (SIC Code 2951) located at sand and gravel facilities, and to areas of the permittee's facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.
SEE PERMIT FOR ADDITIONAL REQUIREMENTS FOR ASPHALT BATCH PLANTS STORMWATER ONLY

This section is not applicable to the Site, because there are no asphalt batch plants.

P. SECTOR-SPECIFIC REQUIREMENTS FOR CONCRETE BATCH PLANTS – Stormwater only
The requirements of this Part apply to stormwater discharges associated with industrial activity from concrete batch plants (SIC Code 3273) located at sand and gravel facilities, and to areas of the permittee's facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

1. Concrete Batch Plants
Concrete batch plants (permanent and mobile) that operate at sand and gravel facilities, where the facility is permitted for such operations, may be covered by this permit. Concrete batch plants that operate at sand and gravel facilities, where the facility is NOT permitted for such operations, must obtain alternate permit coverage, currently under CDPS general permit COR900000.

2. Additional Practice-Based Effluent Limits
a. Good Housekeeping Measures. With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant material in stormwater from paved portions of the site that are exposed to

stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in the facility SWMP the frequency of sweeping or equivalent measures.

Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a month if cement, aggregate, or settled dust are being handled or processed. The permittee must also prevent the exposure of fine granular solids (e.g., cement, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering.

3. Additional SWMP Requirements

a. Drainage Area Site Map. Document in the SWMP the locations of the following, as applicable: dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

b. Certification. For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the nonstormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with CDPS requirements or are recycled.

4. Sector-Specific Benchmarks

Table P-1 identifies benchmarks that apply to discharges associated with industrial activity from concrete batch plants

There are no sector-specific requirements for this SWMP.

Q. OTHER TERMS AND CONDITIONS – Stormwater only

1. All dischargers must comply with the lawful requirements of counties, drainage districts and other state or local agencies regarding any discharges of stormwater to storm drain systems or other water courses under their jurisdiction.

2. Reporting to Municipality – Any permitted facility discharging to a municipal storm sewer shall provide the municipality with a copy of the permit application, and/or Annual Reports, upon request. A copy of the SWMP shall also be provided to the municipality upon request.

The Owner will comply with the lawful requirements of counties, drainage districts and other state or local agencies regarding any discharges of stormwater.

The Facility does not discharge to a municipal storm sewer. Reporting to a municipality should not be required.

5 NOTIFICATION REQUIREMENTS

A. NOTIFICATION REQUIREMENTS

1. Notification to Parties

All notification requirements under this section shall be directed as follows:

a. Oral Notifications, during normal business hours shall be to:

Water Quality Protection Section – Industrial Compliance Program
Water Quality Control Division
Telephone: (303) 692-3500

b. Written notification shall be to:

Water Quality Protection Section – Industrial Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

2. Change in Discharge

The permittee shall give advance notice to the Division, in writing, of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged, or;

b. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported pursuant to an approved land application plan.

Whenever notification of any planned physical alterations or additions to the permitted facility is required pursuant to this section, the permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge, the stream, or ground water. If the Division finds that such new or altered discharge might be inconsistent with the conditions of the permit, the Division shall require a new or revised permit application and shall follow the procedures specified in Sections 61.5 through 61.6, and 61.15 of the Colorado Discharge Permit System Regulations.

3. Noncompliance Notification

The permittee shall give advance notice to the Division, in writing, of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

a. If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitations or standards specified in this permit, the permittee shall, at a minimum, provide the Division with the following information:

i) A description of the noncompliance and its cause;

ii) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and

iii) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The permittee shall report the following circumstances ***orally within twenty-four (24) hours*** *from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the information requested in Part II.A.4 (a) within five (5) working days after becoming aware of the following circumstances:*

i) Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;

ii) Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;

iii) Circumstances leading to any upset which causes an exceedance of any effluent limitation in the permit;

iv) Daily maximum violations for any of the pollutants limited by Part I.A of this permit as specified in Part III of this permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.

c. Unless otherwise indicated in this permit, the permittee shall report instances of non-compliance which are not required to be reported within 24-hours at the time Discharge Monitoring Reports are submitted. The reports shall contain the information listed in sub-paragraph (a) of this section.

The Permittee shall provide oral and written notice to CDPHE as indicated above if there is a change in the discharge or an incidence of noncompliance.

6 EMPLOYEE TRAINING

Part I. 2.a.viii. Employee Training
The permittee must develop and implement a training program for employees. Training must be conducted at least ***annually****, and must address the following, as applicable to the trainee's activities: the site-specific control measures used to achieve the effluent limits in this Part, components and goals of the SWMP, monitoring and inspection*

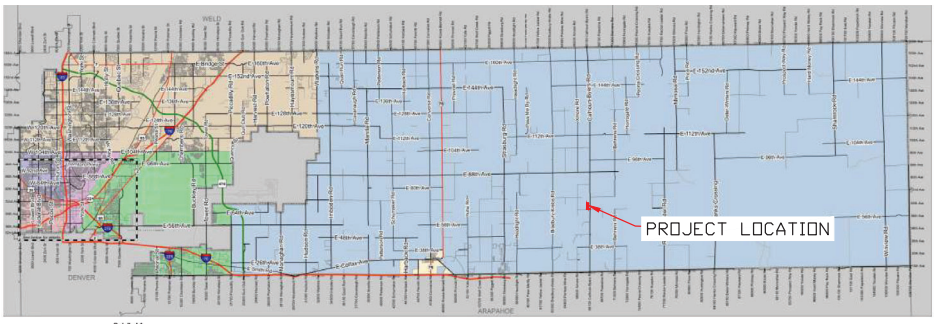
procedures, and other applicable requirements of the permit. At a minimum, the following individuals must be trained:
a) Employee(s) overseeing implementation of, revising, and amending the SWMP.
b) Employee(s) performing installation, inspection, maintenance, and repair of control measures.
c) Employee(s) who work in areas of industrial activity subject to this permit.
d) Employee(s) who conduct stormwater discharge monitoring required by Part.I.I of this permit.

Employee training will be conducted at least annually. The training will address the following, as applicable to the trainee's activities:

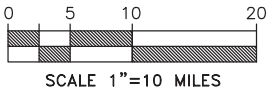
- the site-specific control measures used to achieve the effluent limits in this Part,
- components and goals of the SWMP, monitoring and inspection procedures, and
- other applicable requirements of the permit.

At a minimum, the following individuals will be trained:

a) Employee(s) overseeing implementation of, revising, and amending the SWMP.
b) Employee(s) performing installation, inspection, maintenance, and repair of control measures.
c) Employee(s) who work in areas of industrial activity subject to this permit.
d) Employee(s) who conduct stormwater discharge monitoring required by Part.I.I of this permit.



PROJECT LOCATION IN ADAMS COUNTY
VICINITY MAP SHOWN ON FIGURE 2



DEVELOPER INFORMATION:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403
CALVIN KELLEY
PHONE: 303-279-4150

PROJECT ENGINEER INFORMATION:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DRIVE
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.
PHONE: 303-905-3635

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FIGURE 8 - FINAL CONDITIONS MAP
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FIGURE 10. ARMORED CREEK RUNDOWN

NOTES:

1. PUBLIC IMPROVEMENTS SHALL CONFORM TO ADAMS COUNTY STANDARDS AND SPECIFICATIONS AND LATEST EDITION OF COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
2. SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN
3. PROJECT BENCHMARK: (AZTEC #400). ADAMS COUNTY BENCHMARK NUMBER 2023 BEING A 3-1/4" ALUMINUM ALLOY CAP SET IN CONCRETE STAMPED "ADAMS COUNTY COLORADO 1999 GOMEZ SURVEY MARK" LOCATED AT 5.9 MI (9.5 KM) NORTHEAST OF STRASBURG IN THE ROW OF BRADBURY-KREBS ROAD IN THE SOUTHWEST 1/4 OF SECTION 8, T 3 S, R 61 W, 6TH P.M, 29.0 FEET EAST OF THE CENTER OF BRADBURY-KREBS ROAD, 43.0 FEET NORTH OF THE CENTER OF A DIRT ROAD TO THE SOUTH, 3.0 FEET NORTH OF A FIBERGLASS WITNESS POST, 3.1 FEET SOUTH OF A FIBERGLASS WITNESS POST AND AT THE SAME LEVEL AS BRADBURY-KREBS ROAD.
   ELEVATION = 5070.45' (NAVD88)

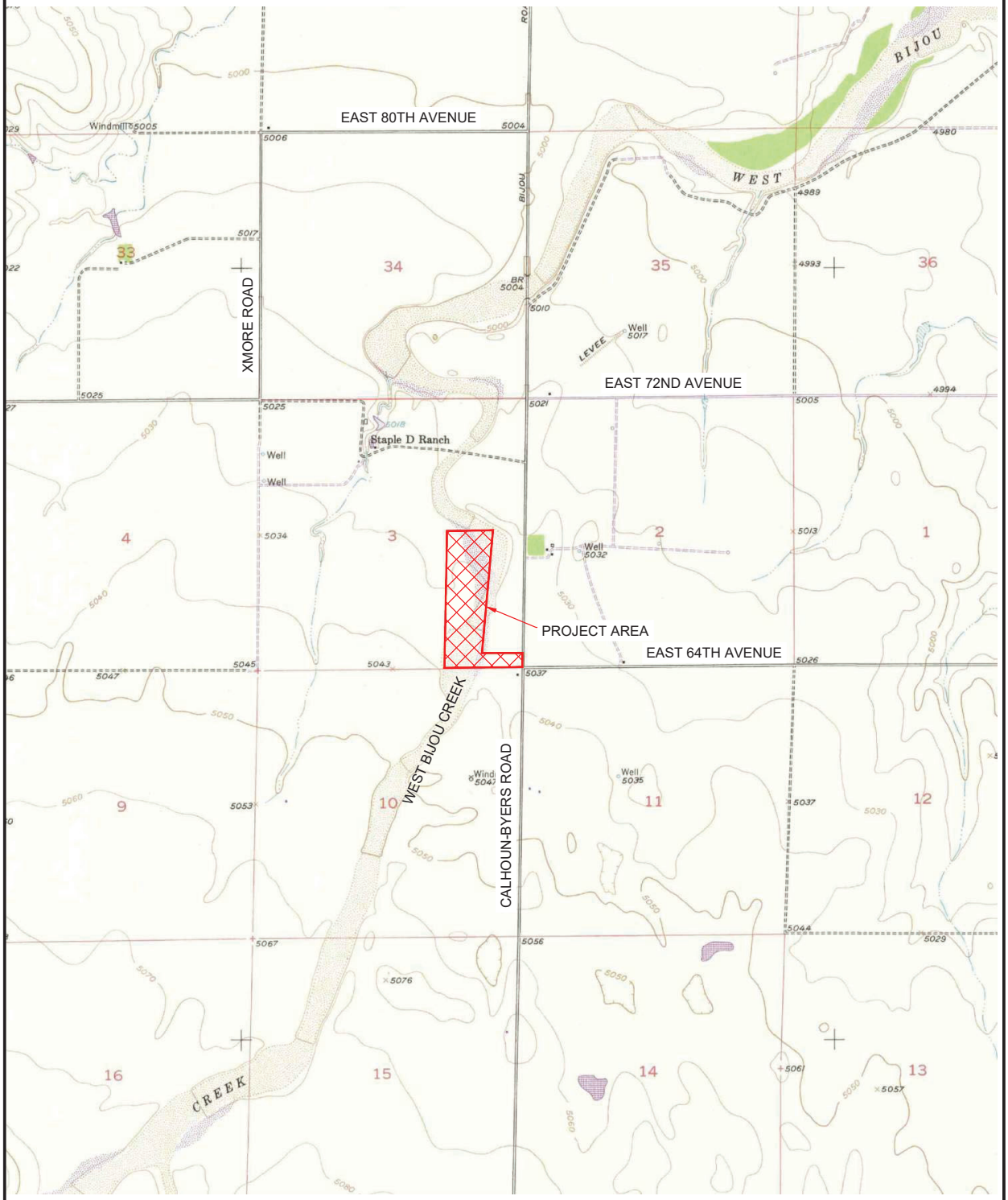
   PROJECT CONTROL STATEMENT: PROJECT COORDINATES ARE MODIFIED COLORADO STATE PLANE NORTH ZONE 83(2011) COORDINATES. PROJECT COORDINATES ARE DERIVED FROM STATE PLANE COORDINATES USING THE FOLLOWING FORMULAS:
   - PROJECT NORTHING = (STATE PLANE NORTHING * 1.0002529622) - 1000000.00'
   - PROJECT EASTING = (STATE PLANE EASTING * 1.0002529622) - 3000000.00'
4. ADDITIONAL SURVEY INFORMATION IS PRESENTED IN ATTACHMENT 3, LAND SURVEY PLAT. HORIZONTAL LOCATIONS BASED ON NAD 83 AND VERTICAL ELEVATION ON NAVD 88.
5. UTILITY LOCATE PHONE NUMBER: COLORADO811.
   DIAL 811 OR 800-922-1987 FOR ALL LOCATE REQUESTS OR
   ON WEB SITE WWW.COLORADO811.ORG
6. INDEX OF PUBLIC UTILITIES AND UTILITIES COMPANIES PHONE NUMBER: THERE ARE NO PUBLIC UTILITIES ON THE SAND CREEK FARM SITE.

EROSION AND SEDIMENT CONTROL
FIGURE 1 - PROJECT TITLE SHEET

REVISIONS:	DATE:
ADDITIONAL BENCHMARK INFORMATION	12-2-2024

PROJECT:	PREPARED FOR:	PREPARED BY:
SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

Sand-Creek-Site-Plan-JLJ.dwg



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

N

0 1000 2000 4000

SCALE 1"=2000'

SOURCE:
USGS 7.5–MINUTE QUADRANGLE
LEADER SW, CO REVISED 1979

EROSION AND SEDIMENT CONTROL
FIGURE 2 - VICINITY MAP AND TOPOGRAPHIC MAP

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

General Notes – to be included on plan set:

"The general notes for erosion and sediment control work shall be as follows:

1. Owner/Contractor is responsible for obtaining a State of Colorado, Colorado Department of Public Health and Environment (CDPHE) General Permit for Stormwater Discharges Associated with Construction Activity COR-030000 prior to construction (CDPS Stormwater Construction Permit).
2. The Owner/Contractor shall provide Adams County with a copy of this CDPS Stormwater Construction Permit letter of approval and Certification from the State prior to receiving a County Construction/Building Permit. The Owner/Contractor is responsible for all fees associated with this CDPS Stormwater Construction Permit.
3. A copy of the CDPS Stormwater Construction Permit from CDPHE and the approved Stormwater Management Plan (SWMP) with an Erosion and Sediment Plan shall be kept on site and updated at all times in compliance with the CDPS Stormwater Construction Permit.
4. Owner/Contractor is responsible for filing a CDPHE Inactivation Notice – Construction Stormwater Discharge General Permit Certification; once the construction site has been finally stabilized in compliance with the CDPS Stormwater Construction Permit.
5. The Owner/Contractor shall provide Adams County with a copy of this Inactivation Notice. There will be no fee charged to Adams County for the Inactivation Notice or if the Contractor neglects to file this Notice.
6. The SWMP Administrator is responsible for implementing and maintaining erosion and sediment control measures at all times during construction. The SWMP shall be modified in compliance to the CDPS Stormwater Construction Permit.
7. Standard Inspections - A thorough inspection of the Best Management Practices (BMPs) shall be performed every fourteen (14) calendar days and within twenty-four (24) hours after any precipitation or snowmelt event that causes surface erosion.
8. Use biodegradable erosion control blankets on slopes 3:1 or steeper and in swales or long channels.
9. All soil imported to or exported from the site shall be properly covered to prevent the loss of material during transport. Haul routes must be permitted by the County. No material shall be transported to another site without first obtaining a Hauling Permit from Adams County Planning.
10. The concrete washout containment structure shall contain all concrete washout water. Stormwater shall not carry wastes from the designated concrete washout location and shall be located a minimum of fifty (50) feet horizontal from waters of the State.
11. The actual schedule for implementing erosion and sediment control measures will be determined by project construction progress. Down slope protective measures (i.e. sediment control barriers) must always be in place before soil is disturbed.
12. Install sediment control barriers down slope from construction that disturb site soil. Sediment control barriers should be installed in the locations shown on the Erosion and Sediment Control Drawings, as well as other locations as deemed necessary by the contractor, inspector or owner."

Performance Standard Notes – to be included on plan set:

"The general performance requirements for erosion control work shall be as follows:

1. Temporary and/or permanent BMPs intended to control erosion of an earth disturbance operation shall be installed before any earth disturbance operations take place in sequence with proper phasing.
2. Earth disturbances shall be conducted in such a manner so as to minimize disturbed area and protect natural features, soil and vegetation.
3. Persons engaged in earth disturbances shall implement and maintain acceptable soil erosion and sedimentation control measures, in conformance with the erosion control technical standards adopted by Adams County and in compliance with the CDPS Stormwater Construction Permit.
4. Earth disturbances shall be designed, constructed and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest possible period of time.
5. Sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the earth disturbance.
6. Excavated material and other construction debris shall not be stockpiled within the roadway section. Backfill materials up to a maximum of 130 CY may be stockpiled, with appropriate erosion control measure, but must be removed or placed by the end of each work week.
7. Any construction areas, not graded to final grade, require temporary BMPs for site stabilization.
8. As necessary, construct a temporary facility designated for conveyance of stormwater around, through, or from the construction site.
9. Permanent erosion and sediment control measures for all slopes, channels, ditches, or any disturbed land area shall be stabilized immediately after final grading.
10. All spills shall be cleaned up immediately after discovery, or contained until appropriate cleanup methods can be employed. Manufacture's recommended methods for spill cleanup shall be followed, along with proper disposal methods.
11. Concrete washouts shall not be placed in low areas, ditches or adjacent to state waters.
12. The Owner/Contractor shall check the capacity for all concrete washout areas. Waste materials must be removed by the contractor and legally disposed of when accumulations amount to two-thirds (⅔) of the wet storage capacity of the structure.
13. All concrete washout areas shall be clearly marked. The concrete washout containment structure will include a 2'x3'sign posted with the words "Concrete Washout". The concrete washout Area shall be repaired and/or enlarged as necessary to maintain capacity for wasted concrete.
14. At the end of construction, all concrete shall be removed from the site and legally disposed of. Concrete washout waste must not be buried.
15. Disturbed areas and stockpiles which are not at final grade shall be temporarily stabilized immediately after interim grading.

FIGURE 3 - ADAMS COUNTY STANDARD EROSION & SEDIMENT CONTROL NOTES - 1 OF 2

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

16. Final stabilization is reached when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least seventy percent (70%) of pre-disturbance levels or equivalent permanent, physical erosion reduction methods has been employed.
17. Records of spills, leaks, or overflows that result in the discharge of pollutants must be documented and maintained. Some spills may need to be reported to the Division immediately: specifically, a release of any chemical, oil, petroleum product, sewage, etc., which may enter Waters of the State, must be reported. More guidance is available on the web at www.cdphe.state.co.us/emp/spillsandreleased.htm.The Division's toll free 24-hour environmental emergency spill reporting line is 1-877-518-5608. Also immediately call Adams County at 303-.453-8787 and the Tri-County Health Department at 303-220-9200"

July 2008
Revised 2/10; 3/11

BMP Maintenance Notes – to be included on plan set:
"The general maintenance requirements for BMPs shall be as follows:

1. It is anticipated that the BMPs implemented at the site will have to be modified to adapt to changing conditions or to ensure that potential pollutants are being properly managed at the site. When BMPs are modified, the SWMP must be modified to accurately reflect the actual field conditions.
2. The Owner/Contractor shall continuously maintain all silt fencing so that it functions properly during construction and work suspensions. All silt fencing shall be removed by the Contractor upon substantial permanent stabilization unless otherwise directed by authorized Adams County personnel.
3. Silt fence shall be installed along contours and prior to any grubbing or grading activity. It shall be located to capture overland, low-velocity sheet flows in which it shall be installed at a fairly level grade.
4. It is recommended that silt fence shall be installed five (5) feet away from the toe of the slope or stockpile, and every seventy five (75) to one hundred twenty five (125) feet apart on long slopes.
5. Do not place silt fence in or adjacent to existing wetlands where trenching impacts wetlands.
6. All inlet/outlet protection will be checked for maintenance and failure daily. Sediment shall be removed and properly disposed of once it has accumulated to half the design of the trap or daily during periods of consistent precipitation.
7. The Owner/Contractor shall be responsible for maintaining the Vehicle Tracking Control during construction. The Vehicle Tracking Control shall be removed at the completion of this project unless otherwise directed by authorized Adams County personnel.
8. Temporary sediment traps and basins shall be installed before any land disturbance takes place in the drainage area. The area under the embankment shall be cleared, grubbed, and stripped of all vegetation and root mat. Sediment shall be removed when no longer functional and disposed of at an approved location.
9. All sediment from stormwater infrastructure (i.e. detention ponds, storm sewer pipes, outlets, inlets, roadside ditches, etc.) shall be removed prior to initial acceptance. This sediment shall not be flushed off-site, but shall be captured on-site and disposed of at an approved location.
10. Temporary Rock Check Dam – The maximum height of the check dam at the center should not exceed one half the depth of the ditch or swale. The maximum spacing between dams should be such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.
11. Construction Safety Barrier Fencing (orange construction fence) must be used to protect wetlands and other sensitive areas and to prevent access.
12. Water from dewatering operations shall not be directly discharged into any waters conveyance systems including wetlands, irrigation ditches, canals, rivers, streams or storm sewer systems, unless allowed by a State Construction Dewatering Permit.

FIGURE 4 - ADAMS COUNTY STANDARD EROSION & SEDIMENT CONTROL NOTES - 2 OF 2

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

SAND CREEK FARM PROJECT SITE-SPECIFIC NOTES

1. THE OWNER/CONTRACTOR HAS OBTAINED STORMWATER PERMIT COVERAGE UNDER THE CDPHE GENERAL PERMIT COG500000 FOR DISCHARGES ASSOCIATED WITH SAND & GRAVEL MINING AND PROCESSING (CERTIFICATION NUMBER COG501756).
2. THE OWNER/CONTRACTOR WILL COMPLY WITH THE REQUIREMENTS OF THIS STORMWATER PERMIT, INCLUDING THE PREPARATION OF A STORMWATER MANAGEMENT PLAN (SWMP), IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES, AND REQUIRED INSPECTIONS.
3. THE SOIL ON THE SITE IS SAND TO A DEPTH OF MORE THAN 80 INCHES WITH RUNOFF CLASS DEFINED AS NEGLIGIBLE.
4. THE MAIN ACTIVITY ON THE SITE WILL BE SAND MINING, WITH AN EXCAVATOR OR LOADER LOADING DIRECTLY INTO HAUL TRUCKS (NO STOCKPILING IS PLANNED).
5. EQUIPMENT AND PERSONAL VEHICLES WILL BE PARKED IN DESIGNATED AREAS OUTSIDE OF THE EXISTING SAND CHANNEL OF WEST BIJOU CREEK.
6. ONCE THE MINE PIT IS ESTABLISHED, EQUIPMENT MAY BE PARKED IN THE MINE PIT.
7. THERE WILL BE NO FUEL STORAGE ON SITE. EQUIPMENT WILL BE FUELED USING A MOBILE FUEL TANK ON A TRUCK.
8. THERE WILL BE A CONEX FOR STORAGE AND A PORTABLE TOILET PLACED IN A DESIGNATED AREA OUTSIDE OF THE EXISTING SAND CHANNEL.
9. THERE WILL BE NO CONCRETE WASHOUT ON THE SITE.
10. THE MAIN EROSION AND SEDIMENT CONTROL WILL BE THE MINE PIT ITSELF. THE PIT OR PITS WILL ACT AS SEDIMENT CONTROL / DETENTION BASINS.
11. NO SILT FENCE IS PROPOSED AT THIS TIME. SILT FENCE WILL BE IMPLEMENTED IF THE INSPECTIONS INDICATE THAT IT IS NEEDED.

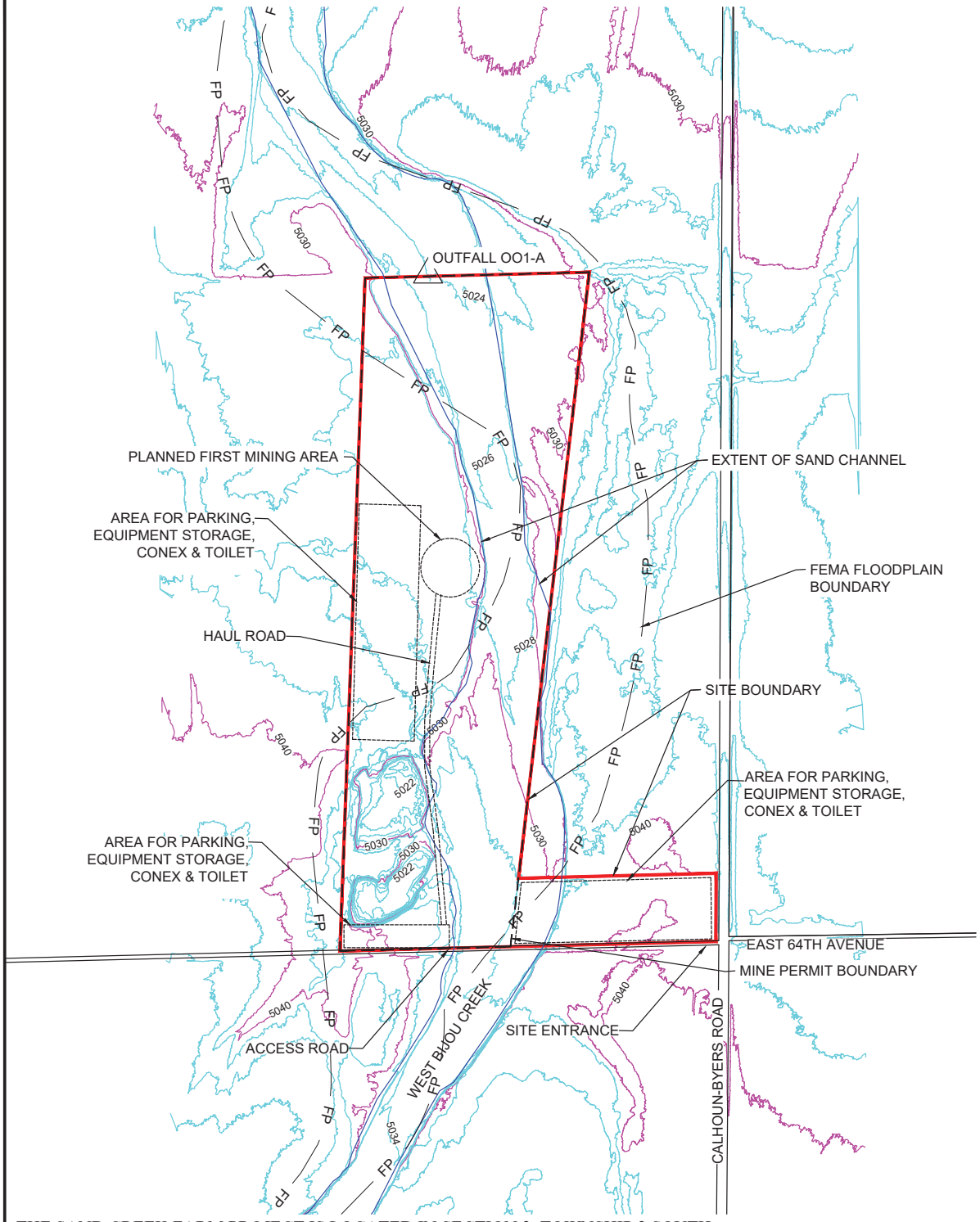
ENGINEER'S CERTIFICATION

"I hereby certify that this Erosion Control Drawing for Sand Creek Farms was prepared by me (or under my direct supervision) in accordance with the provisions of Adams County Storm Drainage Design and Stormwater Quality Regulations for the Owners thereof."

Registered Professional Engineer
State of Colorado No. 30491

EROSION AND SEDIMENT CONTROL
FIGURE 5 - SAND CREEK FARM SITE-SPECIFIC NOTES

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

KEY

- EXTENT OF MINE PIT & BASIN BOUNDARY
- SITE BOUNDARY
- MINE PERMIT BOUNDARY
- EXTENT OF SAND CHANNEL
- FP — FEMA FLOODPLAIN LINE
- 5040 — EXISTING 10-FOOT CONTOUR
- EXISTING 2-FOOT CONTOUR
- 5010 — PROPOSED 10-FOOT CONTOUR
- PROPOSED 2-FOOT CONTOUR

0 200 400 800

SCALE 1"=400'

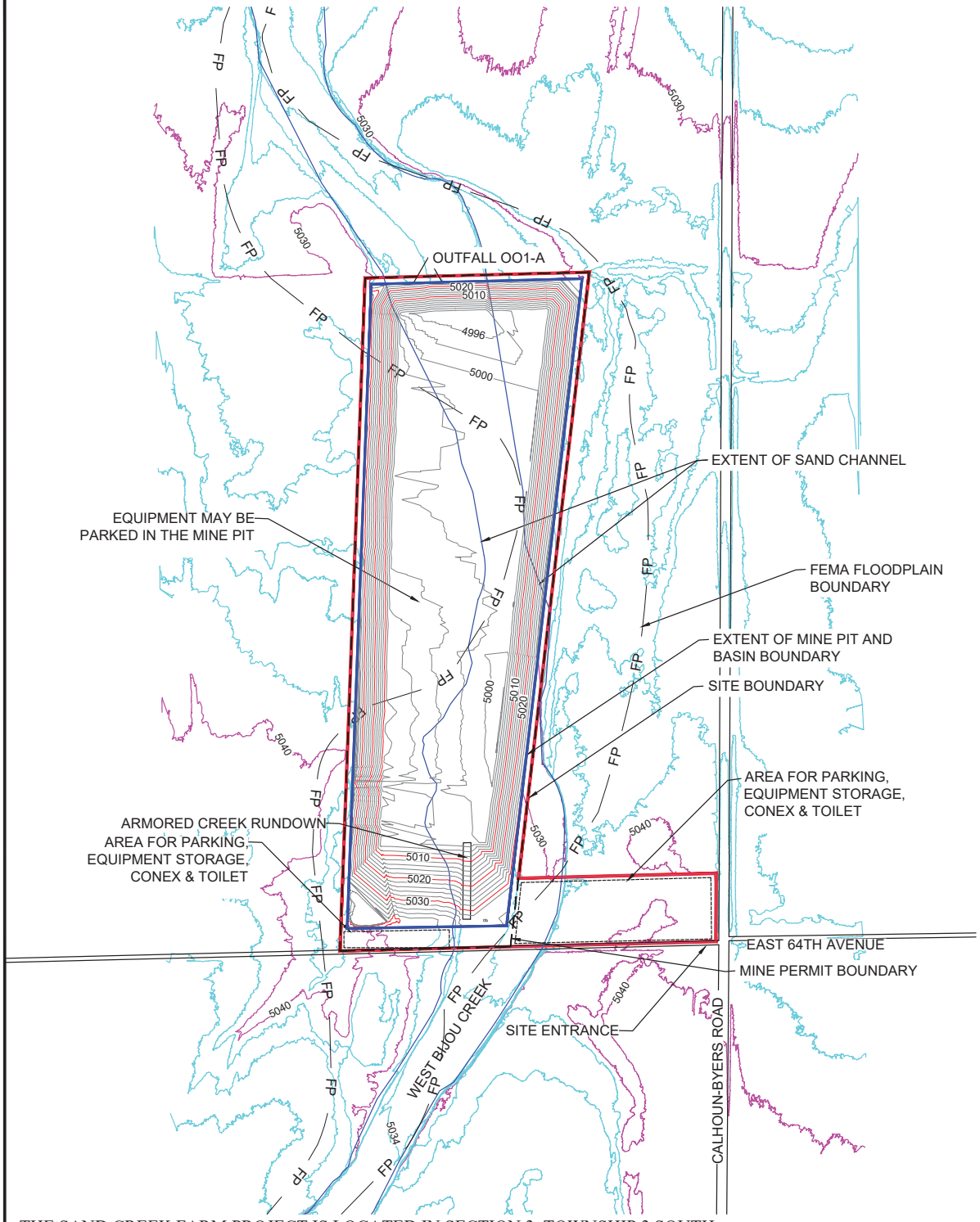
N

SOURCE:
4K EQUIPMENT, LLC

STORMWATER MANAGEMENT PLAN
FIGURE 6 - INITIAL CONDITIONS MAP

REVISIONS:	DATE:	PROJECT:	PREPARED FOR:	PREPARED BY:
		SAND CREEK FARM 64TH AVENUE & CALHOUN-BYERS ROAD UNINCORP. ADAMS COUNTY BYERS, CO 80103	4K EQUIPMENT, LLC 6201 MCINTYRE STREET GOLDEN, CO 80403	EME SOLUTIONS, INC. 15248 W ELLSWORTH DR GOLDEN, CO 80401 JOHN JANKOUSKY, P.E.

EXISTING-TOPO-JLJ.dwg



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

KEY

- EXTENT OF MINE PIT & BASIN BOUNDARY
- SITE BOUNDARY
- MINE PERMIT BOUNDARY
- EXTENT OF SAND CHANNEL
- FP — FEMA FLOODPLAIN LINE
- 5040 — EXISTING 10-FOOT CONTOUR
- EXISTING 2-FOOT CONTOUR
- 5010 — PROPOSED 10-FOOT CONTOUR
- PROPOSED 2-FOOT CONTOUR

0 200 400 800

SCALE 1"=400'

N

SOURCE:
4K EQUIPMENT, LLC

STORMWATER MANAGEMENT PLAN

FIGURE 7 - PROPOSED MINE PIT (INTERIM CONDITIONS)

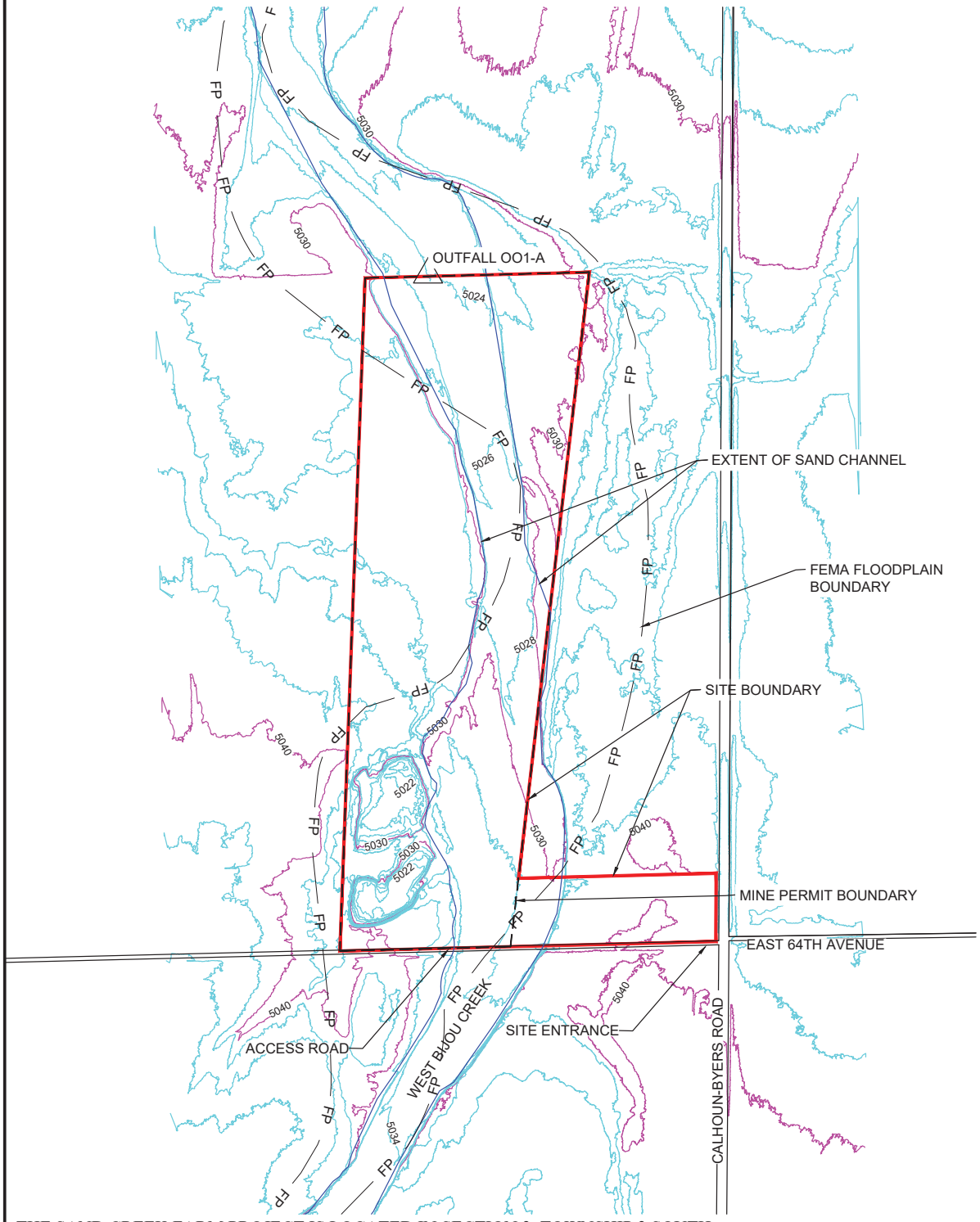
REVISIONS:	DATE:

PROJECT:
SAND CREEK FARM
64TH AVENUE &
CALHOUN-BYERS ROAD
UNINCORP. ADAMS COUNTY
BYERS, CO 80103

PREPARED FOR:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403

PREPARED BY:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DR
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.

PROPOSED-TOPO-JJ.dwg



THE SAND CREEK FARM PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 3 SOUTH, RANGE 61 WEST OF THE 6TH PRINCIPAL MERIDIAN

KEY

- EXTENT OF MINE PIT & BASIN BOUNDARY
- SITE BOUNDARY
- MINE PERMIT BOUNDARY
- EXTENT OF SAND CHANNEL
- FP — FEMA FLOODPLAIN LINE
- 5040 — EXISTING 10-FOOT CONTOUR
- EXISTING 2-FOOT CONTOUR
- 5010 — PROPOSED 10-FOOT CONTOUR
- PROPOSED 2-FOOT CONTOUR

FOR THE FINAL CONDITIONS, THE SITE WILL BE RETURNED TO THE ORIGINAL CONTOURS.

0 200 400 800

SCALE 1"=400'

N

SOURCE:
4K EQUIPMENT, LLC

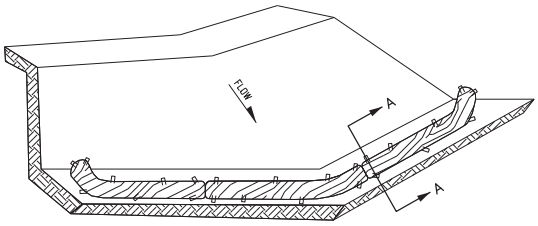
STORMWATER MANAGEMENT PLAN
FIGURE 8 - FINAL CONDITIONS MAP

REVISIONS:	DATE:

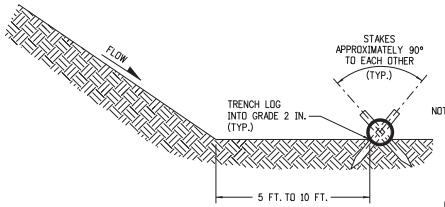
PROJECT:
SAND CREEK FARM
64TH AVENUE &
CALHOUN-BYERS ROAD
UNINCORP. ADAMS COUNTY
BYERS, CO 80103

PREPARED FOR:
4K EQUIPMENT, LLC
6201 MCINTYRE STREET
GOLDEN, CO 80403

PREPARED BY:
EME SOLUTIONS, INC.
15248 W ELLSWORTH DR
GOLDEN, CO 80401
JOHN JANKOUSKY, P.E.



ISOMETRIC VIEW



NOTE: THE TOPS OF ALL STAKES SHALL NOT EXTEND MORE THAN 2 INCHES ABOVE THE TOPS OF EROSION LOGS.

SECTION A-A

NOTES:

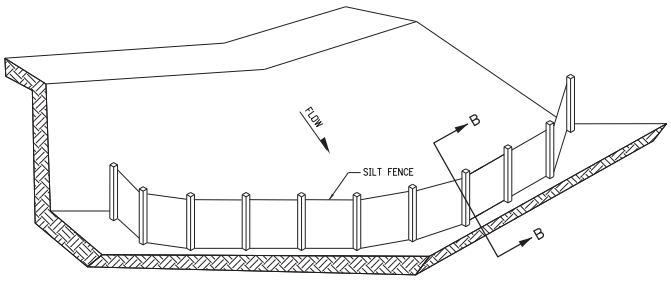
1. EROSION LOGS USED AT TOE OF SLOPE SHALL BE PLACED 5 TO 10 FEET BEYOND TOE OF SLOPE TO PROVIDE STORAGE CAPACITY.
2. EROSION LOGS SHALL BE PLACED ON THE CONTOUR WITH ENDS FLARED UP SLOPE.
3. SEE SHEET 2 OF 11 FOR JOINING LOGS DETAIL.

EROSION LOGS PAY ITEMS	
NUMBER	DESCRIPTION
208-00012	TYPE 1 (9 IN.)
208-00002	TYPE 1 (12 IN.)
208-00013	TYPE 1 (20 IN.)
208-00007	TYPE 2 (8 IN.)
208-00008	TYPE 2 (12 IN.)
208-00009	TYPE 2 (18 IN.)
208-00022	TYPE 3 (9 IN.)
208-00023	TYPE 3 (12 IN.)
208-00024	TYPE 3 (20 IN.)

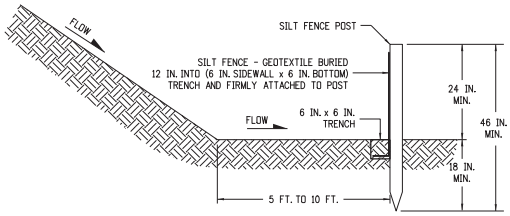
EROSION LOG TOE OF SLOPE PROTECTION

NOTES

1. SILT FENCE SHALL HAVE A MAXIMUM DRAINAGE AREA OF ONE-QUARTER ACRE PER 100 FEET OF SILT FENCE LENGTH; MAXIMUM SLOPE LENGTH BEHIND BARRIER IS 100 FEET.
2. SILT FENCE USED AT TOE OF SLOPE SHALL BE PLACED 5 TO 10 FEET BEYOND TOE OF SLOPE TO PROVIDE STORAGE CAPACITY.
3. SILT FENCE SHALL BE PLACED PARALLEL TO THE CONTOUR WITH ENDS FLARED UP SLOPE.
4. THE MAXIMUM LENGTH OF EROSION LOGS OR SILT FENCES WITHOUT A FLARED END TURNING UPSLOPE IS 150 FEET.



ISOMETRIC VIEW



SECTION B-B

SILT FENCE TOE OF SLOPE PROTECTION

NOTE: THE PAY ITEM NUMBER FOR SILT FENCE (LF) IS 208-00020.

TOE OF SLOPE PROTECTION APPLICATIONS

FIGURE 9. SILT FENCE AND EROSION LOG DETAILS

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: DK	(R-X)		
Last Modification Date: 05/16/24	(R-X)		
Detailer Initials: LTA	(R-X)		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Construction Engineering Services DK

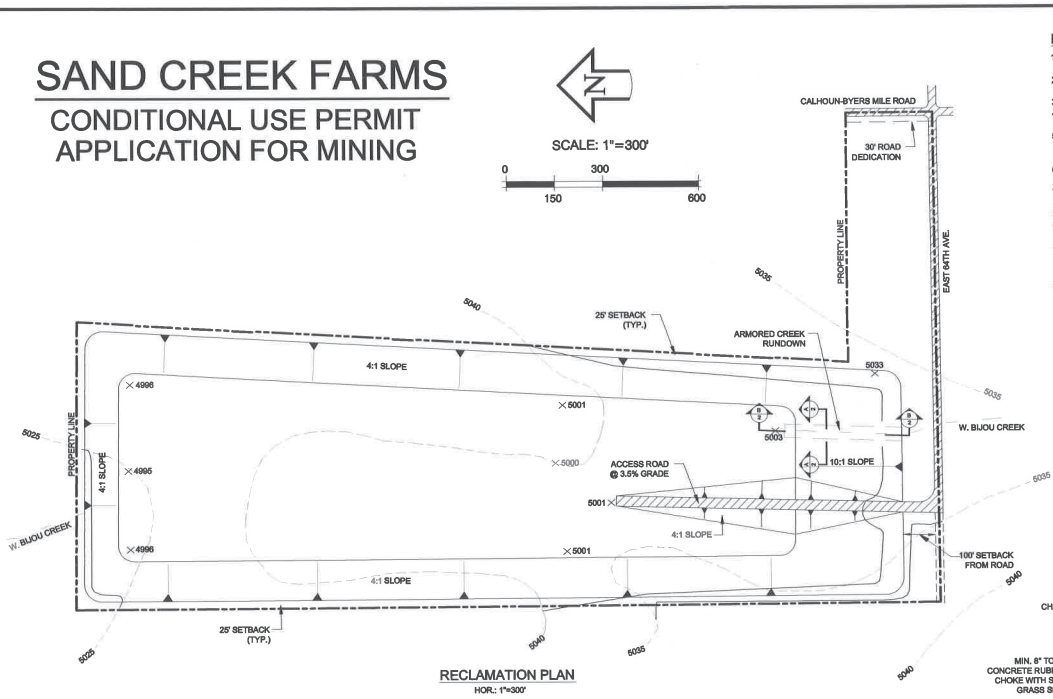
TEMPORARY EROSION CONTROL

Issued by the Project Development Branch: July 31, 2019

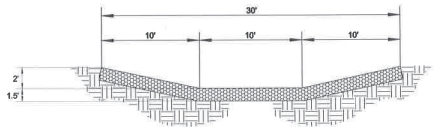
STANDARD PLAN NO.
M-208-1
Standard Sheet No. 3 of 11
Project Sheet Number:

SAND CREEK FARMS

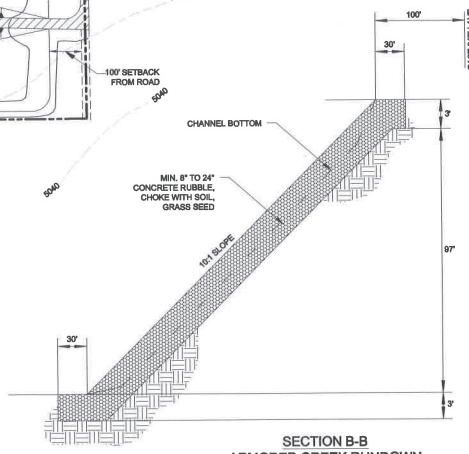
CONDITIONAL USE PERMIT APPLICATION FOR MINING



RECLAMATION PLAN
HOR.: 1"=300'



SECTION A-A
ARMORED CREEK RUNDOWN
1"=10'



SECTION B-B
ARMORED CREEK RUNDOWN
HOR.: 1"=100' VERT.: 1"=10'

RECLAMATION PLAN NOTES:

1. Existing trees and vegetation not in disturbed area will be preserved.
2. Concurrent reclamation will be utilized to backfill final slopes and grass seed as mining progresses deeper.
3. Inflow and outflow points of W. Bijou Creek will be preserved.
4. Final mining depth is higher than surrounding water wells and no impacts to wells is expected.
5. A significant porous sand aquifer exists under the mining pit. Rainfall quickly soaks into the ground and no long term ponding will result.
6. The access road and armored creek rundown will remain as features of the reclamation.
7. Owner will dedicate an additional 30 feet of Right-of-Way for the adjoining Calhoun Byers Mile Road.
8. No buildings or structures.
9. This mining operation is also covered by DRMS permit M-1992-038.
10. This CUP expires on December 31, 2034.

LEGAL DESCRIPTION:

Section 3, T3S, R61W
Part of the SE 1/4 of section 3 described as follows:
Beginning at the SE corner of section 3;
Thence West 30.01 Feet to the West Right-of-Way line of Calhoun-Byars Mile Road being the Point of Beginning;
Thence continuing West 1,479.26 Feet;
Thence North 03°, 01' East 2,649.38 Feet;
Thence East 681.79 Feet;
Thence South 07°, 31' West 2,400.10 Feet;
Thence East 777.53 Feet to the West Right-of-Way line of Calhoun-Byars Mile Road;
Thence South 268.43 Feet to the Point of Beginning.
Area - 52.01 acres more or less.

REVISION:
DATE:

RENEWAL CUP
#46-92-C
ADAMS COUNTY

SAND CREEK FARMS
RECLAMATION PLAN

PREPARED BY:
Tuttle & Associates
Planning and Permitting Services
PO BOX 4485
Broomfield, Colorado 80038-0485
Phone: 303.653.5564
garytuttle@gmail.com

Project No.
SCF001-2014

Date
7-31-2014

Sheet
2 OF 3

FIGURE 10. ARMORED CREEK RUNDOWN

List of Attachments

1. Certification Allowing Discharge
2. General Permit for Stormwater Discharges Associated with Sand and Gravel Mining and Processing Operations, Permit No. COG-500000
3. Control Measures Installation, Implementation, and Maintenance Requirements
4. List of Required Sampling, Recordkeeping, and Reporting
5. Quarterly Visual Monitoring Form
6. Quarterly Inspection and Maintenance Report Form
7. Annual Report Form
8. Annual Training Form

Attachment 1
Certification Allowing Discharge

CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG500000
DISCHARGES ASSOCIATED WITH SAND & GRAVEL MINING AND PROCESSING
(and other Nonmetallic Minerals except fuel)

Certification Number: **COG501756**

This Certification to Discharge specifically authorizes:

4K Equipment, LLC
to discharge from the facility identified as

Sand Creek Mine
to:
West Bijou Creek - Bijou Creek

Facility Located at:	64 Ave and Xmore Rd SWC, uninc, Adams County, CO 80022
	Center Point Latitude 39.8, Longitude -104.216666

Defined Discharge Outfall(s) to Surface Water	Outfall(s) Lat, Long	Discharge Outfall(s) Description	Receiving Stream
Outfall Number 001-A	39.746685, -104.192264	Stormwater discharge	**West Bijou Creek Bijou Creek**

All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.

<u>Stormwater Monitoring Requirements</u>

Permit Limitations and/or Monitoring Requirements apply to outfall 001A as outlined in the Permit in Part I.C.2 and Parts I.G through I.Q.

On the effective date of this certification, the Sand Creek Mine is subject to the monitoring requirements identified below at each discharge point of stormwater from the facility.

A. *Visual monitoring, Part I.I.1*

Per Part I.I.1 of the permit, the permittee must collect a stormwater sample from each outfall (or a substantially identical outfall pursuant to Part I.H.1 of the permit) and conduct a visual assessment of each of these samples once each **quarter** for the entire permit term.

B. *WQBEL/Water Quality Standards, Part I.I.4*

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.

4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe/wqcd
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

Stormwater Reporting Requirements

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31.	February 28	Annual(10)

Modified, reissued and effective: 3/14/2024

Modification transfers permit certification from Jones Fine Sand Co Inc to 4K Equipment, LLC.

Certification issued: 4/17/2017 Effective: 7/1/2017 Expiration Date: 12/31/2021

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Approved by
Andrea Stucky
Permits Unit 3 Work Group Leader
Water Quality Control Division

4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe/wqcd
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

Attachment 2
Colorado Discharge Permit System (CDPS)
General Permit for Stormwater Discharges
Associated with Sand and Gravel Mining and Processing Operations,
Permit No. COG-500000

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Water Quality Control Division

CDPS GENERAL PERMIT COG500000

FOR
DISCHARGES FROM SAND AND GRAVEL MINING AND PROCESSING
(AND OTHER NONMETALLIC MINERALS EXCEPT FUEL)

AUTHORIZATION TO DISCHARGE UNDER
COLORADO DISCHARGE PERMIT SYSTEM

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), sand and gravel mining and processing operations, and facilities that mine and process other nonmetallic minerals except fuel, are authorized to discharge from authorized locations throughout the State of Colorado to specified surface waters of the State. Such discharges shall be in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit specifically authorizes the entity identified in the certification of this permit to discharge process water and stormwater at the location(s) described in the certification of this permit, to waters of the state as identified in the certification of this permit.

The applicant may demand an adjudicatory hearing within thirty (30) days of the date of issuance of the final permit determination, per the Colorado Discharge Permit System Regulations, 61.7(1). Should the applicant choose to contest any of the effluent limitations, monitoring requirements or other conditions contained herein, the applicant must comply with Section 24-4-104 CRS and the Colorado Discharge Permit System Regulations. Failure to contest any such effluent limitation, monitoring requirement, or other condition, constitutes consent to the condition by the Applicant.

The authorization to discharge under this permit is in effect from the date of the certification of this permit until the expiration date identified below.

This permit shall expire at midnight December 31, 2021

Issued and Signed this 13th day of October 2016

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Janet S. Kieler

Digitally signed by Janet S. Kieler
DN: dc=local, dc=dphe, ou=Divisions, ou=WQC, ou=Users, cn=Janet S. Kieler, email=janet.kieler@state.co.us
Date: 2016.10.13 16:46:39 -06'00'

Janet Kieler, Permits Section Manager
Water Quality Control Division

Administratively continued 1/1/2022

ISSUED AND SIGNED: October 13, 2016

EFFECTIVE DATE OF PERMIT: **January 1, 2017**

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PART I

A. COVERAGE UNDER THIS PERMIT – Process water and stormwater

1. Activities Covered

This permit authorizes the discharge of **process water** and **stormwater runoff** to surface waters of the state, from active and inactive eligible facilities engaged in mining and processing of sand and gravel (and other nonmetallic minerals, except fuel). Such facilities are described by Standard Industrial Classification (SIC) Code Major Group 14, unless a specific SIC code is made ineligible under Part I.A.2. of this permit. Appendix A provides a description of SIC Code Major Group 14 facilities.

This permit also authorizes the discharge of **stormwater runoff** to surface waters of the state from the following non-mining activities that are located **at** sand and gravel facilities: asphalt batch plants (SIC code 2951), concrete batch plants (SIC Code 3273), and asphalt and concrete recycling industrial activities.

This permit contains both process water and stormwater provisions, as follows:

- Applicable to **ALL** discharges: *Parts I.A, I.B, I.D, I.E, and I.F; Part II; Part III; and all Appendices*
- Applicable to **process water** discharges, **only**: *Part I.C.1*
- Applicable to **stormwater** discharges, **only**: *Part I.C.2 and Parts I.G through Q*

a. Eligible Process water discharges:
Process water discharges from facilities that produce the commodities listed below are specifically eligible for coverage under this permit.

- Dimension stone (SIC code 1411)
- Crushed stone (SIC code 1422, 1423, 1429)
- Construction sand and gravel (SIC code 1442)
- Industrial sand (SIC code 1446)
- Kaolin and Ball Clay (SIC code 1455)
- Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified (SIC code 1459)
- Graphite (SIC code 1499)

The following process water discharges are eligible for coverage under this permit, unless made ineligible under Part I.A.2,:

i. mine dewatering, which includes:
   - any water, including groundwater, seepage, and stormwater (precipitation and surface runoff), that is impounded or that collects in the mine pit (surface or underground workings) and is pumped, drained, or otherwise removed from the mine through the efforts of the mine operator;
   - additionally, for construction sand and gravel facilities and industrial sand facilities only, wet pit overflow caused solely by direct rainfall and/or groundwater seepage.

ii. process generated wastewater, which includes any wastewater used in slurry transport of mined materials, air emissions control, and processing exclusive to mining (40 CFR Part 436);

iii. water used in sand and gravel processing (e.g., sorting, screening, crushing, and classifying);

iv. stormwater runoff that becomes comingled with the above listed wastewaters before the discharge point.

b. Eligible Stormwater discharges:
Stormwater discharges from all SIC Major Group 14 facilities, and from asphalt batch plants (SIC code 2951); concrete batch plants (SIC code 3273); and asphalt and concrete recycling activities conducted at such facilities, are eligible for coverage under this permit. Please see Appendix C - Definitions for how the terms 'asphalt batch plant' and 'asphalt concrete' are used in this permit.

Stormwater discharges from the following areas at all SIC code Major Group 14 facilities are eligible for coverage under this permit unless made ineligible under Part I.A.2:

i. industrial plant yards;
ii. immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
iii. material handling sites, including those used for asphalt and concrete recycling activities, asphalt batch plants, and concrete batch plants;
iv. sites used for storage and maintenance of material handling equipment;
v. shipping and receiving areas;
vi. manufacturing buildings, including asphalt batch plants and concrete batch plants;
v. storage areas and stockpiles of raw material, intermediate products, byproducts, finished products or waste products (including topsoil, overburden, and materials associated with asphalt and concrete recycling activities, asphalt batch plants, and concrete batch plants);
vii. areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater;
viii. all disturbed areas (other than those subject to the process water discharge provisions above), including mine pit out slopes; and,
ix. stormwater run-on that commingles with stormwater discharges associated with sand and gravel mining and processing.

c. Allowable non-stormwater discharges:

The following non-stormwater discharges, as applicable to a facility, are authorized by this permit provided that appropriate control measures are implemented to minimize erosion and sediment transport resulting from such discharges, and the non-stormwater component(s) of the discharge and the control measure(s) used are identified in the Stormwater Management Plan (SWMP):

i. Uncontaminated condensate (external atmospheric condensation, only) from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
ii. Landscape (including reclamation activities) watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
iii. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blow down or drains); and
iv. Process water discharges as characterized in Part I.A.1.a above.

2. Limitations on Coverage

This permit does not authorize the discharges or activities listed below. Permittees may seek individual or alternate general permit coverage for such discharges, as appropriate and available.

a. Stormwater discharges associated with construction activity that disturbs one acre or more;
b. Process water discharges from asphalt batch plants (resulting from the production of asphalt concrete);
c. Process water discharges from concrete batch plants, including drum and truck wash water;
d. Stormwater and process water discharges from placer mining industrial activities (SIC Major Group 10);
e. Discharges to receiving waters designated as "outstanding waters" in accordance with 5 CCR 1002-31 (Regulation 31 - The Basic Standards and Methodologies For Surface Water);
f. Discharges that are currently covered under an individual permit or an alternative general permit;
g. Discharges of non-stormwater, except those authorized non-stormwater discharges listed in Part I.A.1.c;
h. Discharges currently covered by a Division Low Risk Guidance Document;
i. Process water discharges solely to ground water if such discharges are subject to direct regulation by the EPA or by implementing agencies under Section 25-8-202(7) of the Water Quality Control Act or Senate Bill 181 (including the Division of Reclamation, Mining and Safety). This exclusion does not apply to discharges to groundwater that have a hydrologic connection to surface waters and for which the Division determines the surface waters requirements of Regulations 31 through 39, and 61 apply;

j. Process water discharges from operations that produce the following commodities (SIC Code in parentheses):

- Gypsum (1499);
- Asphaltic minerals (1499);
- Asbestos and wollastonite (1499);
- Barite (1479);
- Fluorspar (1479);
- Salines from brine lakes (2899);
- Borox (1474);
- Potash (1474);
- Phosphate Rock (1475);
- Sodium sulfate (1474);
- Frasch sulfur (1479);
- Bentonite (1459);
- Magnesite (1459);
- Diatomite (1499);
- Jade (1499);
- Novaculite (1499); and
- Tripoli (1499)

3. Chemical addition

Discharges with chemical addition (including, but not limited to chemical additions at any point in the treatment process, release agents, etc), are eligible for coverage under this permit only if the Division approves the use of the specific chemical(s) and provides notification of such approval to the permittee.

To request Division approval, the permit applicant must submit a list of proposed chemicals, including dosage rates, used in the treatment process. Additionally, the applicant must submit an MSDS for each chemical proposed for use. In granting the use of such chemicals, the Division may impose additional limitations and monitoring requirements in the permit certification. Chemicals used in waters that will or may be discharged to waters of the State must be used in accordance with all state and federal regulations, and in strict accordance with the manufacturer's site-specific instructions.

4. Obtaining and maintaining Authorization under this permit

a. Application Requirements: To obtain authorization for discharges under this permit:

i. The applicant must meet the eligibility requirements under Parts I.A.1.
ii. For stormwater discharges, the applicant must develop a Stormwater Management Plan (SWMP) in accordance with the requirements of this permit prior to submitting an application to the Division, and must certify in the application that a SWMP has been completed.
iii. The applicant must submit a complete, accurate, and signed permit application, on a form provided by the Division, by mail or hand delivery to the Division at least **60 days** before the anticipated date of discharge; or for stormwater-only discharges, at least **60 days** before the facility commences industrial activity that may result in a discharge of stormwater. The applicant must sign the application in accordance with the requirements of Part I.F (Reporting and Recordkeeping) of this permit. The complete application shall be submitted to:

Colorado Department of Public Health and Environment
Water Quality Control Division
Permits Section, WQCD-PCP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

iv. The applicant(s) must receive written notification that the Division granted permit coverage.

b. Permit Certification Procedures: Following review of the application or other information, the Division may:

i. request such additional information as is reasonably necessary to evaluate the discharge;
ii. delay the authorization to discharge pending further review;
iii. notify the applicant that additional terms and conditions are necessary;
iv. provide a compliance schedule in the certification for terms and conditions that are new or more stringent than previous conditions;
v. deny the authorization to discharge under this general permit.

The Division will notify the applicant in writing of its request or determination for items i. – v.

c. Alternative permits

i. Division required alternate permit coverage: The Division may require an applicant or permittee to apply for an individual permit or an alternative general permit if it determines the discharge does not fall under the scope of this general permit. In this case, the Division will notify the applicant or permittee that an individual or alternate permit application is required.

ii. Permittee request for alternate permit coverage: A permittee authorized to discharge under this general permit may request to be excluded from coverage by applying for an individual permit. In this case, the permittee must submit an individual application, with reasons supporting the request, to the Division at least 180 days prior to any discharge. The permittee's authorization to discharge under this general permit is terminated on the effective date of the individual permit.

d. Permit Expiration, and Continuation

A permittee desiring continued coverage under this general permit must reapply at least **180 days** in advance of the permit expiration date. The Division will determine if the permittee may continue to discharge under the terms of the general permit. An individual permit may be required for any facility not reauthorized to discharge under the reissued general permit.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued and remain in force and effect. For permittees that have applied for continued permit coverage, discharges authorized under this permit prior to the expiration date will automatically remain covered by this permit until the earliest of:

i. An authorization to discharge under a reissued permit, or a replacement of this permit, following the timely and appropriate submittal of a complete application requesting authorization to discharge under the new permit and compliance with the requirements of the new permit; or
ii. The issuance and effect of a termination issued by the Division; or
iii. The issuance or denial of an individual permit for the facility's discharges; or
iv. A formal permit decision by the Division not to reissue this general permit, at which time the Division will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease when coverage under another permit is granted/authorized; or
v. The Division has informed the permittee that discharges previously authorized under this permit are no longer covered under this permit.

5. Transfer of permit coverage

A permittee may transfer coverage under this general permit to a new discharger if all of the following conditions are met:

a. The permittee (existing discharger) and new discharger submit a complete and accurate Notice of Transfer form, signed by the permittee and the new legal entity, to the Division at the address listed in Part I.A.4, at least **30 days** prior to the proposed transfer date. The Notice of Transfer form must contain a specific date for transfer of permit responsibility, coverage, and liability.
b. The type of industrial activities and practices remain substantially unchanged.
c. The Division does not notify the permittee of the need to submit a new application for coverage under the general permit or for an individual permit.
d. The Division does not notify the permittee and new discharger of its intent to revoke coverage under the general permit.

6. Modifying an existing permit

A permittee may modify an existing permit certification if all of the conditions identified below are met.

Modifications include but are not limited to: adding or removing discharge outfalls, introducing new or additional chemicals to the treatment process or effluent, modifying treatment in a manner that would result in a new or altered discharge in terms of location or effluent quality, **changing permit coverage from one that authorizes process water discharges (or process water and stormwater discharges), to one that authorizes stormwater discharges only** because the process water discharge has been terminated, etc. Note that modifications may be subject to a fee, consistent with Part II of the permit.

a. The permittee must submit a complete and accurate Modification Form, signed by the permittee, to the Division at the address listed in Part I.A.4, at least **60 days** prior to implementing any requested modifications that result in a discharge to state waters.
b. The permittee is not authorized to discharge under the modified conditions until the modified certification is issued and effective.

7. Permit Termination Procedures

To terminate permit coverage, the permittee must submit a complete and accurate Notice of Termination form, signed by the permittee, to the Division at the address listed in Part I.A.4. The permittee's authorization to discharge under this permit terminates as notified by the Division.

A Notice of Termination request that does not meet one or more of the conditions identified below is not valid. The permittee is responsible for complying with the terms of this permit until notified by the Division that the authorization is terminated.

Conditions for a Notice of Termination request include:

a. Termination Criteria for facilities **with** Division of Reclamation, Mining and Safety (DRMS) financial and performance warranties

   The Division may approve a Notice of Termination request when the following criteria are met for the entire sand and gravel facility:

   i. all permitted process water discharges authorized by this permit (as applicable to the facility), have ceased; and
   ii. all permitted stormwater discharges authorized by this permit have ceased because the industrial activity (including soil disturbing activities) has ceased, and no significant materials or industrial pollutants remain exposed to stormwater (i.e., all raw materials, intermediate products, byproducts, finished products and waste products have been removed or are not exposed to stormwater); and
   iii. the DRMS has released the permittee from further responsibility for the facility, and the permittee provides documentation with the Notice of Termination request that DRMS approved the applicable financial and performance warranty release.

b. Termination Criteria for facilities **without** DRMS financial and performance warranties

   The Division may approve a Notice of Termination request when the following criteria are met for the entire sand and gravel facility:

   i. all permitted process water discharges authorized by this permit (as applicable to the facility), have ceased; and
   ii. all permitted stormwater discharges authorized by this permit have ceased because the industrial activity (including soil disturbing activities) has ceased, and no significant materials or industrial pollutants remain exposed to stormwater (i.e., all raw materials, intermediate products, byproducts, finished products and waste products have been removed or are not exposed to stormwater); and
   iii. the site has attained final stabilization, with little evidence of soil erosion or other runoff problem, as follows:
      a) a uniform, perennial vegetative cover has been established with a plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed;
      b) all alternatives to vegetation must be permanent, must stabilize all disturbed areas, and all stabilization control measures must be selected, installed, and implemented following good engineering, hydrologic, and pollution control practices adequate to prevent pollution or degradation of State waters;

iv. the permittee provides documentation with the Notice of Termination request that the above conditions for termination have been met for the facility, and includes photographic documentation of final stabilization conditions.

c. The permittee has obtained authorization under an individual or alternative general permit for all facility discharges.

d. No Exposure Certification. If the facility authorized to discharge stormwater-only under this permit becomes eligible for a no exposure exclusion from permitting under 5 CCR 1002-61.3(2)(h), the permittee may submit a complete and accurate No Exposure Certification to the Division at the address listed in Part I.A.4. The Division will terminate permit coverage using information provided in the No Exposure Certification form; the permittee does not need to submit a Notice of Termination.

The Division may, after consultation with the permittee and upon good cause, revise the vegetative cover requirements on a case-by-case basis.

B. PERMIT COMPLIANCE – Process water and stormwater

A permittee must comply with all the terms and conditions of this permit. Violation of the terms and conditions specified in this permit may be subject to civil and criminal liability pursuant to sections 25-8-601 through 612, C.R.S.. Correcting a permit violation does not remove the original violation. Failure to take any required corrective actions, as detailed in Part I.K (Corrective Actions), constitutes an independent, additional violation of this permit and may be subject to civil and criminal liability. However, where corrective action is triggered by an event that does not itself constitute permit noncompliance, such as an exceedance of an applicable benchmark, there is no permit violation unless the permittee fails to take the required corrective action within the relevant deadlines.

1. <u>Facilities Operation and Maintenance</u>

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective performance, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems when installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

Any sludge produced at the wastewater treatment facility shall be disposed of in accordance with State and Federal guidelines and regulations. The permittee shall take all reasonable steps to minimize or prevent any discharge of sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. As necessary, accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge is required.

C. EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.5; the Colorado Discharge Permit System Regulations, Section 61.8(2), 5 C.C.R. 1002-61; and the effluent limitation guidelines found 40 CFR Part 436 (Mineral Mining and Processing Point Source Category), the permitted discharge shall not contain effluent parameter concentrations that exceed the effluent limitations identified in this Part, and specified in the permit certification.

1. <u>Process Water Discharge Effluent Limitations</u>

The permittee shall monitor the effluent consistent with the requirements identified in Tables C.1.1 through C.1.6 and specified in the permit certification, as applicable to the permitted feature.

“Report Only” monitoring requirements for additional site-specific parameters may be included in the permit certification to obtain additional effluent quality data.

The permittee must conduct all required monitoring and reporting consistent with Parts I.E and I.F of this permit, unless otherwise noted.

a. Dimension Stone facilities (SIC code 1411)

Table C.1.1 – Applicable Limitations

ICIS Code	Parameter	Limitations				Monitoring Frequency		Sample Type
		30 day average	7 day average	Daily Max.	2 year average	Minor Facilities	Major Facilities	
General Permit Requirements								
50050	Flow, MGD[1]	Limit in cert.	----	Report	----	Monthly (Continuous or Instantaneous[2])	2x/month (Continuous or Instantaneous[2])	Recorder or In-situ
00400	pH, s.u.	----	----	6.5-9.0	----	2x/month	Weekly	Grab
84066	Oil and Grease, mg/l	----	----	----	----	2x/month	Weekly	Visual[3]
03582	Oil and Grease, mg/l	----	----	10	----	Contingent	Weekly	Grab[3]
00530	Total Suspended Solids, mg/l	30	45	----	----	2x/month	Weekly	Grab
Site Specific Requirements								
51500 1	Flow, Total, MG[4]	Report Quarterly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
51500 EG	Flow, Total, MG[4]	Report Monthly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
70295	Total Dissolved Solids, mg/l[5]	Report	----	----	----	Quarterly	Quarterly	Grab
00665	Total Phosphorus (as P), mg/l[6]	Various	Various	Various	----	Various	Various	Composite
00665	Total Phosphorus (as P), lb/month[6]	Various	----	----	----	Various	Various	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months	Various	----	----	----	Various	Various	Calculated
01323	Selenium, Potentially Dissolved, µg/l	Various	----	Various	Various	2x/month	Weekly	Grab
01323	Selenium, Potentially Dissolved, lbs/day[7]	Various	----	Various	----	2x/month	Weekly	Calculated
00094	Electrical Conductivity (EC), dS/m	Various	----	----	----	Quarterly	Quarterly	Grab
Various	Other Pollutants of Concern	Various	----	Various	Various	Various	Various	Grab or Composite
Various	Whole Effluent Toxicity (WET)							
	Chronic	Stat Diff and IC25≥IWC			----	Quarterly	Quarterly	3 Composites/ Test
	Acute	LC50>100%			----			Grab

Note 1: Flow Limit – The chronic flow limit is equal to the flow rate provided in the permit application, and will be stated in the certification.

Note 2: Flow Measurement – If power is not available, flow may be measured on an instantaneous basis.

Note 3: Oil and Grease: – A visual observation of the discharge for each permitted outfall must be made 2 times per month or weekly, as stated in the certification. In the event an oil sheen or floating oil is observed, a grab sample shall be collected weekly, analyzed, and reported on the DMR. In addition, corrective action shall be taken immediately to mitigate the discharge of oil.

Note 4: Total Flow – Total flow is the cumulative flow of the discharge for the quarter or month in million gallons. If continuous flow monitoring is not conducted, the permittee must calculate the total flow for the month or quarter using the 30-day average flow (measured) and the number of days the facility discharged within the month or quarter.

Note 5: Total Dissolved Solids (TDS) – Analysis for salinity, measured as TDS, and a requirement to report quarterly total flow will be included in the permit certification for all discharges to the Colorado River Basin.

Note 6: Total Phosphorus – Analysis for Total Phosphorus, as P, will be included in the permit certification for all discharges to waters with a control regulation for P. Monitoring requirements and effluent limitations vary depending on the applicable control regulation (Regulations 71 through 74).

Note 7: Selenium Loading Calculation -- To determine selenium loading values, use the calculation formula below:

Loading in lbs/day = (30 day average effluent flow in **MGD** × 30 day average selenium concentration in **mg/l**) × 8.34

1000 ug/l = 1 mg/l

b. Crushed Stone, and Construction Sand and Gravel (SIC codes 1422, 1423, 1429, 1442)

Table C.1.2 – Applicable Limitations

ICIS Code	Parameter	Limitations				Monitoring Frequency		Sample Type
		30 day average	7 day average	Daily Max.	2 year average	Minor Facilities	Major Facilities	
General Permit Requirements								
50050	Flow, MGD[1]	Limit in cert.	----	Report	----	Monthly (Continuous or Instantaneous[2])	2x/month (Continuous or Instantaneous[2])	Recorder/ In-situ
00400	pH, s.u.	----	----	6.5-9.0	----	2x/month	Weekly	Grab
84066	Oil and Grease, mg/l	----	----	----	----	2x/month	Weekly	Visual[3]
03582	Oil and Grease, mg/l	----	----	10	----	Contingent	Weekly	Grab[3]
00530	Total Suspended Solids, mg/l	30	45	----	----	2x/month	Weekly	Grab
Site Specific Requirements								
51500 1	Flow, Total, MG[4]	Report Quarterly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
51500 EG	Flow, Total, MG[4]	Report Monthly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
70295	Total Dissolved Solids, mg/l[5]	Report	----	----	----	Quarterly	Quarterly	Grab
00665	Total Phosphorus (as P), mg/l[6]	Various	Various	Various	----	Various	Various	Composite
00665	Total Phosphorus (as P), lb/month[6]	Various	----	----	----	Various	Various	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months	Various	----	----	----	Various	Various	Calculated
01323	Selenium, Potentially Dissolved, µg/l	Various	----	Various	Various	2x/month	Weekly	Grab
01323	Selenium, Potentially Dissolved, lbs/day[7]	Various	----	Various	----	2x/month	Weekly	Calculated
00094	Electrical Conductivity (EC), dS/m	Various	----	----	----	Quarterly	Quarterly	Grab
Various	Other Pollutants of Concern	Various	----	Various	Various	Various	Various	Grab or Composite
Various	Whole Effluent Toxicity (WET)							
	Chronic	Stat Diff and IC25≥IWC			----	Quarterly	Quarterly	3 Composites/ Test
	Acute	LC50>100%			----			Grab

Notes 1-7 are located with Table C.1.1

c. Industrial Sand (SIC code 1446)

Table C.1.3 – Applicable Limitations for mine dewatering; and process-generated wastewater from facilities that DO NOT use HF Flotation

ICIS Code	Parameter	Limitations				Monitoring Frequency		Sample Type
		30 day average	7 day average	Daily Max.	2 year average	Minor Facilities	Major Facilities	
General Permit Requirements								
50050	Flow, MGD[1]	Limit in cert.	----	Report	----	Monthly (Continuous or Instantaneous[2])	2x/month (Continuous or Instantaneous[2])	Recorder/ In-situ
00400	pH, s.u.	----	----	6.5-9.0	----	2x/month	Weekly	Grab
84066	Oil and Grease, mg/l	----	----	----	----	2x/month	Weekly	Visual[3]
03582	Oil and Grease, mg/l	----	----	10	----	Contingent	Weekly	Grab[3]
Federal Effluent Limitation Guidelines								
00530	Total Suspended Solids, mg/l[8]	25	----	45	----	2x/month	Weekly	Grab
Site Specific Requirements								
51500 1	Flow, Total, MG[4]	Report Quarterly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
51500 EG	Flow, Total, MG[4]	Report Monthly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
70295	Total Dissolved Solids, mg/l[5]	Report	----	----	----	Quarterly	Quarterly	Grab
00665	Total Phosphorus (as P), mg/l[6]	Various	Various	Various	----	Various	Various	Composite
00665	Total Phosphorus (as P), lb/month[6]	Various	----	----	----	Various	Various	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months	Various	----	----	----	Various	Various	Calculated
01323	Selenium, Potentially Dissolved, µg/l	Various	----	Various	Various	2x/month	Weekly	Grab
01323	Selenium, Potentially Dissolved, lbs/day[7]	Various	----	Various	----	2x/month	Weekly	Calculated
00094	Electrical Conductivity (EC), dS/m	Various	----	----	----	Quarterly	Quarterly	Grab
Various	Other Pollutants of Concern	Various	----	Various	Various	Various	Various	Grab or Composite
Various	Whole Effluent Toxicity (WET)							
	Chronic	Stat Diff and IC25≥IWC			----	Quarterly	Quarterly	3 Composites/ Test
	Acute	LC50>100%			----			Grab

Notes 1-7 are located with Table C.1.1

Note 8: Precipitation Event Relief: As specified by the ELG, any overflow from facilities subject to Subpart D – Industrial Sand shall not be subject to the limitations for total suspended solids if the facility is designed, constructed, and maintained to contain or treat the volume of waste water which would result from a 10-year, 24-hour precipitation event.

c. Industrial Sand (SIC code 1446) (continued)

Table C.1.4 – Applicable Limitations for process-generated wastewater from facilities that use HF Flotation

ICIS Code	Parameter	Limitations				Monitoring Frequency		Sample Type
		30 day average	7 day average	Daily Max.	2 year average	Minor Facilities	Major Facilities	
General Permit Requirements								
50050	Flow, MGD[1]	Limit in cert.	----	Report	----	Monthly (Continuous or Instantaneous[2])	2x/month (Continuous or Instantaneous[2])	Recorder/ In-situ
00400	pH, s.u.	----	----	6.5-9.0	----	2x/month	Weekly	Grab
84066	Oil and Grease, mg/l	----	----	----	----	2x/month	Weekly	Visual[3]
03582	Oil and Grease, mg/l	----	----	10	----	Contingent	Weekly	Grab[3]
00951	Total Fluoride, mg/l[9]	----	----	2.0	----	2x/month	2x/month	Grab
Federal Effluent Limitation Guidelines								
51412	Total Suspended Solids, lbs/1000 lbs production[8]	0.023 lbs per 1,000 lbs total product	----	0.046 lbs per 1,000 lbs total product	----	2x/month	2x/month	Calculated
00951	Total Fluoride, lbs/1000 lbs production[8]	0.003 lbs per 1,000 lbs total product	----	0.006 lbs per 1,000 lbs total product	----	2x/month	2x/month	Calculated
Site Specific Requirements								
51500 1	Flow, Total, MG[4]	Report Quarterly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
51500 EG	Flow, Total, MG[4]	Report Monthly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
70295	Total Dissolved Solids, mg/l[5]	Report	----	----	----	Quarterly	Quarterly	Grab
00665	Total Phosphorus (as P), mg/l[6]	Various	Various	Various	----	Various	Various	Composite
00665	Total Phosphorus (as P), lb/month[6]	Various	----	----	----	Various	Various	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months	Various	----	----	----	Various	Various	Calculated
01323	Selenium, Potentially Dissolved, µg/l	Various	----	Various	Various	2x/month	Weekly	Grab
01323	Selenium, Potentially Dissolved, lbs/day[7]	Various	----	Various	----	2x/month	Weekly	Calculated
00094	Electrical Conductivity (EC), dS/m	Various	----	----	----	Quarterly	Quarterly	Grab

Various	Other Pollutants of Concern	Various	----	Various	Various	Various	Various	Grab or Composite
Various	Whole Effluent Toxicity (WET)							
	Chronic	Stat Diff and IC25≥IWC			----	Quarterly	Quarterly	3 Composites/ Test
	Acute	LC50>100%			----			Grab

Notes 1-7 are located with Table C.1.1

Note 8: Precipitation Event Relief: As specified by the ELG, any overflow from facilities subject to Subpart D – Industrial Sand shall not be subject to the limitations for total suspended solids if the facility is designed, constructed, and maintained to contain or treat the volume of waste water which would result from a 10-year, 24-hour precipitation event.

Note 9: Fluoride Water Quality Standard Based Effluent Limitation: The acute water quality based standard limitation of 2.0 mg/l for fluoride applies only on segments that are designated for domestic water supply use.

d. Kaolin; Ball Clay; and Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified, Excluding Bentonite and Magnesite (SIC codes 1455 and 1459)

Table C.1.5 – Applicable Limitations

ICIS Code	Parameter	Limitations				Monitoring Frequency		Sample Type
		30 day average	7 day average	Daily Max.	2 year average	Minor Facilities	Major Facilities	
General Permit Requirements								
50050	Flow, MGD[1]	Limit in cert.	----	Report	----	Monthly (Continuous or Instantaneous[2])	2x/month (Continuous or Instantaneous[2])	Recorder/ In-situ
00400	pH, s.u.	----	----	6.5-9.0	----	2x/month	Weekly	Grab
84066	Oil and Grease, mg/l	----	----	----	----	2x/month	Weekly	Visual[3]
03582	Oil and Grease, mg/l	----	----	10	----	Contingent	Weekly	Grab[3]
00530	Total Suspended Solids, mg/l	30	45	----	----	2x/month	Weekly	Grab
Site Specific Requirements								
51500 1	Flow, Total, MG[4]	Report Quarterly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
51500 EG	Flow, Total, MG[4]	Report Monthly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
70295	Total Dissolved Solids, mg/l[5]	Report	----	----	----	Quarterly	Quarterly	Grab
00665	Total Phosphorus (as P), mg/l[6]	Various	Various	Various	----	Various	Various	Composite
00665	Total Phosphorus (as P), lb/month[6]	Various	----	----	----	Various	Various	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months	Various	----	----	----	Various	Various	Calculated
01323	Selenium, Potentially Dissolved, µg/l	Various	----	Various	Various	2x/month	Weekly	Grab
01323	Selenium, Potentially Dissolved, lbs/day[7]	Various	----	Various	----	2x/month	Weekly	Calculated
00094	Electrical Conductivity (EC), dS/m	Various	----	----	----	Quarterly	Quarterly	Grab
Various	Other Pollutants of Concern	Various	----	Various	Various	Various	Various	Grab or Composite
Various	Whole Effluent Toxicity (WET)							
	Chronic	Stat Diff and IC25≥IWC			----	Quarterly	Quarterly	3 Composites/ Test
	Acute	LC50>100%			----			Grab

Notes 1-7 are located with Table C.1.1

e. Graphite Mining (SIC code 1499)

Table C.1.6 – Applicable Limitations

ICIS Code	Parameter	Limitations				Monitoring Frequency		Sample Type
		30 day average	7 day average	Daily Max.	2 year average	Minor Facilities	Major Facilities	
General Permit Requirements								
50050	Flow, MGD[1]	Limit in cert.	----	Report	----	Monthly (Continuous or Instantaneous[2])	2x/month (Continuous or Instantaneous[2])	Recorder/ In-situ
00400	pH, s.u.	----	----	6.5-9.0	----	2x/month	Weekly	Grab
84066	Oil and Grease, mg/l	----	----	----	----	2x/month	Weekly	Visual[3]
03582	Oil and Grease, mg/l	----	----	10	----	Contingent	Weekly	Grab[3]
Federal Effluent Limitation Guidelines								
00530	Total Suspended Solids, mg/l	10	----	20	----	2x/month	Weekly	Grab
74010	Total Iron, mg/l	1	----	2	----	2x/month	Weekly	Grab
Site Specific Requirements								
51500 1	Flow, Total, MG[4]	Report Quarterly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
51500 EG	Flow, Total, MG[4]	Report Monthly Total	----	----	----	Continuous or Instantaneous[2]	Continuous or Instantaneous[2]	Calculated
70295	Total Dissolved Solids, mg/l[5]	Report	----	----	----	Quarterly	Quarterly	Grab
00665	Total Phosphorus (as P), mg/l[6]	Various	Various	Various	----	Various	Various	Composite
00665	Total Phosphorus (as P), lb/month[6]	Various	----	----	----	Various	Various	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months	Various	----	----	----	Various	Various	Calculated
01323	Selenium, Potentially Dissolved, µg/l	Various	----	Various	Various	2x/month	Weekly	Grab
01323	Selenium, Potentially Dissolved, lbs/day[7]	Various	----	Various	----	2x/month	Weekly	Calculated
00094	Electrical Conductivity (EC), dS/m	Various	----	----	----	Quarterly	Quarterly	Grab
Various	Other Pollutants of Concern	Various	----	Various	Various	Various	Various	Grab or Composite
Various	Whole Effluent Toxicity (WET)							
	Chronic	Stat Diff and IC25≥IWC			----	Quarterly	Quarterly	3 Composites/ Test
	Acute	LC50>100%			----			Grab

Notes 1-7 are located with Table C.1.1

Note 8: As specified by the ELG, for facilities subject to Subpart AL – Graphite, only that volume of water resulting from precipitation that exceeds the maximum safe surge capacity of a process waste water impoundment may be discharged from that impoundment. The height difference between the maximum safe surge capacity level and the normal operating level must be greater than the inches of rain representing the 10-year, 24-hour rainfall event as established by

the National Climatic Center, National Oceanic and Atmospheric Administration for the locality in which such impoundment is located.

2. Stormwater Discharge Effluent Limitations

a. Practice Based Effluent Limitations

i. Minimize exposure
The permittee must minimize the exposure of pollutant sources associated with manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff. Minimizing exposure may include locating these industrial materials and activities inside or protecting them with storm resistant coverings.

ii. Good housekeeping
The permittee must keep clean all areas exposed to stormwater runoff, as necessary to minimize potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

iii. Maintenance of Control Measures
The permittee must maintain all control measures (structural and non-structural) used to achieve the effluent limits required by this permit in effective operating condition. The permittee must conduct maintenance of control measures in accordance with Part.I.G (Control Measures) of this permit.

iv. Spill prevention and response procedures
The permittee must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such potential spills. The permittee must at a minimum implement:

a) Procedures for regularly inspecting, testing, maintaining, and repairing all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters.
b) Procedures for plainly labeling containers that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
c) Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, or procedures for material storage and handling;
    - Permittees must implement control measures (secondary containment or equivalent protection) for any chemical (e.g., petroleum products, pesticides, magnesium chloride, treatment chemicals, etc.) located at the facility to contain all spills and prevent any spilled material from entering state waters. The containment system must have sufficient capacity to contain 10% of the volume of containers, or the volume of the largest container plus 10%, whichever is greater.
d) Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available; and
e) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Contact information must be in locations that are readily accessible and available.

v. Erosion and sediment controls
The permittee must stabilize exposed areas and manage runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions taken to meet this effluent limit, flow velocity dissipation devices must be placed at discharge locations and within outfall channels where necessary to minimize erosion and/or settle out pollutants.

vi. Management of runoff and Pollutant Removal
The permittee must divert; infiltrate; reuse; contain; or treat stormwater runoff to remove pollutants, in a manner that minimizes pollutants in stormwater discharges from the site.

vii. Salt storage piles or piles containing salt

The permittee must enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces, and implement appropriate measures to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another permit.

viii. Employee Training

The permittee must develop and implement a training program for employees. Training must be conducted at least **annually**, and must address the following, as applicable to the trainee's activities: the site-specific control measures used to achieve the effluent limits in this Part, components and goals of the SWMP, monitoring and inspection procedures, and other applicable requirements of the permit. At a minimum, the following individuals must be trained:

a) Employee(s) overseeing implementation of, revising, and amending the SWMP.
b) Employee(s) performing installation, inspection, maintenance, and repair of control measures.
c) Employee(s) who work in areas of industrial activity subject to this permit.
d) Employee(s) who conduct stormwater discharge monitoring required by Part.I.I of this permit.

ix. Non stormwater discharges

The permittee must eliminate non-stormwater discharges not authorized by this or any other CDPS permit, or conducted in accordance with a Division Low Risk Guidance document.

x. Waste, Garbage and Floatable Debris

The permittee must minimize the discharge of waste, garbage, and floatable debris from the site by keeping exposed areas free of such materials or by intercepting them before they are discharged.

xi. Dust generation and vehicle tracking of industrial materials

The permittee must minimize generation of dust and off-site tracking of raw, final, or waste materials.

b. Water Quality Based Effluent Limitations

i. Water Quality Standards

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.

The Division expects that compliance with all other terms and conditions in this permit will control discharges as necessary to meet applicable water quality standards. If at any time the permittee becomes aware, or the Division determines, that the authorized discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must conduct, document, and report corrective action as required in Part I.K (Corrective Actions).

If information in the application, required reports, or from other sources indicates that compliance with the other terms and conditions of this permit will not control the discharge as necessary to meet applicable water quality standards, the Division may include a site-specific water quality-based effluent limitation in the permit certification, or require the permittee to obtain coverage under an individual permit. The Division may include a compliance schedule for any new or revised water quality-based effluent limitation included in a permit certification, as appropriate. The Division may also include additional terms and conditions in the permit certification to determine whether compliance with the remaining terms and conditions of the permit will control the discharge as necessary to meet applicable water quality standards, or to monitor compliance with a site-specific water quality-based effluent limitation.

ii. Additional requirements for discharge to water quality impaired waters

a) **Existing** Discharge to an Impaired Water **with** an EPA Approved or Established TMDL. Where a pollutant and applicable water quality standard has been identified, the Division may apply the monitoring requirements of Part I.I.3 in the permit certification.

When the Division determines that compliance with the other terms and conditions of this permit will not control the discharge as necessary to be consistent with the assumptions and requirements of the TMDL, including any wasteload allocation for the facility, the Division may include a site-specific water quality-based effluent limitation in accordance with Part I.C.2.b.i above in the permit certification, or inform the permittee if coverage under an individual permit is necessary. The Division may also include additional terms and conditions in the permit certification to determine whether the discharge is consistent with the assumptions and requirements of the TMDL.

b) **Existing** Discharge to an Impaired Water **without** an EPA Approved or Established TMDL. Where a pollutant and applicable water quality standard has been identified, the Division may apply the monitoring requirement of Part I.I.3 in the permit certification. Note that this provision also applies to situations where the Division determines that the discharge may need to be controlled as necessary to meet water quality standards in a downstream water segment, even if the discharge is to a receiving water that is not specifically identified on a Section 303(d) list.

c) **New** Discharge to an Impaired Water. Where a pollutant and applicable water quality standard has been identified, the Division will make a determination whether the discharge has reasonable potential to cause or contribute to an exceedance of the applicable water quality standard for the identified pollutant. Where reasonable potential is determined, the Division will include monitoring requirements of Part I.I.3 and/or a site-specific water quality-based effluent limitation in accordance with Part I.C.2.b.i. The water quality-based effluent limitation will be narrative, and consistent with the following statement:

> "Discharges authorized under this permit must be controlled as necessary to meet the applicable water quality standard for [*the subject pollutant*] at the point of discharge (end of pipe)."

iii. Additional requirements for discharges to waters designated as critical habitat for threatened and endangered species

Where a pollutant and applicable water quality standard has been identified, the Division may apply the monitoring requirements of Part I.I.3 in the permit certification. The Division may also include additional terms and conditions in the permit certification to determine whether compliance with the remaining terms and conditions of the permit will control the discharge as necessary to eliminate or minimize the potential for no more than minor detrimental effects to listed species in regards to receiving water mixing (October 2005 Memorandum of Agreement (MOA) entered into by the Division, EPA, and USFWS).

iv. Additional requirements for new or increased discharges to reviewable waters

If the Division determines that compliance with the other terms and conditions of this permit will not control the discharge as necessary to be consistent with the applicable antidegradation requirements, the Division may include additional terms and conditions in accordance with Part I.C.2.b.i above in the permit certification, or inform the permittee if coverage under an individual permit is necessary.

D. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS – Process water and stormwater

The Division may require WET testing for discharges on a site-specific basis, to ensure that there are no discharges of pollutants "in amounts, concentrations or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life", as required by Section 31.11 (1) of the Basic Standards and Methodologies for Surface Waters. WET testing requirements are identified below. Appendix B identifies the test results that constitute a failure and/or violation of WET; and automatic compliance response triggers and associated required actions.

1. WET Test Requirements

a. Acute Testing Requirements: For facilities where acute WET testing is required, the permittee shall conduct an acute 48-hour WET test using Ceriodaphnia dubia, and an acute 96-hour WET test using Pimephales promelas. Acute tests shall be conducted as a static replacement test using a single effluent grab sample. The permittee shall conduct each acute WET test in accordance with the 40 CFR Part 136 methods described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, Fifth Edition, October 2002 (EPA-821-R-02-012) or its most current edition.

b. Chronic Testing Requirements: For facilities where chronic WET testing is required, the permittee shall conduct the chronic WET test using Ceriodaphnia dubia and Pimephales promelas, as a static renewal 7-day test using three separate composite samples. The permittee shall conduct each chronic WET test in accordance with the 40 CFR Part 136 methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002 (EPA-821-R-02-013) or the most current edition.

For the chronic Ceriodaphnia dubia test, the termination requirement shall be where 80% or more of the surviving control females having produced their third brood. If this requirement is not met, the test is considered invalid and retesting must be performed during the monitoring period. The permittee will be required to submit documentation showing that the appropriate number of the surviving control females have had their third brood with the WET information summary that is submitted to the Division with the WET test results.

c. Acute and Chronic Testing Requirements: The minimum dilution series to be used at the facility will be specified in the certification. If the permittee uses more dilutions than prescribed, and accelerated testing is to be performed, the same dilution series shall be used in the accelerated testing as was used in the failed test.

All WET tests shall be done at the frequency listed in Part I.C.1. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

If a test is considered invalid, the permittee is required to perform additional testing during the monitoring period to obtain a valid test result. Failure to obtain a valid test result during the monitoring period shall result in a violation of the permit for failure to monitor.

2. Toxicity Reopener

This permit may be reopened and modified to include additional or modified numerical permit limitations, new or modified compliance response requirements, changes in the WET testing protocol, the addition of both acute and chronic WET requirements, or any other conditions related to the control of toxicants.

E. GENERAL MONITORING AND SAMPLING REQUIREMENTS – Process water and stormwater

1. Monitoring Periods and Monitored outfalls

Monitoring requirements in this permit begin in the first full month following the permit effective date. Applicable monitoring requirements apply to each outfall authorized by this permit, except as otherwise exempt from monitoring as a "substantially identical outfall" (for stormwater only - see Part I.H.1 of the permit).

2. Representative sampling and Monitoring points

Samples and measurements taken for the respective identified monitoring points required in the permit certification shall be representative of the volume and nature of the wastestream and/or effluent. Monitoring points shall be so designed or modified so that a sample of the effluent can be obtained at a point after the final treatment process and prior to discharge to state waters. All samples shall be taken at the monitoring points specified in the permit certification and, when specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without a modification request submitted to and approval by the Division. The permittee shall provide access to the

Division to sample at these points. Except where specified, grab samples shall be used for all monitoring and shall not be combined.

3. Adverse Weather Conditions

When adverse weather conditions prevent sample collection according to the relevant monitoring schedule, the permittee must take a substitute sample, as possible, during the remaining monitoring period; for stormwater, the permittee must take a substitute sample during the next qualifying storm event. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms.

Adverse weather does not exempt the permittee from having to file timely DMRs. The permittee must report any failure to monitor and indicate the basis for not sampling during the usual reporting period.

4. Analytical requirements

The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the division in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.

The permittee may use an equivalent and acceptable alternative to an EPA-approved method without EPA review where the requirements of 40 CFR Part 136.6 are met and documented. The permittee may use an Alternative Test Procedure (ATP). An ATP is defined as a way in which an analyte is identified and quantified that is reviewed and approved by EPA in accordance with 40 CFR Part 136.4 for nationwide use, or a modification to a 40 CFR 136 approved method that is reviewed and approved by EPA in accordance with 40 CFR Part 136.5 for limited use.

a. The permittee must select a test procedure that is “sufficiently sensitive” for all monitoring conducted in accordance with this permit.

b. The PQLs for specific parameters are listed in tables E.4-1, below.

c. If the permit contains an interim effluent limitation (a limit is report until such time as a numeric effluent limit becomes effective) for a parameter, the final numeric effluent limit shall be considered the AWQC for the purpose of determining whether a test method is sufficiently sensitive.

d. When the analytical method which complies with the above requirements has an ML greater than the permit limit, and the permittee’s analytical result is less than the ML, the permittee shall report "BDL" on the DMR. Such reports will not be considered as violations of the permit limit, as long as the method is sufficiently sensitive. For parameters that have a report only limitation, and the permittee’s analytical result is less than the ML, (where X = the ML) “< X” shall be reported on the DMR.

e. In the calculation of average concentrations (i.e. 7- day, 30-day average, 2-year rolling average) any individual analytical result that is less than the ML shall be considered to be zero for the calculation purposes. When reporting:

   - If all individual analytical results are less than the ML, the permittee shall report either “BDL” or “<X” (where X = the ML), following the guidance above.

   - If one or more individual results is greater than the ML, an average shall be calculated and reported. Note that it does not matter if the final calculated average is greater or less than the ML, it must be reported as a value.

Table E. 4-1. Practical Quantitation Limits (PQLs) – Metals, inorganics, nutrients, radiological parameters, and nonylphenol

Parameter	Reporting Units	PQL	Parameter	Reporting Units	PQL
Aluminum	µg/L[1]	15	Ammonia Nitrogen	mg/L[2] N	0.2
Antimony	µg/L	2	Nitrate+Nitrite Nitrogen	mg/L N	0.1
Arsenic	µg/L	1	Nitrate Nitrogen	mg/L N	0.1
Barium	µg/L	1	Nitrite Nitrogen	mg/L N	0.05
Beryllium	µg/L	2	Total Kjeldahl Nitrogen	mg/L N	0.5
Boron	µg/L	20	Total Nitrogen	mg/L N	0.5
Cadmium	µg/L	0.5	Total Inorganic Nitrogen	mg/L N	0.2
Calcium	µg/L	120	Phosphorus	mg/L P	0.05[3]
Chromium	µg/L	20	BOD/CBOD	mg/L	2
Chromium, Trivalent	µg/L	---	Chloride	mg/L	2
Chromium, Hexavalent	µg/L	20[3, 4]	Total Residual Chlorine, DPD	mg/L	0.5
Copper	µg/L	2	Total Residual Chlorine, Amperiometric	mg/L	0.05
Iron	µg/L	20[3]	Cyanide	µg/L	10[3]
Lead	µg/L	0.5	Fluoride	mg/L	0.5
Magnesium	µg/L	35	Phenols	µg/L	30
Manganese	µg/L	2	Sulfate	mg/L	2
Mercury	µg/L	0.2[3]	Sulfide	mg/L H_2S	0.1
Mercury, Low Level	µg/L	0.002	Total Dissolved Solids (TDS)	mg/L	10
Molybdenum	µg/L	0.5	Total Suspended Solids (TSS)	mg/L	5
Nickel	µg/L	1	Radium-226	pCi/L	1
Selenium	µg/ L	1[3]	Radium-228	pCi/L	1
Silver	µg/ L	0.5	Uranium	µg/ L	1
Sodium	µg/ L	150	Nonylphenol, ASTM D7065	µg/ L	10
Thallium	µg/ L	0.5			
Zinc	µg/ L	10			

[1] µg/L = micrograms per liter
[2] mg/L = milligrams per liter
[3] PQL established based on parameter specific evaluation
[4] For hexavalent chromium, samples must be unacidified so dissolved concentrations will be measured rather than potentially dissolved concentrations.

5. <u>Flow Measuring Device</u> – Process water discharges

The permittee shall provide flow measuring and metering to give representative values of throughput and treatment of the wastewater system. The flow measuring device may be equipped with a local flow indication instrument and a flow indication-recording-totalization device suitable for providing permanent flow records.

At the request of the Division, the permittee must be able to show proof of the accuracy of any flow-measuring device used in obtaining data submitted in the monitoring report. The flow-measuring device must indicate values within ten (10) percent of the actual flow discharging from the point source.

6. Extra monitoring

If the permittee, using an approved analytical method, monitors any parameter more frequently than required by this permit, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs) or other forms as required by the Division. Such increased frequency shall also be indicated.

F. REPORTING AND RECORDKEEPING – Process water and stormwater

1. Routine Reporting of data – DMRs

As directed by the Division, the permittee may be required to report the data gathered in compliance with Parts I.C on a **monthly** basis for those facilities subject to a WLA and associated concentration based WQBEL in the permit certification; reporting shall be a on a **quarterly** basis for all other facilities. Reporting of all data shall comply with the requirements of Part I.E. (General Monitoring and Sampling Requirements) and Part I.F. (Reporting and Recordkeeping) of this permit.

Starting December 21, 2016, the permittee must electronically report DMRs by using the EPA's Net-DMR service unless a waiver is granted in compliance with 40 CFR 127.

If submitted on paper, the data must be reported on Division approved discharge monitoring report (DMR) forms (EPA form 3320-1). The permittee must submit these forms by mail. The original signed copy of each discharge monitoring report (DMR) shall be submitted to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

For both electronic and paper reporting the data must be received no later than the 28th day of the following month (for example, the DMR for the first calendar quarter must be received by the Division by April 28th). If no discharge occurs during the reporting period, "No Discharge" shall be reported.

The Discharge Monitoring Report paper and electronic forms shall be filled out accurately and completely in accordance with requirements of this permit and the instructions on the forms. They shall be signed by an authorized person as identified in Part I.F.4.

2. Additional Reporting

In addition to the reporting requirements stipulated in this Part, the permittee is also subject to the standard permit reporting provisions of Part II of this permit.

3. Records

a. The permittee shall establish and maintain records. Those records shall include, but not be limited to, the following:

   i. The date, type, exact place, and time of sampling or measurements;
   ii. The individual(s) who performed the sampling or measurements;
   iii. The date(s) the analyses were performed;
   iv. The individual(s) who performed the analyses;
   v. The analytical techniques or methods used; and
   vi. The results of such analyses.
   vii. Any other observations which may result in an impact on the quality or quantity of the discharge as indicated in 40 CFR 122.44 (i)(1)(iii).

b. The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records, copies of all

reports required by this permit and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or Regional Administrator.

4. Signatory and certification requirements

a. All reports and other information required by the Division, shall be signed and certified for accuracy by the permittee in accord with the following criteria:

i. In the case of corporations, by a responsible corporate officer. For purposes of this section, the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the form originates;
ii. In the case of a partnership, by a general partner;
iii. In the case of a sole proprietorship, by the proprietor;
iv. In the case of a municipal, state, or other public facility, by either a principal executive officer, or ranking elected official. For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates;
v. By a duly authorized representative of a person described above, only if:
   a) The authorization is made in writing by a person described in i, ii, iii, or iv above;
   b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
   c) The written authorization is submitted to the Division.

b. If an authorization as described in this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

The permittee, or the duly authorized representative shall make and sign the following certification on all such documents:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G. CONTROL MEASURES – Stormwater only

All control measures used by the permittee to meet the effluent limitations contained in this permit must be selected, designed, installed, implemented, and maintained in accordance with good engineering hydrologic and pollution control practices, and the manufacturer's specifications, when applicable.

The term "**Minimize**", for purposes of implementing control measures to meet the requirements of Part I.C.2 of this general permit, means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

1. Installation and implementation specifications

Installation and implementation specifications for each control measure type used by the permittee to meet the effluent limitations contained in this permit, must be retained with the SWMP (see Part I.M of this general permit).

2. Maintenance of Control Measures and Associated Documentation

a. The permittee must maintain all control measures used to achieve the effluent limits required by this permit in effective operating condition (see Part I.C.2). For this permit, maintenance includes preventative and routine maintenance, modification, repair, replacement, or installation of new control measures. Observations resulting in maintenance activities can be made during a site inspection, or during general observations of site conditions.

b. Corrective actions associated with maintaining control measures must be conducted with due diligence, as soon as possible after the need is discovered, to achieve the effluent limits required by this permit. The permittee must implement interim control measures to achieve the effluent limits required by this permit while performing maintenance of the primary control measure.

c. The permittee shall document corrective actions associated with maintaining control measures, in accordance with Part. I.K (Corrective Actions) of this permit, and shall revise the facility SWMP to reflect replacement or installation of new control measures.

H. GENERAL MONITORING REQUIREMENTS – Stormwater only

1. Substantially identical outfalls

When a facility has two or more outfalls that, based on a consideration of features (e.g. grass vs. pavement, slopes, catch basins vs. swales) and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may monitor the effluent of one such outfall and report that the results also apply to the substantially identical outfalls.

a. For visual assessments, this provision applies only when visual assessments are rotated between each substantially identical outfall throughout the period of the permittees coverage under this permit.

b. As required in Part I.M.8, the SWMP must describe the rationale for any substantially identical outfall determinations.

2. Measurable storm events and Delayed release of stormwater

a. Rain event: The permittee must conduct all required monitoring on a storm event that results in an actual discharge from the facility ("measurable storm event"), which includes discharges to surface water within the facility permit boundary, and that follows the preceding measurable storm event by at least 72 hours (3 days).

b. Snowmelt event: The permittee must conduct snowmelt monitoring at a time when a measurable discharge occurs from the facility, which includes discharges to surface water within the facility permit boundary occurs.

c. Delayed release of stormwater: In the event stormwater is detained at the facility (such as in a detention pond/area), and discharges or is manually released at a later date, the permittee must conduct all required monitoring at the time of release, and record Storm Event information (see Part I.H.3, below) for the previous measureable storm event.

This requirement pertains to those discharges that result in an actual discharge from the facility, or that discharge to surface water within the facility permit boundary. Discharges from the mining pit (process water) are not subject to this provision.

3. Storm event information

a. Rain event: For each measurable storm event that is monitored to meet the requirements of the permit, the permittee must document:

i. The date, time of the start of the discharge, time of sampling, duration (in hours) of the rainfall event, and magnitude (in inches) of the storm event sampled; and
ii. The duration between the storm event sampled and the end of the most recent storm event that produced a discharge

This documentation is required only for those storm events that result in a discharge that the permittee monitors.

b. Snowmelt monitoring: The permittee must document the date of the sampling event for each monitored snowmelt event. This documentation is required only for those snowmelt events that result in a discharge that the permittee monitors.

4. Sample Type and Requirements

a. Grab samples shall be used for all monitoring and shall not be combined.
b. Permittees must take a minimum of one grab sample from a discharge resulting from a measurable storm event.
c. Grab samples must be collected within the first 30 minutes of a measurable storm event (see Part I.H.2). If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes, and documentation must be kept with the SWMP explaining why it was not possible to take samples within the first 30 minutes.
d. In the case of snowmelt, samples must be taken during a period with a measurable discharge.
e. All discharge samples at a facility must be taken during the same storm event, if feasible.

5. Climates with Irregular Stormwater Runoff

a. If a facility is located in an area where limited rainfall occurs during parts of the year, or in areas where freezing conditions exist that prevent runoff from occurring for extended periods, the permittee may submit a modification request to the Division, to change the required monitoring events to seasons when precipitation occurs, or when snowmelt results in a measurable discharge from the facility.

b. The permittee must still collect the required number of samples.

c. The permittee must maintain the revised monitoring schedule with the facility's SWMP as specified in Part I.M.8.

6. Monitoring for allowable non-stormwater discharges

A permittee is only required to monitor allowable non-stormwater discharges (as delineated in Part I.A.1.c) when they are commingled with stormwater discharges associated with industrial activity.

7. Monitoring Exceptions for Inactive and Unstaffed Sites

The requirement that permittees conduct and document visual monitoring, benchmark sampling, or water quality standards monitoring of stormwater discharges does not apply at inactive and unstaffed sites (please see Appendix C - Definitions for how the term 'inactive' is used in this permit). Routine reporting of DMR data must follow the reporting conventions required at the Stormwater Specific Reporting and Recordkeeping section (Part I.N) of the permit.

Additional requirements apply to these facilities, as provided below.

a. At inactive and unstaffed facilities that **maintain a condition of no exposure**, i.e., there are no industrial materials or activities exposed to stormwater:

   i. The permittee must maintain a statement in the facility SWMP (Part I.M.8) indicating that the site is inactive and unstaffed (and associated dates), and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 5 CCR 1002-61.3(2)(h). The statement must be signed and certified in accordance with Part I.F (Reporting and Recordkeeping).

   ii. If conditions change and industrial materials or activities become exposed to stormwater, this exception no longer applies and instead, the exception at Part I.H.7.b, below, applies.

b. At inactive and unstaffed facilities that **do not maintain a condition of no exposure**, the permittee must conduct additional facility inspections as required at Part I.J.4 of this permit.

c. If conditions change and the facility becomes active and/or staffed, exceptions under this part **no longer apply** and the permittee must **immediately** resume quarterly visual monitoring and benchmark sampling, and applicable water quality standards sampling at the frequency identified in the permit certification.

d. The presence of staff at the facility to conduct required facility inspections does not change the inactive and unstaffed status of the facility for the purposes of this part.

8. Monitoring Exceptions for Completed and Finally Stabilized Areas

The requirement that permittees conduct and document visual monitoring, benchmark sampling, or water quality standards monitoring of stormwater discharges does not apply at completed facilities, completed portions of facilities, or finally stabilized portions of facilities that meet all of the following conditions:

a. All industrial activities (such as mining, processing, batch plant activities, other land disturbing activities, fueling, loading/unloading etc.) are **temporarily** or **permanently** complete in the specified area, where temporarily complete means that such industrial activities are not currently conducted at the facility, but may recommence in the future; and

b. The permittee has implemented **all** final stabilization measures (with or without seeding) to enable the specified area to attain final stabilization, or the specified area has attained final stabilization consistent with Part.I.A.7.a or b of the permit; and

c. All final stabilization measures are selected, designed, installed, implemented and maintained in accordance with good engineering hydrologic and pollution control practices such that they effectively reduce pollutant potential and the potential for control measure failure for the designated area; and

d. The permittee amended the SWMP to identify those areas for which this exception applies, including the date the areas met the exception conditions.

Stormwater discharges from portions of facilities that are permanently stabilized (i.e., meet the termination criteria at Part I.A. 7.b of the permit, or have obtained an Acreage (or partial) Release from the DRMS for that portion of the facility) no longer require CDPS permit coverage, as the discharge no longer meets the definition of "stormwater discharges associated with industrial activity" pursuant to Regulation 61.3(2). In such cases, the permittee may request that the division reduce the facility permit boundary by the relevant portion of the facility.

9. Revocation of Monitoring Exception

The division retains the authority to revoke any Monitoring Exception identified in this Part where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

I. SPECIFIC MONITORING REQUIREMENTS – Stormwater only

1. Visual Monitoring

Once each **quarter** for the entire permit term, the permittee must collect a stormwater sample from each outfall (or a substantially identical outfall pursuant to Part I.H.1 above) and conduct a visual assessment of each of these samples.

a. These samples should be collected in such a manner that the samples are representative of the stormwater discharge.

b. The visual assessment must be made of a sample in a clean, clear glass or plastic container, and examined in a well-lit area. The permittee must visually inspect the sample for the presence of the following water quality characteristics:

i. Color;
ii. Odor;
iii. Clarity;
iv. Floating solids;
v. Settled solids;

vi. Suspended solids;
vii. Foam;
viii. Oil sheen; and
ix. Other obvious indicators of stormwater pollution.

c. Quarterly Visual Assessment Documentation. The permittee must document the visual assessment results and maintain this documentation onsite with the facility SWMP as required in Part I.M.8. The permittee is not required to submit visual assessment findings to the Division, unless specifically requested to do so. At a minimum, visual assessment documentation of the must include:

i. Sample location(s);
ii. Sample collection date and time, and visual assessment date and time for each sample;
iii. Personnel collecting the sample and performing visual assessment, and their signatures;
iv. Nature of the discharge (i.e., runoff or snowmelt);
v. Results of observations of the stormwater discharge;
vi. Probable sources of any observed stormwater contamination; and
vii. If applicable, why it was not possible to take samples within the first 30 minutes.

d. Quarterly Visual Assessment Corrective Actions: If the visual assessment indicates the control measures for the facility are inadequate or are not being properly operated and maintained, the permittee must conduct corrective actions consistent with Part I.K (Corrective Actions) of this permit.

e. The permittee shall maintain visual monitoring procedures in the SWMP as required in Part I.M.8.

2. Benchmark Monitoring

This permit provides pollutant benchmark concentrations that may be applicable to the discharge authorized by this permit. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. When the discharge exceeds an applicable benchmark concentration, the permittee must conduct corrective actions consistent Part I.K (Corrective Actions) of this permit. Failure to respond to benchmark value exceedances is a violation of the permit.

a. Applicability of Benchmark Monitoring
The permittee shall monitor at each benchmark sampling location for each benchmark parameter(s) specified for the industrial activity in **Part I.O – Asphalt Batch Plants**, and **Part I.P – Concrete Batch Plants** of this permit. The Division may also include a site specific benchmark in a permit certification as appropriate to ensure that compliance with the other terms and conditions of the permit will control discharges as necessary to meet water quality based effluent limitations contained in Part I.C.2.b of the permit.

b. Benchmark Monitoring Schedule
Benchmark monitoring must be conducted **quarterly**, for the first **4** full quarters of permit coverage. Exceptions to this schedule include:

i) Permittees at facilities in climates with irregular stormwater runoff may request a modification of this quarterly schedule as specified in Part I.H.5 of this permit.

c. Averaging monitoring values
Permittees must calculate average concentrations in accordance with the requirements of Part I.E.4 of this permit.

d. Benchmark Monitoring Actions – Data not exceeding benchmarks
After collecting **4** benchmark samples, if the average of the monitoring values for any parameter, at a specific outfall, does not exceed the benchmark, the permittee may reduce benchmark monitoring frequency for that parameter to **once-per-year**, rotating through the quarterly monitoring periods. DMR reporting shall be consistent with Part I.N of this permit.

e. Benchmark Monitoring Actions – Data exceeding benchmarks

i) If the averaged monitoring values for any parameter, at a specific outfall, exceeds the benchmark, as described in a) through c) below, the permittee must conduct corrective action in accordance with Part I.K—Corrective Actions of this permit.

a) The average of the initial **4** quarterly sample monitoring values for any parameter exceeds the benchmark.

b) If less than **4** benchmark samples have been taken, but the sum of the quarterly sample results to date is more than **4** times the benchmark level (i.e., an exceedance of the **4** quarter average is mathematically certain), this is considered a benchmark exceedance.

c) If any of the annual samples taken after the first **4** quarterly samples (i.e., samples **5** through **8**), when averaged with the proceeding samples, causes an average monitoring value that exceeds the benchmark for any parameter, this is considered a benchmark exceedance.

ii) Following control measure(s) modification, the permittee must continue **quarterly** monitoring for **4** additional quarters. For this monitoring:

a) If the average of the monitoring values for any parameter does not exceed the benchmark, the permittee may monitor once-per-year as described in Part I.I.2.d, above.

b) If the average of the monitoring values for any parameter still exceeds the benchmark (or if an exceedance of the benchmark by the 4 quarter average is mathematically certain prior to conducting the full 4 additional quarters of monitoring), the permittee must again conduct corrective actions consistent with Part I.K (Corrective Actions) of this permit unless the Division waives the requirement for additional monitoring and corrective action.

3. Water Quality Standards Monitoring

a. Applicability of water quality standards monitoring

Consistent with the provisions in Part I.C.2., the Division may apply monitoring conditions (i.e., sampling parameters, sampling frequency, and sample type) in the permit certification issued to a permittee for discharges to impaired waters, discharges to waters designated as critical habitat for threatened and endangered species, and other discharges as necessary to determine if compliance with the other terms and conditions of the permit will control discharges as necessary to meet water quality standards. Monitoring conditions will be consistent with applicable water quality standard(s) for the receiving water, and as applicable, the assumptions of any available wasteload allocation in an applicable TMDL. Water quality standards monitoring is only required at a facility if specified in the certification.

b. Monitoring Frequency and modification

When specified in the certification, the permittee must monitor discharges once per quarter at each outfall (except substantially identical outfalls) discharging stormwater to impaired waters.

c. Modifying Monitoring Requirements

A permittee may request modification of the water quality standards monitoring requirements required by the permit certification if, after one year of monitoring or 4 samples, a pollutant, at a specific outfall, is not detected above the applicable, end-of-pipe water quality standard in any sample.

4. Additional Monitoring Required by the Division

The Division may notify a permittee of additional discharge monitoring requirements. Any such notice will briefly state the reasons for the monitoring, locations, and monitoring parameters, frequency and period of monitoring, sample types, and reporting requirements. Such monitoring may include salinity and in-stream sampling and whole effluent toxicity testing.

J. FACILITY INSPECTIONS – Stormwater only

1. Inspection frequency and personnel

a. The permittee shall conduct and document visual inspections of the facility at least **quarterly** (i.e., once each calendar quarter). Inspections shall be conducted at least 20 days apart.
b. The permittee shall conduct a minimum of one (1) of the annual quarterly inspections during a runoff event, which for a rain event means during, or within 24 hours after the end of, a measureable storm event; and for a snowmelt event, means at a time when a measurable discharge occurs from the facility.
c. The permittee shall ensure that qualified personnel conduct inspections.

2. Inspection scope

Each inspection shall include:

a. Observations made at stormwater sampling locations and areas where stormwater associated with mining and processing is discharged off-site, to waters of the state, or to a storm sewer system that drains to waters of the state.
b. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).
c. Observations of the condition of and around stormwater outfalls, including flow dissipation measures to prevent scouring.
d. Observations for the presence of illicit discharges or other non-permitted discharges.
e. A verification that the descriptions of potential pollutant sources required under this permit are accurate.
f. A verification that the site map in the SWMP reflects current conditions.
g. An assessment of all control measures used to comply with the effluent limits contained in this permit, noting all of the following:

    i. Effectiveness of control measures inspected.
    ii. Locations of control measures that need maintenance or repair.
    iii. Reason maintenance or repair is needed and a schedule for maintenance or repair.
    iv. Locations where additional or different control measures are needed and the rationale for the additional or different control measures.

3. Inspection documentation

The permittee shall document the findings for each inspection in an inspection report or checklist, and keep the record onsite with the facility SWMP. The permittee shall ensure each inspection report documents the observations, verifications and assessments required in Part I.J.2 above, and additionally includes:

a. The inspection date and time;
b. Locations inspected;
c. Weather information and a description of any discharges occurring at the time of the inspection;
d. A statement that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Part I.F.4 (Reporting and Recordkeeping), the site is either in compliance or out of compliance with the terms and conditions of this permit, with respect to Part I.J.2 (Inspection Scope);
e. A summary report and a schedule of implementation of the corrective actions that the permittee has taken or plans to take if the site inspection indicates that the site is out of compliance;
f. Name, title, and signature of the person conducting site inspection; and the following statement: “I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.”;
g. Certification and signature of the person described in Part I.F.4 (Reports and Recordkeeping), or a duly authorized representative of the facility thereof.

4. Inspection frequency exceptions for Inactive and Unstaffed Sites

The requirement that permittees conduct and document quarterly visual inspections of the facility, and conduct at least one (1) inspection per calendar year during a runoff event, does not apply at inactive and unstaffed sites. Instead, the following requirements apply to such facilities (see also Monitoring Exceptions for Inactive and Unstaffed Sites at Part I.H.7 of the permit):

a. At inactive and unstaffed facilities that **maintain a condition of no exposure**, i.e., there are no industrial materials or activities exposed to stormwater:

   i. The permittee must conduct **two site inspections** annually, in the spring and fall, in accordance with the requirements of this Part.

   ii. The permittee must maintain a statement in the facility SWMP pursuant to Part I.M.7 indicating that the site is inactive and unstaffed (and associated dates), and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 5 CCR 1002-61.3(2)(h). The statement must be signed and certified in accordance with Part I.F.4 (Reports and Recordkeeping).

   iii. If conditions change and industrial materials or activities become exposed to stormwater, this exception no longer applies and instead, the exception at Part I.J.4.b, below, applies.

   iv. If conditions change and the facility becomes active and/or staffed, exceptions under this part **no longer apply** and the permittee must **immediately** resume inspections as required in Parts I.J.1-3 above.

b. At inactive and unstaffed facilities that **DO NOT maintain a condition of no exposure**, i.e., industrial materials or activities **ARE** exposed to stormwater:

   i. The permittee must conduct **six site inspections** annually, once every two calendar months, at least **20 days apart**, in accordance with the requirements of this Part.

   ii. The permittee must maintain a statement in the facility SWMP pursuant to Part I.M.7 indicating that the site is inactive and unstaffed, and associated dates. The statement must be signed and certified in accordance with Part I.F.4 (Reports and Recordkeeping).

   iii. If conditions change and the facility becomes active and/or staffed, exceptions under this part **no longer apply** and the permittee must **immediately** resume inspections as required in Parts I.J.1-3 above.

c. The presence of staff at the facility to conduct required facility inspections does not change the inactive and unstaffed status of the facility for the purposes of this part.

5. Runoff event inspection exception at Completed and Finally Stabilized Areas

The requirement that permittees conduct and document at least one (1) inspection per calendar year during a runoff event, does not apply at completed facilities, completed portions of facilities, or finally stabilized portions of facilities that meet all of the conditions below. Note that all other inspection provisions in this part remain applicable.

a. All industrial activities (such as mining, processing, batch plant activities, other land disturbing activities, fueling, loading/unloading etc.) are **temporarily** or **permanently** complete in the specified area, where temporarily complete means that such industrial activities are not currently conducted at the facility, but may recommence in the future; and

b. The permittee has implemented **all** final stabilization measures (with or without seeding) to enable the specified area to attain final stabilization, **OR** the specified area has attained final stabilization consistent with Part.I.A.7.a or b of the permit; and

c. All final stabilization measures are selected, designed, installed, implemented and maintained in accordance with good engineering hydrologic and pollution control practices such that they effectively reduce pollutant potential and the potential for control measure failure for the designated area; and

d. The permittee amended the SWMP to identify those areas for which this exception applies, including the date the areas met the exception conditions.

Stormwater discharges from portions of facilities that are permanently stabilized (i.e., meet the termination criteria at Part I.A. 7.b of the permit, or have obtained an Acreage (or partial) Release from the DRMS for that portion of the facility) no longer require CDPS permit coverage, as the discharge no longer meets the definition of " stormwater discharges associated with industrial activity" pursuant to Regulation 61.3(2). In such cases, the permittee may request that the division reduce the facility permit boundary by the relevant portion of the facility.

6. Non-compliance discovered during inspection

Any corrective action required as a result of a facility inspection must be performed consistent with Part I.K (Corrective Actions) of this permit, and retained with the SWMP.

K. CORRECTIVE ACTIONS – Stormwater only

1. Conditions that must be eliminated

If any of the following conditions occur at the permitted facility (as identified by the permittee; the Division; or an EPA official, or local, or State entity), the permittee must review and revise the selection, design, installation, and implementation of facility control measures to ensure that the condition is eliminated and will not be repeated in the future:

a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another permit) occurs;
b. Facility control measures are not stringent enough for the discharge to meet applicable water quality standards;
c. Modifications to the facility control measures are necessary to meet the practice-based effluent limits in this permit; or
d. The permittee finds in a facility inspection that facility control measures are not properly selected, designed, installed, operated or maintained.

2. Condition requiring review and modification

If any of the following conditions occur, the permittee must review the selection, design, installation, and implementation of facility control measures to determine the appropriate modifications necessary to attain the effluent limits in this permit:

a. Construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged; or

b. The **average** of quarterly sampling results as described in Part I.I.2.e of this permit exceeds an applicable benchmark.

3. Corrective action reports and deadlines

The permittee must document discovery of any condition listed in Parts I.K.1 and I.K.2 above, within 5 days as described below, submit the documentation in an annual report as required in Part I.N, and retain a copy onsite with the facility SWMP.

Within five (5) days of discovery of any condition listed in Parts I.K.1 and I.K.2, the permittee must document the following information:

a. Identification of the condition triggering the need for corrective action review;
b. Description of the problem identified;
c. Date the problem was identified;

d. Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.K.2 where the permittee determines that corrective action is not necessary, the basis for this determination);
e. Notice of whether SWMP modifications are required as a result of this discovery or corrective action;
f. Date corrective action initiated; and
g. Date corrective action completed or expected to be completed.

4. Control measure modification

Modification of any control measure as part of the corrective action required by Parts I.K.1 and I.K.2 must be performed consistent with Part I.G (Control Measures) of this permit.

5. Substantially identical outfalls

If the event triggering corrective action is associated with an outfall that represents other substantially identical outfalls, the permittee's review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be performed consistent with Part I.G (Control Measures) of this permit, and the permittee must implement interim or temporary controls measures during the maintenance effort.

L. GENERAL SWMP REQUIREMENTS – Stormwater only

The General SWMP requirements contained in this section address administrative requirements of the SWMP, as opposed to the specific SWMP content requirements provided in Part I.M of the permit.

An existing permittee authorized under the previous versions of this permit shall modify the existing SWMP to comply with the requirements of this permit within 180-days of the facility permit certification effective date.

1. SWMP requirement

The permittee must develop, implement, and maintain a SWMP for each facility authorized by this permit. The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control practices (the SWMP need not be prepared by a registered engineer). The permittee must modify the SWMP to reflect current site conditions (see Part I.L.7 below).

2. Preparation, Submission and Implementation

The permittee must complete a SWMP prior to submitting the permit application for authorization to discharge industrial stormwater from a facility, and submit it to the Division if requested. The permittee must implement the SWMP when the facility begins industrial activities, which includes installation of control measures.

3. Signatory Requirements

The permittee must sign and certify all SWMPs in accordance with Part I.F.4 (Reporting and Recordkeeping); this requirement applies to the original SWMP prepared for the facility, and each time the permittee modifies a SWMP as required by Part I.L.7.a and b below.

4. Permit Retention

The permittee must maintain a copy of this permit and the permit certification issued to the permittee with the SWMP.

5. SWMP Retention

The permittee must retain a copy of the SWMP at the facility unless another location, specified by the permittee, is approved by the Division.

6. Consistency with Other Plans

The permittee may incorporate, by reference, applicable portions of plans prepared for other purposes at their facility. Plans or portions of plans incorporated by reference into a SWMP become enforceable requirements of this permit and must be available along with the SWMP as required in Part.I.L.5 above.

7. Required SWMP Modifications

a. Division initiated Modifications

i. The permittee must modify the SWMP when notified by the Division that it does not meet one or more of the requirements of this permit. Unless otherwise provided by the Division, the permittee shall have 30 days after notification to make the necessary changes to the SWMP and implement them.
ii. The Division may require the permittee to submit the modified SWMP to the Division.
iii. If the Division determines that the permittee's stormwater discharges do not, or may not, achieve the effluent limits required by this permit, the Division may require the permittee, within a specified time period, to develop and implement a supplemental control measure action plan, which describes additional SWMP modifications to adequately address the identified water quality concerns.

b. Permittee initiated Modifications

i. The permittee must modify the SWMP whenever necessary to address any of the triggering conditions for corrective action in Part I.K (Corrective Actions) to ensure that they do not reoccur.
ii. The permittee must modify the SWMP whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, significantly increases the quantity of pollutants discharged, or that requires the permittee to implement new or modified control measures.
iii. The SWMP modifications may include a schedule for control measure design and implementation, provided that interim control measures needed to comply with the permit are documented in the SWMP and implemented during the design period.
iv. The permittee must make all SWMP modifications in accordance with the corrective action deadline in Part I.K (Corrective Actions).

M. SPECIFIC SWMP REQUIREMENTS – Stormwater only

1. SWMP Administrator

The SWMP shall identify a specific individual(s) by name or by title whose responsibilities include: SWMP development, implementation, maintenance, and modification.

2. Facility Description

The facility description shall include:

a. A narrative description of the industrial activities conducted at the facility;
b. The total size of the facility property in acres;
c. The general layout of the facility including mining areas, revegetated areas, buildings, raw material storage areas, and the flow of goods and materials through the facility.

3. Facility Map

The SWMP shall include a legible site map(s), showing the entire facility, and vicinity as appropriate, identifying:

a. The boundary of the mining and processing operation.
b. The location of the facility in relation to surface waters that receive industrial stormwater discharges from the facility (including the name of the surface water; if the name is not known, indicate that on the map); a separate vicinity map may be necessary to comply with this requirement.
c. The location of significant impervious surfaces within the facility property boundaries, including paved areas and buildings.
d. The locations of all facility stormwater conveyances including ditches, pipes, and swales.
e. The locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 001, No.002, etc), and indicating whether one or more outfalls are "substantially identical" under Part I.H (General Monitoring Requirements); and an approximate outline of the areas draining to each outfall.
f. The directions of stormwater flow indicated by arrows;
g. The areas where mining and processing activities are currently or have previously been conducted, where such activities are exposed to precipitation. This includes all areas of soil disturbance and reclamation/revegetation.
h. The locations of all actual or potential pollutant sources (including sediment) associated with mining and processing activities, including but not limited to those identified in the Facility Inventory and Assessment of Pollutant Sources (below) and the following:

    i. Vehicle fueling areas;
    ii. Fertilizer or chemical storage areas;
    iii. Areas used for storage or disposal of overburden, materials, soils or wastes;
    iv. Areas used for mineral milling and processing;
    v. All access and haul roads; and
    vi. All asphalt or concrete batch plants, or areas used for recycling of asphalt or concrete.

i. The location of any and all process water discharge outfalls, including specified locations of mine dewatering operations.
j. The location of all structural and applicable non-structural control measures used to meet the effluent limits required by this permit.
k. The locations where significant spills or leaks identified under Part I.L.4.b have occurred.
l. The locations of all stormwater monitoring points applicable to the facility (visual monitoring; benchmark monitoring, water quality-based monitoring).
m. Location and description of any non-stormwater discharges authorized in Part I.A.1.c or authorized by separate permit coverage.
n. Locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants.
o. The date that the facility site map was prepared and/or amended.

4. <u>Facility Inventory and Assessment of Pollutant Sources</u>

The facility inventory and assessment shall include the following:

a. Inventory of facility activities and equipment

The inventory shall identify all areas (except interior areas that are not exposed to precipitation) associated with industrial activities that have been, or may potentially be, sources of pollutants, that contribute, or have the potential to contribute, any pollutants to stormwater, including but not limited to the following:

i. Loading and unloading of materials, including solids and liquids.
ii. Outdoor storage of materials or products, including solids and liquids.
iii. Outdoor manufacturing and processing.

iv. On-site dust or particulate generating processes, including dust collection devices and vents.
v. On-site waste treatment, storage, or disposal, including waste ponds and solid waste management units.
vi. Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
vii. Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
viii. Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area.
ix. Roofs and associated surfaces composed of galvanized materials that may be mobilized by stormwater (e.g., roofs, ducts, heating/air conditioning equipment, gutters and downspouts).

b. Inventory of materials

The inventory shall list materials that contribute, or have the potential to contribute, pollutants to stormwater, including but not limited to the following:

i. The types of materials handled at the facility that may be exposed to precipitation or runoff and could result in stormwater pollution.
ii. The types of materials handled at the facility that may leak or spill, and be exposed to precipitation or runoff and result in stormwater pollution.
iii. A narrative description of any potential sources of pollutants from past activities, materials and spills that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The description shall include the method and location of any on-site storage or disposal; and documentation of all significant spills and leaks of oil or toxic or hazardous pollutants that occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the SWMP preparation date.

c. Assessment of potential pollutant sources

The assessment of potential pollutant sources shall provide a short narrative or tabulation describing the potential of a pollutant to be present in stormwater discharges for each facility activity, equipment and material identified above. The permittee shall update this narrative when data become available to verify the presence or absence of these pollutants. Potential pollutant sources include:

i. Loading and unloading operations;
ii. Outdoor storage of chemicals or equipment;
iii. Crushing facilities or significant dust and particulate generating activities;
iv. On site waste disposal practices;
v. Stockpiles of overburden, raw material, intermediate products, byproducts, finished products or waste products;
vi. Asphalt or concrete batch plants or areas used for recycling of asphalt or concrete;
vii. Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.;
viii. Haul roads; and
ix. Disturbed and revegetated areas.

5. Description of Control Measures

a. The permittee shall document the location, installation date, type, and implementation specifications of each non-structural and structural control measure implemented at the facility to achieve meet the effluent limitations contained in this permit. Documentation must include those control measures implemented for stormwater run-on that commingles with any discharges covered under this permit.

b. Installation and implementation specifications for each control measure used by the permittee to meet the effluent limitations contained in this permit must be retained with the SWMP.

6. Additional Control Measure Requirements

The permittee shall document the schedules, procedures, and evaluation results for the following subset of practice-based effluent limitations.

a. Good Housekeeping (see Part I.C.2.a.ii) - A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.
b. Maintenance (see Part I.C.2.a.iii) - Preventative maintenance schedules for industrial equipment and systems; control measures; and any back-up practices in place should a runoff event occur while a control measure is off-line.
c. Spill Prevention and Response Procedures (see Part I.C.2.a.iv) - Procedures for preventing, responding to, and reporting spills and leaks. The permittee may reference other plans (e.g., a Spill Prevention Control and Countermeasure (SPCC) plan) otherwise required by a permit for the facility, provided that a copy of the other plan is kept onsite with the SWMP, and made available for review consistent with Part I.L (SWMP—General SWMP Requirements).
d. Employee Training (see Part I.C.2.a.viii) - A schedule for all types of training required by this permit, content of the training, and log of the dates on which specific employees received training.
e. Non-Stormwater Discharges (see Part I.C.2.a.ix) - Documentation of the stormwater conveyance system evaluation for the presence of non-stormwater discharges not authorized in Part.I.A.1.c, and the elimination of all unauthorized discharges. Documentation of the evaluation must include:

    i. The date of any evaluation;
    ii. A description of the evaluation criteria used;
    iii. A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
    iv. The different types of non-stormwater discharge(s) and source locations; and
    v. The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified.

7. Inspection Procedures and Documentation

The permittee shall document inspection procedures, and maintain such procedures and other documentation with the SWMP, as follows:

a. The permittee shall document procedures for performing the facility inspections required by Part I.J (Facility Inspections) of the permit. Procedures must identify:
    i. Person(s) or positions of person(s) responsible for inspection;
    ii. Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular stormwater runoff discharges; and
    iii. Specific items to be covered by the inspection, including inspection schedules for specific outfalls.

b. The permittee shall maintain inspection documentation with the SWMP as required by Part I.J (Facility Inspections) of this permit.

c. Permittees that invoke the exception to quarterly inspections for inactive and unstaffed facilities must include in the SWMP the signed and certified documentation to support this claim as required in Part I.J (Facility Inspections).

8. Monitoring Procedures and Documentation

The permittee shall document monitoring procedures, and maintain such procedures and other documentation with the SWMP, as follows:

a. The permittee shall document procedures for performing any applicable types of monitoring required by Part I.I (Specific Monitoring Requirements) of the permit, including:
    i. Visual assessment monitoring (see Part I.I.1)

ii. Benchmark monitoring (see Part I.I.2)
iii. Water Quality Standards monitoring (see Part I.I.3); and
iv. Additional monitoring as required by the Division (see Part I.I.4).

b. For each type of monitoring, procedures must identify:

i. Locations where samples are collected, and outfall identification by its unique identifying number;
ii. Staff responsible for conducting stormwater sampling;
iii. Procedures for sample collection and handling, including any deviations from sampling within the first 30 minutes of a measurable storm event;
iv. For any parameters requiring analysis, the name of the parameter, the holding times and preservatives, the analytical methods used, and the laboratory quantitation levels;
v. Procedures for sending samples to a laboratory, as applicable;
vi. Monitoring schedules, including any deviations from the monitoring schedule for alternate monitoring periods for climates with irregular stormwater runoff (see Part I.H.5);
vii. The numeric control values (benchmarks, TMDL-related requirements, or other requirements) applicable to discharges from each outfall.

c. Permittees must maintain Quarterly Visual Assessment documentation (see Part I.I.1.c) with the SWMP.

d. Permittees that invoke the Monitoring Exceptions for Inactive and Unstaffed Sites and for Completed and Finally Stabilized Areas, must include in the SWMP the signed and certified documentation to support this claim.

e. Permittees that use the substantially identical outfall monitoring exception (Part I.H.1) must document the following in the SWMP:
i. Location of each of the substantially identical outfalls, and the outfall sampled;
ii. Description of the general industrial activities conducted in the drainage area of each outfall;
iii. Description of the control measures implemented in the drainage area of each outfall;
iv. Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
v. Impervious surfaces in the drainage area that could affect the percolation of stormwater runoff into the ground (e.g., asphalt, crushed rock, grass, etc.);
vi. Why the permittee expects the outfalls to discharge substantially identical effluents.

9. Corrective Action Documentation

The permittee must maintain a copy of all Corrective Action reports that document corrective actions taken by the permittee consistent with Part I.K (Corrective Actions) of this permit, with the facility SWMP.

N. STORMWATER SPECIFIC REPORTING AND RECORDKEEPING – Stormwater only

1. Routine Reporting of data – DMRs

In addition to the Reporting and Recordkeeping requirements provided at Part I.F of this permit, the required DMR reporting conventions for stormwater discharges are as follows:

a. If no discharge occurs during the reporting period, "**No Discharge**" shall be reported on the DMR.
b. If the permittee's benchmark sampling frequency is reduced consistent with Part I.I.2.d of this permit (Benchmark Monitoring Actions – *Data not exceeding benchmarks*), the permittee must submit quarterly DMRs and indicate "**Benchmark Met**" in the result field on the DMR for each parameter that meets the sampling frequency reduction criteria.

c. If the permittee's monitoring is excepted consistent with Parts I.H.7 and I.H.8 of this permit, the permittee must submit quarterly DMRs and indicate "**General Permit Exemption**" in the result field on the DMR for each parameter for the period the site meets the monitoring exception criteria.

2. Annual report

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31.	February 28	Annual

a. The annual report shall include:

i. Name of permittee, address, phone number
ii. Permit certification number
iii. Facility name and physical address
iv. Contact person name, title, and phone number
v. Summary of inspection dates
vi. Summary of visual monitoring
vii. Corrective action documentation as required in Part I.J., and status of any outstanding corrective action(s).

b. The signed copy of each annual report shall be submitted to the Division at the address below, and a copy maintained with the SWMP.

Attn: Annual Report
Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

3. SWMP records

The permittee shall retain copies of the facility SWMP, including any modifications made during the term of this permit, documentation related to corrective actions taken, all reports and certifications required by this permit, monitoring data, and records of all data used to complete the application to be covered by this permit, for a period of at least 3 years from the date that coverage under this permit expires or is terminated.

O. SECTOR-SPECIFIC REQUIREMENTS FOR ASPHALT BATCH PLANTS – Stormwater only

The requirements of this Part apply to stormwater discharges associated with industrial activity from asphalt batch plants (SIC Code 2951) located at sand and gravel facilities, and to areas of the permittee's facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

1. Asphalt batch plants

Asphalt batch plants (permanent and mobile) that operate at sand and gravel facilities, where the facility is permitted for such operations, may be covered by this permit. Asphalt batch plants that operate at sand and gravel facilities, where the facility is NOT permitted for such operations, must obtain alternate permit coverage, currently under CDPS general permit COR900000.

2. Sector-Specific Benchmarks

Table O-1 identifies benchmarks that apply to discharges associated with industrial activity from asphalt batch plants

Table O-1.		
Sector	**Parameter**	**Benchmark Monitoring Concentration**
Asphalt Paving Mixtures and Blocks (SIC 2951)	Total Suspended Solids (TSS)	100 mg/L

P. SECTOR-SPECIFIC REQUIREMENTS FOR CONCRETE BATCH PLANTS – Stormwater only

The requirements of this Part apply to stormwater discharges associated with industrial activity from concrete batch plants (SIC Code 3273) located at sand and gravel facilities, and to areas of the permittee's facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

1. Concrete Batch Plants

Concrete batch plants (permanent and mobile) that operate at sand and gravel facilities, where the facility is permitted for such operations, may be covered by this permit. Concrete batch plants that operate at sand and gravel facilities, where the facility is NOT permitted for such operations, must obtain alternate permit coverage, currently under CDPS general permit COR900000.

2. Additional Practice-Based Effluent Limits

a. Good Housekeeping Measures. With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in the facility SWMP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a month if cement, aggregate, or settled dust are being handled or processed. The permittee must also prevent the exposure of fine granular solids (e.g., cement, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering.

3. Additional SWMP Requirements

a. Drainage Area Site Map. Document in the SWMP the locations of the following, as applicable: dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

b. Certification. For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with CDPS requirements or are recycled.

4. Sector-Specific Benchmarks

Table P-1 identifies benchmarks that apply to discharges associated with industrial activity from concrete batch plants

Table P-1.		
Sector	**Parameter**	**Benchmark Monitoring Concentration**
Ready-Mixed Concrete (SIC 3273)	Total Suspended Solids (TSS)	100 mg/L
	Total Iron	1.0 mg/L

Q. OTHER TERMS AND CONDITIONS – Stormwater only

1. All dischargers must comply with the lawful requirements of counties, drainage districts and other state or local agencies regarding any discharges of stormwater to storm drain systems or other water courses under their jurisdiction.

2. Reporting to Municipality – Any permitted facility discharging to a municipal storm sewer shall provide the municipality with a copy of the permit application, and/or Annual Reports, upon request. A copy of the SWMP shall also be provided to the municipality upon request.

PART II

A. NOTIFICATION REQUIREMENTS

1. Notification to Parties

All notification requirements under this section shall be directed as follows:

a. Oral Notifications, during normal business hours shall be to:

Water Quality Protection Section – Industrial Compliance Program
Water Quality Control Division
Telephone: (303) 692-3500

b. Written notification shall be to:

Water Quality Protection Section – Industrial Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

2. Change in Discharge

The permittee shall give advance notice to the Division, in writing, of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged, or;

b. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported pursuant to an approved land application plan.

Whenever notification of any planned physical alterations or additions to the permitted facility is required pursuant to this section, the permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge, the stream, or ground water. If the Division finds that such new or altered discharge might be inconsistent with the conditions of the permit, the Division shall require a new or revised permit application and shall follow the procedures specified in Sections 61.5 through 61.6, and 61.15 of the Colorado Discharge Permit System Regulations.

3. Noncompliance Notification

The permittee shall give advance notice to the Division, in writing, of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

a. If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitations or standards specified in this permit, the permittee shall, at a minimum, provide the Division with the following information:

i) A description of the noncompliance and its cause;

ii) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and

iii) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The permittee shall report the following circumstances **orally within twenty-four (24) hours** from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the

information requested in Part II.A.4 (a) **within five (5) working days** after becoming aware of the following circumstances:

i) Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;

ii) Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;

iii) Circumstances leading to any upset which causes an exceedance of any effluent limitation in the permit;

iv) Daily maximum violations for any of the pollutants limited by Part I.A of this permit as specified in Part III of this permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.

c. Unless otherwise indicated in this permit, the permittee shall report instances of non-compliance which are not required to be reported within 24-hours at the time Discharge Monitoring Reports are submitted. The reports shall contain the information listed in sub-paragraph (a) of this section.

4. Transfer of Ownership or Control

The permittee shall notify the Division, in writing, thirty (30) calendar days in advance of a proposed transfer of the permit.

a. Except as provided in paragraph b. of this section, a permit may be transferred by a permittee only if the permit has been modified or revoked and reissued as provided in Section 61.8(8) of the Colorado Discharge Permit System Regulations, to identify the new permittee and to incorporate such other requirements as may be necessary under the Federal Act.

b. A permit may be automatically transferred to a new permittee if:

i) The current permittee notifies the Division in writing 30 calendar days in advance of the proposed transfer date; and

ii) The notice includes a written agreement between the existing and new permittee(s) containing a specific date for transfer of permit responsibility, coverage and liability between them; and

iii) The Division does not notify the existing permittee and the proposed new permittee of its intent to modify, or revoke and reissue the permit.

iv) Fee requirements of the Colorado Discharge Permit System Regulations, Section 61.15, have been met.

5. Other Notification Requirements

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit, shall be submitted to the WQCD Industrial Compliance Program on the date listed in the compliance schedule section. The fourteen (14) calendar day provision in Regulation 61.8(4)(n)(i) has been incorporated into the due date.

The permittee's notification of all anticipated noncompliance does not stay any permit condition.

All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Division as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i) One hundred micrograms per liter (100 µg/l);

ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2.4-dinitrophenol and 2-methyl-4.6-dinitrophenol; and one milligram per liter (1.0 mg/l) for antimony;

iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 61.4(2)(g).

iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i) Five hundred micrograms per liter (500 µg/l);

ii) One milligram per liter (1 mg/l) for antimony; and

iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.

iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).

6. Bypass Notification

If the permittee knows in advance of the need for a bypass, a notice shall be submitted, at least ten (10) calendar days before the date of the bypass, to the Division. The bypass shall be subject to Division approval and limitations imposed by the Division. Violations of requirements imposed by the Division will constitute a violation of this permit.

7. Bypass

a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility.

b. Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:

i) The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;

ii) There were no feasible alternatives to bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

iii) Proper notices were submitted in compliance with Part II.A.5.

c. "Severe property damage" as used in this Subsection means substantial physical damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

d. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance or to assure optimal operation. These bypasses are not subject to the provisions of paragraph (a) above.

e. The Division may approve an anticipated bypass, after considering adverse effects, if the Division determines that the bypass will meet the conditions specified in paragraph (a) above.

8. Upsets

a. “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include

noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of paragraph (b) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:

i) An upset occurred and that the permittee can identify the specific cause(s) of the upset; and

ii) The permitted facility was at the time being properly operated and maintained; and

iii) The permittee submitted proper notice of the upset as required in Part II.A.4. of this permit (24-hour notice); and

iv) The permittee complied with any remedial measure necessary to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reason able likelihood of adversely affecting human health or the environment.

In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.

d. Burden of Proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

9. Submission of Incorrect or Incomplete Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Division, the permittee shall promptly submit such facts or information.

B. RESPONSIBILITIES

1. Reduction, Loss, or Failure of Treatment Facility

The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the effluent limitations of the permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production, control sources of wastewater, or all discharges, until the facility is restored or an alternative method of treatment is provided. This provision also applies to power failures, unless an alternative power source sufficient to operate the wastewater control facilities is provided.

It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Inspections and Right to Entry

The permittee shall allow the Division and/or the authorized representative, upon the presentation of credentials:

a. To enter upon the permittee's premises where a regulated facility or activity is located or in which any records are required to be kept under the terms and conditions of this permit;

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any monitoring equipment or monitoring method required in the permit; and

c. To enter upon the permittee's premises in a reasonable manner and at a reasonable time to inspect and/or investigate, any actual, suspected, or potential source of water pollution, or to ascertain compliance or non compliance with the Colorado Water Quality Control Act or any other applicable state or federal statute or regulation or any order promulgated by the Division. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing of any person having knowledge related to the discharge permit or alleged violation, access to any and all facilities or areas within the permittee's premises that may have any affect on the discharge, permit, or alleged violation. Such entry is also authorized for the purpose of inspecting and copying records required to be kept concerning any effluent source.

d. The permittee shall provide access to the Division to sample the discharge at a point after the final treatment process but prior to the discharge mixing with state waters upon presentation of proper credentials.

In the making of such inspections, investigations, and determinations, the Division, insofar as practicable, may designate as its authorized representatives any qualified personnel of the Department of Agriculture. The Division may also request assistance from any other state or local agency or institution.

3. Duty to Provide Information

The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit.

4. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Clean Water Act and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.5(4), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division and the Environmental Protection Agency.

The name and address of the permit applicant(s) and permittee(s), permit applications, permits and effluent data shall not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Clean Water Act, and Section 25-8-610 C.R.S.

5. Modification, Suspension, Revocation, or Termination of Permits By the Division

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

a. A permit may be modified, suspended, or terminated in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:

   i) Violation of any terms or conditions of the permit;

   ii) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit; or

   iii) Materially false or inaccurate statements or information in the permit application or the permit.

   iv) A determination that the permitted activity endangers human health or the classified or existing uses of state waters and can only be regulated to acceptable levels by permit modifications or termination.

b. A permit may be modified in whole or in part for the following causes, provided that such modification complies with the provisions of Section 61.10 of the Colorado Discharge Permit System Regulations:

   i) There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

ii) The Division has received new information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance. For permits issued to new sources or new dischargers, this cause includes information derived from effluent testing required under Section 61.4(7)(e) of the Colorado Discharge Permit System Regulations. This provision allows a modification of the permit to include conditions that are less stringent than the existing permit only to the extent allowed under Section 61.10 of the Colorado Discharge Permit System Regulations.

iii) The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:

(A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved water quality standard, or an effluent limitation set forth in 5 CCR 1002-62, § 62 et seq.; and

(B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a Commission action with respect to the water quality standard or effluent limitation on which the permit condition was based; and

(C) The permittee requests modification after the notice of final action by which the EPA effluent limitation guideline, water quality standard, or effluent limitation is revised, withdrawn, or modified; or

(D) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with this Regulation, within ninety (90) calendar days of judicial remand.

iv) The Division determines that good cause exists to modify a permit condition because of events over which the permittee has no control and for which there is no reasonable available remedy.

v) Where the Division has completed, and EPA approved, a total maximum daily load (TMDL) which includes a wasteload allocation for the discharge(s) authorized under the permit.

vi) The permittee has received a variance.

vii) When required to incorporate applicable toxic effluent limitation or standards adopted pursuant to § 307(a) of the Federal act.

viii) When required by the reopener conditions in the permit.

ix) As necessary under 40 C.F.R. 403.8(e), to include a compliance schedule for the development of a pretreatment program.

x) When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under Section 61.8(2) of the Colorado Discharge Permit System Regulations.

xi) To establish a pollutant notification level required in Section 61.8(5) of the Colorado Discharge Permit System Regulations.

xii) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions, to the extent allowed in Section 61.10 of the Colorado State Discharge Permit System Regulations.

xiii) When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

xiv) When another State whose waters may be affected by the discharge has not been notified.

xv) For any other cause provided in Section 61.10 of the Colorado Discharge Permit System Regulations.

c. At the request of a permittee, the Division may modify or terminate a permit and issue a new permit if the following conditions are met:

i) The Regional Administrator has been notified of the proposed modification or termination and does not object in writing within thirty (30) calendar days of receipt of notification,

ii) The Division finds that the permittee has shown reasonable grounds consistent with the Federal and State statutes and regulations for such modifications or termination;

iii) Requirements of Section 61.15 of the Colorado Discharge Permit System Regulations have been met, and

iv) Requirements of public notice have been met.

d. For permit modification, termination, or revocation and reissuance, the Division may request additional information from the permittee. In the case of a modified permit, the Division may require the submission of an updated application. In the case of revoked and reissued permit, the Division shall require the submission of a new application.

e. Permit modification (except for minor modifications), termination or revocation and reissuance actions shall be subject to the requirements of Sections 61.5(2), 61.5(3), 61.6, 61.7 and 61.15 of the Colorado Discharge Permit System Regulations. The Division shall act on a permit modification request, other than minor modification requests, within 180 calendar days of receipt thereof. Except for minor modifications, the terms of the existing permit govern and are enforceable until the newly issued permit is formally modified or revoked and reissued following public notice.

f. Upon consent by the permittee, the Division may make minor permit modifications without following the requirements of Sections 61.5(2), 61.5(3), 61.7, and 61.15 of the Colorado Discharge Permit System Regulations. Minor modifications to permits are limited to:

i) Correcting typographical errors; or

ii) Increasing the frequency of monitoring or reporting by the permittee; or

iii) Changing an interim date in a schedule of compliance, provided the new date of compliance is not more than 120 calendar days after the date specific in the existing permit and does not interfere with attainment of the final compliance date requirement; or

iv) Allowing for a transfer in ownership or operational control of a facility where the Division determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees has been submitted to the Division; or

v) Changing the construction schedule for a discharger which is a new source, but no such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge; or

vi) Deleting a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

vii) Incorporating conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.

g. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term.

h. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination does not stay any permit condition.

i. All permit modifications and reissuances are subject to the antibacksliding provisions set forth in 61.10(e) through (g).

j. If cause does not exist under this section, the Division shall not modify or revoke and reissue the permit.

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act. Nothing in this permit shall be construed to prevent or limit application of any emergency power of the division.

8. Permit Violations

Failure to comply with any terms and/or conditions of this permit shall be a violation of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Except as provided elsewhere in this permit, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance (40 CFR 122.41(a)(1)).

9. Severability

The provisions of this permit are severable. If any provisions or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

10. Confidentiality

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this Subsection (12) shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

11. Fees

The permittee is required to submit payment of an annual fee as set forth in the 2005 amendments to the Water Quality Control Act. Section 25-8-502 (l) (b), and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.15 as amended. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S. 1973 as amended.

12. Duration of Permit

The duration of a permit shall be for a fixed term and shall not exceed five (5) years. If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least one hundred eighty (180) calendar days before this permit expires. Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications. If the permittee anticipates there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Part II.B.4.

13. Section 307 Toxics

If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard

or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

14. Effect of Permit Issuance

a. The issuance of a permit does not convey any property or water rights in either real or personal property, or stream flows or any exclusive privilege.

b. The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.

c. Except for any toxic effluent standard or prohibition imposed under Section 307 of the Federal act or any standard for sewage sludge use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Federal act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Section 61.8(8) of the Colorado Discharge Permit System Regulations.

d. Compliance with a permit condition which implements a particular standard for biosolid use or disposal shall be an affirmative defense in any enforcement action brought for a violation of that standard for biosolid use or disposal.

PART III

CATEGORICAL INDUSTRIES

Aluminum Forming
Asbestos Manufacturing
Battery Manufacturing
Builders' Paper and Board Mills
Canned & Preserved Fruits and Vegetables Processing
Canned & Preserved Seafood Processing
Carbon Black Manufacturing
Cement Manufacturing
Coal Mining
Coil Coating
Copper Forming
Dairy Products Processing
Electrical and Electronic Components
Electroplating
Explosives Manufacturing
Feedlots
Ferroalloy Manufacturing
Fertilizer Manufacturing
Glass Manufacturing
Grain Mills
Gum and Wood Chemicals Manufacturing
Hospital
Ink Formulation
Inorganic Chemicals Manufacturing
Iron and Steel Manufacturing
Leather Tanning and Finishing
Meat Products
Metal Finishing
Metal Molding and Casting (Foundries)
Mineral Mining and Processing
Nonferrous Metals Manufacturing
Nonferrous Metals Forming and Metal Powders
Oil and Gas Extraction
Organic Chemicals, Plastics, and Synthetic Fibers
Ore Mining and Dressing
Paint Formulation
Paving and Roofing Materials (Tars and Asphalt)
Pesticide Chemicals
Petroleum Refining
Pharmaceutical Manufacturing
Phosphate Manufacturing
Photographic
Plastics Molding and Forming
Porcelain Enameling
Pulp, Paper, and Paperboard Manufacturing
Rubber Manufacturing
Soap and Detergent Manufacturing
Steam Electric Power Generating
Sugar Processing
Textile Mills
Timber Products Processing

PRIORITY POLLUTANTS AND HAZARDOUS SUBSTANCES

ORGANIC TOXIC POLLUTANTS IN EACH OF FOUR FRACTIONS
IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GC/MS)

Volatiles	**Base/Neutral**	**Acid Compounds**	**Pesticides**
acrolein	acenaphthene	2-chlorophenol	aldrin
acrylonitrile	acenaphthylene	2,4-dichlorophenol	alpha-BHC
benzene	anthracene	2,4,-dimethylphenol	beta-BHC
bromoform	benzidine	4,6-dinitro-o-cresol	gamma-BHC
carbon tetrachloride	benzo(a)anthracene	2,4-dinitrophenol	delta-BHC
chlorobenzene	benzo(a)pyrene	2-nitrophenol	chlordane
chlorodibromomethane	3,4-benzofluoranthene	4-nitrophenol	4,4'-DDT
chloroethane	benzo(ghi)perylene	p-chloro-m-cresol	4,4'-DDE
2-chloroethylvinyl ether	benzo(k)fluoranthene	pentachlorophenol	4,4'-DDD
chloroform	bis(2-chloroethoxy)methane	Phenol	dieldrin
dichlorobromomethane	bis(2-chloroethyl)ether	2,4,6-trichlorophenol	alpha-endosulfan
1,1-dichlorethane	bis(2-chloroisopropyl)ether		beta-endosulfan
1,2-dichlorethane	bis(2-ethylhexyl)phthalate		endosulfan sulfate
1,1-dichlorethylene	4-bromophenyl phenyl ether		endrin
1,2-dichlorpropane	butylbenzyl phthalate		endrin aldehyde
1,3-dichlorpropylene	2-chloronaphthalene		heptachlor
ethylbenzene	4-chlorophenyl phenyl ether		heptachlor epoxide
methyl bromide	chrysene		PCB-1242
methyl chloride	dibenzo(a,h)anthracene		PCB-1254
methylene chloride	1,2-dichlorobenzene		PCB-1221

PRIORITY POLLUTANTS AND HAZARDOUS SUBSTANCES

ORGANIC TOXIC POLLUTANTS IN EACH OF FOUR FRACTIONS
IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GC/MS)

Volatiles	Base/Neutral	Acid Compounds	Pesticides
1,1,2,2-tetrachloroethane	1,3-dichlorobenzene		PCB-1232
tetrachloroethylene	1,4-dichlorobenzene		PCB-1248
Toluene	3,3-dichlorobenzidine		PCB-1260
1,2-trans-dichloroethylene	diethyl phthalate		PCB-1016
1,1,1-trichloroethane	dimethyl phthalate		toxaphene
1,1,2-trichloroethane	di-n-butyl phthalate		
trichloroethylene	2,4-dinitrotoluene		
vinyl chloride	2,6-dinitrotoluene		
	di-n-octyl phthalate		
	1,2-diphenylhydrazine (as azobenzene)		
	fluorene		
	fluoranthene		
	hexachlorobenzene		
	hexachlorobutadiene		
	hexachlorcyclopentadiene		
	hexachloroethane		
	indeno(1,2,3-cd)pyrene		
	isophorone		
	naphthalene		
	nitrobenzene		
	N-nitrosodimethylamine		
	N-nitrosodi-n-propylamine		
	N-nitrosodiphenylamine		
	phenanthrene		
	pyrene		
	1,2,4-trichlorobenzene		

OTHER TOXIC POLLUTANTS
(AMMONIA, METALS AND CYANIDE) AND TOTAL PHENOLS

Antimony, Total
Arsenic, Total
Beryllium, Total
Cadmium, Total
Chromium, Total
Copper, Total
Lead, Total
Mercury, Total
Nickel, Total
Selenium, Total
Silver, Total
Thallium, Total
Zinc, Total
Cyanide, Total
Phenols, Total

TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES

REQUIRED TO BE IDENTIFIED BY EXISTING DISCHARGERS IF EXPECTED TO BE PRESENT

Toxic Pollutants

Asbestos

Hazardous Substances

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D(2,4-Dichlorophenoxy acetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2-Dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine
Dinitrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethanolamine
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Keithane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Napthenic acid
Nitrotoluene
Parathion
Phenolsulfanate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
Styrene
TDE (Tetrachlorodiphenylethane)
2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Trichlorofan
Triethylamine
Trimethylamine
Uranium
Vandium
Vinyl Acetate
Xylene
Xylenol
Zirconium

Appendix A – Description of Standard Industrial Classification (SIC) Code Major Group 14 facilities

Major group 14 includes establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals, except fuels.

Dimension Stone (SIC code 1411) - Establishments primarily engaged in mining or quarrying dimension stone. Also included are establishments engaged in producing rough blocks and slabs.

Crushed and Broken Limestone (SIC code 1422) - Establishments primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa.

Crushed and Broken Granite (SIC code 1423) - Establishments primarily engaged in mining or quarrying crushed and broken granite, including related rocks, such as gneiss, syenite, and diorite.

Crushed and Broken Stone, Not Elsewhere Classified (SIC code 1429) - Establishments primarily engaged in mining or quarrying crushed and broken stone, not elsewhere classified.

Construction Sand and Gravel (SIC code 1442) - Establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, or otherwise preparing sand and gravel for construction uses.

Industrial Sand (SIC code 1446) - Establishments primarily engaged in operating sand pits and dredges, and in washing, screening, and otherwise preparing sand for uses other than construction, such as glassmaking, molding, and abrasives.

Kaolin and Ball Clay (SIC code 1455) - Establishments primarily engaged in mining, milling, or otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay.

Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified (SIC code 1459) - Establishments primarily engaged in mining, milling, or otherwise preparing clay, ceramic, or refractory minerals, not elsewhere classified.

Potash, Soda, and Borate Minerals (SIC code 1474) - Establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds.

Phosphate Rock (SIC code 1475) - Establishments primarily engaged in mining, milling, drying, calcining, sintering, or otherwise preparing phosphate rock, including apatite.

Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified (SIC code 1479) - Establishments primarily engaged in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, not elsewhere classified.

Nonmetallic Minerals Services, Except Fuels (SIC code 1481) - Establishments primarily engaged in the removal of overburden, strip mining, and other services for nonmetallic minerals, except fuels, for others on a contract or fee basis.

Miscellaneous Nonmetallic Minerals, Except Fuels (SIC code 1481) - Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing nonmetallic minerals, except fuels. This industry includes the shaping of natural abrasive stones at the quarry.

Appendix B – Failures/Violations of the WET Permit Limit and Automatic Compliance Response

A. Failures and Violations of the Permit Limit

1. **Acute Testing**: An acute WET test failure/violation is whenever the LC50, which represents an estimate of the effluent concentration which is lethal to 50% of the test organisms in the time period prescribed by the test, is found to be less than or equal to 100% effluent. When WET testing is specified in the certification, an acute WET test failure is a violation of the permit.

   In the event of any acute WET test failure/violation, the permittee must provide written notification of the failure to the Division, along with a statement as to whether accelerated testing or a Toxicity Identification Evaluation (TIE) is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

2. **Chronic testing:** A chronic WET test is considered to have failed one of the two statistical endpoints when either the NOEC or the IC25 are at any effluent concentration less than the IWC. The IWC for this permit has been determined to be 100% effluent, as dilution considerations do not apply to this general permit.

   A chronic WET test violation is when *both* the NOEC *and* the IC25 are at any effluent concentration less than the IWC. When specified in the certification, a chronic WET test failure is a violation of the permit.

   The permittee must provide written notification to the Division if a chronic WET test violation occurs, or if two consecutive reporting periods have resulted in failure of one of the two statistical endpoints (regardless of which statistical endpoints are failed). Such notification should explain whether it was a violation, a failure of both endpoints when only monitoring is required, or two consecutive failures of a single endpoint. The written notification must also indicate whether accelerated testing or a Toxicity Identification Evaluation or Toxicity Reduction Evaluation (TIE or TRE) is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

B. Automatic Compliance Response

1. The permittee is responsible for implementing the automatic compliance response provisions of this permit when one of the following occurs:

   a. For *all* WET testing:
      i. there is a violation of the permit limit (as described for acute and chronic limitations above);
      ii. the permittee is otherwise informed by the Division that a compliance response is necessary.

   b. For *acute* WET testing:
      i. during a report-only period, when the LC50 endpoint is less than the applicable IWC

   c. For *chronic* WET testing:
      i. two consecutive monitoring periods have resulted in failure of one of the two statistical endpoints (either the IC25 or the NOEC). Note that this provision is applicable during 'report' only periods as well as when permit limitations are applicable.
      ii. during a report only period, when both the NOEC and the IC25 are at any effluent concentration less than the IWC.

2. When one of the above listed events occurs, the following automatic compliance response shall apply. The permittee shall either:

   a. conduct accelerated testing using the single species found to be more sensitive as described in this appendix, Part C, or
   b. conduct a Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE) investigation as described below in this appendix, Part D.

C. Accelerated Testing

If accelerated testing is being performed, testing will be at least once every two weeks for up to five tests, at the appropriate IWC, but only one test should be run at a time.

For chronic WET testing, only the IC25 statistical endpoint is used to determine if the test passed or failed at the appropriate IWC. However, if accelerated testing is required due to failure of one statistical endpoint in two consecutive monitoring periods, and in both of those failures it was the NOEC endpoint that was failed, then the NOEC shall be the only statistical endpoint used to determined whether the accelerated testing passed or failed at the appropriate IWC.

Accelerated testing shall continue until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a TIE/TRE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach. **The permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.**

D. Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE)

If a TIE/TRE is being performed, the results of the investigation are to be received by the Division within 180 calendar days of the demonstration of acute WET in the routine test, as defined above, or if accelerated testing was performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 60 and 120 calendar day points of the TIE/TRE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 180 calendar day deadline. Such request must include a justification and supporting data for such an extension.

Under a TIE, the permittee may use the time for investigation to conduct a preliminary TIE (PTIE) or move directly into the TIE. A PTIE consists of a brief search for possible sources of WET, where a specific parameter(s) is reasonably suspected to have caused such toxicity, and could be identified more simply and cost effectively than a formal TIE. If the PTIE allows resolution of the WET incident, the TIE need not necessarily be conducted in its entirety. If, however, WET is not identified or resolved during the PTIE, the TIE must be conducted within the allowed 180 calendar day time frame.

The Division recommends that the EPA guidance documents regarding TIEs be followed. If another method is to be used, this procedure should be submitted to the Division prior to initiating the TIE.

If the pollutant(s) causing toxicity is/are identified, and is/are controlled by a permit effluent limitation(s), this permit may be modified upon request to adjust permit requirements regarding the automatic compliance response.

If the pollutant(s) causing toxicity is/are identified, and is/are not controlled by a permit effluent limitation(s), the Division may develop limitations the parameter(s), and the permit may be reopened to include these limitations.

If the pollutant causing toxicity is not able to be identified, or is unable to be specifically identified, or is not able to be controlled by an effluent limit, the permittee will be required to either:

1. Conduct an investigation which demonstrates actual instream aquatic life conditions upstream and downstream of the discharge, or identify, for Division approval, and conduct an alternative investigation which demonstrates the actual instream impact. This should include WET testing and chemical analyses of the ambient water. Depending on the results of the study, the permittee may also be required to identify the control program necessary to eliminate the toxicity and its cost. Data collected may be presented to the WQCC for consideration at the next appropriate triennial review of the stream standards; or

2. Move to a TRE by identifying the necessary control program or activity and proceed with elimination of the toxicity so as to meet the WET effluent limit.

If toxicity spontaneously disappears in the midst of a TIE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency of WET testing for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

The control program developed during a TRE consists of the measures determined to be the most feasible to eliminate WET. This may happen through the identification of the toxicant(s) and then a control program aimed specifically at that toxicant(s) or through the identification of more general toxicant treatability processes. A control program is to be developed and submitted to the Division within 180 calendar days of beginning a TRE. Status reports on the TRE are to be provided to the Division at the 60 and 120 calendar day points of the TRE investigation.

If toxicity spontaneously disappears in the midst of a TRE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

Appendix C – Definitions

1. "Acute Toxicity" – The acute toxicity limitation is exceeded if the LC50 is at any effluent concentration less than or equal to the IWC indicated in this permit.

2. "Applicable water quality criterion (AWQC)" is the quantitation target level or goal. The AWQC may be one of the following:

   Where an effluent limit has been established,
   i. The AWQC is the effluent limit.

   Where an effluent limit has not been established, the AWQC may be
   i. An applicable technology based effluent limit (TBEL);
   ii. Half of a water quality standard;
   iii. Half of a water quality standard as assessed in the receiving water, or potential WQBEL; or
   iv. Half of a potential antidegradation based effluent limitation, which can be an antidegradation based average concentration or a potential non-impact limit.

3. "Asphalt batch plant" – refers to the manufacturing plant that combines aggregate and an asphalt binder to produce asphalt concrete.

4. "Asphalt concrete" – produced in a manufacturing plant (asphalt batch plant) and is known by many different names, such as hot mix asphalt, plant mix, bituminous mix, bituminous concrete, etc.

5. "Best Management Practices (BMPs)" – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to state waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 5 CCR 1002-61.2(9).

6. "Chronic toxicity", which includes lethality and growth or reproduction, occurs when the NOEC and IC25 are at an effluent concentration less than the IWC indicated in this permit.

7. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow. For a SBR type treatment system, a composite sample is defined as sampling equal aliquots during the beginning, middle and end of a decant period, for two consecutive periods during a day (if possible).

8. "Continuous" measurement, is a measurement obtained from an automatic recording device which continually measures the effluent for the parameter in question, or that provides measurements at specified intervals.

9. "Control Measure" refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the state.

10. "Daily Maximum limitation" for all parameters (except temperature, pH and dissolved oxygen) means the limitation for this parameter shall be applied as an average of all samples collected in one calendar day. For these parameters the DMR shall include the highest of the daily averages. For pH and dissolved oxygen, this means an instantaneous maximum (and/or instantaneous minimum) value. The instantaneous value is defined as the analytical result of any individual sample. For pH and dissolved oxygen, DMRs shall include the maximum (and/or minimum) of all instantaneous values within the calendar month. Any value beyond the noted daily maximum limitation for the indicated parameter shall be considered a violation of this permit. For temperature, see Daily Maximum Temperature.

11. "Daily Maximum Temperature (DM)" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as the highest two-hour average water temperature recorded during a given 24-hour period. This will be determined using a rolling 2-hour maximum temperature. If data is collected every 15 minutes, a 2 hour maximum can be determined on every data point after the initial 2 hours of collection. Note that the time periods that overlap days (Wednesday night to Thursday morning) do not matter as the reported value on the DMR is the greatest of all the 2-hour averages.

    For example data points collected at:

08:15, 08:30, 08:45, 09:00, 09:15, 09:30, 09:45, 10:00, would be averaged for a single 2 hour average data point
08:30, 08:45, 09:00, 09:15, 09:30, 09:45, 10:00, 10:15, would be averaged for a single 2 hour average data point
08:45, 09:00, 09:15, 09:30, 09:45, 10:00, 10:15, 10:30, would be averaged for a single 2 hour average data point

This would continue throughout the course of a calendar day. The highest of these 2 hour averages over a month would be reported on the DMR as the daily maximum temperature. At the end/beginning of a month, the collected data should be used for the month that contains the greatest number of minutes in the 2-hour maximum. Data from 11 pm to 12:59 am, would fall in the previous month. Data collected from 11:01 pm to 1:00 am would fall in the new month.

12. "Discharge" - when used without qualification, means the "discharge of a pollutant." See 5 CCR 1002-61.2(22).

13. "Discharge of a pollutant" - the introduction or addition of a pollutant into state waters. See 25-8-103(3) C.R.S.

14. "Dissolved (D) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a water and suspended sediment sample which passed through a 0.40 or 0.45 UM (micron) membrane filter. Determinations of "dissolved" constituents are made using the filtrate. This may include some very small (colloidal) suspended particles which passed through the membrane filter as well as the amount of substance present in true chemical solution.

15. "Geometric mean" for *E. coli* bacteria concentrations, the thirty (30) day and seven (7) day averages shall be determined as the geometric mean of all samples collected in a thirty (30) day period and the geometric mean of all samples taken in a seven (7) consecutive day period respectively. The geometric mean may be calculated using two different methods. For the methods shown, a, b, c, d, etc. are individual sample results, and n is the total number of samples.

    Method 1:

    Geometric Mean = $(a*b*c*d*...)^{(1/n)}$ "*" - means multiply

    Method 2:

    Geometric Mean = antilog ([log(a)+log(b)+log(c)+log(d)+...]/n)

    Graphical methods, even though they may also employ the use of logarithms, may introduce significant error and may not be used.

    In calculating the geometric mean, for those individual sample results that are reported by the analytical laboratory to be "less than" a numeric value, a value of 1 should be used in the calculations. If all individual analytical results for the month are reported to be less than numeric values, then report "less than" the largest of those numeric values on the monthly DMR. Otherwise, report the calculated value.

    For any individual analytical result of "too numerous to count" (TNTC), that analysis shall be considered to be invalid and another sample shall be promptly collected for analysis. If another sample cannot be collected within the same sampling period for which the invalid sample was collected (during the same month if monthly sampling is required, during the same week if weekly sampling is required, etc.), then the following procedures apply:

    i. A minimum of two samples shall be collected for coliform analysis within the next sampling period.

    ii. If the sampling frequency is monthly or less frequent: For the period with the invalid sample results, leave the spaces on the corresponding DMR for reporting coliform results empty and attach to the DMR a letter noting that a result of TNTC was obtained for that period, and explain why another sample for that period had not been collected.

    If the sampling frequency is more frequent than monthly: Eliminate the result of TNTC from any further calculations, and use all the other results obtained within that month for reporting purposes. Attach a letter noting that a result of TNTC was obtained, and list all individual analytical results and corresponding sampling dates for that month.

16. "Good Engineering, Hydrologic and Pollution Control Practices" - methods, procedures, and practices that a) are based on basic scientific fact(s); b) reflect best industry practices and standards; c) are appropriate for the conditions and pollutant sources; and d) provide appropriate solutions to meet the associated permit requirements, including all effluent limitations.

17. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.

18. "IC25" or "Inhibition Concentration" is a point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g. growth or reproduction) calculated from a continuous model (i.e. interpolation method). IC25 is a point estimate of the toxic concentration that would cause a 25-percent reduction in a non-lethal biological measurement.

19. "Impaired Water" (or "Water Quality Impaired Water")– A water is impaired for purposes of this permit if it has been identified by a State or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

20. "Inactive mining operations" – Regulation 61.3(2)(e)(iii)(C) identifies that "inactive mining operations" are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim).

    This term includes the following types of facilities that have an identifiable owner/operator:

    - mineral mining and/or milling occurred in the past but is not covered by an active mining permit issued by DRMS;
    - operations are limited seasonally (i.e., intermittent operations), consistent with DRMS requirements for notification, only during the portion of the year when the facility is not active; or
    - operations cease for 180-days or more for reasons not associated with intermittent status, and still has reserves (consistent with temporary cessation status as defined by DRMS), only during the time period the facility is not active; or
    - exploration or extraction activities have ceased permanently.

21. "Industrial Activity" – for this permit means those activities identified by the SIC codes described in the applicability section of the permit.

22. "Industrial Stormwater" - stormwater runoff from industrial activity.

23. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.

24. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.

25. "LC50" or "Lethal Concentration" is the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.

26. "Maximum Weekly Average Temperature (MWAT)" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as an implementation statistic that is calculated from field monitoring data. The MWAT is calculated as the largest mathematical mean of multiple, equally spaced, daily temperatures over a seven-day consecutive period, with a minimum of three data points spaced equally through the day. For lakes and reservoirs, the MWAT is assumed to be equivalent to the maximum WAT from at least three profiles distributed throughout the growing season (generally July-September).

    The MWAT is calculated by averaging all temperature data points collected during a calendar day, and then averaging the daily average temperatures for 7 consecutive days. This 7 day averaging period is a rolling average, i.e. on the 8th day, the MWAT will be the averages of the daily averages of days 2-8. The value to be reported on the DMR is the highest of all the rolling 7-day averages throughout the month. For those days that are at the end/beginning of the month, the data shall be reported for the month that contains 4 of the 7 days.

Day 1: Average of all temperature data collected during the calendar day.
Day 2: Average of all temperature data collected during the calendar day.
Day 3: Average of all temperature data collected during the calendar day.
Day 4: Average of all temperature data collected during the calendar day.
Day 5: Average of all temperature data collected during the calendar day.
Day 6: Average of all temperature data collected during the calendar day.
Day 7: Average of all temperature data collected during the calendar day.

1st MWAT Calculation as average of previous 7 days

Day 8: Average of all temperature data collected during the calendar day.

2nd MWAT Calculation as average of previous 7 days

Day 9: Average of all temperature data collected during the calendar day.

3rd MWAT Calculation as average of previous 7 days

27. "Measurable storm event" - a storm event that results in an actual discharge from the facility.

28. "Minimize" - reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

29. “Minimum level (ML)” means the lowest concentration of an analyte that can be accurately and precisely quantified using a given method, as determined by the laboratory.

30. "New Discharger" - means any building, structure, facility, or installation from which there is or may be a discharge of pollutants that did not commence at the particular site before August 13, 1979, that is not a new source, and that has never received a final effective permit for discharges at the site. See 5 CCR 1002-61.2(65).

31. "NOEC" or "No-Observed-Effect-Concentration" is the highest concentration of toxicant to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms (i.e. the highest concentration of toxicant in which the values for the observed responses are not statistically different from the controls). This value is used, along with other factors, to determine toxicity limits in permits.

32. “No exposure” – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. 5 CCR 1002-61.3(2)(h).

33. "Person" - an individual, corporation, partnership, association, state or political subdivision thereof, federal agency, state agency, municipality, Commission, or interstate body. See 5 CCR 1002-61.2(73).

34. "Point source" - any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. "Point Source" does not include irrigation return flow. See 5 CCR 1002-61.2(75).

35. "Pollutant" - dredged spoil, dirt, slurry, solid waste, incinerator residue, sewage, sewage sludge, garbage, trash, chemical waste, biological nutrient, biological material, radioactive material, heat, wrecked or discarded equipment, rock, sand, or any industrial, municipal or agricultural waste. See 5 CCR 1002-61.2(76).

36. "Potentially dissolved (PD) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.40 or 0.45-UM (micron) membrane filter. Note the "potentially dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.

37. "Practical Quantitation Limit (PQL)" means the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration. The use of PQL in this document may refer to those PQLs shown in Part I.E of this permit or the PQLs of an individual laboratory.

38. "Qualified Personnel" for stormwater provisions - those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at a facility, and who can also evaluate the effectiveness of control measures.

39. "Quarterly measurement frequency" means samples may be collected at any time during the calendar quarter if a continual discharge occurs. If the discharge is intermittent, then samples shall be collected during the period that discharge occurs.

40. "Recorder" requires the continuous operation of an automatic data retention device for providing required records such as a data logger, a chart and/or totalizer (or drinking water rotor meters or pump hour meters where previously approved.)

41. SAR and Adjusted SAR - The equation for calculation of SAR-adj is:

$$SAR\text{-}adj = \frac{Na^{+}}{\sqrt{\frac{Ca_{x} + Mg^{++}}{2}}}$$

Where:

Na^{+} = Sodium in the effluent reported in meq/l
Mg^{++} = Magnesium in the effluent reported in meq/l
Ca_x = calcium (in meq/l) in the effluent modified due to the ratio of bicarbonate to calcium

The values for sodium (Na+), calcium (Ca++), bicarbonate (HCO3-) and magnesium (Mg++) in this equation are expressed in units of milliequivalents per liter (meq/l). Generally, data for these parameters are reported in terms of mg/l, which must then be converted to calculate the SAR. The conversions are:

$$\text{meq/l} = \frac{Concentration\ in\ mg/l}{Equivalent\ weight\ in\ mg/meq}$$

Where the equivalent weights are determined based on the atomic weight of the element divided by the ion's charge:

Na^{+} = 23.0 mg/meq (atomic weight of 23, charge of 1)
Ca^{++} = 20.0 mg/meq (atomic weight of 40.078, charge of 2)
Mg^{++} = 12.15 mg/meq (atomic weight of 24.3, charge of 2)
HCO3- = 61 mg/mep (atomic weight of 61, charge of 1)

The *EC* and the HCO_3^{-}/Ca^{++} ratio in the effluent (calculated by dividing the HCO_3^{-} in meq/l by the Ca^{++} in meq/l) are used to determine the Ca_x using the following table.

Table – Modified Calcium Determination for Adjusted Sodium Adsorption Ratio

HCO_3/Ca Ratio And *EC* [1], [2], [3]													
Salinity of Effluent (*EC*)(dS/m)													
		0.1	**0.2**	**0.3**	**0.5**	**0.7**	**1.0**	**1.5**	**2.0**	**3.0**	**4.0**	**6.0**	**8.0**
Ratio of HCO_3/Ca	**.05**	13.20	13.61	13.92	14.40	14.79	15.26	15.91	16.43	17.28	17.97	19.07	19.94
	.10	8.31	8.57	8.77	9.07	9.31	9.62	10.02	10.35	10.89	11.32	12.01	12.56
	.15	6.34	6.54	6.69	6.92	7.11	7.34	7.65	7.90	8.31	8.64	9.17	9.58
	.20	5.24	5.40	5.52	5.71	5.87	6.06	6.31	6.52	6.86	7.13	7.57	7.91
	.25	4.51	4.65	4.76	4.92	5.06	5.22	5.44	5.62	5.91	6.15	6.52	6.82
	.30	4.00	4.12	4.21	4.36	4.48	4.62	4.82	4.98	5.24	5.44	5.77	6.04
	.35	3.61	3.72	3.80	3.94	4.04	4.17	4.35	4.49	4.72	4.91	5.21	5.45
	.40	3.30	3.40	3.48	3.60	3.70	3.82	3.98	4.11	4.32	4.49	4.77	4.98
	.45	3.05	3.14	3.22	3.33	3.42	3.53	3.68	3.80	4.00	4.15	4.41	4.61

	.50	2.84	2.93	3.00	3.10	3.19	3.29	3.43	3.54	3.72	3.87	4.11	4.30
	.75	2.17	2.24	2.29	2.37	2.43	2.51	2.62	2.70	2.84	2.95	3.14	3.28
	1.00	1.79	1.85	1.89	1.96	2.01	2.09	2.16	2.23	2.35	2.44	2.59	2.71
	1.25	1.54	1.59	1.63	1.68	1.73	1.78	1.86	1.92	2.02	2.10	2.23	2.33
	1.50	1.37	1.41	1.44	1.49	1.53	1.58	1.65	1.70	1.79	1.86	1.97	2.07
	1.75	1.23	1.27	1.30	1.35	1.38	1.43	1.49	1.54	1.62	1.68	1.78	1.86
	2.00	1.13	1.16	1.19	1.23	1.26	1.31	1.36	1.40	1.48	1.54	1.63	1.70
	2.25	1.04	1.08	1.10	1.14	1.17	1.21	1.26	1.30	1.37	1.42	1.51	1.58
	2.50	0.97	1.00	1.02	1.06	1.09	1.12	1.17	1.21	1.27	1.32	1.40	1.47
	3.00	0.85	0.89	0.91	0.94	0.96	1.00	1.04	1.07	1.13	1.17	1.24	1.30
	3.50	0.78	0.80	0.82	0.85	0.87	0.90	0.94	0.97	1.02	1.06	1.12	1.17
	4.00	0.71	0.73	0.75	0.78	0.80	0.82	0.86	0.88	0.93	0.97	1.03	1.07
	4.50	0.66	0.68	0.69	0.72	0.74	0.76	0.79	0.82	0.86	0.90	0.95	0.99
	5.00	0.61	0.63	0.65	0.67	0.69	0.71	0.74	0.76	0.80	0.83	0.88	0.93
	7.00	0.49	0.50	0.52	0.53	0.55	0.57	0.59	0.61	0.64	0.67	0.71	0.74
	10.00	0.39	0.40	0.41	0.42	0.43	0.45	0.47	0.48	0.51	0.53	0.56	0.58
	20.00	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35	0.37
	30.00	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.27	0.28

[1] Adapted from Suarez (1981).

[2] Assumes a soil source of calcium from lime ($CaCO_3$) or silicates; no precipitation of magnesium, and partial pressure of CO_2 near the soil surface (P_{CO2}) is 0.0007 atmospheres.

[3] Ca_x, HCO_3, Ca are reported in meq/l; EC is in dS/m (deciSiemens per meter).

Because values will not always be quantified at the exact *EC* or HCO_3^- /Ca^{++} ratio in the table, the resulting Ca_x must be determined based on the closest value to the calculated value. For example, for a calculated *EC* of 2.45 dS/m, the column for the *EC* of 2.0 would be used. However, for a calculated *EC* of 5.1, the corresponding column for the *EC* of 6.0 would be used. Similarly, for a HCO_3^- /Ca^{++} ratio of 25.1, the row for the 30 ratio would be used.

The Division acknowledges that some effluents may have electrical conductivity levels that fall outside of this table, and others have bicarbonate to calcium ratios that fall outside this table. For example, some data reflect HCO_3^- /Ca^{++} ratios greater than 30 due to bicarbonate concentrations reported greater than 1000 mg/l versus calcium concentrations generally less than 10 mg/l (i.e., corresponding to HCO_3^- /Ca^{++} ratios greater than 100). Despite these high values exceeding the chart's boundaries, it is noted that the higher the HCO_3^- /Ca^{++} ratio, the greater the SAR-adj. Thus, using the Ca_x values corresponding to the final row containing bicarbonate/calcium ratios of 30, the permittee will actually calculate an SAR-adj that is less than the value calculated if additional rows reflecting HCO_3^- /Ca^{++} ratios of greater than 100 were added.

42. "Seven (7) day average" means, with the exception of fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected in a seven (7) consecutive day period. Such seven (7) day averages shall be calculated for all calendar weeks, which are defined as beginning on Sunday and ending on Saturday. If the calendar week overlaps two months (i.e. the Sunday is in one month and the Saturday in the following month), the seven (7) day average calculated for that calendar week shall be associated with the month that contains the Saturday. Samples may not be used for more than one (1) reporting period. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.3 for guidance on calculating averages and reporting analytical results that are less than the PQL).**

43. "Significant spills and leaks" - include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environment al Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

44. Significant materials – includes, but is not limited to raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA as amended by SARA (1986); any chemical the facility is required to report pursuant to Section 313 of Title III of SARA (1986); fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 5 CCR 1002-61.2(76).

45. "Stormwater" - stormwater runoff, snow melt runoff, and surface runoff and drainage. See 5 CCR 1002-61.2(103).

46. "Stormwater Discharges Associated with Industrial Activity" - the discharge from any conveyance that is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. Except for the provision of 61.3(2)(c) that addresses construction activities associated with oil and gas operations or facilities, the term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122 or the CDPS program under Regulation No. 61.

    For the categories of industries identified in this permit, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. See 5 CCR 1002-61.3(2)(e).

47. “Sufficiently sensitive test procedures”:

    i. An analytical method is ‘‘sufficiently sensitive’’ when the method detects and accurately and precisely quantifies the amount of the analyte. In other words there is a valid positive result; or
    ii. An analytical method is “sufficiently sensitive” when the method accurately and precisely quantifies the result to the AWQC, as demonstrated by the ML is less than or equal to the AWQC. In other words, the level of precision is adequate to inform decision making; or
    iii. An analytical method is “sufficiently sensitive” when the method achieves the required level of accuracy and precision, as demonstrated by the ML is less than or equal to the PQL. In other words, the most sensitive method is being used and properly followed.

48. "Thirty (30) day average" means, except for fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected during a thirty (30) consecutive-day period. The permittee shall report the appropriate mean of all self-monitoring sample data collected during the calendar month on the Discharge Monitoring Reports. Samples shall not be used for more than one (1) reporting period. **(See the “Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.3 for guidance on calculating averages and reporting analytical results that are less than the PQL).**

49. "Total Maximum Daily Loads (TMDLs)" - A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

50. "Total Metals" means the concentration of metals determined on an unfiltered sample following vigorous digestion (Section 4.1.3), or the sum of the concentrations of metals in both the dissolved and suspended fractions, as described in Manual of Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979, or its equivalent.

51. "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979 or its equivalent.

52. "Toxicity Identification Evaluation (TIE)” is a set of site-specific procedures used to identify the specific chemical(s) causing effluent toxicity.

53. "Toxicity Reduction Evaluation (TRE)" is a site-specific study conducted in a step-wise process to identify the causative agents of effluent toxicity, isolate the source of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity after the control measures are put in place.

54. "Twenty four (24) hour composite" sample is a combination of at least eight (8) sample aliquots of at least 100 milliliters, collected at equally spaced intervals during the operating hours of a facility over a twenty-four (24) hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the wastewater or effluent flow at the time of sampling or the total wastewater or effluent flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

55. "Twice Monthly" monitoring frequency means that two samples shall be collected each calendar month on separate weeks with at least one full week between the two sample dates. Also, there shall be at least one full week between the second sample of a month and the first sample of the following month.

56. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.

57. "Water Quality Control Division" or "Division" means the state Water Quality Control Division as established in 25-8-101 et al.)

58. "Water Quality Standards" - means a narrative and/or numeric restriction established by the Commission applied to state surface waters to protect one or more beneficial uses of such waters. Whenever only numeric or only narrative standards are intended, the wording shall specifically designate which is intended. See 5 CCR 1002- 31.5(37).

59. “Wet pit” – generally, a non-navigable waters (frequently a flooded dry pit), from which raw material is extracted using dragline or barge-mounted dredging equipment (hydraulic dredge), both above and below the water table. (40 CFR 436).

Additional relevant definitions are found in the Colorado Water Quality Control Act, CRS §§ 25-8-101 et seq., the Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61) and other applicable regulations.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Water Quality Control Division

COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET TO PERMIT NUMBER COG500000
GENERAL PERMIT FOR DISCHARGES FROM SAND AND GRAVEL MINING AND PROCESSING (AND OTHER NONMETALLIC MINERALS EXCEPT FUEL)

Permit Writer - Al Stafford
October 13, 2016

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I. TYPE OF PERMIT

Master General, NPDES, Surface Water, Sixth Renewal, Statewide.

II. FACT SHEET DESCRIPTION

This fact sheet addresses the following statutory and regulatory requirements:

- A permit "rationale" as required by Colorado Discharge Permit System Regulations, 5-CCR-61.5(2)
- A "preliminary analysis" as required by Colorado Water Quality Control Act, C.R.S. 25-8-502(3)(b)

- A "statement of basis and purpose" as required by the federal Discharge Permit Regulations, 40 CFR 124.7, to "describe the derivation of permit conditions and the reasons"
- A "fact sheet" as required by the federal Discharge Permit Regulations 40 CFR 124.8 and 124.56 to "briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. describe the reason" for permit terms and conditions
- A "statement of basis and purpose" as required by SB 13-073 and incorporated into Colorado Water Quality Control Act, C.R.S. 25-8-503.5, "explaining the need for the proposed requirements" and to "present evidence supporting the need for the proposed requirements, including information regarding pollutant potential and available controls, incidents of environmental damage, and permit violations"

III. NEED FOR PERMIT REQUIREMENTS

This section includes factors explaining the need for the proposed requirements and presents evidence supporting the need for the proposed requirements, including information regarding pollutant potential and available controls, incidents of environmental damage, and permit violations. The Division has also included some background information to provide context for the statutory and regulatory direction as to how permit terms and conditions are established.

A. Pollutant potential

Sand and Gravel

The Development Document for Effluent Limitations Guidelines and Standards for the Mineral Mining and Processing Industry Point Source Category (EPA 440/1-76/059b, July 1979) provides the supporting data and rationale for development of the ELGs and standards of performance for this point source category (i.e., 40 CFR Part 436). For the facilities that are eligible to discharge under the final permit, the major waste water pollutant parameters identified in the development document include total suspended solids, dissolved solids, iron, zinc, fluoride and pH. Note that a number of additional pollutant parameters were studied, including metals, temperature, asbestos, and radium 226, but were not found to be significant at the time the development document was published.

Further, EPA documented the pollutants that are typically associated with sand and gravel mining operations in the federal register with the issue of the 1995 MSGP (60 Federal Register 189, p. 50919. September 29, 1995). For most activities, such as site preparation, mineral extraction, mineral processing, and reclamation, typical pollutants included dust, total suspended solids, total dissolved solids, and turbidity. EPA also identified the potential for pollution from oil and fuel, and other toxic contaminants, such as metals, benzene, trichloroethane, tetrachloroethylene, polyaromatic hydrocarbons, and solvents from equipment and vehicle maintenance, as well as nitrogen and phosphorus from any fertilizer used in reclamation activities. In 2006, EPA issued an industrial stormwater factsheet series and identified the pollutants that may be present in stormwater discharges from sand and gravel operations and Best Management Practices (BMPs) to control these pollutants (US Environmental Protection Agency. EPA-833-F-06-025, Dec. 2006). The pollutants identified in the 1995 FR were also identified in the 2006 fact sheet.

With respect to selenium, numerous peer-reviewed articles on the environmental impacts of high selenium levels on aquatic life have been published. Many of these studies are cited in the January, 2011 TMDL. (*See, i.e.*, *Ohlendorf, et.al.,* 1986, 1988). These studies, and the potential impacts to aquatic species from selenium, were considered as part of the development process for the TMDL. Currently EPA is reviewing the Aquatic Life criterion for selenium. 79 FR 27601-27604. Once finalized, EPA's revised water quality criterion for selenium will provide recommendations to states and tribes authorized to establish water quality standards under the Clean Water Act.

Asphalt Batch Plants

EPA documented the pollutants typically associated with stormwater discharges from asphalt paving manufacturing facilities, which includes asphalt batch plants, in the federal register with the issue of the 1995 MSGP (60 Federal

Register 189, p. 50861 and 50862. September 29, 1995). For material storage and handling activities, typical pollutants included total suspended solids, oil and grease, pH and chemical oxygen demand (COD).

In addition, the 2006 industrial factsheet series issued by EPA for Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers (US Environmental Protection Agency. EPA-833-F-06-019, Dec. 2006) identifies the pollutants that may be present in stormwater discharges from these industrial activities, which includes asphalt batch plants. This factsheet expands the list of pollutants identified in the 1995 FR to also include total dissolved solids (TDS), biochemical oxygen demand (BOD), benzene, methylene blue active substances (MBAS), and metals.

Concrete Batch Plants

EPA documented the pollutants that are typically associated with concrete mixing operations in the federal register with the issue of the 1995 MSGP (60 Federal Register 189, p. 50869 and 50870. September 29, 1995). For concrete mixing activities, typical pollutants included TSS, pH, COD, lead, iron and zinc. At facilities that also conduct equipment/vehicle fueling and maintenance, additional potential pollutants included oil and grease, BOD, lead, aluminum, arsenic, cadmium, chromium, and benzene.

In 2006, EPA issued an industrial stormwater factsheet series and identified the pollutants that may be present in stormwater discharges from concrete manufacturing operations and BMPs to control these pollutants (US Environmental Protection Agency. EPA-833-F-06-020, Dec. 2006). The pollutants identified in the 2006 factsheet included TSS, pH, COD, lead, iron, zinc, oil and grease, BOD.

B. Compliance History

The Division reviewed indicators of permit compliance for general permits COG500000 and COR340000 as part of the renewal process. The Division reviewed Discharge Monitoring Report (DMR) data for general permit COG500000, and obtained input from Division inspectors who conduct field-based assessments of compliance for both COG500000 and COR340000 general permits.

DMR data

The Division reviewed DMR data for approximately 160 facilities authorized under COG500000 from 2008 through 2013. Overall, facilities reported "no discharge" conditions approximately 70% of the time, and failed to submit DMRs approximately 6% of the time. The Division observed that sampling data accuracy was hindered by incorrect data entry or unit conversions in a number of instances.

All facilities were required to monitor or sample for discharge flow, total suspended solids, oil and grease, and pH. The Division made the following observations for these parameters:

- Flow: 65% of the reported flows were less than one million gallons per day; an additional 32% were between one and ten million gallons per day.
- Total suspended solids: The data revealed that there was a 1.9% exceedance rate of the 30 day average effluent limitation.
- Oil and grease: Many facilities entered observations incorrectly and were unclear on the need for sampling; however, of the samples analyzed, none displayed exceedances of the daily maximum effluent limitation.
- pH: a total of 0.5% of the samples values fell outside of the limitation range.

Facilities discharging to the Colorado River Basin were required to monitor for total dissolved solids (TDS) – the mean 30 day average was 1,742 mg/l, with concentrations ranging from zero to 13,160 mg/l. This wide range indicates that TDS discharge concentrations are site specific and vary depending on current site activity.

A total of 19 facilities were required to sample for total recoverable iron – 0.5% of the samples exceeded the 30 day average limitation. One facility sampled for manganese – the 30 day average data displayed a wide range from 5-915 µg/l.

Ten facilities were required to sample for phosphorus, but all facilities either did not submit data or observed "no discharge" conditions during all monitoring periods. Two facilities were required to sample for sulfate – twenty total samples were analyzed, and concentrations ranged from 240-551 mg/l.

While no selenium limitations were applied in the permit certifications, a total of 54 facilities were required to sample for selenium. A total of 444 samples were analyzed, the mean 30 day average concentration was 6.2 µg/l, and the median concentration was 1.0 µg/l. The data indicates a 30% exceedance rate of the 30 day average chronic water quality standard of 4.6 µg/l.

Field-based Compliance Assessments

Input from Division inspectors who conduct field-based compliance assessments for the general permits indicate that some existing permit conditions are not sufficiently clear to enable a compliance determination in the field. Examples include variable monitoring frequency (weekly vs. 2 days/month), continuous vs. instantaneous flow measurement, applicability of monitoring to stormwater discharges, etc. The Division clarified these requirements in this renewal.

Input also indicated that other agency requirements (e.g., Division of Reclamation, Mining and Safety and Mine Safety and Health Administration) and site topography/grading practices may benefit permittees with respect to permit compliance. For example, safety berm requirements can serve as an effective perimeter berm BMP; facility grading that directs stormwater to the mine pit can minimize the need for erosion/sediment control BMPs. However, Division inspectors commonly observed deficiencies during field-based compliance assessments, which include:

- DMR forms not sent to the Division; or DMR information not reported appropriately (units not reported in correct columns; oil and grease not reported properly);
- Non-detects results not averaged appropriately; units not reported correctly; or conversion from laboratory report units to permit required units not done correctly;
- Flow measured as instantaneous instead of continuous.
- Stormwater Management Plan (SWMP) deficiencies;
- Comprehensive inspections deficient or not conducted;
- Annual reports deficient and not signed by appropriate personnel;
- Inadequate secondary containment (lack of good housekeeping);
- Equipment leaks, drip, spills (lack of spill response BMPs);
- Installation details for BMPs implemented in field not included in SWMP;
- Access road BMP deficiencies, including vehicle tracking.

The Division used this information to structure some of the changes and clarifications made to the permit, as discussed in Part III.C and Part V of this Fact Sheet.

C. Basis for Determining Permit Terms and Conditions

The Division develops permit terms and conditions as directed through federal and state statutes and implementing regulations as summarized below.

Congress created the National Pollutant Discharge Elimination System (NPDES) permit program through enactment of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972. This followed a period of previous water quality legislation where Congress had authorized states to develop water quality standards that were intended to limit discharges of pollutants based on the individual characteristics of waterbodies. The FWPCA Amendments of 1972 introduced the NPDES program including the requirement to include technology-based requirements to address a concern about a lack of progress in water quality protection and a lack of enforceability in previous legislation.

The FWPCA Amendments contained four important principles related to the NPDES program as summarized by EPA:

1. The discharge of pollutants to navigable waters is not a right.
2. A discharge permit is required to use public resources for waste disposal and limits the amount of pollutants that may be discharged.
3. Wastewater must be treated with the best treatment technology economically achievable, regardless of the condition of the receiving water.
4. Effluent limits must be based on treatment technology performance, but more stringent limits may be imposed if the technology-based limits do not prevent violations of water quality standards in the receiving water.

The NPDES permit was created by Congress as the implementation tool for restriction of the quantity, rate, and concentration of pollutants that the point sources may discharge into water. The Division, as the delegated authority for development and issuance of NPDES permit for the state of Colorado, is obligated to develop and issue NDPES permits in a manner that meets both state and federal statutory and regulatory requirements.

Routine review is an integral aspect of the NPDES program. Congress's expectation is that permits remain current in their ability to incorporate advancements in science and technology, law, and be reflective of current industrial operations resulting in a discharge of pollutants to waters. The Division must renew general permits once every 5 years, and must include such conditions in the renewal permit that are necessary to implement statutory and regulatory provisions. This comprehensive permit renewal results from the Division's review of the sand and gravel stormwater and process water permits, which identified differences in the existing permits relative to EPA's MSGP, other state permits, case law, and statutory and regulatory direction provided.

EPA summarizes the major steps for development and issuance of NPDES permits, as required by 40 CFR §124, as follows:

1. Receive application from permittee.
2. Review application for completeness and accuracy.
3. Request additional information as necessary.
4. Develop technology-based effluent limits using application data and other sources.
5. Develop water quality-based effluent limits using application data and other sources.
6. Compare water quality-based effluent limits with technology-based effluent limits and choose the more stringent of the two as the effluent limits for the permit.
7. Develop monitoring requirements for each pollutant.
8. Develop special conditions.
9. Develop standard conditions.
10. Consider variances and other applicable regulations.
11. Prepare the fact sheet, summarizing the principal facts and the significant factual legal, methodological and policy questions considered in preparing the draft permit including public notice of the draft permit, and other supporting documentation.
12. Complete the review and issuance process.
13. Issue the final permit.
14. Ensure permit requirements are implemented.

During the development of this permit, the Division received a number of comments suggesting that the Division perform a cost-benefit analysis to justify the changes in terms and conditions, specifically monitoring and recordkeeping requirements and effluent limitations. Neither the Colorado Water Quality Control Act and the Colorado Discharge Permit Regulations (5 CCR 61) nor the federal Clean Water Act, and federal discharge permit regulations (40 CFR 122, 124, etc), require a formal monetized cost benefit analyses for development of permit terms and conditions, where every dollar spent on pollution control, monitoring, and recordkeeping must return at least a dollar in enhanced water quality. Rather, the Division develops permit terms and conditions as directed through federal and state statutes and implementing regulations with key thresholds for decision making as

summarized below.

All NPDES permits are required to contain technology-based limitations. [*see* 40 CFR §§122.44(a)(1) and 125.3. CWA sections 301(b)(1)(A) for (BPT); 301(b)(2)(A) for (BAT); and 301(b)(2)(E) for (BCT).] The Division developed technology based effluent limits consistent with the federal requirements cited above, and state requirements such as those contained in 5 CCR 1002-62. The Division also found in this case that more stringent limits must be imposed for some discharges, specifically those discharging to impaired waterbodies consistent with the assumptions and requirements of TMDLs. Additional information regarding the derivation and establishment of effluent limits is contained in this fact sheet.

All NPDES permits are required to contain monitoring requirements. Federal and state permitting regulations require that at a minimum permits specify monitoring requirements for each pollutant limited in the permit, and for industrial stormwater permits, specify on-site inspection requirements. Permits must specify monitoring equipment, methods, intervals, and frequencies sufficient to yield data which are representative of the monitoring activity and must specify the content of records to be maintained, and records retention requirements. The state discharge permit regulations establish a threshold of "reasonableness" in directing the derivation of monitoring and recordkeeping requirements. For development of this permit the Division determined the monitoring and records logically needed to meet the threshold of representative of the monitoring activity, demonstrate that the monitoring was adequately performed, document the conditions surrounding the event and what was observed, and document findings and actions taken, while not including superfluous requirements.

IV. SCOPE OF THE GENERAL PERMIT

Two CDPS general permits currently exist (see table below) related to sand and gravel or other non-metallic mineral mining and processing facilities (except fuel), hereafter referred to as 'sand and gravel facilities' in this fact sheet. The COG500000 general permit authorized both process water and stormwater discharges; the COR340000 general permit authorizes stormwater-only discharges. Together these general permits provide coverage for discharges from approximately 660 sand and gravel facilities across the state. Both permits were administratively extended to provide ongoing permit coverage until the renewal was complete. This renewal master general permit is necessary to provide continued coverage for these existing discharges, and for new discharges from sand and gravel facilities.

Permit name and number	Effective date	Expiration date
Sand & Gravel Mining and Processing (And Other Nonmetallic Minerals, Except Fuel) (COG500000)	July 1, 2008	June 30, 2013
Stormwater Discharges Associated with Sand & Gravel Mining and Processing (And Other Nonmetallic Minerals, Except Fuel) (COR340000)	October 1, 2007	September 30, 2012

This renewal master general permit (permit) combines the two general permits referenced above. The Division determined that combining the two existing general permits will result in a more comprehensive permitting approach; consistency of permit requirements; clearly defined termination requirements; and a more efficient renewal process.

A. Standard Industrial Classification (SIC) codes and Descriptions of Covered Discharges

This permit authorizes the discharge of **process water** and **stormwater runoff** to surface waters of the state, from active and inactive eligible facilities engaged in mining and processing of sand and gravel (and other nonmetallic minerals, except fuel). Such facilities are generally described by Standard Industrial Classification (SIC) Code Major Group 14.

This permit also authorizes the discharge of **stormwater runoff** to surface waters of the state from the following non-mining activities that are located **at** sand and gravel facilities: asphalt batch plants (SIC code 2951), concrete batch plants (SIC Code 3273), and asphalt and concrete recycling industrial activities.

The public notice version of the permit did not authorize the non-mining discharges described above, opting to authorize them through alternate permits and focus the renewal permit solely on mining activities. However, after considering the stakeholder comments received on this proposed approach during the public notice period, and further weighing the associated advantages and disadvantages of authorizing discharges from the non-mining activities, the division ultimately decided to include coverage for stormwater discharges from asphalt batch plants (SIC code 2951); stormwater discharges from concrete batch plants (SIC code 3273); and stormwater discharges from asphalt and concrete recycling activities in final permit COG500000 (see response to Comment ID COG50-2.2 and COG50-5.3).

Note that the term 'asphalt batch plant' (2951 SIC code) as used in the renewal permit documents refers to the manufacturing plant that combines aggregate and an asphalt binder to produce asphalt concrete. Asphalt concrete is known by many different names, such as hot mix asphalt, plant mix, bituminous mix, bituminous concrete, etc. The division is using the term 'asphalt batch plant' instead of 'asphalt concrete batch plant' to avoid any confusion with concrete batch plants (3273 SIC code), and for consistency with other CDPS permits.

The final permit clarifies the types of discharges that are eligible for permit coverage, as follows:

1. **Process water** discharges from facilities that produce the following commodities.

- Dimension stone (SIC code 1411)
- Crushed stone (SIC code 1422, 1423, 1429)
- Construction sand and gravel (SIC code 1442)
- Industrial sand (SIC code 1446)
- Kaolin and Ball Clay (SIC code 1455)
- Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified (SIC code 1459)
- Graphite (SIC code 1499)

This list includes all commodities identified in the applicable federal Effluent Limitation Guideline [40 CFR Part 436 (Mineral Mining and Processing Point Source Category)] for which a facility discharge is allowed. The list also includes facilities that produce Dimension stone, Kaolin and Ball Clay, and Clay, Ceramic, and Refractory Minerals, as the Division has permitted discharges from such facilities in the past. The list does not include those subparts that require 'no discharge' of process generated wastewater, as discussed in the Limitations on Coverage section of this fact sheet. APPENDIX A of this fact sheet provides a description of each SIC code identified above.

The following process water discharges from the facilities identified in this section are eligible for permit coverage.

a. mine dewatering, which includes:
   i. any water, including *groundwater, seepage, and stormwater* (precipitation and surface runoff), that is impounded or that collects in the mine pit (surface or underground workings) and is pumped, drained, or otherwise removed from the mine through the efforts of the mine operator;
   ii. additionally, for construction sand and gravel facilities and industrial sand facilities only, wet pit* overflow caused solely by direct rainfall and/or groundwater seepage.
b. process generated wastewater, which includes any wastewater used in slurry transport of mined materials, air emissions control, and processing exclusive to mining (40 CFR Part 436);
c. water used in sand and gravel processing (e.g., sorting, screening, crushing, and classifying);
d. stormwater runoff that becomes comingled with the above listed wastewaters before the discharge point.

* The division also provided a definition for "wet pit", consistent with the development document for the federal ELG (40 CFR 436), as a non-navigable water (frequently from a flooded dry pit) from which raw

material is extracted using dragline or barge-mounted dredging equipment (hydraulic dredge), both above and below the water table.

2. **Stormwater** discharges from the areas identified below, at active and inactive SIC code Major Group 14 facilities, including those from asphalt and concrete batch plants (SIC codes 2951 and 3273), and from asphalt and concrete recycling activities. Note that the final permit does not include stormwater discharges from refuse sites; sites used for the application or disposal of process waste waters; and sites used for residual treatment, storage, or disposal as stormwater discharges from these activities are not included in the eligibility scope of the permit. For example, sand and gravel facilities that have a concurrent or post-mine land use as a landfill must obtain CDPS stormwater discharge permit coverage separate from this permit.

    a. industrial plant yards;
    b. immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
    c. material handling sites, including those used for asphalt and concrete recycling activities, asphalt batch plants, and concrete batch plants;
    d. sites used for storage and maintenance of material handling equipment;
    e. shipping and receiving areas;
    f. manufacturing buildings, including asphalt batch plants and concrete batch plants;
    g. storage areas and stockpiles of raw material, intermediate products, byproducts, finished products or waste products (including topsoil, overburden, and materials associated with asphalt and concrete recycling activities, asphalt batch plants, and concrete batch plants);
    h. areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater;
    i. all disturbed areas (other than those subject to the process water discharge provisions above), including mine pit out slopes; and,
    j. stormwater run-on that commingles with stormwater discharges associated with sand and gravel mining and processing.

3. **Allowable non-stormwater discharges** as described in this part, provided that appropriate control measures are implemented to minimize erosion and sediment transport resulting from such discharges, and the non-stormwater component(s) of the discharge and the control measure(s) used are identified in the Stormwater Management Plan (SWMP). Note that in the final permit, the division clarified that 'uncontaminated condensate' as an allowable non-stormwater discharge refers to *external atmospheric condensation* only.

    a. Uncontaminated condensate (external atmospheric condensation, only) from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
    b. Landscape (including reclamation activities) watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
    c. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blow down or drains); and

B. Summary of Major Changes from Last Permit Versions

With respect to process water discharges eligible for coverage under the renewal permit, the Division made changes to the permit to clarify and update effluent limitations and other terms and conditions, consistent with regulatory

requirements and direction, and Division practice. This fact sheet addresses these changes, and an updated evaluation of parameters has been added.

With respect to stormwater discharges eligible for coverage under this renewal permit, the Division's approach was consistent with that taken for general permit COR900000 (Stormwater Discharges Associated with Non-Extractive Industrial Activity). Specifically, the Division evaluated the effluent limitations, and terms and conditions contained in EPA's 2008 and 2015 MSGPs related to sand and gravel industrial activities, and the associated basis for each provided in the Fact Sheets. The Fact Sheets for the MSGPs provide detailed background and basis for the organization, scope and content of those permits; these documents are available on EPA's website. In this fact sheet, the Division has documented where terms and conditions in this permit are consistent with the MSGPs.

Pre-Public Notice stakeholder meeting

As part of the renewal of the existing general permits, the Division conducted a stakeholder process that included a Pre-Public Notice Meeting on February 28, 2014. The purpose of the stakeholder meeting was to increase awareness of the renewal process for the general permit, discuss the substantive areas of review, and obtain input for developing draft permit conditions. The Division considered the stakeholder input received during the meeting, and written input received after the meeting.

The division considered the stakeholder input in developing draft permit conditions, and balanced these comments with regulatory and environmental obligations. Major stakeholder input that was submitted is detailed below:

1. Within the stakeholder process, the Division sought guidance on whether the former COG500000 and COR340000 permits should be combined into one permit that authorizes both stormwater and process water discharges. Permittees responded positively to this proposal, so long as the Division made the difference in permit requirements for stormwater and process water discharges very clear. The Division consequently has combined the two permits, and has clearly labeled throughout the permit sections that apply only to stormwater or only to process water discharges. The Division also provided a general overview at the beginning of the permit, which specifies which sections apply to only one type of discharge.

2. Stakeholders expressed concern regarding requiring benchmark sampling for stormwater discharge only facilities due to burden and the capacity of Practice Based Effluent Limitations to minimize pollutants of concern from discharging from the site. As noted further within this Fact Sheet, the Division has determined that benchmark sampling will not be required for stormwater discharges from SIC code Major Group 14 activities, and instead visual monitoring will be required, as further described below.

3. The Division also addresses within this Fact Sheet stakeholder concerns regarding unstaffed and remote sites. The Division acknowledges the burden in sampling at inactive and unstaffed sites (whether they are remote or not), and therefore did not require visual monitoring at such facilities. However, some level of monitoring must be maintained to continue to ensure a low pollutant potential, and therefore an increased inspection frequency is included in the permit for these sites.

4. An issue of high input within the industry was the implementation of the selenium TMDL for the Gunnison River and tributaries, as well as selenium monitoring on impaired segments. Implementation for these situations is further addressed within this fact sheet, which takes into account the input of the permittees as well as the assumptions and requirements of the established TMDL. Intake credits are also discussed in response to stakeholder comments regarding this topic.

Summary of Major Changes from the Last Permit Versions that were contained in the Draft Permit

This fact sheet provides a description of the major and significant changes from the existing sand and gravel stormwater discharge permit (COR340000) and process water discharge permit (COG500000). A summary of the major changes from the previous permits are provided below; Part V of this fact sheet provides further detail, including additional basis for the changes, where warranted.

General

- The Division added a new section entitled **Allowable Non-Stormwater Discharges** to the renewal permit to identify all allowable non-stormwater discharges, including those not specific to this sector. The Division added this section to clarify the scope of the renewal permit.

- The renewal permit clarifies the administrative aspects of permit coverage (i.e., Application Requirements, Permit Certification Procedures, Alternative permits, Permit Expiration and Continuation, Transfer of permit coverage, Modifying an existing permit, and Permit Termination Procedures), and includes clear direction for permittees to change permit coverage from one that authorizes both process water and stormwater, to stormwater-only permit coverage.

- The Division added a new section entitled **Permit Compliance** to the renewal permit to clarify conditions that constitute a violation of the permit (e.g., failure to comply with the terms and conditions of the permit; failure to perform corrective actions, etc.). This section also clarifies that correcting a permit violation does not remove the original violation.

Process water

- Discharges from facilities that produce Phosphate rock (SIC code 1475) are no longer eligible for coverage under this permit.
- Process water discharges from asphalt batch plants are no longer eligible for coverage under this permit.
- Process water discharges from concrete batch plants, including wash water discharges from associated trucks and drums are no longer eligible for coverage under this permit.
- Flow limitations were added to the effluent limitations tables.
- Effluent limits for selenium were derived for discharges to the Gunnison River and tributaries, consistent with the assumptions and requirements of the TMDL.

Stormwater

Many of the provisions applicable to stormwater in the renewal permit are consistent with CDPS general permit COR900000. Changes the division made to the final permit resulting from public comments are provided following the original list.

- The Division modified the self-inspection requirements in the renewal permit. Most significant among the changes are inspection frequency (i.e., quarterly inspections); inspection scope (i.e., one inspection must be conducted during a run-off event); modified inspection frequency for inactive and unstaffed facilities (6 per year); and corrective action requirements.
- The Stormwater Discharge Effluent Limitations contained in this permit are located in a section separate from the Stormwater Management Plan (SWMP), thereby differentiating effluent limitations from other terms and conditions of the permit.
- The Division modified the practice-based effluent limitations required by this permit from those required under permits COG500000 and COR340000. Most significant among the changes are including the term "minimize" within the practice-based effluent limitations, and adding several new practice-based effluent limitations.
- The Division added a new section (Water Quality Based Effluent Limitations) that addresses water quality-based effluent limitations (WQBELs) applicable to stormwater discharges.
- The Division consolidated and clarified monitoring requirements for stormwater discharges in the General Monitoring Requirements - Stormwater Only section of the renewal permit.

- The Division added a new section (Specific Monitoring Requirements - Stormwater Only), that addresses requirements for Visual Monitoring, and Water Quality Standards monitoring requirements as applicable to the facility.
- The Division added a new section (Corrective Actions) that identifies permittee responsibilities with respect to resolving specific facility conditions.

Summary of Major Changes from the Draft Permit to the Final Permit

The division solicited input on the draft permit conditions, specifically for situations where reviewers found that the information presented in the draft permit, upon which the Division relied to make draft decisions, was incomplete; and on the specific permit language. The final permit contains permit conditions based on the best information available to inform decisions for Colorado, and incorporates additional information received on these topics during public notice, as appropriate.

The final permit contains the following new or modified provisions. Please see the Division Response to Public Comments for a discussion of these changes.

- The division added flexibility to the self-inspection requirements in the permit by adding an exception to the annual runoff event inspection for Completed and Finally Stabilized Areas.
- The division added coverage for stormwater discharges from asphalt batch plants (SIC code 2951), stormwater discharges from concrete batch plants (SIC code 3273), and stormwater discharges from asphalt and concrete recycling activities in final permit COG500000.
- The division modified the Specific Monitoring Requirements - Stormwater Only section, to add Benchmark Monitoring requirements for Asphalt Batch Plants and Concrete Batch Plants, as applicable to the facility, and added Sector-Specific Requirements for Asphalt Batch Plants and Concrete Batch Plants at Parts I.O and I.P, respectively.
- The division added definitions to the permit (Appendix C) to clarify the meaning of 'inactive' for this permit, which broadens the applicability of the monitoring exceptions for inactive and unstaffed sites, and to clarify the terms wet pit, asphalt batch plant, and asphalt concrete as used in this permit.
- The division added new monitoring exceptions for Completed and Finally Stabilized Areas.
- The division added a new provision that allows the division to revoke any monitoring exception.
- The division added requirements regarding EPA's Net-DMR submittal.

C. Limitations on Coverage

This section of the fact sheet identifies those discharges from sand and gravel facilities that are specifically excluded from permit coverage. Permittees may seek individual or alternate general permit coverage for such discharges, as appropriate and available.

After public notice, the division added a limitation of coverage for discharges from placer mining activities (SIC Major Group 10) to clarify that the scope the permit, like the previous permit, does not authorize discharges from placer mining activities. The division further clarified the requirement to obtain permit coverage under the Construction stormwater permit (general permit COR030000) in this fact sheet (see below). In addition, the division removed the limitation for process water discharges from 'major' facilities, as determined by the NPDES Permit Rating Work Sheet. The following list of limitations incorporates these changes. Please see the Division Response to Public Comments for a discussion of these changes.

- Stormwater discharges associated with construction activity that disturbs one acre or more are excluded from coverage. Consistent with Division practice, construction activity **does not** include land disturbance resulting from the act of mining, such as removal of topsoil and overburden to expose mineable minerals, or the

extraction, removal or recovery of minerals. Construction activity does include construction of facilities necessary to conduct mining activities, including but not limited to haul roads, pads, structures, etc.

The Division considered including these construction activities (those that exceed one-acre of disturbance) as an industrial activity authorized under this renewal permit. However, the Division determined that because an ELG has been promulgated by EPA for the construction and development category (Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category, 40 CFR Part 450), it was more appropriate to interpret the ELG during renewal of the CDPS stormwater construction permit (COR030000). In addition, the Division finds it most efficient, for general permits, to have a specific type of discharge authorized in just one general permit rather than multiple general permits. For these reasons, the Division decided against providing coverage for construction activities in this renewal permit. Therefore, stormwater discharges from construction of haul road, pad, structure, etc. at sand and gravel facilities, that exceeds the one-acre threshold and that do not commingle with process water from the facility (see discussion on **Commingled discharges** below), must be covered by a separate stormwater construction permit certification.

- Commingled discharges: The division considers stormwater runoff (from industrial or construction activities) that combines with process water (such as water in the mine pit), to be process water. Such discharges are subject to the process water provisions in the permit, and the stormwater provisions do not apply. This approach also applies to stormwater runoff from construction activities at the facility that exceed the one-acre threshold; specifically, if run-off from such activities commingles with facility process water, the commingled discharge is subject to the process water provisions in the permit, and the activity does not require separate construction stormwater permit coverage.

- Discharges to outstanding waters are excluded because the Division requires such discharges to be authorized by an individual permit to fulfill the antidegradation requirements of Regulation 31-The Basic Standards and Methodologies for Surface Water.

- Discharges solely to ground water are excluded water if such discharges are subject to direct regulation by implementing agencies under Section 25-8-202(7) of the Water Quality Control Act or Senate Bill 181. At mining facilities, discharges solely to ground water fall under the jurisdiction of the Division of Reclamation, Mining and Safety. This exclusion does not apply to point source discharges of pollutants to groundwater in direct hydrologic connection to surface waters and for which the Division determines the surface waters requirements of Regulation 61 apply, such as for some discharges to groundwater in alluvial areas.

- Discharges currently covered by another permit or a Division Low Risk Guidance Document are excluded. As stated in the Low Risk Policy, the Division does not intend to provide general permit coverage for discharges covered by a Low Risk Guidance Document.

- Discharges with chemical additions (including release agents) are not authorized unless expressly approved by the Division, and the Division provides notification of such approval to the permittee. A release agent is a substance used to aid in the separation of the desired material from the substrate, and must be disclosed. Part I.A.3 of the permit provides the process and information required to request Division approval of a specific chemical. If authorized, all chemicals must be used and stored in accordance with the manufacturers' recommendations and in accordance with any applicable state or federal regulation. On a case-by-case basis, the Division may determine that some discharges with chemical addition require individual permit coverage, such as if the specific chemical proposed contains constituents of concern that requires a more extensive reasonable potential analysis, or if dilution is required to meet applicable water quality standards in the receiving water.

- Process water discharges from the facilities listed below are excluded from coverage due to the potential toxicity and wide variety of pollutants, the minimal operations in Colorado, or Federal ELGs that require no discharge of process water from these facilities:

Facility types that require no discharge of process water	40 CFR 436 Subpart	SIC Code
Gypsum facilities that do not employ wet air emissions control scrubbers	E	1499
Asphaltic mineral facilities	F	1499
Asbestos and wollastonite facilities	G	1499
Barite facilities that do not employ wet processes or flotation processes	J	1479
Flourspar facilities that do not employ heavy media separation or flotation processes	K	1479
Saline from brine lake facilities	L	2899
Borax facilities	M	1474
Potash facilities	N	1474
Sodium sulfate facilities	O	1474
Phosphate Rock	R	1475
Frasch sulfur facilities	S	1479
Bentonite facilities	V	1459
Magnesite facilities	W	1459
Diatomite facilities	X	1499
Jade facilities	Y	1499
Novaculite facilities	Z	1499
Tripoli facilities	AF	1499
Asphalt batch plants	40 CFR 443	2951
Concrete batch plants, including associated truck and drum wash out	---	3273

V. BASIS FOR MAJOR CHANGES FROM LAST PERMIT VERSIONS

A. General

1. **Termination criteria**

The permit identifies the process by which the permittee can inactivate permit coverage, and the mandatory termination conditions for sand and gravel facilities that have a Division of Reclamation, Mining and Safety (DRMS) financial and performance warranty, and those that do not.

Termination of permit coverage requires that 'all permitted process water discharges authorized by this permit … have ceased'. This requirement applies specifically to the discharge authorized by the Water Quality Control Division. While this discharge remains, the permit certification cannot be terminated.

In some cases, the post-mining land-use for the sand and gravel pit is identified as a pond (such as for livestock watering, recreation purposes, etc.), and occasionally, the pond will discharge due to localized hydrology, etc. In such cases, when the post-mining land-use is achieved, the Division does not require continued permit coverage for discharges from the pond, for the following reasons.

- The post-mining land-use pond no longer meets the definition of a 'mine' – As provided in the effluent limitation guidelines found at 40 CFR Part 436 (Mineral Mining and Processing Point Source Category),

the term 'mine' means an area of land, surface or underground, actively mined for the production of [commodity] from natural deposits.

- The pond discharge does not meet the definition of 'mine dewatering' – As provided in the effluent limitation guidelines found at 40 CFR Part 436, 'mine dewatering' includes any water, including groundwater and stormwater, that is impounded or that collects in the mine and is pumped, drained, or otherwise removed from the mine through the efforts of the mine operator.

Because the post-mining land-use pond is no longer a mine, and therefore, the pond discharge is not mine dewatering, the Division determined that continued permit coverage for any discharge from the pond is not required. Note that termination is contingent on the permittee demonstrating to the Division that DRMS approved the applicable financial and performance warranty release, or alternatively, that the facility meets the final stabilization criteria established in the permit. This termination approach is a long-standing Division practice for sand and gravel facilities with a post-mining land-use as described above. The Division added the specific termination criteria in the permit and the associated discussion in the fact sheet to facilitate public comment and improve transparency and certainty.

2. **Electronic reporting of data**

The final permit includes requirements regarding EPA's Net-DMR submittal, and dates when permittees must start reporting data electronically. Prior to December 21, 2016, the permittee may elect to electronically submit DMRs instead of mailing paper DMRs by using the EPA's Net-DMR service. Starting on December 21, 2016, the permittee must electronically report DMRs by using the EPA's Net-DMR service unless a waiver is granted in compliance with 40 CFR 127.

B. Process water

This section provides the basis for major changes to the process water provisions from the previous permit versions. The discussion of process water effluent limitations is at Section VI of this fact sheet. Note that after public notice, the division made the following changes to the final permit:

- removed the limitation for process water discharges from 'major' facilities, and such facilities are now eligible for coverage under the final permit, and
- removed the discussion regarding facilities that produce asphalt emulsion from the fact sheet, as it is unlikely that this manufacturing industrial activity occurs at mining facilities in Colorado.

The following list incorporates changes to the final permit resulting from the division's review of comments received during the public notice period. Please see the Division Response to Public Comments for a discussion of these changes.

1. **Process water discharges from Dimension stone; Kaolin and Ball Clay; and Clay, Ceramic, and Refractory Minerals**

The Division clarified the types of facilities that are eligible for coverage under the permit, and specifically identified the following commodities: Dimension stone (SIC code 1411); Kaolin and Ball Clay (SIC code 1455); and Clay, Ceramic, and Refractory Minerals (SIC code 1459 - except bentonite) as eligible. The Division highlighted these specific commodities as Division records indicate that discharges from such facilities have been previously permitted -- such facilities are not prohibited from discharging by an applicable federal ELG, and the pollutants of concern are similar to other facilities eligible for coverage under the permit.

2. **Process water discharges from Graphite mining facilities**

The Division clarified the types of discharges from graphite facilities that are eligible for coverage under the permit. In accordance with the Federal ELG for graphite facilities, "Only that volume of water resulting from precipitation that exceeds the maximum safe surge capacity of a process waste water impoundment may be

discharged from that impoundment. The height difference between the maximum safe surge capacity level and the normal operating level must be greater than the inches of rain representing the 10-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the locality in which such impoundment is located."

3. **Discharges from facilities that produce Phosphate rock (SIC code 1475) excluded from coverage**

The Division removed from the types of facilities eligible for coverage under the permit, facilities that produce Phosphate rock (SIC code 1475). The Division determined that the pollutants of concern associated with Phosphate rock are different from other facilities eligible for coverage under the permit (based on the Toxic Pollutant Potential factor for the NPDES Permit Rating Work Sheet), and review of Division and DRMS records indicates that facilities that produce Phosphate rock are not currently permitted. Any new facilities that produce Phosphate rock and require discharge permit coverage must apply for an individual permit or an alternative general permit, as applicable.

4. **Process water discharges from asphalt batch plants excluded from coverage**

The Division determined, based on review of the applicable federal ELG (40 CFR 443) and associated Development Document, that the required level of technology-based control (BPT/BAT/NSPS) for discharges from facilities that produce asphalt concrete is '**no discharge of process wastewater pollutants to navigable waters'**. Therefore, the Division excluded process water discharges from asphalt batch plants from coverage under this permit.

5. **Process water discharges from concrete batch plants (including truck wash water /drum wash out) excluded from coverage**

The Division determined that the pollutants of concern associated with truck wash water and process water discharges from concrete batch plants are different and potentially more toxic than those for other facilities eligible for coverage under the permit. Therefore, the Division excluded process water discharges from concrete batch plants from coverage this permit.

6. **Flow limitation**

The Division added a flow limitation in the permit, as required by 5 CCR 1002-61.8(2)(i). The chronic flow limit will be equal to the maximum monthly average flow rate provided in the permit application. As required by 5 CCR 1002-62.5(7), the flow-measuring device must indicate values within ten percent of the actual flow being measured. The division is also requiring reporting for total quarterly flow in cases where needed to support a loading analysis.

7. **Standardized monitoring frequency**

The final permit provides coverage for process water discharges from both 'minor' and 'major' facilities, determined using the NPDES Permit Rating Work Sheet. Therefore, the final permit contains monitoring frequencies for both major and minor facilities, consistent with Water Quality Control Division Policy WQP-20 (Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Domestic and Industrial Wastewater Treatment Facilities).

8. **Separate monitoring parameter line for selenium**

The Division added a separate line for selenium in the effluent limitations tables in Part I.C.1 of the permit (selenium was included in the 'Other Pollutants of Concern' line in the previous permit). This change was made for clarity, and to clearly identify the regulatory basis for selenium monitoring.

C. Stormwater

1. **Control measures**

The Division uses the term "control measure" instead of "Best Management Practice (BMP)" throughout this permit. This term has a broader range of meaning than BMP, as it includes both BMPs and "other methods", and

as such, better describes the range of pollutant reduction practices a permittee may implement. The Division does not typically mandate specific control measures a permittee must implement to control pollutant sources at their facility. The permittee has the flexibility to select appropriate control measure that when implemented, enable the permittee to meet all applicable permit effluent limitations for stormwater discharges from their facility.

In this part of the permit, the Division uses and defines the term "**minimize**" to provide the permittee with a clear expectation for the level of performance of control measures implemented to achieve effluent limits that require the permittee to "minimize" pollutants. The Fact Sheet for EPA's MSGPs provides significant discussion about both terms with respect to the levels of technology-based control required by this permit.

This permit requires that **installation and implementation specifications** be retained with the Stormwater Management Plan for each control measure used by the permittee to meet the effluent limitations contained in the permit. The Division finds that this necessary to ensure the permittee recognizes, selects, and implements control measures that are appropriate for specific pollutant sources. The Division's expectation for maintenance of control measures is that the permittee conduct this action "immediately, in most cases". The intent of this permit condition is that the permittee correct control measures as they are discovered, and that interim control measures are implemented while the primary control measure is corrected.

2. **Stormwater Discharge Effluent Limitations**

This permit identifies all stormwater effluent limitations required by the permit (practice-based effluent limits and water quality-based effluent limitations), and clearly states that all discharges authorized under the permit shall attain these effluent limitations. This permit does not contain any numeric effluent limits based on effluent limitation guidelines (ELGs) for stormwater, as they are not applicable to the discharges eligible for coverage under this permit. The effluent limitations contained in this permit are located in a section separate from the SWMP, thereby differentiating effluent limitations from other terms and conditions of the permit.

The practice-based effluent limits (PBELs) are technology-based effluent limits - technology-based effluent limits are required for all CDPS permits. The PBELs correspond to the required levels of technology-based control (BPT, BCT, BAT) for various discharges under the Colorado Water Quality Control Act. For this permit, the technology-based effluent limits for stormwater discharges (i.e., the PBELs) are based on Best Professional Judgment (BPJ) decision-making.

The renewal permit includes water quality-based effluent limits as necessary to meet applicable water quality standards and supplement the technology-based effluent limits. The Division determined that it was appropriate to include the BPJ based technology-based effluent limits and the water quality-based effluent limits on the same basis EPA used in development of EPA's MSGPs.

a. **Practice-based Effluent Limitations**

The Division modified the practice-based effluent limitations required by this permit. Most significant among the changes are including the term "**minimize**" within the practice-based effluent limitations, and adding four new practice-based effluent limitations, as described below.

i. *Minimize Exposure*

Minimizing exposure prevents pollutants from coming into contact with precipitation and can reduce the need for control measures to treat or otherwise reduce pollutants in stormwater runoff. As such, this is one of the most important control options.

ii. *Management of Runoff*

Managing runoff (diverting, infiltrating, reusing, containing, or treating stormwater runoff) prevents stormwater contact with exposed materials or pollutant sources, and like minimizing exposure, can reduce the need for control measures to treat or otherwise reduce pollutants in stormwater runoff.

iii. *Waste, Garbage and Floatable Debris*

In addition to other stormwater pollutants, the permittee must minimize the discharge of waste, garbage, and floatable debris, pollutants associated with most if not all industrial activities, so that these pollutants are not ultimately discharged to receiving waters. Trash and floating debris in waterways have become significant pollutants, especially near areas where a large volume of trash can be generated in a concentrated area. Trash can cause physical impairments in water bodies to aquatic species and birds, is also visual pollution, and detracts from the aesthetic qualities of receiving waters.

iv. *Salt Storage Piles or Piles Containing Salt*

Salt storage piles are prevalent across the country. The permit requires that permittees adequately control salt piles to prevent aquatic effects resulting from stormwater runoff from such piles. Preventing exposure of piles to stormwater or run-on also eliminates the economic loss from materials being dissolved and washed away.

b. **Water Quality-Based Effluent Limitations**

The renewal permit includes a new section that addresses water quality-based effluent limitations (WQBELs) applicable to stormwater discharges. The permit allows the Division to conduct a reasonable potential analysis that allows one of three outcomes to be determined: 1) a finding of reasonable potential, which for a new (proposed) discharge would need to be based on information other than monitoring from the proposed facility, such as monitoring information for similar sites/discharges, published scientific information, or information in the application, 2) a monitor-only reasonable potential decision, which indicates that the Division expects the pollutant to be present in the discharge, but does not have certainty that levels will cause or contribute to an exceedance of a water quality standard, or 3) a finding of no reasonable potential and no monitoring, indicating that the Division either does not expect the pollutant to be present or if expected to be present it is at levels significantly below the applicable water quality standard.

i. *Water Quality Standards*

a) Consistent with EPA's MSGPs and general permit COR900000, the Division included the requirement that 'stormwater discharges authorized under the renewal permit must be controlled as necessary to meet applicable water quality standards'. Generally, this means attaining the water quality standards in the receiving water, but may be end-of-pipe due to site-specific circumstances such as for new discharges to impaired waters. This statement replaces the statement in the preceding sand and gravel stormwater permit that 'stormwater discharges from the industrial activity shall not cause, have the reasonable potential to cause, or measurably contribute to an exceedance of any water quality standard, including narrative standards for water quality'. This requirement applies to all stormwater discharges; additional requirements apply to discharges to Water Quality Impaired Waters and Waters Designated as Critical Habitat for Threatened and Endangered Species, as described below.

b) The Division expects that compliance with the other conditions in the renewal permit will control discharges as necessary to meet applicable water quality standards. However consistent with EPA's MSGPs and general permit COR900000, the Division included a provision in the permit that allows a site-specific water quality-based effluent limitation to be included in the certification as necessary to comply with water quality standards. The Division also included a provision in the permit that allows site-specific terms and conditions to be included in the certification to determine whether compliance with the other terms and conditions of the permit will control the discharge as necessary to meet applicable water quality standards.

c) The type of information that the Division anticipates may become available substantiating the need for a site specific water quality-based effluent limitation includes, but is not limited to, in-stream water quality data, discharge monitoring data and information regarding corrective

actions. Any site-specific water quality-based effluent limitation will be derived from and comply with the associated water quality standard.

d) The type of additional terms and conditions the Division anticipates could be appropriate to determine if compliance with the other terms and conditions of the permit will control the discharge as necessary to meet applicable water quality standards includes, but is not limited to in stream monitoring, site-specific discharge water quality standards monitoring, site-specific benchmarks, and source characterization studies.

ii. *Additional Requirements for Discharges to Water Quality Impaired Waters*

a) **Existing** Discharge to an Impaired Water **with** an EPA Approved or Established TMDL.

Consistent with EPA's MSGPs and general permit COR900000, the Division will implement a new review process for existing discharges to impaired waters with an approved or established TMDL. Where an operator indicates on its application that the discharge is to one of these waters, the Division will determine whether the pollutant is of concern for the discharge and review the applicable TMDL to determine whether the TMDL includes requirements that apply to the individual discharger or to its industrial sector. The Division will determine whether additional requirements are necessary to comply with the wasteload allocation or alternatively, whether an individual permit application is necessary. Where the discharge is authorized under the general permit, the Division may include water quality standards monitoring to verify that the discharge will be controlled as necessary to be consistent with the assumptions and requirements of the TMDL through compliance with the other terms and conditions of the general permit.

The Division utilizes this process for new discharges to impaired waters, and intends to extend this process to existing discharges to impaired waters in this category under this renewal permit. The Division included a specific section regarding water quality standards monitoring in the permit.

Stormwater discharges to stream segments subject to the selenium TMDL – The EPA approved a selenium TMDL for the Gunnison River and Tributaries, Uncompahgre River and Tributaries, in February 2011. This TMDL identifies that selenium contributions to sand and gravel discharges occur when selenium-laden groundwater intercepts sand and gravel pits and is discharged as process water. Therefore, for the 12 segments subject to the TMDL identified above and for this permit term, the Division will not require permittees to sample stormwater-only discharges for selenium, for such discharges from the facility through outfalls not associated with the mining pit (e.g., through sheet flow, diverted stormwater, detained stormwater, etc.).

b) **Existing** Discharge to Impaired Waters **without** an EPA Approved or Established TMDL.

The Division will implement a new review process for existing discharges to impaired waters without an approved TMDL.

Where an operator indicates on its application that the discharge is to an impaired waters where a TMDL has not yet been established, the Division will determine whether a pollutant has been identified as a constituent of concern in an impairment listing, and if this constituent it is a concern for the proposed discharge covered by the permit. If so, the Division may include water quality standards monitoring to provide information to support development of the TMDL and to determine if the discharge, once a TMDL is issued, will be controlled as necessary to be consistent with the assumptions and requirements of the TMDL through compliance with the other terms and conditions of this permit.

The Division utilizes this process for new discharges to impaired waters, and intends to extend this process to existing discharges to impaired waters in this category under this renewal permit. The Division included a specific section regarding water quality standards monitoring in the permit.

c) **New** Discharge to an Impaired Water.

The Division considered emulating the conditions included in EPA's MSGPs and determined that an alternate approach was more appropriate for this permit and consistent with permitting practices conducted by the Division in Colorado. EPA's MSGPs substantively addresses requirements for new discharges to impaired waters under limitations on coverage and does not include additional water quality-based effluent limits to further control those discharges. In EPA's MSGPs, EPA included language from the permit regulations that prohibit issuance of a permit to new discharges to impaired waters in certain circumstances, as a permit condition under limitations on coverage. The Division has had a longstanding practice of meeting the subject regulatory prohibition through two practices: 1) assigning water quality-based effluent limits at the point of discharge (end of pipe) to new discharges to impaired waters, which does not allow a discharge to cause or contribute to a violation of a water quality standard, and 2) denying permit applications in cases where the Division has determined (and the applicant has been unable to substantiate otherwise) that the discharge without additional treatment or controls, would not be controlled as necessary to meet to meet permit terms and conditions, specifically water quality-based effluent limits.

The Division intends to continue that process with this renewal permit, and has included a narrative water quality-based effluent limitation in the permit, which will be included in permit certifications authorizing new discharges to impaired waters, including naming the relevant water quality standards. The Division determined that it was appropriate to include a narrative water quality-based effluent limitation in the permit as an additional protection to ensure compliance with water quality standards and make it clear to the permittee that water quality standards must be met at the point of discharge (end of pipe).

In addition, where an operator indicates on its application that the discharge is to an impaired water, the division will determine whether a pollutant (including selenium) is of concern for the discharge. If so, the Division may include water quality standards monitoring to provide information to support development of the TMDL and to determine if the discharge, once a TMDL is issued, will be controlled as necessary to be consistent with the assumptions and requirements of the TMDL through compliance with the other terms and conditions of this permit.

iii. *Additional Requirements for Discharges to Waters Designated as Critical Habitat for Threatened and Endangered Species.*

The Division, EPA, and USFWS entered into a Memorandum of Agreement (MOA) "regarding enhanced coordination in implementing Colorado's mixing zone rule and the Service's August 11, 2003 biological opinion on this matter" in October 2005 (The Mixing MOA). The Mixing MOA evolved from an Endangered Species Act (ESA) Section 7 consultation that was conducted as part of EPA's approval of Colorado's water quality standards mixing zone provisions. In development of the Mixing MOA, the parties were primarily focused on ensuring no more than minor detrimental effects from larger, continuous point source discharges during critical low flow conditions.

Since execution of the Mixing MOA and consistent with options included in the Mixing MOA, the Division's has issued permits for larger, continuous discharges that have required the discharges to meet water quality standards at the point of discharge (end of pipe) based on critical low flow conditions. The Division has also required a large continuous discharge to occur from a diffuser to ensure instantaneous

mixing. The Mixing MOA also includes an option for passive mixing in situations where the permittee can demonstrate that such mixing will be protective of the listed species.

The Division has determined that additional information is needed to determine whether compliance with the other conditions of this permit will control the discharges as necessary to eliminate or minimize the potential for no more than minor detrimental effects to listed species in regards to receiving water mixing. The Division has included a provision in the permit that requires water quality-based monitoring for discharges to waters designated as critical habitat for threatened and endangered species. The Division has also included a provision that allows additional terms and conditions to be included in the certification, and the types of additional terms and conditions the Division anticipates could be appropriate includes, but is not limited to studies to determine whether instantaneous mixing occurs due to the location of the discharge and flow in the receiving water at the time of discharge, and studies to determine whether passive mixing is protective of listed species.

iv. *Additional Requirements for New or Increased Discharges to Reviewable Waters*

Consistent with EPA's MSGPs and general permit COR900000, the Division expects that compliance with the other conditions of the permit will control discharges as necessary to comply with the applicable antidegradation requirements. However, the Division included a provision in the permit that allows additional terms and conditions to be included in the certification as necessary to comply with antidegradation requirements. Types of information that may become available warranting site-specific conditions includes but is not limited to information on new or increased discharges, including information provided consistent with Part I.I and Part II (Change in Discharge) of the renewal permit.

3. **General Monitoring Requirements – Stormwater Only**

The Division consolidated and clarified stormwater monitoring requirements for the permittee in this section of the renewal permit. Applicable monitoring requirements in the renewal permit apply to each outfall authorized by the permit, except as otherwise exempt from monitoring as a "substantially identical outfall." Outfalls are locations where stormwater exits the facility property, including pipes, ditches, swales, sheet flow and other structures that transport stormwater (EPA 832-B-09-003 (Industrial Stormwater Monitoring and Sampling Guide – March 2009 [Final Draft]), or where the discharge enters a surface water within the facility permit boundary.

To be considered substantially identical, outfalls must have generally similar industrial activities, control measures, and exposed materials that may significantly contribute pollutants to stormwater. When a permittee believes its facility has two or more outfalls that qualify as substantially identical, the permittee may monitor one of these outfalls and report that the quantitative data also apply to the other substantially identical outfalls. The Division encourages permittees to use the "substantially identical outfall' provision in the permit as it can significantly reduce the monitoring recordkeeping and reporting burden.

In addition to the monitoring exception included the draft permit (i.e., Monitoring Exceptions for Inactive and Unstaffed Sites), the final permit contains an additional monitoring exception (Monitoring Exceptions for Completed and Finally Stabilized Areas) for mine sites, or areas of the mine site, where the pollutant potential and potential for control measure failure is significantly reduced. Please see the Division Response to Public Comments for a discussion of these changes.

4. **Specific Monitoring Requirements – Stormwater Only**

The Division added a new section that addresses requirements for Visual Monitoring and Water Quality Standards monitoring requirements, as applicable to the facility. Consistent with EPA's MSGPs and COR900000, the Division added the requirement for the permittee to conduct quarterly visual examinations of stormwater discharges for the presence of obvious indicators of stormwater pollution. These assessments of stormwater discharges are an inexpensive and valuable part of the stormwater management and planning process. Permittee responsibilities with respect to documentation of results and corrective actions are provided.

The final permit authorizes stormwater discharges from asphalt batch plants (SIC code 2951) and concrete batch plants (SIC code 3273). Therefore, the division also added the associated benchmark sampling requirements for these industrial activities, consistent with CDPS general permit COR900000, and described below.

a. Stormwater benchmark sampling

Sand and gravel industrial activities
The renewal permit does not include benchmark sampling requirements for stormwater discharges from sand and gravel facilities (SIC code major group 14 activities). This is different from the Division's approach in the COR900000 general permit (Stormwater Discharges Associated with Non-Extractive Industrial Activity), which was to adopt the benchmark parameter and concentrations required in EPA's MSGPs – for sand and gravel facilities, EPA's benchmark parameters are Nitrate plus Nitrite Nitrogen and Total Suspended Solids (TSS).

The Division deviated from the benchmark approach for this renewal permit for several reasons. First, because this permit addresses only one sector, and the sector requires monitoring and reporting for just two benchmarks, the Division had more time to evaluate the basis for the benchmarks, and weigh the pros and cons of adopting the benchmarks versus determining an equivalent alternative to the benchmark approach. Secondly, as provided in the 1995 Federal Register (Federal Register / Vol. 60, No. 189 / Friday, September 29, 1995), the benchmarks for this sector are Nitrate plus Nitrite Nitrogen and TSS, which are based on stormwater discharge monitoring data reported to EPA by the Sand and Gravel sector.

The benchmark concentration for Nitrate plus Nitrite Nitrogen is 0.68 mg/l, and is based on data from the National Urban Runoff Program. The Division was concerned that since the source of the nitrogen is likely fertilizer used in reclamation efforts, that permittees could find themselves performing corrective action for exceeding the benchmark value for a pollutant that may not be controlled with conventional control measures for this sector. Further, the permit requires that permittees apply fertilizer in accordance with the approved labeling, and the narrative WQBEL is applicable to all discharges from Sand and Gravel facilities, including those that use fertilizer. Therefore, the Division determined that it would not apply Nitrate plus Nitrite Nitrogen benchmark sampling for discharges from these facilities in the renewal permit.

The Division considered retaining the TSS benchmark sampling and reporting requirements and associated corrective action in the renewal permit; and looked at the cost and benefit of benchmark monitoring, and sampling and reporting for just one parameter, particularly one for which specific technology-based effluent limitations are addressed in the permit. The Division further considered that the Division of Reclamation, Mining and Safety provides some oversight of such facilities with respect to erosion and sediment control. In an effort to reduce the burden of sampling/reporting for one parameter, and because the Division determined that compliance with the technology-based effluent limitations (PBELs) and other terms and conditions of this permit (such as control measure requirements, visual monitoring, inspections, and documentation requirements) will adequately control stormwater discharges for TSS, the Division decided to not require TSS benchmark sampling for discharges from these facilities in the renewal permit.

Asphalt batch plant and concrete batch plant industrial activities
Because the final permit authorizes stormwater discharges from asphalt and concrete batch plants, the division included applicable benchmark monitoring requirements for these activities.

- Benchmark Monitoring: This renewal permit contains the requirement to conduct benchmark monitoring as an indicator of the performance of the measures undertaken to meet the stormwater effluent limitations contained in the permit. This approach (including specific benchmark parameters and concentrations) is consistent with the benchmark monitoring requirement in the CDPS non-extractive industrial stormwater general permit (permit COR900000) for asphalt and concrete batch plants. The benchmark concentrations are not effluent limits. Therefore, an

exceedance of the benchmark four-quarter average is not a violation of the permit, provided that no separate water quality exceedance resulted from the associated stormwater discharges.

- Benchmark Monitoring Schedule: The renewal permit requires that the permittee conduct benchmark monitoring quarterly for the first four (4) full quarters of permit coverage.

- Benchmark Monitoring Actions: Data not exceeding benchmarks: Benchmark monitoring frequency can be reduced if the permittee can demonstrate monitoring values below the benchmarks concentrations. If, after collecting 4 benchmark samples, the average of the monitoring values for any parameter does not exceed the benchmark, the permittee may submit a request to the division to reduce benchmark monitoring frequency to once-per-year, and rotate through the quarterly monitoring periods such that eight (8) samples are collected every five years. This monitoring framework allows samples to capture seasonal variations in stormwater discharges, yet relieves the permittee from quarterly sampling for the entire permit term, unless the benchmarks are exceeded (see below).

- Data exceeding benchmarks: The renewal permit specifies Corrective Actions (required permittee actions, documentation and timelines) when the averaged monitoring values for any parameter exceeds the benchmark. After corrective action is taken, the permittee is required to continue quarterly monitoring for 4 additional quarters, and calculate average monitoring values. If the data from the additional monitoring does not exceed the benchmarks, permittees may reduce benchmark monitoring frequency to once-per-year as previously described. If this data from the additional monitoring exceeds the benchmarks, the permittees must again perform Corrective Actions and continue quarterly sampling. This monitoring framework requires continued quarterly sampling only for those facilities that continue to exceed benchmarks in stormwater samples.

5. **Inspections**

The Division modified the self-inspection requirements in the renewal permit. Most significant among the changes are inspection frequency (i.e., quarterly inspections); inspection scope (i.e., one inspection must be conducted during a run-off event); and corrective action requirements. This permit specifically addresses an increased inspection frequency (6 per year) for inactive and unstaffed facilities that do not meet the condition of no exposure, as such facilities continue to be sources of pollutants for stormwater runoff.

The Division made changes to this section of the permit largely based on its observations during compliance inspections of permitted sand and gravel facilities. Such observations include non-compliant field conditions the permittee did not identify and correct. Unlike the public notice version of general permit COR900000, this permit requires quarterly not monthly inspections, although in some instances, more frequent inspection (e.g., monthly) may be appropriate for areas of the facility with significant activities and materials exposed to stormwater.

The Division believes that the requirement for more frequent facility inspections (i.e., quarterly inspections) and documented corrective actions is a useful means for permittees to evaluate the effectiveness of implemented control measures, and correct any deficiencies. The Division also added the requirement to conduct one of the quarterly inspections during a run-off event, consistent with general permit COR900000. The Division determined that the run-off event inspection is a particularly useful tool for assessing control measure performance, and has received anecdotal information from permittees/stakeholders authorized under general permit COR900000 substantiating this determination.

As in general permit COR900000, this permit allows an exception to the quarterly inspection frequency for inactive and unstaffed facilities, but only if a condition of no exposure is first established at the facility and documented in the facility SWMP. If this is the case, such facilities are required to conduct two facility inspections annually, in the spring and fall. This twice yearly inspection frequency is intended to ensure that

there are no industrial materials or activities exposed to stormwater, i.e., to maintain the condition of no exposure. Facilities that are both inactive and unstaffed, when the facility no longer has industrial activities or materials exposed to stormwater, could alternatively submit a No Exposure Certification permitting under 5 CCR 1002-61.3(2)(h), terminating permit coverage. However, the Division realizes that some facilities plan to recommence industrial activity in the future and therefore may wish to keep active permit coverage.

The permit also includes an increased frequency requirement (6 per year) for those facilities that are inactive and unstaffed, but that cannot establish a condition of no exposure. The Division recognizes that some facilities, such as those meeting the conditions of "temporary cessation" in accordance with DRMS requirements, continue to be sources of pollutants as these facilities are not reclaimed, and may not be able to qualify for a condition of no exposure. Because the discharge of pollutants does not cease when pollutants sources at such facilities remain exposed to stormwater, oversight of facility conditions by the permittee is necessary.

The increased inspection frequency provides an alternative approach to requiring that permittees conduct quarterly visual monitoring for such facilities, as in general permit COR900000. The Division recognizes the burden associated with obtaining visual samples of stormwater at remote facilities that are not staffed, and developed the increased inspection frequency option accordingly. This is the Division's best effort to balance having requirements adequate to address the pollutant source, while reducing the burden to the extent possible since the facilities are not staffed to support active mining operations.

In response to comments received during the public notice period, the division added an additional exception to the inspection requirements in the final permit, specifically for the runoff event inspection at Completed and Finally Stabilized Areas (see response to Comment ID COG50-5.11).

6. **Corrective Actions**

This new section identifies permittee responsibilities with respect to resolving specific facility conditions. The corrective action process is critical to fixing conditions occurring during the permit term that are indicative of permit violations. Conditions fall into two categories: those the permittee must eliminate, and those that require the permittee to review and modify control measures. Permittee responsibilities with respect to corrective action reports and deadlines, control measure modification and substantially identical outfalls are addressed. In the final permit, the 24-hour and 5-day reporting requirements are condensed into one 5-day reporting requirement.

7. **SWMP requirements**

This permit locates all technology-based effluent limitations (i.e., practice-based effluent limitations and federal ELGs), and water-quality based effluent limitations in sections separate from the requirement to develop and implement a SWMP.

As such, the requirement to prepare a SWMP and the documentation requirements set forth in the SWMP are not effluent limitations themselves, but terms and conditions of the permit, because the permittee is documenting information on how it intends to comply with the effluent limitations of the permit. This difference allows the permittee to modify, at any time and as required by the terms and conditions of the permit, the control measures used to meet these effluent limitations. The Fact Sheets for EPA's MSGPs provides significant discussion regarding the effluent limitation vs. the requirement to develop a SWMP, as required by this permit.

The final permit allows **180 days** from the certification effective date, for an existing permittee to modify the SWMP to meet the final permit requirement. Please see the Division Response to Public Comments for a discussion of this change.

a. General SWMP Requirements

i. SWMP requirement: The Division added the requirement that the permittee must modify the SWMP to reflect current site conditions. The Division expects that the permittee use the SWMP as a tool to plan and implement stormwater management at the facility. The requirement that permittees update the facility SWMPs to reflect current site condition formalizes this expectation.

ii. Signatory Requirements: The Division added the requirement that the permittee must sign and certify all SWMPs, which applies to the original SWMP prepared for the facility, and each time the permittee modifies a SWMP. This requirement ensures that the individual or a position with responsibility for the overall operation of the regulated facility or activity, or a duly authorized representative of that person consistent with 5 CCR 1002-61.4(1)(f), is aware of and approves changes to the SWMP.

iii. Permit Retention: The Division added the requirement that the permittee must maintain a copy of this renewal permit and the permit certification issued to the permittee with the SWMP. The Division determined that it is appropriate to require the permittee to retain a copy of this permit and the permit certification with the SWMP to allow the facility's personnel ready access to both. The Division notes that an electronic copy easily available to facility personnel is also acceptable.

b. Specific SWMP Requirements

The Division modified the Specific SWMP Requirements to require that permittees maintain additional documentation with the SWMP. These documentation requirements include:

i. Facility Map. The Division added a requirement to the renewal permit that requires permittees to identify the locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants.

ii. Facility Inventory and Assessment of Pollutant Sources. The Division added the requirement to maintain, and update as data is available, an assessment of potential pollutant sources that describes the potential of a pollutant to be present in stormwater discharges for each facility activity, equipment and material identified by the permittee.

iii. Additional Control Measure Requirements. The Division added the requirement to document, and maintain with the SWMP, the schedules, procedures, and evaluation results for the following subset of practice-based effluent limitations.

- Good Housekeeping;
- Maintenance;
- Spill Prevention and Response Procedures;
- Employee Training; and,
- Non-Stormwater Discharges.

The stormwater provisions in existing permits COR340000 and COG500000 require such procedures and practices – this permit additionally requires that the permittee document these procedures and practices in the SWMP. Documentation may be electronic as long as all other requirements of the permit are met.

iv. Inspection Procedures and Documentation. The Division added the requirement to document, and maintain with the SWMP, inspection procedures and other documentation related to inspections.

v. Monitoring Procedures and Documentation. The Division added the requirement to document, and maintain with the SWMP, monitoring procedures and other documentation related to monitoring.

8. **Reporting and Recordkeeping**

Permittees required to sample stormwater, other than visual monitoring, must summarize monitoring results for each calendar quarter and submit the results to the division on a quarterly basis (by the 28th day of the following month).

These changes are consistent with the existing reporting convention for monitoring results in Division permits. The Division enters all industrial stormwater facility data into EPA's database of record, which is called the "Integrated Compliance Information System" (ICIS), and is a secure system for National Pollutant Discharge Elimination System (NPDES) that is only available to EPA and state users. The public can access information in ICIS by using the "Enforcement and Compliance History Online" (ECHO), or Envirofacts.

The final permit includes requirements regarding EPA's Net-DMR submittal, and dates when permittees must start reporting data electronically. Prior to December 21, 2016, the permittee may elect to electronically submit DMRs instead of mailing paper DMRs by using the EPA's Net-DMR service. Starting on December 21, 2016, the permittee must electronically report DMRs by using the EPA's Net-DMR service unless a waiver is granted in compliance with 40 CFR 127.

To ensure that permittees know how to report information on the DMR form, this permit contains data reporting conventions, to include reporting "No Discharge" on the DMR if no discharge occurs within the reporting period; "General Permit Exemption" for each parameter for the period the site meets the monitoring exception.

The Division modified the required content of the Annual Report. Specifically, only a summary of inspection dates need to be reported; however, all correct action documentation (including that for inspections) and the status of any outstanding corrective action(s) must be submitted with the annual report. As such, the annual reporting requirements are less than that required by the previous permits, unless the facility has corrective actions to document.

VI. DISCUSSION OF PROCESS WATER EFFLUENT LIMITATIONS

A. Regulatory Basis for Limitations

1. **Technology Based Limitations**

a. Federal Effluent Limitation Guidelines – The federal guidelines that apply to discharges from sand and gravel facilities are found under 40 CFR Part 436 (Mineral Mining And Processing Point Source Category). These limitations will typically apply, unless the Division applies a more stringent limitation or an alternate limitation (as is the case with pH, as discussed in the Parameter Evaluation section of the fact sheet).

b. Regulation 62: Regulations for Effluent Limitations – Regulation 62 includes effluent limitations that apply to all discharges of wastewater to State waters. This regulation is applicable to the discharges from sand and gravel facilities certified under the COG500000 permit, and is the basis for the oil and grease and total suspended solids (TSS) effluent limitations where federal Effluent Limitation Guidelines do not apply to the discharge.

2. **Numeric Water Quality Standards**

For sand and gravel facilities, applicable water quality standards exist for pH, metals, and organic parameters, and may be applied as daily maximum (acute), 30-day average (chronic) limits, or two-year rolling averages. Most acute and chronic water quality standards will apply at the point of discharge (end-of-pipe), with case-by-case exceptions for select parameters, which are detailed below.

While effluent limitations for metals and other parameters are not automatically included in certifications under this general permit, they may be added on a case-by-case basis based on discharge- or receiving water-specific considerations.

3. **Narrative Water Quality Standards**

Section 31.11(1)(a)(iv) of The Basic Standards and Methodologies for Surface Waters (Regulation No. 31) includes the narrative standard that State surface waters shall be free of substances that are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life.

a. Agricultural Use Protection (SAR, EC, and TDS) – Section 31.13(2) of the Basic Standards and Methodologies for Surface Waters (Regulation No. 31) also includes specific narrative provisions for the protection of agriculture as follows;

> *Agriculture. These surface waters are suitable or intended to become suitable for irrigation of crops usually grown in Colorado and which are not hazardous as drinking water for livestock*.

For the protection of irrigated crops, the Division initiated a workgroup in 2007 to address concerns about the impacts of industrial discharges on the quality of downstream water and its suitability for use in irrigating crops. As a result of the workgroup, the Division determined that additional discharge controls were necessary in certain situations to protect the beneficial uses of downstream crop irrigation. This culminated in Water Quality Policy (WQP) #24, entitled *Implementing Narrative Standards in Discharge Permits for the Protection of Irrigated Crops* (hereafter the Ag Policy), March 10, 2008.

The evaluation of the suitability (i.e., quality) of irrigation water is complex and involves interactions of plant tolerances, soil types, and agricultural management practices. Irrigation water has two properties – salinity and sodicity – that can have concurrent impacts on the irrigated crop beneficial use. The Division has thus determined that two parameters, specifically electrical conductivity (EC) and sodium absorption ratio (SAR), are the best parameters to regulate in discharge permits to control levels of salts to minimize both the loss of irrigated crop yield and the sodium hazard.

Electrical Conductivity (EC or Specific Conductivity): Crops have varying sensitivity to electrical conductivity. Studies have established the maximum conductivity in the water that will result in a 'no reduction' of crop yield. Thus, an EC value based on a 'no reduction' of crop yield is implemented in permits as the maximum conductivity based on the most sensitive crop usually grown in the area.

Common crop *EC* thresholds reproduced from the Ag Policy are summarized in the table below. Note that this is not an exhaustive list and *EC* values for additional crops are listed in tables in appendixes to the Ag Policy.

Maximum EC_w That Will Not Reduce The 100% Yield of Selected Irrigated Crops	
Common Colorado Crops	***Irrigation Water Electrical Conductivity (EC_w)***
Beans	0.7
Onion	0.8

Maximum EC_w That Will Not Reduce The 100% Yield of Selected Irrigated Crops	
Common Colorado Crops	***Irrigation Water Electrical Conductivity (EC_w)***
Corn (grain)	1.1
Potato	1.1
Peaches	1.7
Corn (silage)	1.2
Alfalfa	1.3
Orchard grass	1.5
Grapes	1.5
Wheat	4.0
Sugarbeet	4.7
Barley	5.3

The permit writer will determine if EC must be limited and/or monitored in the discharge to protect downstream crop irrigation. ***For new discharges, this may include an EC limitation in the permit, if warranted. For existing discharges, a 'report' only requirement is anticipated during this permit term to characterize EC in discharges from this industry.***

Sodium Adsorption Ratio (SAR): This value is a representation of the relative proportion of sodium cations to calcium and magnesium cations (also known as the "sodium hazard"). The equation for SAR follows:

$$SAR = \frac{Na^{+}}{\sqrt{\frac{Ca^{++} + Mg^{++}}{2}}}$$

The SAR standard used to establish a SAR permit limit, is calculated using the SAR/EC equation of SAR = (7.1* EC)-2.48), reproduced herein from the Ag Policy. A permit limitation for SAR is based on this calculation using an EC value from the established crop grown in the area. For example,

CORN GRAIN IRRIGATED CROP	
EC for Corn (grain) = 1.1	***SAR = (7.1 * 1.1) - 2.48 = 5.3***

Note that to retain a 'no reduction in infiltration' per the Ag policy, SAR permit limitations are capped at 9. Please see the Ag policy for a full discussion of EC and SAR for irrigated crops.

Since sand and gravel process water discharges covered under this permit are typically from shallow mining operations (e.g. alluvial pit dewatering), or from processing related to materials extracted from shallow deposits (crushing, sorting, screening, etc.), SAR values in the soil profile can be used to estimate the concentrations of SAR in the effluent. The Division reviewed statewide NRCS SSURGO Soils profiles in areas where the majority of process water discharges occur. The result of this analysis indicates that, for the vast majority of sites, there is no reasonable potential for SAR to cause or contribute to an exceedance of the standard. ***Thus, monitoring for SAR will not typically be required***. Note however, that for facilities located in high SAR soil locations, or facilities where SAR is expected in concentrations that may cause or contribute to an exceedance of the standard, a limitation or reporting for SAR may be implemented on a case-by-case basis. An individual permit may be requested for detailed mixing zone (dilution) considerations, if warranted.

Total Dissolved Solids (TDS) - The Division's practice has been to include a TDS limitation of 3,500 mg/l where discharges are to surface waters that are used for livestock (range cattle) watering. This practice is based on EPA's "Blue Book" (Water Quality Criteria 1972 ("Blue Book"). U.S. Environmental Protection Agency. Wash., D.C.: U.S. Government Printing Office, #R3-73-003, 3/73. The "Blue Book" was developed by a Committee on Water Quality Criteria formed through the National Academy of Sciences. The Colorado State University (CSU) Cooperative Extension also uses the "Blue Book" values as recommendations for livestock watering (Livestock Drinking Water Quality, CSU Cooperative Extension, October 1993, Reviewed March 1999).

b. Whole Effluent Toxicity - The Division has established the use of Whole Effluent Toxicity (WET) testing as a method for identifying and controlling toxic discharges from wastewater treatment facilities. WET testing is used as a means to ensure that there are no discharges of pollutants "in amounts, concentrations or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life" as required by Regulation 31, Section 31.11 (1).

The requirements for WET testing are implemented in accordance with Division policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010).

4. **Water Quality Regulations, Policies, and Guidance Documents**

a. Antidegradation – As required by Section 31.8 of The Basic Standards and Methodologies for Surface Water, an antidegradation (AD) review is required for discharges to "reviewable waters", except in cases where the regulated activity will result in only temporary or short term changes in water quality, or where the ratio of the low flow to the facility flow is 100:1 or more. Discharges permitted under this general permit are not normally temporary or short-term, thus, these discharges are not exempted from an AD review. Based on the information and data in the application, the permit writer will assess the ratio of the chronic low flow of the receiving stream to the facility design flow to determine if antidegradation applies.

The AD review is applicable only to water-quality based effluent limitations, not technology-based effluent limitations. For discharges eligible under this general permit, an antidegradation (AD) limit will be calculated as 15% of the Water Quality Standard, and the resulting effluent limitation will be identified as a site-specific limitation in the certification.

The permittee would then have the choice of this AD limit, or of a non-impact limitation (NIL). The NIL is either the limitation contained as of September 2000, or may be determined by the use of an implicit limitation if a previous limit did not exist. The implicit limit is determined as the maximum effluent concentration in the years prior to September 2000 (later data may be substituted on a case-by-case basis if data is unavailable from this time period). Alternately, if effluent data are not available, the division will include monitoring requirements in the permit so that data can be collected in order to make such a determination of an implicit limit. An individual permit will be required where the permittee requests consideration of dilution and ambient water quality.

In addition, the permittee may elect to perform an alternatives analysis. As this may be subject to public notice requirements, an individual permit will be required. See Regulation 31.8(3)(d) and the Division's Antidegradation Guidance document for more information regarding an alternatives analysis.

AD limitations will not be calculated for facilities discharging to segments that are impaired for a pollutant of concern. For these facilities, the water quality standard will be applied, as there is no new or increased impact to the assimilative capacity of the previously impaired stream segment.

b. Discharges to Threatened and Endangered (T&E) Species Designated Waters – Discharges to T&E waters are subject to the Memorandum of Agreement between the Division and the U.S. Fish and Wildlife Service. In summary, a discharge to a T&E water must achieve one of three options: 1) The permit contains end of pipe limitations based on the water quality standards; 2) the permittee installs a diffuser, and is then granted a portion of the assimilative capacity of the receiving stream; or 3) the discharge is relocated to a segment that is not designated as T&E habitat.

   For facilities discharging to T&E species designated water, all WQBELs must be met at the point of discharge (end-of-pipe) and therefore, the first option is met. End-of-pipe limitations will satisfy the MOA, and no further consideration is needed.

c. Antibacksliding – As the receiving waters are either designated Use-Protected, or the Division has performed an antidegradation evaluation in accordance with the Antidegradation Guidance, the antibacksliding requirements in Regulation 61.10 have been met.

d. Implementation of Total Maximum Daily Loads (TMDLs) – When reissuing the renewal certifications and for new permit applications under this revised general permit, the Division will assess whether or not any permitted facility discharges to segments for which a TMDL has been completed and approved. As required under the Clean Water Act Section 303(d), TMDLs are submitted, through the normal public notification process, to EPA Region VIII for their review and approval.

   At the present time, at least twelve sand and gravel facilities in the Gunnison and Uncompahgre Basins with effective permit certifications are subject to a waste load allocation (WLA) in the February 2011 selenium TMDL for the Gunnison River and Tributaries, Uncompahgre River and Tributaries. The Division will establish effluent limitations, consistent with the requirements and assumptions of the TMDL, and as consistent with the Reasonable Potential Analysis described in Part VI.A.4.i, below. Selenium limitations will be applied as necessary in the permit certifications issued to facilities assigned WLAs in the TMDL.

   As part of the renewal, the Division included a provision in the general permit that authorizes including additional effluent limits and other terms and conditions in a certification for discharges to segments for which a TMDL has been completed. The Division will apply a limitation in the certifications consistent with the assumptions and requirements of the TMDL.

e. Determination of Discharges to 303(d) Listed Waters— When reissuing the renewal certifications and for new permit applications under this revised general permit, the Division will assess whether or not any permitted facility discharges to segments, or may effect a downstream portion of a segment, on the 303(d) list of impaired waters. The Division has included a provision in the general permit that authorizes the inclusion of additional effluent limits and other terms and conditions in a certification for discharges to segments that are on the 303(d) list of impaired waters. The determination of whether compliance with numeric effluent limitations is required will be made on a case-by-case basis.

f. Colorado Mixing Zone Regulations – With the exception of facilities discharging to segments assigned TMDLs, the mixing zone regulations do not apply to discharges covered under this general permit, as nearly all effluent limitations are applicable at the point of discharge (end of pipe). The Division is not considering mixing zones for this general permit due to the time and resources required to conduct a thorough analysis of the receiving stream and associated assimilative capacity.

g. Total Phosphorus – If the discharge from a facility, certified under this permit, ultimately impacts a water body subject to a Phosphorus Control Regulation, such as WQCC Regulations 71 – 74, restrictions on the amount of total phosphorus discharged may be placed in the certification under this general permit. These control regulations may impose total phosphorus concentration limitations. No

phosphorus data have been submitted from these facilities in the previous permit term. Reporting requirements and/or limitations will be implemented for facilities discharging to the basins specified by these regulations.

h. Salinity Regulations – In compliance with the Colorado River Salinity Standards and the Colorado Discharge Permit System Regulations (Regulation 39), the permittee shall monitor for total dissolved solids on a quarterly basis when discharging to the Colorado River basin. Data submitted during the previous permit term did not include loading calculations, and also displayed a large range of concentrations both between sites and within sites over time, rendering it difficult to determine compliance with the salinity standards. Therefore, reporting for both concentration and load (lbs/day) will be required in the permit certification.

i. Reasonable Potential Analysis – Regulation 61, Section 61.8(2)(b)(i)(A) requires that permit limitations be placed upon any discharged pollutant that causes or contributes to, or that has the reasonable potential (RP) to cause or contribute to, an exceedance of water quality standards. The Division's RP analysis is based on the Division's procedural guidance Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential, dated December 2013. This guidance document utilizes both quantitative and qualitative approaches to establish RP depending on the amount of available data.

A qualitative determination of RP may be made where ancillary and/or additional treatment technologies are employed to reduce the concentrations of certain pollutants. Because it may be anticipated that the limits for a parameter could not be met without treatment, and the treatment is not coincidental to the movement of water through the facility, limits may be included to assure that treatment is maintained. This is the case for pH, selenium and other metals, and organic compounds in discharges from sand and gravel facilities.

A qualitative RP determination may also be made where a state or federal ELG exists for a parameter. This is the case for iron and fluoride (40 CFR Part 436-Mineral Mining And Processing Point Source Category).

To conduct a quantitative RP analysis, a minimum of 10 effluent data points from the previous 5 years, should be used. The equations set out in the guidance for normal and lognormal distribution, where applicable, are used to calculate the maximum estimated pollutant concentration (MEPC). For data sets with non-detect values, and where at least 30% of the data set was greater than the detection level, MDLWIN software is used consistent with Division guidance to generate the mean and standard deviation, which are then used to establish the multipliers used to calculate the MEPC. If the MDLWIN program cannot be used the Division's guidance prescribes the use of best professional judgment.

For some parameters, recent effluent data or an appropriate number of data points may not be available, or collected data may be in the wrong form (dissolved vs total) and therefore may not be available for use in conducting an RP analysis. Thus, consistent with Division procedures, monitoring will be required to collect samples to support a RP analysis and subsequent decisions for a numeric limit. A compliance schedule may be added to the permit to require the request of an RP analysis once the appropriate data have been collected.

For other parameters, effluent data may be available to conduct a quantitative analysis, and therefore an RP analysis will be conducted to determine if there is RP for the effluent discharge to cause or contribute to exceedances of ambient water quality standards. The guidance specifies that if the MEPC exceeds the maximum allowable pollutant concentration (MAPC), limits must be established and where the MEPC is greater than half the MAPC (but less than the MAPC), monitoring must be established.

Where there is no RP, no concentration based effluent limit is included. However, the division has prescribed ongoing monitoring to inform future RP analyses and TMDL implementation.

j. Intake Credits – The Division included a discussion of intake credits in this fact sheet in response to questions and written input received during the pre-public notice stakeholder process. In response comments received on the draft permit, the Division took a second look at the potential applicability of intake credits under the general permit. In doing so, the Division re-reviewed all available EPA guidance, including the EPA Region 8 memo on Intake Credits and the Region 5 Great Lakes System (GLS) rule which both discuss the application of intake credits.

In general terms, an intake credit refers to the extent that the presence of a pollutant in intake waters should be considered when conducting a reasonable potential analysis and in the establishment of effluent limitations. Allowances for intake credits under the Clean Water Act were originally designed to apply in the context of cooling water intake structures or similar water uses where water from a surface water diversion was not chemically modified before it was discharged to the same stream. Intake credits may be available for other industrial processes, but are only allowed under very specific circumstances. Regulation 61 prohibits the Division from issuing intake credits if issuance would be inconsistent with federal law (Regulation 61.8(2)(d)(i)).

As a preliminary matter, the Division concludes that intake credits incorporated into the general permit on an industry-wide basis are not appropriate under state or federal law. This position is consistent with numerous court decisions that have held that the application of intake credits can only be analyzed in the context of a particular factual setting. *See American Iron & Steel Inst. v. EPA*,115 F.3d 979, 999 (D.C. Cir.1997), *citing NRDC v. EPA*, 859 F.2d 156, 204-205 (D.C. Cir. 1988); *Diamond Shamrock Corp. v. Costle*, 580 F.2d 670, 674 (D.C. Cir. 1978).

Intake credit availability differs based on the effluent limitation in the permit. Intake credit rules vary for technology-based effluent limits ("TBELs"), water quality based effluent limits ("WQBELs"), and WLAs assigned under a TMDL. The draft sand and gravel general permit contains TBELs, WQBELs, and WLA requirements. Any intake credits incorporated into the draft general permit must be consistent with EPA's requirements for TBELs, WQBELs, and WLAs.

Intake Credits for a TBEL - EPA allows intake credits for TBELS if a discharger demonstrates that the intake water is drawn from the same body of water into which the discharge of effluent is made. 40 CFR §122.45(g)(4). The application of intake credits for TBELs is not at issue for this permit.

Intake Credits for a WQBEL - National federal guidelines for intake credits for WQBELs have not been codified. EPA takes different approaches for WQBEL intake credits at a regional level. For many years, the Division relied upon a 1992 EPA Region 8 memo for guidance. EPA also adopted more official intake credit guidance for WQBEL in the Water Quality Guidance for the Great Lakes System (EPA Region V). 60 F.R. 15366. The Great Lakes System approach is not a legal requirement in Colorado since it only applies to EPA Region 7 states. However, the Division reviewed this approach as useful guidance to aid in its determination of whether intake credits could be applied. The Region VIII and Region V approaches are consistent, but the Great Lakes System rule is' much more comprehensive.

Under the 1992 EPA Region 8 memo approach, intake credits are only available if: 1) the industrial activity discharging water in no way modifies the intake water character; 2) the point of diversion is the same waterbody as the point of discharge; and 3) the time of the discharge does not create a water quality standard exceedance that would not occur otherwise.

Under the Great Lakes System approach, EPA developed procedures for considering intake pollutants in determining reasonable potential and for establishing WQBELs. EPA has allowed Great Lakes States to

determine that there is no reasonable potential for the discharge of an identified intake pollutant or pollutant parameter to cause or contribute to an excursion above a narrative or numeric water quality standard where a discharger specific demonstration is made in accordance with Procedure 5 of 40 C.F.R. §132 Appendix F. This demonstration must be made as part of a permit application, and must show that all five of the following conditions are satisfied:

1) The facility withdraws 100 percent of the intake water containing the pollutant from the same body of water into which the discharge is made
2) The facility does not contribute any additional mass of the identified intake pollutant to its wastewater
3) The facility does not alter the identified intake pollutant chemically or physically in a way that would cause adverse impacts to occur that would not occur if the pollutants were left in the stream;
4) The facility does not increase the identified intake pollutant concentration
5) The timing and location of the discharge would not cause adverse water quality impacts to occur that would otherwise not occur if the identified intake pollutant were left in the stream. 40 C.F.R. §132 Appendix F Procedure 5.D.3.

1) Same Body of Water requirement:

In order to be considered the same body of water under Procedure 5, the permitting authority must determine that a pollutant in the intake water would have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee. This can be demonstrated by showing that 1) the background concentration of the pollutant in the receiving water and the intake and the receiving water are the same; 2) there is a direct hydrologic connection between the intake and discharge points; 3) and the water quality characteristics are similar in the intake and receiving waters. An intake pollutant from groundwater may be considered to be from the same body of water if the permitting authority determines that the pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee. Importantly, a pollutant is not from the same body of water if the groundwater contains the pollutant partially or entirely due to human activity, such as industrial, commercial, or municipal operations, disposed actions, or treatment processes (40 C.F.R. §132, Appendix F, Procedure 5 D.2).

The Division concluded that there has not been a sufficient demonstration that all sand and gravel facilities covered under the permit can sufficiently demonstrate the "same body of water" requirements under the Great Lakes System approach. Some commenters have argued that alluvial groundwater flowing into sand and gravel should generally be considered the same "body of water" as a surface water stream, based in part on assumptions of Colorado water rights administration and Water Quality Control Commission standards for alluvial wells. While these arguments have been made in general terms, they do not include site-specific analyses about intake and receiving water quality, hydrologic connection, and discharge characteristics for each covered facility. It is problematic to make general conclusions about the characteristics of the intake and discharge locations of all sand and gravel operations in the State of Colorado in the context of a general permit. Each individual mining operation has unique hydrology, and water that collects in a gravel pit may come from various sources. Making this conclusion on a state-wide basis is also inconsistent with previous decisions in the federal case law cited above.

2) Contribution of Additional Mass of Identified Pollutants:

Under the Great Lakes System approach, EPA also allows states to consider intake pollutants in establishing effluent limits where reasonable potential exists. A permitting authority can establish limits based on a principle of "no net addition" (i.e., the limit would allow the mass and concentration of the pollutant to discharge up to the mass and concentration of the pollutant in the intake water. The

permitting authority may establish effluent limitations allowing the facility to discharge a mass and concentration of the pollutant that are no greater than the mass and concentration of the pollutant identified in the facility's intake water ("no net addition limitations"). This procedure allows the discharge to design and operate its treatment system to only remove the mass and concentration of the pollutant contributed by their operations. This determination can only be made if a permittee can also demonstrate that the intake water is from the "same body of water" as the receiving water.

As stated previously, Division concluded that there has not been a sufficient demonstration that all sand and gravel facilities covered under the permit can sufficiently demonstrate the "same body of water" requirements; therefore the Division cannot issue an intake credit based solely on an analysis of the contribution of pollutant mass. However, looking at this issue independently, the Division also cannot concluded that, that "no reasonable potential" exists if intake credits were granted on an industry-wide basis to all covered facilities. There is not sufficient information about the individual intake and receiving water quality, and the water quality characteristic of the effluent being discharged from covered facilities to conclude that no reasonable potential exists. Furthermore, there is not sufficient information to determine the mass and concentration of intake water bodies and receiving water bodies. Without this information, the Division cannot conclude that all sand and gravel facilities throughout the state do not contribute additional mass of pollutants, are not increasing intake pollutant concentrations, do not alter the intake pollutant in a way that would cause adverse impacts, and are not timing their discharge in a way that would cause adverse water quality impacts.

Intake Credits when a TMDL has been established – As a general rule, intake credits are generally not available for waterbodies where a TMDL has been established. The development of a TMDL process is the preferred mechanism for addressing the equitable division of the loading capacities in non-attainment waters (see 60 FR 15371). Discharge limitations in a WLA apply regardless of background water quality. Any application of intake credits to WLAs would need to occur through the TMDL process rather than a permitting process. Here, a TMDL has already been established on the Gunnison River and Tributaries, Uncompahgre River and Tributaries. The concept of intake credits was raised during the TMDL development process. Intake credits were not applied in the development of selenium TMDLs being implemented in this permit. Intake credits cannot be independently established along these stretches as part of the permitting process. The TMDL specifically identifies sand and gravel operators as a point-source contributor of selenium. (TMDL, p. 57-58). Water treatment at sand and gravel facilities typically consists of retention in settling ponds, and little, if any selenium removal is accomplished. (TMDL, p. 58).

B. Parameter Evaluation

1. **Total Suspended Solids (TSS)** – Limitations for TSS in the renewal permit are based on both the federal ELG (as applicable to discharges from specific mining commodities) and Regulation 62.

   - *Industrial Sand and Graphite Mining*: The federal ELG (40 CFR Part 436) is applied to discharges consistent with Regulation 62.

   - The Regulation 62 TSS limitations are applied to all other process water discharges authorized by the permit, for which a federal ELG for TSS does not exist.

These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

2. **Oil and Grease** – Limitations for Oil and Grease in the renewal permit are based on Regulation 62.

This limitation is the same as that contained in the previous permit and is imposed upon the effective date of this permit.

3. **pH** – This parameter is limited by the water quality standards of 6.5-9.0 s.u., as this range is more stringent than other applicable standards. This limitation is the same as that contained in the previous permit and is imposed upon the effective date of this permit.

4. **Selenium**

   a. *Discharges to stream segments subject to the selenium TMDL* – The EPA approved a selenium TMDL for the Gunnison River and Tributaries, Uncompahgre River and Tributaries, in February 2011. The TMDL affects non-attainment portions of 12 stream segments in these water sheds. Currently, sand and gravel facilities discharge to 4 segments included in this TMDL as follows;

      Lower Gunnison- COGULG01, COGULG02
      North Fork of the Gunnison- COGUNF03
      Uncompahgre River- COGUUN04b

      The Division will implement a waste load allocation (WLA) in the permit certifications for facilities discharging within the segments listed in the TMDL consistent with the requirements and assumptions of the TMDL. In addition, consistent with Regulation 61.8(2)(i), all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of concentration and mass or concentration and flow. Therefore, for facilities that are subject to a mass-based WLA for selenium, the Division may also implement a concentration-based limitation for selenium in the permit certification, based on a quantitative reasonable potential (RP) analysis as described in Part VI.A.4.i.

      For existing sand and gravel dischargers, the mass-based WLA listed in the TMDL for each segment is noted as 'WLA Sand and Gravel' or 'WLA' depending on the segment. A separate allocation for each facility was not assigned in the TMDL. Rather, to allow flexibility in implementation, the WLA for all sand and gravel facilities on a given segment is listed collectively, as one allocation (lbs/day). Thus, where more than one sand and gravel discharger is present on a segment, implementation of limitations for specific dischargers may be based on, or adjusted from, the design flow of the facility at the time of the TMDL, and the presence or absence of other sand and gravel dischargers on the segment since the development of the TMDL. For new sand and gravel dischargers, loading allocations may be based on the collective allocation within the TMDL, the 'WLA Reserve,' where applicable, or the water quality standard will be applied end of pipe.

      For all facilities, concentration-based limitations may be based on mixing zone considerations, where consistent with the TMDL. The TMDL notes that in some months certain segments may be in attainment (assimilative capacity is available) of the standard. As a result, the concentration-based limitations in these months may incorporate dilution, where available, using the monthly low flows documented in the TMDL.

   b. *Discharges to 303(d) waters listed for selenium* – Consistent with Division practice, this permit establishes monitoring requirements for these pollutants until such time as the TMDL(s) is complete and waste load allocations have been determined.

      The Division will require sampling and reporting of selenium data for discharges to 303(d) listed waters impaired for selenium. At a minimum, the sampling and reporting will be a "monitor and report" requirement. The Division may determine whether compliance with numeric effluent limitations is also required, on a case-by-case basis.

5. **Site Specific Organics, Inorganics, and Metals** – The Division may make a case-by-case determination as to whether organics, inorganics, and metals are potential pollutants of concern that must be limited and/or monitored to protect the classified uses assigned to the receiving water. The case-by-case determination will be made based on the chemicals used in the treatment process, pollutants of concern for the industrial sector, the potential for characterization of the mine dewatering water to change due to locations of contaminant plumes (such as Leaking Underground Storage Tanks, Corrective Action sites, Voluntary Clean-Up sites, Superfund site, etc.), and data used to characterize the mine water.

   a. *Discharges to 303(d) waters listed for arsenic, iron and manganese*: The Division may require sampling and reporting of iron and manganese data for discharges authorized under this permit, as they have been identified as pollutants that dewatering activities can increase in pollutant concentration and loading due to their presence in the dewatering environment. The Division also considered requiring sampling and reporting of arsenic data for discharges to 303(d) waters listed for arsenic, since arsenic is also present in the dewatering environment, it can be affected by the discharge activity. Due to the uncertainty in the underlying standard and the limitation of 'current conditions' for facilities existing prior to June 2013, the Division decided not to impose this requirement for this permit term.

      The effluent data collected during the course of this permit term will be used to make a new reasonable potential determination at the time of permit renewal in accordance with Clean Water Policy 1, Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential."

      The limitations for organics, inorganics, and metals are based upon the water quality standards contained in Regulation 31 and the basin regulations (Regulations 32-38). Standards for metals in the basin regulations that are shown as Table Value Standards (TVS) must be derived from equations that depend on the receiving stream hardness or species of fish present. These equations can be found in the basin regulations (Regulations 32-38).

      The effluent data collected during the course of this permit term will be used to make a new reasonable potential determination at the time of permit renewal in accordance with Clean Water Policy 1, Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential."

6. **Electrical Conductivity (EC or Specific Conductivity)** - Consistent with the discussion at A.3.a of this section, reporting for this parameter will be included in the permit certification.

7. **Whole Effluent Toxicity (WET) Testing** – The Division anticipates that the majority of discharges from sand and gravel facilities will not require WET testing; however, some discharges covered under this general permit may exhibit whole effluent toxicity based on the potential pollutant concentrations in the discharge (e.g., chemical additive use, or treatment or production processes that add pollutants to the discharge). Therefore, WET monitoring requirements or limitations may be imposed in the permit certification, on a case-by-case basis.

   For most certifications covered by this permit, a mixing zone is not applicable, and the low flow is considered to be zero. Therefore, consistent with the Division WET policy [Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010)], chronic WET testing will generally be applied in the permit certification. The WET dilution series will be specified in the certification, and will be 0% effluent (control), 20%, 40%, 60%, 80%, and 100% (effluent) for facilities for which a mixing zone is not applicable.

However, on a site-specific basis, the Division may apply acute WET testing requirements in the permit certification, consistent with the Division WET policy referenced above, for facilities that demonstrate to the Division that they qualify for acute WET testing.

The permittee should read the WET testing section of Part I.D and Appendix B of the permit carefully, as this information has been updated in accordance with the Division's updated WET policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010). These sections of the permit outline the test requirements and the required follow-up actions the permittee must take to resolve a toxicity incident. The permittee should also read the above mentioned policy, which is available on the Permit Section website. The permittee should be aware that some of the conditions outlined above may be subject to change if the facility experiences a change in discharge, as outlined in Part II.A.2. of the permit. Such changes shall be reported to the Division immediately.

C. Parameter Speciation

1. **Total / Total Recoverable Metals (EXCEPT Arsenic)**

For standards based upon the total and total recoverable methods of analysis, the limitations are based upon the same method as the standard.

2. **Dissolved Metals / Potentially Dissolved**

For metals with aquatic life-based dissolved standards, effluent limits and monitoring requirements are typically based upon the potentially dissolved method of analysis, as required under Regulation 31, Basic Standards and Methodologies for Surface Water. Thus, effluent limits and/or monitoring requirements for these metals will be prescribed as the "potentially dissolved" form.

3. **Dissolved Iron and Dissolved Manganese if WS based**

The dissolved iron and chronic manganese standards are drinking water-based standards. Thus, sample measurements for these two parameters must reflect the dissolved fraction of the metals.

4. **Fluoride if WS based**

The fluoride standard is a drinking water-based standard. Therefore, to conservatively protect drinking water uses, sample measurements for this parameter must reflect the total fluoride method.

VII. ADDITIONAL TERMS AND CONDITIONS

A. Monitoring

Effluent Monitoring – Effluent monitoring is required as shown in the general permit document. Refer to the permit certification for locations of monitoring points. Monitoring requirements have been established in accordance with the frequencies and sample types set forth in the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities.

B. Reporting

Discharge Monitoring Report – Facilities authorized under this permit must submit Discharge Monitoring Reports (DMRs). The final permit includes the requirement for electronic submission of DMRs to the division. Prior to December 21, 2016, the permittee may elect to electronically submit DMRs instead of mailing paper DMRs by using the EPA's Net-DMR service. Starting on December 21, 2016, the permittee must electronically report DMRs by using the EPA's Net-DMR service unless a waiver is granted in compliance with 40 CFR 127.

For those facilities subject to a WLA and associated concentration based WQBEL in the permit certification, DMRs shall be submitted on a monthly basis to assure loading calculations are as accurate as possible. DMRs shall be submitted on a quarterly basis for all other facilities. These reports should contain the required summary of the test

results for all parameters and monitoring frequencies identified in the permit certification. See the permit, Part I.F, for details on such submission.

Many facilities statewide are required to submit monthly DMRs, though the practice for the sand and gravel industry has been quarterly submission to reduce the burden to the permittees. For sand and gravel facilities subject to a selenium WLA, the increased DMR burden (monthly) is necessary to incorporate monthly variations in dilution that are included in the TMDL, which may result in monthly effluent limitations.

The Division considered requiring monthly DMR submittal to improve the accuracy of salinity loading for facilities discharging to the Colorado River basin. However, the Division found that more accurate salinity loading information can be obtained by requiring permittees to report quarterly total flow as well as a TDS concentration.

Special Reports – Special reports are required in the event of an upset, bypass, or other noncompliance. Please refer to Part II.A. of the permit for reporting requirements. Permittees are no longer required to submit these reports to the US Environmental Protection Agency Region VIII.

C. Spills

Spill requirements apply to materials spilled that result in their presence in the discharge authorized under this permit. Spills that may cause pollution of state waters that are not discharged through an outfall authorized under this general permit are not within the scope of this general permit and are required to be reported in accordance with the Colorado Water Quality Control Act 25-8-601(2), since the Division views these actions as not authorized under the scope of a discharge permit. Additional information regarding reporting of unauthorized spills is contained in the Divisions Guidance for Reporting Spills.

D. Signatory and Certification Requirements

Signatory and certification requirements for reports and submittals are discussed in Part I.F.4 of the permit.

E. Compliance Schedules

Existing dischargers may be granted compliance schedules for any new effluent limitations applicable to the discharge. Some items requiring a compliance schedule may require an individual permit.

F. Economic Reasonableness Evaluation

Section 25-8-503(8) of the revised (June 1985) Colorado Water Quality Control Act required the Division to "determine whether or not any or all of the water quality standard based effluent limitations are reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons, and are in furtherance of the policies set forth in sections 25-8-192 and 25-8-104."

The Colorado Discharge Permit System Regulations, Regulation No. 61, further define this requirement under 61.11 and state: "Where economic, environmental, public health and energy impacts to the public and affected persons have been considered in the classifications and standards setting process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

1. A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or
2. In the case of a continuing discharge, additional information or factors have emerged that were not anticipated or considered at the time of the classification and standards rulemaking."

The evaluation for this permit shows that the Water Quality Control Commission, during their proceedings to adopt the basin regulations, considered economic reasonableness.

Furthermore, no new information has been presented regarding the classifications and standards. Therefore, the water quality standard-based effluent limitations of this permit are determined to be reasonably related to the

economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104. If a party that desires coverage under this general permit disagrees with this finding, pursuant to 61.11(b) (ii) of the Colorado Discharge Permit System Regulations, they should submit all pertinent information to the Division during the public notice period.

VIII. PUBLIC NOTICE COMMENTS – See Appendix B for Division Response to Public Comments document.

IX. REFERENCES

A. Colorado Department of Public Health and Environment, Water Quality Control Division Files, for Permit Number COG500000.

B. Basic Standards and Methodologies for Surface Water, Regulation No. 31, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective January 31, 2013.

C. Classifications and Numeric Standards for Arkansas River Basin, Regulation No. 32, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective December 31, 2013.

D. Classifications and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), Regulation No. 33, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2013.

E. Classifications and Numeric Standards for Upper San Juan River and Dolores River Basins, Regulation No. 34, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2013.

F. Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins, Regulation No. 35, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2013.

G. Classifications and Numeric Standards for Rio Grande Basin, Regulation No. 36, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective December 31, 2013.

H. Classifications and Numeric Standards for Lower Colorado River Basin, Regulation No. 37, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2013.

I. Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin, Regulation No. 38, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2013.

J. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective January 30, 2012.

K. Regulations for Effluent Limitations, Regulation No. 62, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective July 30, 2012.

L. Colorado River Salinity Standards, Regulation No. 39, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective August 30, 1997.

M. Colorado's Section 303(d) List of Impaired Waters and Monitoring and Evaluation List, Regulation No 93, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective April 30, 2010.

N. Antidegradation Significance Determination for New or Increased Water Quality Impacts, Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December 2001.

O. Memorandum Re: First Update to (Antidegradation) Guidance Version 1.0, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 23, 2002.

P. Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December 2013.

Q. The Colorado Mixing Zone Implementation Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 2002.

R. Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Domestic and Industrial Wastewater Treatment Facilities, Water Quality Control Division Policy WQP-20, May 1, 2007.

S. Implementing Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (WET) Testing. Colorado Department of Public Health and Environment, Water Quality Control Division Policy Permits-1, September 30, 2010.

T. Code of Federal Regulations, 40 CFR Part 132, Water Quality Guidance for the Great Lakes System, Office of the Federal Register, Government Printing Office, effective July 24, 1975 and as amended.

U. Code of Federal Regulations, 40 CFR Part 443, Paving and Roofing Materials (Tars and Asphalt) Point Source Category, Office of the Federal Register, Government Printing Office, effective July 1, 2015.

V. Code of Federal Regulations 40 CFR Part 436, Mineral Mining And Processing Point Source Category Point Source Category, Office of the Federal Register, Government Printing Office, effective October 16, 1975 and as amended.

W. McKee, Jack and Harold Wolf, Water Quality Criteria ("California Book") Sacramento, State of California Water Resources Control Board, 2nd Ed. 1963

X. Environmental Protection Agency, Office of Wastewater Management, Water Permitting 101. Available at: https://www3.epa.gov/npdes/pubs/101pape.pdf. Last accessed October 10, 2016.

Y. Environmental Protection Agency. Final Water Quality Guidance for the Great Lakes System. 60 Fed. Reg. 15366, March 23, 1995.

Z. Environmental Protection Agency Region VIII. Intake Credits. Memo Ref: 8WM-WQ, March 2, 1992.

APPENDIX A – Description of Standard Industrial Classification (SIC) Code Major Group 14 facilities

Major group 14 includes establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals, except fuels.

Dimension Stone (SIC code 1411) - Establishments primarily engaged in mining or quarrying dimension stone. Also included are establishments engaged in producing rough blocks and slabs.

Crushed and Broken Limestone (SIC code 1422) - Establishments primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa.

Crushed and Broken Granite (SIC code 1423) - Establishments primarily engaged in mining or quarrying crushed and broken granite, including related rocks, such as gneiss, syenite, and diorite.

Crushed and Broken Stone, Not Elsewhere Classified (SIC code 1429) - Establishments primarily engaged in mining or quarrying crushed and broken stone, not elsewhere classified.

Construction Sand and Gravel (SIC code 1442) - Establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, or otherwise preparing sand and gravel for construction uses.

Industrial Sand (SIC code 1446) - Establishments primarily engaged in operating sand pits and dredges, and in washing, screening, and otherwise preparing sand for uses other than construction, such as glassmaking, molding, and abrasives.

Kaolin and Ball Clay (SIC code 1455) - Establishments primarily engaged in mining, milling, or otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay.

Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified (SIC code 1459) - Establishments primarily engaged in mining, milling, or otherwise preparing clay, ceramic, or refractory minerals, not elsewhere classified.

Potash, Soda, and Borate Minerals (SIC code 1474) - Establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds.

Phosphate Rock (SIC code 1475) - Establishments primarily engaged in mining, milling, drying, calcining, sintering, or otherwise preparing phosphate rock, including apatite.

Miscellaneous Nonmetallic Minerals, Except Fuels (including Graphite) (SIC code 1499) - Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing nonmetallic minerals, except fuels. This industry includes the shaping of natural abrasive stones at the quarry.

APPENDIX B – See Division Response to Public Comments document for Appendix B.

Attachment 3
Control Measures Installation, Implementation, and Maintenance Requirements

Attachment 2
Control Measures Installation, Implementation, and Maintenance Requirements

The following Control Measures are in use at Sand Creek Farm (the Site):

- Drainage to mine pits

1. Drainage to Mine Pits

Installation and Implementation. The drainage of the Site to the mine pits is integrated into the design and construction of the Site. The mine pits are to the north of (downgradient from) the Site entrance, the access road at 64th Avenue, the parking and equipment storage area, and any haul roads. Any stormwater discharge from these areas will flow to the mine pits. Stormwater runoff entering the mine pits is expected to infiltrate into the subsurface within 72 hours. There will be no discharge from the mine pits under most conditions. Under a large storm scenario, there will be a discharge after the mine pit fills with runoff. The mine pits provide a sediment control measure and also provide an opportunity to prevent the release of a spill to waters of the State.

Maintenance. The drainage of the Site to the mine pits is mainly a function of the grading on the site and minimal maintenance is required. If erosion occurs that threatens to result in the release of sediment off-site, it will be corrected by re-grading as needed.

Attachment 4
List of Required Sampling, Recordkeeping, and Reporting

Sand Creek Farms
LIST OF REQUIRED SAMPLING, RECORDKEEPING AND REPORTING

1) Outfall 001-A requires one Visual Sample each quarter

   The Visual Sample should be inspected for:
   a) Color;
   b) Odor;
   c) Clarity;
   d) Floating solids;
   e) Settled solids;
   f) Suspended solids;
   g) Foam;
   h) Oil sheen; and
   i) Other obvious indicators of stormwater pollution.

2) Four Inspections per year for entire site
3) One Annual Report for entire site
4) One Annual Training

Attachment 5
Quarterly Visual Monitoring Form

SAND CREEK FARM OUTFALL 001-A
QUARTERLY SAMPLING FORM

Quarterly Visual Sample Form

Sample Location	001-A	Runoff or Snowmelt:	
Date of Collection		Name of Person Sampling	
Time of Storm Event		Time Collected	

____ Check here if unable to collect quarterly sample.

If sample was not collected within 30 minutes of a measurable storm event, document reason.

Visual Assessment. Signature of Person Conducting Visual Assessment: _____

Date		Time	

Assessment Parameter	Observations
Color	
Odor	
Clarity	
Floating solids	
Settled solids	
Suspended solids	
Foam	
Oil sheen	
Other obvious indicators of stormwater pollution	

Possible Sources of Any Stormwater Contamination

Attachment 6
Quarterly Inspection and Maintenance Report Form

QUARTERLY STORMWATER INSPECTION FORM

Site Name: _____ Date & Time of Inspection _____

Note: Inspections shall be conducted by a qualified person once each calendar quarter and shall be at least 20 days apart. At least one of the annual quarterly inspections must be conducted during a runoff event

Statement of Compliance:
In our judgment, the Site is _____ in compliance _____ not in compliance with the terms and conditions of this permit, with respect to Part I.J.2 (Inspection Scope);

_____ Date: _____ _____ Date: _____
Inspector Responsible Corporate Officer

Print Name _____ Print Name _____

Certification of Inspector:
I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.

_____ Date: _____
Inspector

Print Name _____

Certification of Responsible Corporate Officer:
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ Date: _____
Responsible Corporate Officer

Print Name _____

QUARTERLY STORMWATER INSPECTION FORM

Site Name: _____ Date & Time of Inspection _____

Weather Conditions: _____

List the locations inspected	

Corrective Actions

If the site inspection indicates that the site is out of compliance, provide a summary report and a schedule of implementation of the corrective actions that the permittee has taken or plans to take;

Proposed Corrective Action	Schedule for Implementation

Required Inspection Items	NOTES	INSPECTED & ACCEPTABLE YES	INSPECTED & ACCEPTABLE NO	PROCEDURES TO BRING INTO COMPLIANCE
Are there any discharges during the inspection?				
Inspect stormwater sampling locations and areas where stormwater associated with mining and processing is discharged off-site.				
Are there floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s)?				
What is the condition of and around stormwater outfalls, including flow dissipation measures to prevent scouring?				
Are there illicit discharges or other non-permitted discharges?				
Verify the descriptions of potential pollutant sources required under the permit (see SWMP).				
Verify that the site map in the SWMP reflects current conditions.				

QUARTERLY STORMWATER INSPECTION FORM

Site Name: _____ Date & Time of Inspection _____

Required Inspection Items	NOTES	INSPECTED & ACCEPTABLE YES	NO	PROCEDURES TO BRING INTO COMPLIANCE
Assess all control measures used to comply with the effluent limits.				
i. Effectiveness of control measures inspected.				
ii. Locations of control measures that need maintenance or repair.				
iii. Reason maintenance or repair is needed and a schedule for maintenance or repair.				
iv. Locations where additional or different control measures are needed and the rationale for the additional or different control measures.				
Check off Areas Inspected as appropriate:				
Haul Routes				
Processing Area				
Sediment Basins				
Outfalls (if any)				
Topsoil Stockpiles				
Employee Parking Areas				
Fuel Storage				
Product Stockpiles				
Maintenance Area				
Active Mining				
Best Management Practices				
Are Changes to SWMP Required				
Comments				

QUARTERLY STORMWATER INSPECTION FORM

Site Name: _____ Date & Time of Inspection _____

AREA INSPECTED	Items to Check
Haul Routes	If there evidence of significant erosion along haul roads? Is runoff from haul roads contained on the site?
Processing Area	If there evidence of significant erosion at the Processing Area? Is runoff from the Processing Area contained on the site?
Sediment Basins	Structural control measures will be inspected to verify that they are working as planned and for damage. Sediment buildup will be noted. Check whether sediment basins or ponds need to be cleaned out. Check for signs of erosion and whether the outfall appears to operating properly.
Outfalls (if any)	Does the outfall appears to operating properly? Is the discharge clear (no sediment) with no sign of an oil sheen? Locations where storm water leaves the site will be inspected for evidence of erosion or sediment deposition.
Topsoil Stockpiles	Are areas used for topsoil storage contained? Offsite tracking? Pollutants entering a storm drainage system? Stabilized?
Employee Parking Areas	Is offsite tracking minimized? Is a significant amount of dirt or mud being tracked onto paved surfaces? Equipment and vehicles will be inspected for cracks or leaks that could result in discharge of pollutants.
Fuel Storage	Are areas used for fuel storage, fueling, and chemical storage contained? Are the appropriate BMPs implemented to prevent and contain spills? Are the storage areas located at least 50 feet from a watercourse? Is there any evidence of pollutants are entering a storm drainage system? Is there deterioration or corrosion of drums or tanks? Chemical and petroleum product storage areas will be inspected for leaks or evidence of leaks (staining, etc.). Is there accumulation of material in diked or containment areas?
Product Stockpiles	Are areas used for material storage contained? Offsite tracking? Pollutants entering a storm drainage system?
Maintenance Area	Equipment and vehicles will be inspected for cracks or leaks that could result in discharge of pollutants. Housekeeping, petroleum storage practices, and chemical storage practices will be evaluated.
Active Mining	Are mining areas contained? Offsite tracking? Pollutants entering a storm drainage system?
Best Management Practices/ Control Measures	Are the BMPs performing properly? Is BMP maintenance required? Are additional BMPs needed? A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
Changes to SWMP	Are changes needed in the SWMP? Have previously proposed changes to the SWMP been implemented?

Attachment 7
Annual Report Form

COLORADO
Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

FOR INTERNAL USE ONLY
Reviewer: _____
Further Review: Yes No

COG500000 Annual Report Form
Sand and Gravel Mining and Processing
Applicable to Stormwater-only discharges

Part A: Permit Identification

General Permit Number: **COG500000**

Facility Certification Number COG50_____

Part B: Reporting Period Jan 1 through Dec 31

(Check one. Report due by February 28 of the following year.)

2021 ☐ 2022 ☐ 2023 ☐ 2024 ☐

Part C: Permittee Information

Organization: _____

Mailing Address: _____

_____

City: _____ State: _____ Zip: _____

Part D: Facility Information

Facility Name: _____

Facility Address: _____

_____

City: _____

Facility Contact Name: _____

Title: _____

Telephone No: _____

Email Address: _____

Part E: Permittee-conducted Inspections

Check the box for which inspection frequency applies to the permitted facility, Part I.J.:

Active Site - 4 inspections annually (Quarterly)		**Inactive Site w/ No Exposure** - 2 inspections annually (Spring/Fall)		**Inactive Site w/ Exposure** - 6 inspections annually (Every 2 months)	

Provide the date(s) the inspections were conducted, as required by Part I.J of the permit:

If an inspection(s) was not conducted in accordance with the required frequency, attach an explanation of why.

Part F: Required Monitoring (Indicate if the following monitoring is required at the permitted facility. Refer to the facility's permit certification for information on required monitoring.)	**YES**	**NO**
- Visual Monitoring (Part I.I.1) (If any of the characteristics in Part I.I.1.b are observed, attach a summary)	☐	☐
- Benchmark Monitoring (Part I.I.2)	☐	☐
- Water Quality Standards Monitoring (Part I.I.3)	☐	☐
- Additional Monitoring Required by Division (Part I.I.4)	☐	☐
Part G: Corrective Actions (Indicate whether any of the following conditions occurred at the permitted facility.)	**YES**	**NO**
- An unauthorized release or discharge observed (e.g., spill, leak, discharge of non-stormwater not authorized under COG500000 or another permit);	☐	☐
- Facility control measures are not stringent enough for the discharge to meet applicable water quality standards;	☐	☐
- Modifications to the facility control measures are necessary to meet the practice-based effluent limits in this permit;	☐	☐
- The permittee finds in a facility inspection, that facility control measures are not properly selected, designed, installed, operated or maintained.	☐	☐
- Construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged;	☐	☐
- The average of quarterly sampling results as described in Part I.I.2.e of this permit exceeds an applicable benchmark.	☐	☐

If the answer to any of the above is "YES," provide a description of the conditions that met the criterion/criteria and describe the corrective action(s) taken (attach additional pages as needed):

Part H: Required Certification Signature [Reg 61.4(1)(h)]

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name:	Title:
Signature:	Date signed:

TEMPORARY COVID19 SUBMISSION, digitally signed documents may be emailed to: cdphe.wqrecordscenter@state.co.us

Attachment 8
Annual Training Form

Training Log

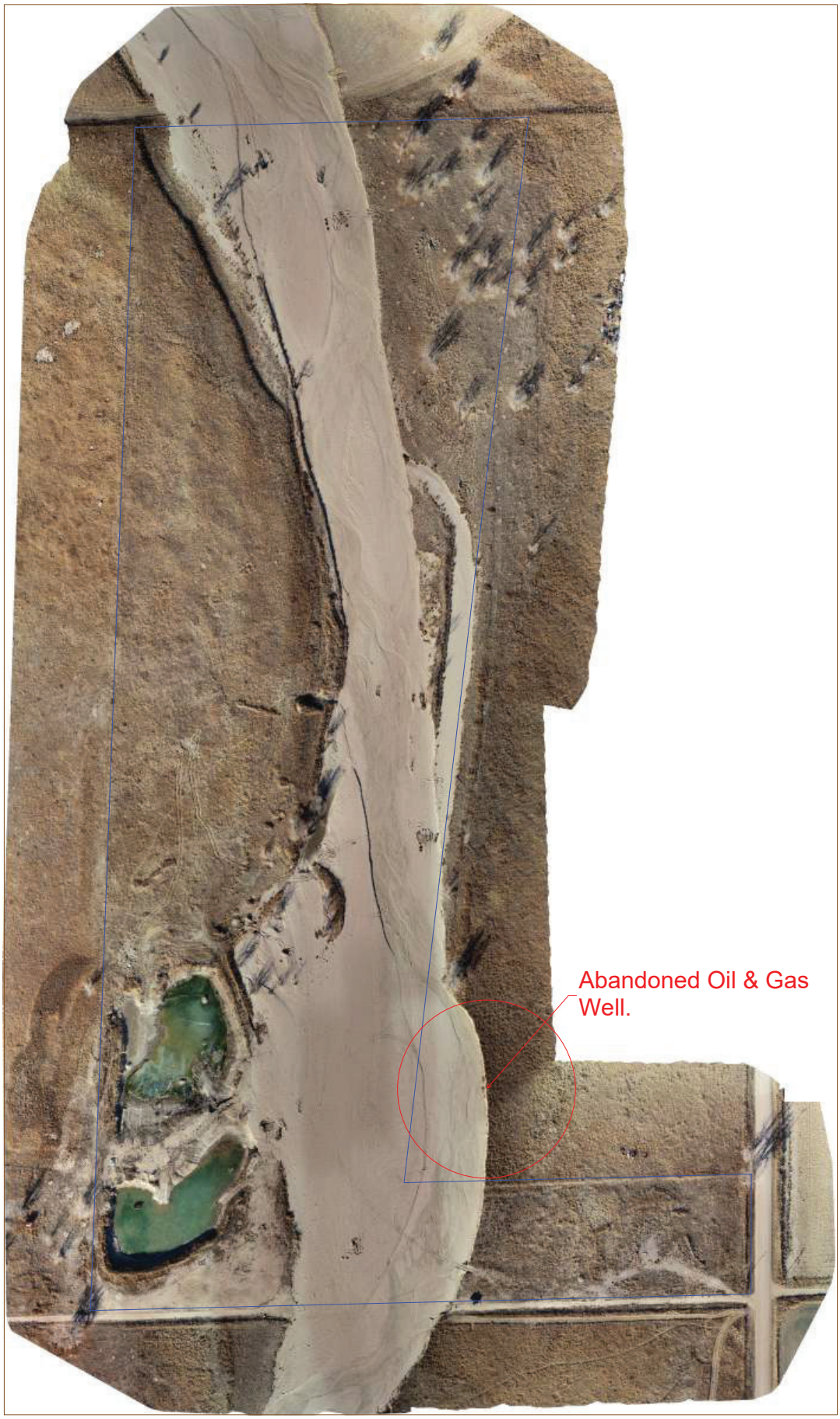
Site Name:		Date:	Page of
Trainer:		Training Agenda	☐ Agenda attached. ☐ Standard agenda ____
Trainer's Notes:			

Name: PLEASE PRINT	ID No.	Signature

Attachment H

Existing Oil and Gas Well

(Plugged and Abandoned)



Sand Creek Farms OGT 231206

KelleyTrucking inc.
Earthmoving Contractors
Golden, CO • kelleytruckinginc.com

COGIS WELL SCOUT CARD

Related Insp MIT GIS Doc COA Wellbore Orders Bradenhead

This operator is no longer active in the State of Colorado.

Surface Location
API# 05-001-06339

Well Classification: DA **Status: PA - 12/15/1971**

Well Name/No:	VAN MATRE #1 (Click Well Name for Production Data)	Click Here for Transporter Gatherer Info	
Operator:	TOLTEK DRILLING CO - 88850 (Click Operator Name for Company Detail Report)	Federal Or State Lease #:	
Facility Status:	PA	Status Date	12/15/1971
FacilityID:	**200936**	LocationID:	375471
County:	ADAMS #001	Location:	SESE 3 3S61W 6
Field:	WILDCAT - #99999	Elevation:	5035 ft.
Planned Location:	600FSL 600 FEL	Lat/Long: 39.813304 / -104.191199	Lat/Long Source: Calculated From Footages

Collapse Section

Wellbore Data for Original Wellbore

Wellbore Classification: DA PA - 12/15/1971 Measured TD: 6839 ft. Vertical TD: 0 ft.

Wellbore Permit

Permit #:	19710666	Expiration Date:	12/12/1972
Prop Depth/Form:	7000 ft.		
Surface Mineral Owner Same:	Not available		
Mineral Owner:	FEE	Surface Owner:	Not available
Unit:		Unit Number:	
Formation And Spacing:	Code: JSND , Formation: J SAND , Order: 0 , Unit Acreage: 80, Drill Unit: S2SE		

Primary Well Designation: None *i*

All Designations		Date
Reported Plugged	N	
Out Of Service Repurposed	N	
Out Of Service	N	
Inactive Exception	N	
Noticed Inactive	N	
Defined Inactive	N	
Low Producing	N	

BOE/MCFE/GOR Calculations Production for Previous 12 Months

July 2023 - June 2024 *i*	
Total Oil Produced (Barrels)	0
Total Gas Produced (MCF)	0
GOR	
GOR Determination	
Average BOE per Day	0.000
Average MCFE per Day	0.000

Federal Financial Assurance	*i*	

Tribal Well	*i*	No

Wellbore Completed

Completion Date:	12/15/1971		
Spud Date:	12/6/1971	Spud Date Is:	ACTUAL
Measured TD:	6839 ft.	Measured PB depth:	0 ft.
True Vertical TD:	0 ft.	True Vertical PB depth:	
Log Types:	(DRESSER ATLAS) IES - DEN		
Casing:	String Type: SURF, Hole Size: 12.5 in., Size: 8.625 in., Top: , Depth: 160 ft., Weight: 24 , Citings Type: ACTUAL		
Cement:	Sacks: 100, Top: , Bottom: , Determination Method:		

Formation Interval Top Log Bottom Cored DSTs

NIOBRARA	5816 ft.
FORT HAYS	6202 ft.
CARLILE	6240 ft.
GREENHORN	6316 ft.
BENTONITE	6538 ft.
D SAND	6635 ft.
J SAND	6687 ft.

Attachment I

Core Electric Will-Serve Letter

The Energy to Thrive™

CORE ELECTRIC COOPERATIVE

August 27, 2024

Jake Brooks
4K Equipment LLC
6201 McIntyre St
Golden, CO 80403

Re: Parcel Number 0811103400002

We are an electric utility operating under the rules and regulations approved by our Board of Directors. The above-referenced parcel of land in Section 3Township 3 South, and Range 61 West of the 6th P.M., County of Adams State of Colorado, is located within our service area.

We are willing to extend our facilities to the proposed project in accordance with our extension policies. When you submit an application for service, the designer assigned will be able to answer any questions concerning the location of electric facilities in relation to the project. Any attempt to identify facilities now may provide inaccurate information due to the phasing of your project and other developments in the vicinity, which may alter the location or type of facilities prior to your request for service.

If you have any further questions, please feel free to contact me.

Sincerely,

Brooks Kaufman
Lands and Rights-of-Way Manager

CORE Electric Cooperative
5496 N. U.S. Highway 85
Sedalia, CO 80135
(800) 332-9540
www.core.coop