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**El Paso County**  
**Stormwater Management Checklist**  
**Stormwater Management Plan**  
**For**  
**Schubert Ranch Sand Resource Pit**  
**COG-50223**

**Prepared by and for:**  
**Ellicott Sand and Gravel LLC, Operator**  
**235 South Franceville Coal Mine Road**  
**Colorado Springs, CO 80292**  
**(602) 558-0846**

**Qualified Stormwater Manager: Christine Wilson**  
**Ellicott Sand and Gravel LLC, Operator**  
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**Revised February 5, 2024**

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Note: The Stormwater Check List is a separate document. It will be signed once El Paso County finds the Stormwater documents final and resubmitted with signatures.



**El Paso County**  
**Stormwater Management Checklist**

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**El Paso County**  
**Stormwater Management**  
**Checklist**

1. **“STORMWAER MANATEMENT PLAN:”**

- 1) *“Applicant (owner/designated operator), SWMP Preparer, Qualified Stormwater Manager, and Contractor Information (On cover/title sheet)”*
- 2) *“Table of Contents”*
- 3) *“Site description and location to include: vicinity map with nearest street/crossroads description”*

a) Site Description:

Portions of the proposed mine area are used as an irrigated commercial sod grass farm and irrigated agricultural fields. These are associated with irrigation pivots on the north and south sides of the permit area.

As stated above, “The site is currently used as irrigated agriculture and rangeland and consists of a deep sand deposit that parallels both sides of Black Squirrel Creek.” (From Pages 5, Exhibit D, Mined Land Reclamation Board Permit Application)

Bisecting the permit area, from north to south, is an ephemeral drainage, Black Squirrel Creek. Big Springs Creek merges with Black Squirrel Creek toward the southern side of the approved permit area. “The landowner has built flow direction berms along the dry creek beds and done some armoring to protect the fields and building from past flooding.” (From Pages 4 & 5, Exhibit D, Mined Land Reclamation Board Permit Application)

b) Location: (From the approved Mined Land Reclamation Board Permit Application.)



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## EXHIBIT A

### LEGAL DESCRIPTION

Part fo the  $S\frac{1}{2}N\frac{1}{2}SE\frac{1}{4}$ ,  $S\frac{1}{2}SE\frac{1}{4}$ , and  $SE\frac{1}{4}SW\frac{1}{4}$  of Section 20, and

The  $E\frac{1}{2}E\frac{1}{2}$  and  $NW\frac{1}{4}NE\frac{1}{4}$  and parts of the  $SW\frac{1}{4}NE\frac{1}{4}$ ,  $SW\frac{1}{4}SE\frac{1}{4}$ , and  $NW\frac{1}{4}SE\frac{1}{4}$  of Section 29 and

The  $E\frac{1}{2}NE\frac{1}{4}$ ,  $SW\frac{1}{4}NE\frac{1}{4}$ , &  $SE\frac{1}{4}NW\frac{1}{4}$ , and parts of the  $NW\frac{1}{4}NE\frac{1}{4}$  &  $NE\frac{1}{4}NW\frac{1}{4}$ , Section 32, Township 14 South, Range 62 West, 6th P.M. El Paso County, Colorado

Containing 733.7 acres more or less.

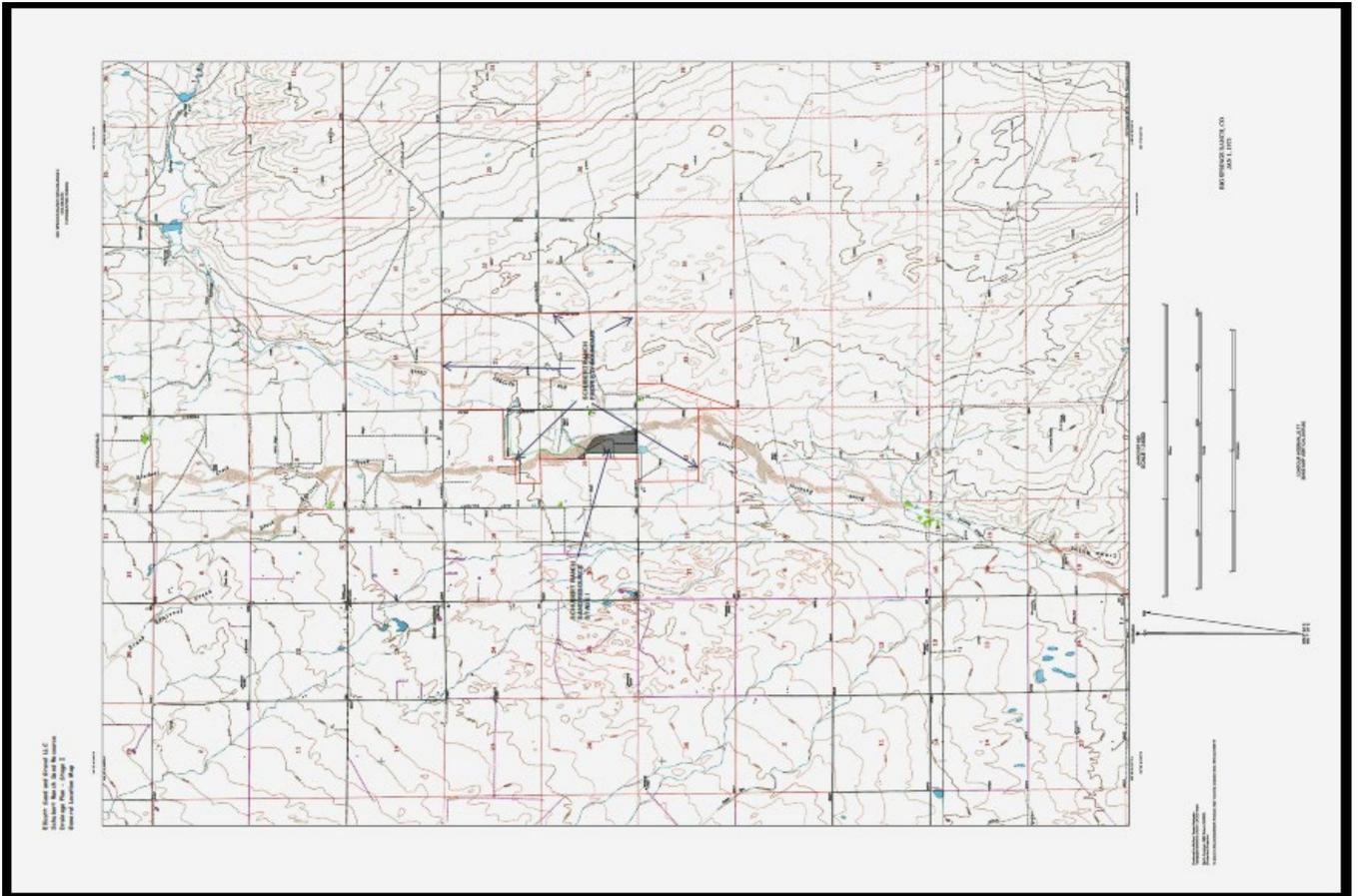
Entrance location Stage I:  ~~$39^{\circ}47'43.59''N, 104^{\circ}21'17.601''$~~

Revised Entrance Location: 2,280 Feet West of Baggett Road on Sanborn Road, or  
 $39^{\circ}47'43.2602'' N, 104^{\circ}21'29.8902'' W$ .



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c) Vicinity Map:



Revised Map



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- 4) *Narrative description of construction activities proposed (e.g., may include clearing and grubbing, temporary stabilization, road grading, utility / storm installation, final grading, final stabilization, and removal of temporary control measures)*

#### **MINING PLAN**

Of the 733.7 acres ± in the permit area a maximum of 561.7 acres ± will be disturbed by the mining operation over the life of the mine. The area is broken into 6 mining stages for sake of discussion. When a stage is opened the 25 foot mining setbacks will be delineated along the permit/affected lands line and 150 feet from the top of the bank along Black Squirrel Creek. If mining will take place near a structure not covered by a Structure agreement a 200 foot setback will be established from the closest structure where on agreement is in place. This setback is Shown on the Mining Plan and Reclamation Plan maps. When a Geotechnical Stability Analysis is approved mining will return to a setback distance consistent with the factors of safety determined by that analysis.

Mining will begin in Stage I west of Black Squirrel Creek and north of Sanborn Road. A 30 acre area will be stripped within the setbacks explained above that will be used as the active mining area, plant site and stockpile area. Mining will move south to north in this stage once a working face that trends east-west across the stage. We expect to mine approximately 35 feet deep in the stripped area creating the first level. Once enough area is open a second 35 foot deep cut will be made to reach the final floor of the mine. This will create two 35 foot

5 (revised 10.31/19)



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MINING PLAN

EXHIBIT D (CONT)

benches that extend from east to west across the stage as shown on the **MINING PLAN MAP - EXHIBIT C-1**. The typical layout of the bench is show on **Figure D-1** following the Mining Timetable. Eventually, an additional 10 acres of partially reclaimed area will be present since reclamation will run concurrent with mining, so the total bonded disturbance allowed will be 40 acres.

There will be a 25-foot or wider digline setback maintained from the permit boundary so there is adequate space on the level above the slope for property line access, setback maintenance, grading and shaping. In Stage VI the setback from the northern house will be between 210 and 215 feet and on the southern ranch complex it will vary from 50 to 130 feet.

As mining progresses across a stage the exterior slope will be mined  $\frac{1}{2}$  to 1 until it is within 55 feet of a stage perimeter then shaped to the final 3:1 rate from the surface to the top of the first bench. Once that slope toe of that slope is established another 55 foot wide vertical mining setback will be established to leave enough material to create the bottom of the 3:1 cut/fill slope along the outer limits of a Stage.

The Plant Site/stockpile area will start on the surface, but once the initial level is reached it will be moved below grade so it is screened below the surrounding areas. **MAP EXHIBIT C-1** shows how the site would look when the mine reaches full production.

On the **Mining Plan Map** the processing/stockpile and partially reclaimed areas covers approximately 22.0 acres, there is 15.0 ac. of bench and working face area and 3.0 acres stripped. The highwall is 500 feet long with approximately 4100 feet being temporary graded to 2h to 1v. As the mining face extends across the property, we will maintain a 500 foot long, near vertical, working face. The remaining highwall will be kept at an interim grade of 2h to 1v. The working face will move from the top bench to the mine floor as it progresses across a given Stage. The plan is to continue to mine into the sand deposit at the mining face until the permit limits are reached. .

Typically mining will be done in cycles. These cycles involve moving a crushing plant into a mine and beginning to process material until there is a six month to 1 year supply of material stockpiled. Once an adequate supply is processed, the processing plant and equipment is moved to another mine. The



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MINING PLAN

EXHIBIT D (CONT)

stockpiles will be used throughout the year by the company. As mining ends on a section of the working face it is temporally graded to 2:1 so it is stable when there are no activities in the mine. Any resoiling and revegetation needed will be completed when the area where material is removed will not be redisturbed. This cycle continues until the mine is played out.

Each time the mine is re-entered, mining begins by setting up the plant and if needed an area is stripped. The salvaged topsoil will be stockpiled along the mine perimeter setbacks or on the mine floor, i.e., in places where it will not be disturbed until needed. Much of the permit area will continue to be used by the owners for their ranching purposes throughout the life of the mine. The approximate location of the soil piles are shown on the **MINING PLAN MAP**.

Mining will begin on a section of the slopes created at the end of the last mining cycle until a near vertical face is open. This face will be worked to the east and west until it extends across the property and at that time mining will progress to the south or north depending on the Stage mining is taking place. As mining progresses thru the site the processing plant will be set near the open face to reduce the haul distance from the mine face.

As mining progresses the plan is to begin to armor both sides of the embankment along the creek channel. The plan entails building the channel side as mining progresses when mining gets within 400 feet of the channel bank. When mining reaches the final dig line on the excavation side that section will be armored. In general, the toe of the armoring will be below the thalweg of the channel, so on the outside it will be 5 ft below and in the inside it will be 3 feet below. The material will be placed a minimum of two (2) feet thick.

The armoring material to be used will be recycled concrete with all exposed rebar removed, that conforms to the definition of Inert Material, available to the Ellicott Sand & Gravel, the exterior slopes will be graded 2.5:1 and the inside slopes will be 3:1. The size of the material will fall in the range of 12 to 36 24 inches with some larger pieces and intermixed with fines and will be placed below grade and on the inside it will be covered with material from onsite. Adequate quantities will be stored onsite, to complete the necessary armoring on any give



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**MINING PLAN**

**EXHIBIT D (CONT)**

section. It will then be seeded when the area is reclaimed. The Typical Armoring Cross Section show on Figure D-2 provides details.

This pit will be operated year-around by Ellicott Sand & Gravel LLC, weather permitting. There may be periods when the demands for material are slow and no mining will take place at which time the mine will become an **Intermediate Operation**. Stockpiles of material will be maintained on the site and as the need arises, it will be hauled to our project sites or sold to the public.

This will be a six stage operation, starting in Stage I and working counter clock wise around the permit area so mining ends in the northeast corner. Generally, mining will be to the north and south depending on what stage is being mined with the mining face extended across each stage from east to west.

Review of **MAP EXHIBIT C-1** shows how we expect the site to look when mining is approximately 20% done. Note, the floor of the excavation is flat and the exterior slopes into the mined area are graded 3:1 where reclaimed, 2:1 when temporary grading is done and near vertical where mining is taking place. Material will be left along the mine perimeter to do a cut/fill sloping operations for the final slopes.

Mining equipment may include but is not limited to, front-end loaders, scrapers, bulldozers, dump trucks and a water truck. Processing equipment may include but is not limited to conveyors, crushers and screen plants. A scale and scale house as well as a shop and maintenance building may also be built at the mine during its life. No blasting will take place at this mine.

As much as possible, the surface drainage will be maintained in the same direction as it now exists. The proposed sloping plan for the excavated area should eliminate any concerns of erosion occurring on the site. The ephemeral drainages will not be disturbed by mining.

On a typical operation of this type we may use up to 3 ac-ft of water per year. Most of the water used for dust control will be used on haul roads. Please refer to **EXHIBIT G - WATER** for the discussion of how water will be used at the site and the source of said water.



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MINING PLAN

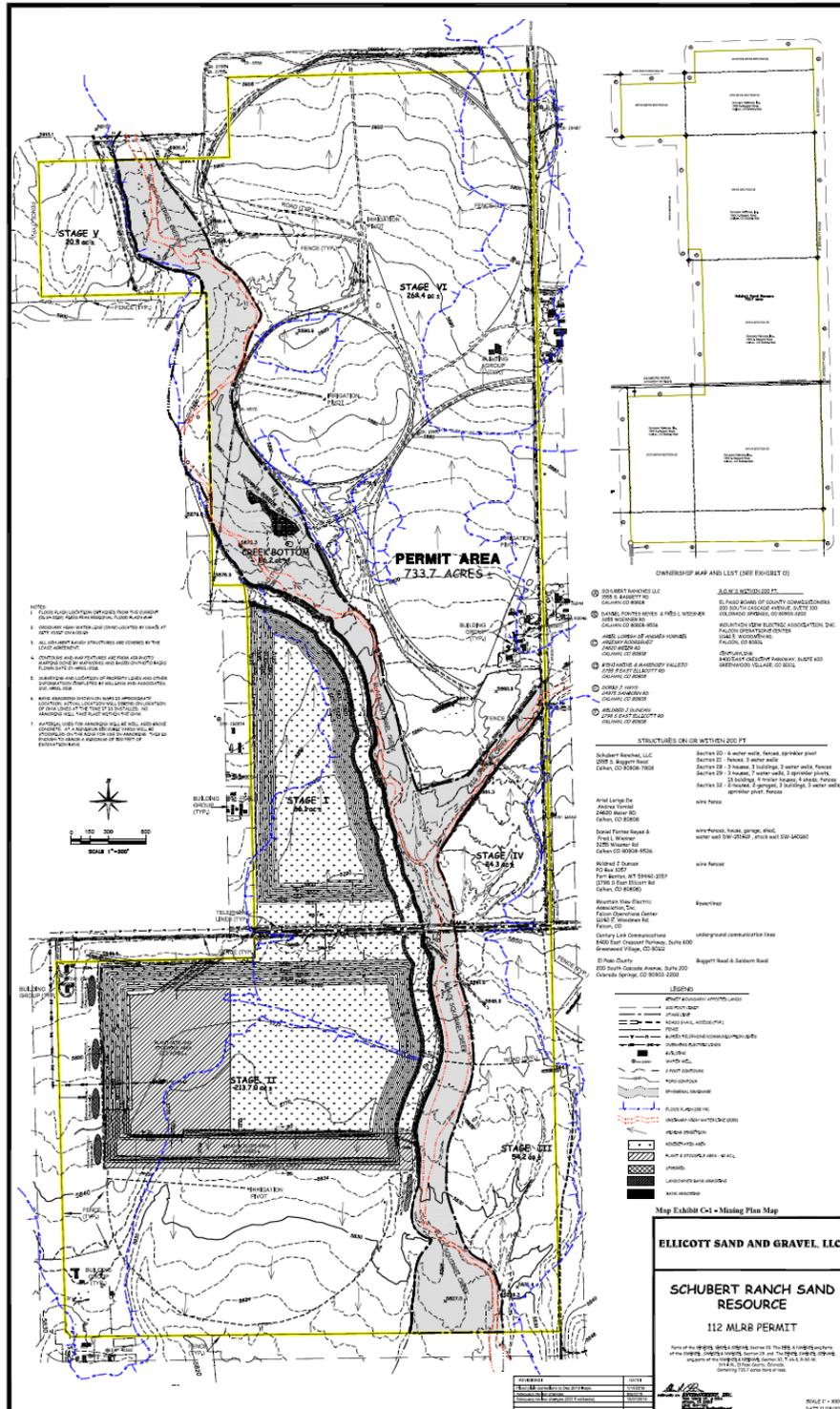
EXHIBIT D (CONT)

There are no ditches crossing the site and no surface or subsurface water will be impacted by the mining operation. All interior pit slopes will be maintained with a pit-ward attitude so that historic drainage patterns can be maintained. This same slope management plan will prevent any offsite slides or other disruptions. Isolation berms or ditches will be constructed around the active mining area to prevent off site stormwater from contacting the disturbed area. All stormwater contacting the disturbed area will be retained on site and allowed to evaporate or soak into the underlying sand. No stormwater will be retained in the mine area for more than 72 hours. No dewatering will take place as this is a dry mine. A CDPS and stormwater permit will be obtained if needed. No U.S. Army Corps of Engineers 404 permit is necessary, as there are no water bodies on the site nor are there any wetland areas that will be disturbed by mining or reclamation. No mining will take place within the ephemeral drains of Black Squirrel Creek or Big Springs Creek.

(From the approved Mined Land Reclamation Board Permit Application, Exhibit D.)



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 Revised Map C-1 Showing Bank Armoring, From Original Application Revision:





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- 5) *Phasing plan – may require separate drawings indicating initial, interim, and final site phases for larger projects. Provide “living maps” that can be revised in the field as conditions dictate*
- a. Phased mining is permitted by the Mined Land Reclamation Board’s regulations. However, phased mining and reclamation does not allow maps that can be revised in the field. They do allow permit revisions. However, revision must go through an agency review process and allow time for public comment. Therefore, we have not included “living maps” since such a process is not allowed by State regulation.
  - b. As presently planned, mining will begin in Stage One and then progress to Stage Two, and the other Stages in sequence. However, whether a Stage is mined depends on the grade and extent of the resource in a Stage. For example, we may find it operationally advantageous to bypass a Stage and move to another Stage for immediate product needs.
- 6) *Proposed sequence for major activities: Provide a construction schedule of anticipated starting and completion dates for each stage of land-disturbing activity depicting conservation measures anticipated, including the expected date on which the final stabilization will be completed*
- a. Anticipated start and completion date for each stage:
    1. The following table provides an estimate of the length of time a Stage will be mined. Given this is a mineral extraction operation and not a commercial or residential development, the start and start dates are dependent on market demand. It is not unusual for an operation to start and stop extraction activities during the annual construction season. Some operations run year-round while other operations may periodically start and stop mining. This operation will start operations at the beginning of the construction and may suspend operations at the end of the construction season.
    2. At the present time, we expect the start date for Stage One to be as soon as possible.

**ESTIMATED MINING TIMETABLE**

Stage	ESTIMATED YEARS	ACRES ±			
		TOTAL AREA	TOTAL MINED	MINED 100%	MINED SLOPES
I	10-15	68.94	60.05	28.22	31.83
II	15-20	214.00	181.14	129.68	51.46
III	4-6	54.39	47.30	14.26	33.04
IV	2-5	24.32	19.00	4.20	14.80
V	2-4	20.81	17.46	3.32	14.15
VI	20-30	268.60	236.70	159.64	77.07
Drainage	LOM	82.81	0.00	0.00	0.00
Totals	52-80	733.87	561.65	339.32	222.35

- b. Conservation measures:
1. Please see the attached Stormwater Management Plan, Sections 4, Table A, and Sections 5 - 6.
- c. Final stabilization date:
1. The completion date for a Stage is dependent on market demand. Once mining is complete, based on the operator's notification to the DRMS, an operator has 5 years to complete reclamation. In this case, as Stage is completed. However, the MLRB Regulations allow an additional 5 years based on specific site conditions. The additional extension of time is dependent upon MLRB approval.
- 7) *Estimates of the total site area and area to undergo disturbance; current area of disturbance must be updated on the SWMP as changes occur*
- a. Estimates of the total site area:
    1. The total MLRB area permitted is 733.7± acres.
  - b. Area to undergo disturbance in Stage 1:
    1. The total MLRB area permitted to be affected is 66.1± acres.
  - c. *“current area of disturbance must be updated on the SWMP as changes occur”*:



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1. We understand this provision and will comply as appropriate.

8) *Soil erosion potential and impacts on discharge that includes a summary of the data used to determine soil erosion potential*

a. Soil erosion potential:

I. Wind erosion: Not listed as an item to address. Fugitive dust is addressed in other submittals to the County. In addition, mitigation measures have also been approved by the State CDPHE, EPC, and the County Commissioners approval of the SUP.

II. Runoff erosion:

A. The Runoff erosion potential is based on the NRCS Websoil Survey Report, 3/27/2018 and Table 7-2, Chapter 7, Hydrologic Soil Groups, Part 630, National Engineering Handbook, Natural Resources Conservation Services, U. S. Dept. of Ag, (210-VI-NEH, May 2007)

B. Table 7-2

**Table 7-2** Criteria for assignment of hydrologic soil groups when any water impermeable layer exists at a depth greater than 100 centimeters [40 inches]

Soil property	Hydrologic soil group A	Hydrologic soil group B	Hydrologic soil group C	Hydrologic soil group D
Saturated hydraulic conductivity of the least transmissive layer	>10 $\mu\text{m/s}$ (>1.42 in/h)	$\leq 10.0$ to >4.0 $\mu\text{m/s}$ ( $\leq 1.42$ to >57 in/h)	$\leq 4.0$ to >0.40 $\mu\text{m/s}$ ( $\leq 0.57$ to >0.06 in/h)	$\leq 0.40$ $\mu\text{m/s}$ ( $\leq 0.06$ in/h)
	and	and	and	and/or
Depth to water impermeable layer	>100 cm [>40 in]	>100 cm [>40 in]	>100 cm [>40 in]	>100 cm [>40 in]
	and	and	and	and/or
Depth to high water table	>100 cm [>40 in]	>100 cm [>40 in]	>100 cm [>40 in]	>100 cm [>40 in]



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B. Hydrologic Soils Group – Site Soils, In Place., Table 1.

Soil Unit	Hydrologic Soils Group	Runoff Class	Natural Drainage Class	Soil Erosion Potential (1), (2), (3)
5	A	Not Reported	Somewhat excessively drained	Given the <8% slope, soil texture, high infiltration rate, and grass cover, normally low SEP.
6	A	Not Reported	Somewhat excessively drained	Given the <3% slope, soil texture, high infiltration rate, and grass cover, normally low SEP.
28	A	Not Reported	Somewhat excessively drained	Given the <5% slope, soil texture, high infiltration rate, and grass cover, normally low SEP.
78	B	Low	Well Drained	Given the <3% slope, soil texture, high infiltration rate, and grass cover, normally low SEP.
95	A	Low	Well Drained	Given the <9% slope, soil texture, high infiltration rate, and grass cover, normally low to moderate SEP.
97	A	Low	Well Drained	Given the <9% slope, soil texture, high infiltration rate, and grass cover, normally low SEP.
101	A	Low	Well Drained	Given the <3% slope, soil texture, high infiltration rate, and grass cover, normally low – moderate SEP.
106	A	Low	Excessively Drained	Given the <8% slope, soil texture, high infiltration rate, and grass cover, normally low SEP.

1. **Soil Erosion Potential:** (“soil erosion is a function of erosivity and erodibility”) Erosivity is a function of rainfall and its energy. Erodibility is a function of soil physical characteristics and soil management. (Soil Conservation, Hudson, Cornell University Press, 1973.) Therefore, erosion potential may be significant for a soil, dependent upon the intensity and duration of the rain event. Given the soil texture is fixed for any given rain event.



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2. The intensity and duration of a rain (runoff event) plus the soil texture. “When the rate of rainfall exceeds the rate of infiltration, the depressions on the surface fill and overflow to cause runoff.” (Erosion and Sediment Pollution Control, Beasley, Iowa State University Press, 1972.)

3. “Runoff and resulting downslope transport do not occur until the rainfall intensity exceeds the infiltration rate.” (of the soil) (Applied Hydrology and Sedimentology for Disturbed Areas, Barfield, Warner, and Haan, Oklahoma Technical Press, 1981.)

b. Impacts on discharge:

1. This will be a zero-discharge facility. All stormwater runoffs will be interior to the facility and onto the pit floor, where it will infiltrate into the sandy/gravelly, pit floor material.
2. Given the low runoff potential, no toxic or hazardous materials will be on site in reportable quantities, and since it will be a zero-discharge operation, we do not expect a significant impact on receiving water.

c. Summary of the data used to determine soil erosion potential:

1. Drill logs:
2. NRCS Websoil Survey Report – Please see above table.

9) *A Description of existing vegetation at the site and percent ground cover and method used to determine ground cover*

a. Existing Vegetation:

1. The existing vegetation is sod grass in the areas of center pivot irrigation. The remaining area is grazing land. Therefore, the natural, ecological vegetation has been altered.
2. According to the NRCS Ecological Site Descriptions, the reference vegetation varies by soil units. The following tables from the ES Description provides the typical plant species which are found in the reference areas.
3. Sandy Bottom Land, Soils Unit 28, RO69XY031CO:



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Table 6. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
<b>Tree</b>					
1	<b>Deciduous Tree</b>			0–200	
	eastern cottonwood	PODE3	<i>Populus deltoides</i>	0–100	–
<b>Grass/Grasslike</b>					
1				1120–1360	
	sand bluestem	ANHA	<i>Andropogon hallii</i>	320–480	–
	prairie sandreed	CALO	<i>Calamovilfa longifolia</i>	240–320	–
	switchgrass	PAVI2	<i>Panicum virgatum</i>	160–320	–
	Indiangrass	SONU2	<i>Sorghastrum nutans</i>	80–160	–
	needle and thread	HECOC8	<i>Hesperostipa comata ssp. comata</i>	80–110	–
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	50–110	–
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	50–110	–
	Grass, perennial	2GP	<i>Grass, perennial</i>	15–80	–
	Canada wildrye	ELCA4	<i>Elymus canadensis</i>	15–50	–
	blowout grass	REFL	<i>Redfieldia flexuosa</i>	15–50	–
	sideoats grama	BOCU	<i>Bouteloua curtipendula</i>	15–50	–
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	15–50	–
	western wheatgrass	PASM	<i>Pascopyrum smithii</i>	15–30	–
	Indian ricegrass	ACHY	<i>Achnatherum hymenoides</i>	15–30	–
	hairy grama	BOHI2	<i>Bouteloua hirsuta</i>	15–30	–
	sun sedge	CAINH2	<i>Carex inops ssp. heliophila</i>	15–30	–
	Schweinitz's flatsedge	CYSC3	<i>Cyperus schweinitzii</i>	0–30	–
	saltgrass	DISP	<i>Distichlis spicata</i>	0–15	–
	Fendler threeawn	ARPUL	<i>Aristida purpurea var. longiseta</i>	0–15	–
	squirreltail	ELELE	<i>Elymus elymoides ssp. elymoides</i>	0–15	–
	thickspike wheatgrass	ELLAL	<i>Elymus lanceolatus ssp. lanceolatus</i>	0–15	–
	prairie Junegrass	KOMA	<i>Koeleria macrantha</i>	0–15	–



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	thin paspalum	PASE5	<i>Paspalum setaceum</i>	0–15	–
	sixweeks fescue	VUOC	<i>Vulpia octoflora</i>	0–15	–
<b>Forb</b>					
2				160–240	
	Forb, perennial	2FP	<i>Forb, perennial</i>	15–50	–
	annual buckwheat	ERAN4	<i>Eriogonum annuum</i>	15–30	–
	silky prairie clover	DAVI	<i>Dalea villosa</i>	15–30	–
	othake	PASP	<i>Palafoxia sphacelata</i>	0–30	–
	lemon scurfpea	PSLA3	<i>Psoraleidum lanceolatum</i>	15–30	–
	upright prairie coneflower	RACO3	<i>Ratibida columnifera</i>	0–15	–
	white heath aster	SYERE	<i>Symphotrichum ericoides</i> var. <i>ericoides</i>	0–15	–
	prairie spiderwort	TROC	<i>Tradescantia occidentalis</i>	0–15	–
	meadow deathcamas	ZIVE	<i>Zigadenus venenosus</i>	0–15	–
	gilia beardtongue	PEAM	<i>Penstemon ambiguus</i>	0–15	–
	broadbeard beardtongue	PEAN4	<i>Penstemon angustifolius</i>	0–15	–
	Carolina larkspur	DECAV2	<i>Delphinium carolinianum</i> ssp. <i>virescens</i>	0–15	–
	shaggy dwarf morning-glory	EVNU	<i>Evolvulus nuttallianus</i>	0–15	–
	stiff sunflower	HEPAP2	<i>Helianthus pauciflorus</i> ssp. <i>pauciflorus</i>	0–15	–
	hairy false goldenaster	HEVI4	<i>Heterotheca villosa</i>	0–15	–
	bush morning-glory	IPLE	<i>Ipomoea leptophylla</i>	0–15	–
	common starlily	LEMO4	<i>Leucocrinum montanum</i>	0–15	–
	dotted blazing star	LIPU	<i>Liatris punctata</i>	0–15	–
	tenpetal blazingstar	MEDE2	<i>Mentzelia decapetala</i>	0–15	–
	Colorado four o'clock	MIMU	<i>Mirabilis multiflora</i>	0–15	–
	whitest evening primrose	OEAL	<i>Oenothera albicaulis</i>	0–15	–
	prostrate pigweed	AMAL	<i>Amaranthus albus</i>	0–15	–
	Cuman ragweed	AMPS	<i>Ambrosia psilostachya</i>	0–15	–
	tarragon	ARDR4	<i>Artemisia dracunculus</i>	0–15	–
	white sagebrush	ARLU	<i>Artemisia ludoviciana</i>	0–15	–
	painted milkvetch	ASCEF	<i>Astragalus ceramicus</i> var. <i>filifolius</i>	0–15	–
	groundplum milkvetch	ASCR2	<i>Astragalus crassicaulus</i>	0–15	–
	Texas croton	CRTE4	<i>Croton texensis</i>	0–15	–
	white prairie clover	DACA7	<i>Dalea candida</i>	0–15	–
	nineanther prairie clover	DAEN	<i>Dalea enneandra</i>	0–15	–
	purple prairie clover	DAPUP	<i>Dalea purpurea</i> var. <i>purpurea</i>	0–15	–
<b>Shrub/Vine</b>					
3				80–240	
	leadplant	AMCA6	<i>Amorpha canescens</i>	30–80	–
	sand sagebrush	ARFI2	<i>Artemisia filifolia</i>	15–80	–
	western sandcherry	PRPUB	<i>Prunus pumila</i> var. <i>besseyi</i>	30–80	–
	Shrub (>.5m)	2SHRUB	<i>Shrub (&gt;.5m)</i>	15–50	–



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4. Soils Unit 5 and 6, Sandy Plains – RO67BY024CO:

Table 6. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
<b>Grass/Grasslike</b>					
1	1			1155–1403	
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	330–495	–
	prairie sandreed	CALO	<i>Calamovilfa longifolia</i>	330–495	–
	sand bluestem	ANHA	<i>Andropogon hallii</i>	83–248	–
	switchgrass	PAVI2	<i>Panicum virgatum</i>	83–165	–
	needle and thread	HECOC8	<i>Hesperostipa comata ssp. comata</i>	83–165	–
	western wheatgrass	PASM	<i>Pascopyrum smithii</i>	17–116	–
	thickspike wheatgrass	ELLAL	<i>Elymus lanceolatus ssp. lanceolatus</i>	0–83	–
	sun sedge	CAINH2	<i>Carex inops ssp. heliophila</i>	17–83	–
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	17–83	–
	Indiangrass	SONU2	<i>Sorghastrum nutans</i>	0–83	–
	sideoats grama	BOCU	<i>Bouteloua curtipendula</i>	17–83	–
	Grass, perennial	2GP	<i>Grass, perennial</i>	0–83	–
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	17–50	–
	prairie Junegrass	KOMA	<i>Koeleria macrantha</i>	17–50	–
	Indian ricegrass	ACHY	<i>Achnatherum hymenoides</i>	17–33	–
	buffalograss	BODA2	<i>Bouteloua dactyloides</i>	0–17	–
	Fendler threeawn	ARPUL	<i>Aristida purpurea var. longiseta</i>	0–17	–
	thin paspalum	PASE5	<i>Paspalum setaceum</i>	0–17	–
<b>Forb</b>					
2	2			165–248	
	Forb, perennial	2FP	<i>Forb, perennial</i>	33–83	–
	purple prairie clover	DAPUP	<i>Dalea purpurea var. purpurea</i>	17–33	–
	manystem pea	LAPO2	<i>Lathyrus polymorphus</i>	17–33	–
	dotted blazing star	LIPU	<i>Liatris punctata</i>	17–33	–
	broadbeard beardtongue	PEAN4	<i>Penstemon angustifolius</i>	17–33	–
	upright prairie coneflower	RACO3	<i>Ratibida columnifera</i>	17–33	–
	scarlet globemallow	SPCO	<i>Sphaeralcea coccinea</i>	17–33	–
	prairie spiderwort	TROC	<i>Tradescantia occidentalis</i>	17–33	–
	American vetch	VIAM	<i>Vicia americana</i>	17–33	–
	white heath aster	SYERE	<i>Symphyotrichum ericoides var. ericoides</i>	0–17	–
	silverleaf Indian breadroot	PEAR6	<i>Pediomelum argophyllum</i>	0–17	–
	slimflower scurfpea	PSTE5	<i>Psoralidium tenuiflorum</i>	0–17	–
	pink statice	LYM1	<i>Limonium carolinianum</i>	0–17	–



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	rush skeletonplant	LYJU	<i>Lygodesmia juncea</i>	0-17	-
	tenpetal blazingstar	MEDE2	<i>Mentzelia decapetala</i>	0-17	-
	crownleaf evening primrose	OECO2	<i>Oenothera coronopifolia</i>	0-17	-
	winged buckwheat	ERAL4	<i>Eriogonum alatum</i>	0-17	-
	shaggy dwarf morning-glory	EVNU	<i>Evolvulus nuttallianus</i>	0-17	-
	hairy false goldenaster	HEVI4	<i>Heterotheca villosa</i>	0-17	-
	Cuman ragweed	AMPS	<i>Ambrosia psilostachya</i>	0-17	-
	tarragon	ARDR4	<i>Artemisia dracunculus</i>	0-17	-
	white sagebrush	ARLU	<i>Artemisia ludoviciana</i>	0-17	-
	woolly locoweed	ASMO7	<i>Astragalus mollissimus</i>	0-17	-
	Texas croton	CRTE4	<i>Croton texensis</i>	0-17	-
<b>Shrub/Vine</b>					
3	3			83-248	
	Shrub (>.5m)	2SHRUB	<i>Shrub (&gt;.5m)</i>	17-83	-
	leadplant	AMCA6	<i>Amorpha canescens</i>	0-50	-
	western sandcherry	PRPUB	<i>Prunus pumila var. besseyi</i>	0-50	-
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	0-33	-
	spreading buckwheat	EREF	<i>Eriogonum effusum</i>	17-33	-
	sand sagebrush	ARFI2	<i>Artemisia filifolia</i>	0-33	-
	prairie sagewort	ARFR4	<i>Artemisia frigida</i>	0-17	-
	spiny star	ESVIV	<i>Escobaria vivipara var. vivipara</i>	0-17	-
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	0-17	-
	plains pricklypear	OPPO	<i>Opuntia polyacantha</i>	0-17	-
	soapweed yucca	YUGL	<i>Yucca glauca</i>	0-17	-



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5. Soils Unit 101, Overflow, RORO69XY037CO:

Table 6. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Grasslike					
1				1050–1275	
	alkali sacaton	SPAI	<i>Sporobolus airoides</i>	450–525	–
	western wheatgrass	PASM	<i>Pascopyrum smithii</i>	300–375	–
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	150–225	–
	vine mesquite	PAOB	<i>Panicum obtusum</i>	105–180	–
	switchgrass	PAVI2	<i>Panicum virgatum</i>	75–150	–
	big bluestem	ANGE	<i>Andropogon gerardii</i>	0–75	–
	buffalograss	BODA2	<i>Bouteloua dactyloides</i>	15–75	–
	Grass, perennial	2GP	<i>Grass, perennial</i>	15–45	–
	needle and thread	HECOC8	<i>Hesperostipa comata ssp. comata</i>	15–45	–
	sun sedge	CAINH2	<i>Carex inops ssp. heliophila</i>	15–45	–
	saltgrass	DISP	<i>Distichlis spicata</i>	15–45	–
	James' galleta	PLJA	<i>Pleuraphis jamesii</i>	0–45	–



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	alkali cordgrass	SPGR	<i>Spartina gracilis</i>	15–30	–
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	0–30	–
	Canada wildrye	ELCA4	<i>Elymus canadensis</i>	0–30	–
	squirreltail	ELELE	<i>Elymus elymoides ssp. elymoides</i>	0–15	–
	scratchgrass	MUAS	<i>Muhlenbergia asperifolia</i>	0–15	–
	ring muhly	MUTO2	<i>Muhlenbergia torreyi</i>	0–15	–
	silver beardgrass	BOLAT	<i>Bothriochloa laguroides ssp. torreyana</i>	0–15	–
	sixweeks fescue	VUOC	<i>Vulpia octoflora</i>	0–15	–
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	0–15	–
	tumblegrass	SCPA	<i>Schedonnardus paniculatus</i>	0–15	–
<b>Forb</b>					
2				75–150	
	American vetch	VIAM	<i>Vicia americana</i>	15–45	–
	Forb, perennial	2FP	<i>Forb, perennial</i>	15–45	–
	dotted blazing star	LIPU	<i>Liatris punctata</i>	0–30	–
	leafy false goldenweed	OOFOF	<i>Oenopsis foliosa var. foliosa</i>	15–30	–
	American licorice	GLLE3	<i>Glycyrrhiza lepidota</i>	15–30	–



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scarlet globemallow	SPCO	<i>Sphaeralcea coccinea</i>	0–30	–
white heath aster	SYER	<i>Symphotrichum ericoides</i>	0–30	–
stiff greenthread	THFI	<i>Thelesperma filifolium</i>	0–15	–
hairy false goldenaster	HEVI4	<i>Heterotheca villosa</i>	0–15	–
povertyweed	IVAX	<i>Iva axillaris</i>	0–15	–
purple locoweed	OXLA3	<i>Oxytropis lambertii</i>	0–15	–
white locoweed	OXSE	<i>Oxytropis sericea</i>	0–15	–
New Mexico groundsel	PANEM	<i>Packera neomexicana</i> var. <i>mutabilis</i>	0–15	–
broadbeard beardtongue	PEAN4	<i>Penstemon angustifolius</i>	0–15	–
woolly plantain	PLPA2	<i>Plantago patagonica</i>	0–15	–
slimflower scurfpea	PSTE5	<i>Psoralidium tenuiflorum</i>	0–15	–
upright prairie coneflower	RACO3	<i>Ratibida columnifera</i>	0–15	–
rush skeletonplant	LYJU	<i>Lygodesmia juncea</i>	0–15	–
lacy tansyaster	MAPIP4	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	0–15	–



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	crownleaf evening primrose	OECO2	<i>Oenothera coronopifolia</i>	0–15	–
	Cuman ragweed	AMPS	<i>Ambrosia psilostachya</i>	0–15	–
	twogrooved milkvetch	ASBI2	<i>Astragalus bisulcatus</i>	0–15	–
	purple prairie clover	DAPU5	<i>Dalea purpurea</i>	0–15	–
<b>Shrub/Vine</b>					
3				150–300	
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	75–225	–
	Shrub (>.5m)	2SHRUB	<i>Shrub (&gt;.5m)</i>	15–45	–
	greasewood	SAVE4	<i>Sarcobatus vermiculatus</i>	0–30	–
	prairie sagewort	ARFR4	<i>Artemisia frigida</i>	0–15	–
	tree cholla	CYIMI	<i>Cylindropuntia imbricata</i> var. <i>imbricata</i>	0–15	–
	rubber rabbitbrush	ERNAG	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>glabrata</i>	0–15	–
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	0–15	–
	plains pricklypear	OPPO	<i>Opuntia polyacantha</i>	0–15	–

6. No Ecological Site Descriptions were found for the other soils units. The soils units where the Ecological Site Descriptions are listed we believe adequately portray what the undisturbed vegetation would be, if the site had not have been affected by sod farming and grazing..

b. Percent Ground Cover:

1. The natural, ecological vegetative ground cover has been altered by agricultural uses, an irrigated sod farm and grazing land.
2. The Colorado Mined Land Reclamation Act for Construction Materials requires the post mine vegetative cover equal ground cover of the surrounding, adjacent areas. However, in our approved Mined Land Reclamation Board permit application, we committed to at least 28% ground cover. (Exhibit H, Wildlife, approved Mined Land Reclamation Board permit application.)



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c. Method Used to Determine Ground Cover:

1. The site is impacted by present operations, i.e., sod farm and grazing, therefore, ground cover was not evaluated.
2. According to State Regulation, once mining and reclamation are complete, the post mining cover must be equal to the surrounding vegetative cover, based on ocular measurements. As stated above, we are committed to at least 28% ground cover.

*10) Location and description of all potential pollution sources including but not limited to: disturbed and stored soils; vehicle tracking; management of contaminated soils; loading and unloading operations; outdoor storage of materials; vehicle and equipment maintenance and fueling; significant dust generating process; routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.; on-site waste management, concrete truck/equipment washing; dedicated asphalt, concrete batch plants and masonry mixing stations; non-industrial waste such as trash and portable toilets*

a. Please see Section 4, Facility Inventory and Assessment of Pollutant Sources of the attached Stormwater Management Plan for Schubert Ranch Sand Resource, COG-502203.

b. Of the above listed items, the following will not occur on the mine site:

- 1) To the best of our knowledge, there is no contaminated soil on the proposed mine site.
- 2) No significant vehicle or equipment maintenance will occur on-site. No fuel will be stored on the mine site. We may have need of a fuel and lube truck to visit the site, and a truck to change a tire on a piece of earth moving equipment.
- 3) No pesticides, detergents, or solvents in reportable quantities will be on-site.
- 4) All on-site generated waste materials will be disposed offsite, at an approved waste disposal facility.
- 5) There will be no concrete truck/equipment washing, dedicated asphalt plants, concrete batch plants, or masonry mixing stations on-site.
- 6) Non-industrial waste, other than in minor amounts will occur. All such waste will also be disposed offsite at an approved waste disposal site.
- 7) Human waste disposal will be via portable toilets which will be serviced by a commercial provider.

*11) Material handling to include spill prevention and response plan and procedures*



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- a. Our Spill Prevention and Response Plan may be found in Section 6, subsection 6c of our attached Stormwater Management Plan for the Schubert Ranch Sand Resource, COG-502203.

*12) Spill prevention and pollution controls for dedicated batch plants*

1. No dedicated batch plant is currently planned for the Schubert Ranch Sand Pit.

*13) Other SW pollutant control measures to include waste disposal and off-site soil tracking*

1. As stated above, all waste disposal (human and non-human) will be collected in approved containers and disposed offsite, at an approved facility.
2. We do not anticipate significant tracking offsite. The material extracted and on which operations will occur is sand and gravel. In addition, the County Road is sand and gravel.

*14) Location and description of any anticipated allowable non-stormwater discharge (ground water springs, irrigation, discharge covered by CDPHE Low Risk Guidance, etc.)*

1. We do not anticipate non-stormwater discharges. We are to stay at least ten feet above the prevailing ground water table. Stormwater will infiltrate into the ground water system due to the high infiltration rate of the substrate.
2. We do not have a CDPHE Low Risk Guidance discharge.

*15) Names(s) of ultimate receiving water; size, type and location of stormwater outfall of storm sewer system discharge*

1. The two ephemeral drainages are Black Squirrel and Big Spring Creeks. Big Springs discharges into Black Springs Creek, Black Springs Creek discharges in Chico Creek, and Chico Creek discharges into the Arkansas River.

*16) Description of all stream crossings located within the project area or statement that no streams cross the project*

1. Currently, the proposed mining operation will not require a stream crossing for Stage One.
2. At some point, Stage V may need to cross the Big Squirrel Creek drainage. Where a stream crossing is required, we will submit the design to the DRMS for approval.



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3. The proposed mineral extraction operations will occur on either side of Black Squirrel and Big Springs Creeks. Presently, the only stream crossing is Sanborn Road, an EPC County Road.

*17) SWMP Map to include:*

*17a construction site boundaries*

*17b flow arrows to depict stormwater flow directions*

*17c all areas of disturbance*

*17d areas of cut and fill*

*17e areas used for storage of building materials, soils (stockpiles) or wastes*

*17f location of any dedicated asphalt / concrete batch plants*

*17g location of all structural control measures*

*17h location of all non-structural control measures*

*17i springs, streams, wetlands and other surface water, including areas that require maintenance of pre-existing vegetation within fifty feet of a receiving water*

1. The map found in the attached Stormwater Management Plan is an example of what will occur in the various Stages.

*18) Description all structural control measures to be used. Modifications to EPC standard control measures must meet or exceed County-approved details*

1. Structural controls include riprap placed along the ephemeral drainages (Black Squirrel and Big Springs Creeks). There will also be riprap placed along the pit slope side of where the two creeks are adjacent to the various stages of mining.
2. Other structural controls include isolation berms and ditches to direct storm water runoff around the affected areas.
3. We are required to construct safety berms along internal haul roads by the Mine Safety and Health Administration. These structures by their nature will redirect storm water runoff which will be internal to the mining operations.



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4. The approved MLRB permit application includes the plans for the riprapped sections. The erosion control riprap feature was reviewed by the MLRD as part of the permit review process.
5. Following are the State approved plans.

#### **EPHEMERAL DRAINAGE BANK AND MINED BANK PROTECTION PLAN**

This bank protection plan is presented to explain the bank armoring on both sides of the Black Squirrel Creek and the tops of the excavated slope that run parallel to the channel. This armoring is being proposed to keep the Black Squirrel Creek within the historic banks so the excavated area will not capture if an epic flood event were to occur after reclamation is complete. The minimum width of the top of the armored banks will be 150 feet.

We have followed the 2013 Urban Drainage and Flood Control District (UDFCD) Publication guideline document for planning and design of the armoring on the mining side bank and the bank armoring on the creek channel side. The armor is intended to define the channel and protect the banks should a 100-year event occur after an area has been mined. All armoring done in or along the dry channel will be done outside the Ordinary Highwater Line (OHW) to avoid needing a U.S. Army Corps of Engineers permit. The existing OHW is shown on all map exhibits in the permit packet as an orange line. If this changes a mining advances around the permit area the armoring locations will change to meet the conditions at that time. The armoring will be covered with a 6-inch layer of growth medium and seeded with the approved seed mix.

We have sized the armoring based on the results from the HEC-RAS modeling of the 100-year storm. Black Squirrel Creek is a true ephemeral drainage where the only water that travels down the drainage is during isolated storm events that create mini floods. In most cases the OHW is ten feet or less across. The 100-year Floodplain information provided by El Paso County has been added to



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all of the Map Exhibits in the Reclamation Packet and is shown as a blue line.

There are general items that will be common to both armoring areas. In general, all armoring material will be recycled concrete fragments with surface rebar removed that meets the definition of Inert Materials, there will be no exposed rebar in the concrete, and it will be sized 12 to 24 inches with a few larger pieces and fines mixed in to fill voids. The toe of the armoring will be a minimum of three feet below the existing creek channel thalweg as described below. ESG will keep enough material stored on the mine to complete armoring needed on an area as it is mined and ready for armoring. At a minimum, 850 cubic yards will be stockpiled on the mine for use in armoring. This is enough to armor a minimum of five hundred feet of excavation bank. The stockpile of armoring material will be placed parallel to the water flow so it will not interfere with flows in the flood plain if flooding occurs and within the 150-foot setback so it is close to the area where it will be placed.

The attached Figure 1 shows the cross sections of the areas discussed below and details of the armoring to protect the banks along Black Squirrel Creek and Big Spring Creek. **Sheet 4 - Final Phase - Reclamation Plan Map** shows the location of the areas to be armored in the mine.

#### **Channel Bank Armoring.**

Along the banks of Black Squirrel Creek and Big Springs Creek banks armoring will be placed wherever mining will take place within four hundred feet of the bank. The armoring will be done as mining advances in each stage so that if mining ended along the channels before mining reached the 400-foot line no armoring would need to be done. As mining approaches, the 400-foot limit the channel adjacent to the mining area will be armored following the UDFCD Guidelines.

Bank armoring will be done, using the concrete recycled material described above. The armored face of the bank will extend to five feet below the thalweg of the dry channel to the top of the existing bank and will be a minimum of two feet thick. This will



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leave an armored face along the surface that is twenty-nine feet wide. On average this will require 2.77 cu-yds per linear foot. The armoring will not take place in the OHW but rather along the historic bank of the creeks. The face of the armoring will be sloped 2.5h to 1v per the guidelines.

**Excavation Bank Armoring.**

On the inside of the mined area adjacent to the creek channels the armoring will be placed from the existing elevation so the toe of the armoring will be a minimum of three feet below the creek thalweg and will be two feet or more thick. This is approximately 1.64 cyds/lft along the excavation bank slopes. The armoring will cover the bank slopes from the original ground surface to a depth of three feet below the channel thalweg and parallel to the channel. Once sloping begins the armoring will be installed on 500-foot sections until completed. This will leave an armored face along the surface that is twenty-seven feet wide.

**Supplied supporting documents.**

Figure 1 - Bank Protection Plan cross section (PPR234 GEC Sheet 5 Revised 01-30-2024)

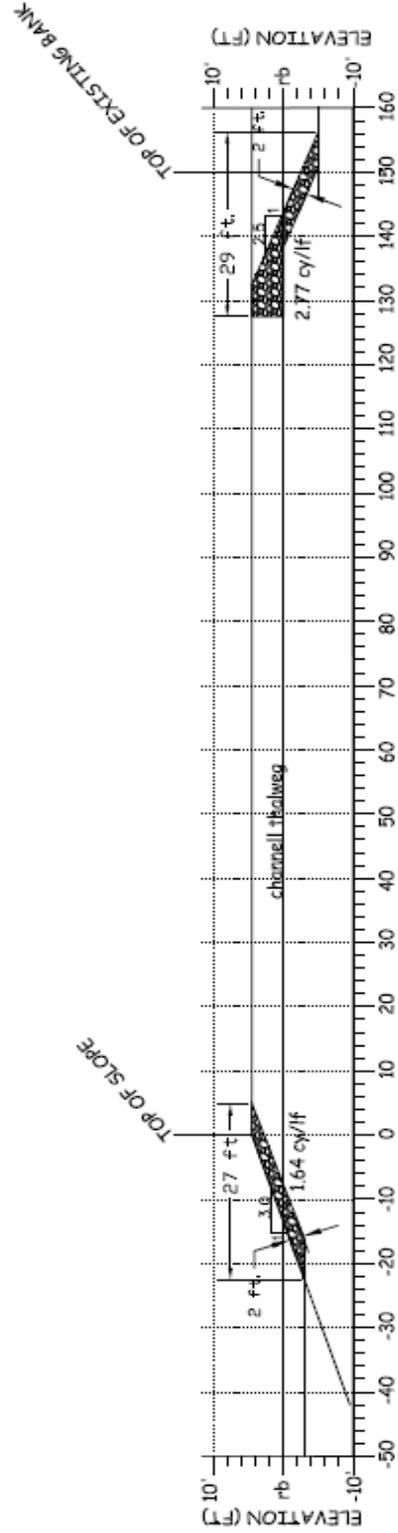
See **PPR 234 Drainage Plan Appendix A - Table 7** for analysis of armor sizing.



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# BANK ARMORING PLAN

# FIGURE 1



## TYPICAL CREEK BERM ARMORING NO SCALE

### NOTES:

1. BANK ARMORING SHOWN ON MAPS IS APPROXIMATE LOCATION. ACTUAL LOCATION WILL DEPEND ON LOCATION OF OHW LINES AT THE TIME IT IS INSTALLED. NO ARMORING WILL TAKE PLACE WITHIN THE OHW.
2. MATERIAL USED FOR ARMORING WILL BE WELL AGED BROKE CONCRETE THAT HAS ALL EXPOSED SURFACE REBAR REMOVED. AT A MINIMUM 850 CUBIC YARDS WILL BE STOCKPILED ON THE MINE FOR USE IN ARMORING. THIS IS ENOUGH TO ARMOR MATERIAL TO ARMOR A MINIMUM OF 500 FEET OF EXCAVATION BANK.
3. STOCKPILE OF ARMORING MATERIAL WILL BE PLACED PARALLEL TO THE WATER FLOW SO IT WILL NOT INTERFERE WITH FLOWS IN THE FLOOD PLAIN IF FLOODING OCCURS AND WITHIN THE 150 FOOT SETBACK SO IT IS CLOSE TO THE AREA WHERE IT WILL BE PLACED.
4. BANK ALONG THE EXCAVATED AREA WILL ARMORED FROM THE EXISTING SURFACE TO A POINT AT LEAST 3 FEET BELOW THE CREEK CHANNEL THALWEG. THE BANK ALONG THE CREEK SIDE WILL BE ARMORED FROM THE SURFACE TO AT LEAST 5 FEET BELOW THE THALWEG OF THE CREEK CHANNEL.
5. CHANNEL SIDE ARMORING WILL BE DONE PRIOR TO MINING WITHIN 400 FEET OF THE AREA TO BE ARMORED IN ADVANCE OF MINING IN EACH STAGE.
6. THE SIZE OF THE MATERIAL WILL FALL IN THE RANGE OF 12 TO 24 INCHES OR GREATER AND WILL BE PLACED BELOW GRADE.
7. THE ARMORING WILL BE COVERED WITH A 6 INCH LAYER OF GROWTH MEDIUM AND SEEDED WITH THE APPROVED SEED MIX.

OCT 31, 2009 - 10:23:52



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*19) Description of all non-structural control measures to be used including seeding, mulching, protection of existing vegetation, site watering, sod placement, etc.*

1. None of the following are planned:
  - a. Protection of existing vegetations: -Those areas to be affected by mineral extraction activity will require topsoil or the upper most layer of soil be removed and stored for site reclamation.
  - b. No irrigation is planned. The post mine land use will be dryland, rangeland, and wildlife habitat. The approved plant species for seeding will be plant species adapted to the anticipated climatic site condition.
  - c. No sod is planned since it requires supplemental irrigation.
2. The site will be seeded to the approved seed mix and mulched, according to the approved reclamation plan. (Please see the GEC Plan for details)
3. “As mining progresses the slopes along the working face of the mining area will be temporally graded 2:1 to stabilize them until it is time for resumption of mining, or they are final graded for final reclamation. By creating the temporary slopes as mining progresses, we are reducing the amount of work necessary to reclaim the site if mining stopped prematurely. The exterior slope will be graded 3h to 1v, resoiled and seeded as soon as practical after they are mined.” (Page 11, Exhibit E, original Mined Land Reclamation Board permit application.)



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CO-ECS-05 - 1

USDA NRCS United States Department of Agriculture Natural Resources Conservation Service **Grass Seeding Planned and Applied Worksheet**

**Grass Seeding PART I - Planned**

Cooperator	Ellicott Sand and Gravel	Date	3/28/18
Tract/Field No	Schubert Gravel Pit	Acres	750
Soil Survey Area	El Paso	Map Unit (s)	Ellicott Loamy course sand 0 to 5 percent
Contract No.	NA	CIN	NA
Seeding dates	dormant suggested	Purpose	Other
Seedbed preparation	Intensive: more than 3 tillage operations	Seed rate	Critical Area Planting drilled (40 seeds/sq ft)
Drill type	grass	Acres to be seeded	750.00
Planting depth-Drill spacing (in)	1/4-1/2 in, 6-8 in spacing		
Planned fertilizer application (lb/ac)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
	0	0	0
	A Nutrient Management Plan is not required for the establishment of vegetative conservation practices.		
Planned weed control activities	Description	Tillage	Attach WIN-PST Soil-Pesticide Interaction Risk Report for all chemical suppression activities
	Date(s)	mowing as needed	
Planned residue cover or mulch	Type	Cereal grain straw	
	Amount (lb/ac)	4000	
	Application method	straw spreader	

**Seed Mix Recommendation, † ‡**

(PLS = Pure Live Seed)

Common name N= native, I= introduced	Genus, species	Recommended Cultivar	% of seed mix	Total Pounds PLS	Pounds PLS per acre
<b>Grasses, forbs</b>					
Grams, Sideoats	N <i>Bouteloua curtipendula</i>	Vaughn	10.0	682.50	0.91
Sand dropseed	N <i>Sporobolus cryptandrus</i>	Common	1.5	5.63	0.01
Bluestem, Little	N <i>Schizachyrium scoparium</i>	Camper	10.0	502.50	0.67
Wheatgrass, Western	N <i>Pascopyrum smithii</i>	Arriba	10.0	1200.00	1.60
Bluestem, Sand	N <i>Andropogon hallii</i>	Chet	5.0	592.50	0.79
Prairie sandreed	N <i>Calamovilfa longifolia</i>	Goshen	5.0	240.00	0.32
Yellow indiangrass	N <i>Sorghastrum nutans</i>	Cheyenne	10.0	785.00	1.02
Switchgrass	N <i>Panicum virgatum</i>	Blackwell	28.0	840.00	1.12
Green needlegrass	N <i>Ephedra viridis</i>	Lodonn	5.0	360.00	0.48
Indian ricegrass - Nezpar, Rimrock	N <i>Actinatherum hymenoides</i>	Nezpar	15.0	832.50	1.11
Prairie clover, purple	N <i>Daless purpurea</i>		0.5	23.63	0.03
			100.0		

**Shrubs (add shrub seed to grass - forb seed mix)**

Four-wing saltbush	N <i>Atriplex canescens</i>			750.00	1.00
Winterfat	N <i>Krascheninnikovia lanata</i>			15.00	0.02
				765.00	
				6044.25	
				6809.25	
					9.08

† Certified Seed is required for all NRCS cost share programs

‡ Complete a Tree and Shrub Establishment 612 Job Sheet for bare-root shrub plantings

Seed Rate (Pounds PLS per acre)

**Additional Recommendations**

use dealer recommended cultivars for area. Certified seed REQUIRED. Rip seed bed to a depth of 24 inches if prior use has compacted soil. Seedbed should be firm, not fluffy. Exclude livestock grazing from seeded area for a minimum of 3 years or until grass is solidly established.

Certified Planner **Greg Langer** Date **3/28/2018**

a.



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The site is currently pasture areas covered with grasses, forbs and weeds or has been used as irrigated sod grass fields or hay production. Which is basically a sandy sparsely covered grass and weedy drainage basin. There is little or no topsoil on the sod farm areas and very little on the sandy Black Squirrel Creek/ Big Spring Creek banks. The NRCS recommended using 2 tons per acre of wheat straw mulch and no fertilizer so no supplemental additive will be used. Planting as explained, will take place in the first year after the seed bed is ready. Under normal conditions this gives 3 plus years after planting to establish vegetation on the revegetated area that is capable of matching surrounding areas as a stage is reclaimed. In some cast all but the final 20 acres in a stage will have been seed many years before mining ended in that stage. During this time remedial seeding and weed control will be done to improve the chances of successful and all livestock will be kept off of the seeded areas until it has been successfully revegetated.

(From: Adequacy Response 01, Page 5, Correspondence from Environment, Inc., Sept 9, 2019, to Mr. Tim Cazier, Division of Reclamation, Mining and Safety.)

*20) Technical drawing details for all control measure installation and maintenance, custom or other jurisdiction's details used must meet or exceed EPC standards*

1. Please see the above Figure 1, Bank Armoring Plan.

*21) Procedure describing how the SWMP is to be revised*

1. Please see Section 9, Corrective Action Documentation, Corrective Action Example Tracking Form.

*22) Description of Final Stabilization and Long-term Stormwater Quality (describe nonstructural and structural measures to control SW pollutants after construction operations have been completed, including detention, water quality control measures etc.)*

1. Final Stabilization will be according to the approved Mined Land Reclamation Board permit application which includes the approved method of material extraction and final site reclamation.

a. Most of the site will drain to a mine pit at the completion of the project. The reclaimed mine pits are structural measures that will protect surface water quality.

2. Once the operator is released from reclamation liability, the care and maintenance of the site reverts to the landowner.



*23) Specification that final vegetative cover density is to be 70% of pre-disturbed levels*

1. The County standard, we believe, is not appropriate in this instance. The site is an irrigated sod farm and grazing land. The post mining land use will be rangeland/wildlife habitat.
2. According to the implementing regulations for the Mined Land Reclamation Act, “In those areas where revegetation is part of the Reclamation Plan, land shall be revegetated in such a way to establish a diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration without continued dependence on irrigation, soil amendments, or fertilizer, and is at least in extent of cover to the natural (emphasis added) vegetation of the surrounding area.”
3. The MLRB regulations require, “...is at least in extent of cover to the natural vegetation of the surrounding area.” Therefore, it appears the County criteria is the existing vegetation minus 30% of cover. Since the site vegetation cover is similar to the surrounding vegetation cover, we expect the County standard to be met.
  - a. The existing site’s cover is degraded, and
  - b. The site will not be irrigated or otherwise be treated once the approved reclamation plant species become established.
  - c. Is to, “...establish a diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration without continued dependence on irrigation, soil amendments, or fertilizer...”

*24) Outline of permit holder inspection procedures to install, maintain, and effectively operate control measures to manage erosion and sediment.*

1. Please see Section 8 Monitoring Procedures and Documentation of the attached Stormwater Management Plan.
2. This Section includes an example of a Visual Monitoring Form.

*25) Record keeping procedures identified to include signature on inspection logs and location of SWMP records on-site.*

1. Please see Section 8 referenced above.
2. It includes a provision for the inspector’s signature.



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3. The Stormwater Management Plan for the Schubert Ranch Sand Resource will be maintained at the Scale House, the only on-site structure.

*26) If this project relies on control measures owned or operated by another entity, a documented agreement must be included in the SWMP that identifies location, installation and design specifications, and maintenance requirements and responsibility of this control measures(s)*

1. This project does not rely on control measures owned or operated by another entity during its period of permitted operation.

***PLEASE NOTE: all items above must be addressed. If not applicable, explain why, simply identifying “not applicable” will not satisfy CDPHE requirement of explanation.***

## **2. ADDITIONAL REPORTS/PERMITS/DOCUMENTS**

*a Grading and Erosion Control Plan (signed)*

1. The Mined Land Reclamation Division, by issuance of the Permit Document, approved the proposed grading and erosion control plan, Permit attached as Attachment II.

*b Erosion and Stormwater Quality Control Permit (ESQCP) (signed):*

1. Please see Attachment III.



**Attachment I**

**Stormwater Management Plan**

**STORMWATER  
MANAGEMENT PLAN  
for  
SCHUBERT RANCH SAND  
RESOURCE  
COG-502203**

Prepared by:  
ELLCOTT SAND & GRAVEL LLC  
235 South Franceville Coal Mine Road.  
Colorado Springs CO 80929  
(602) 558-0846

November 2021



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## SECTION 1:

# SWMP ADMINISTRATOR



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### SECTION 1: SWMP ADMINISTRATION

Team Member/Title/Phone No.	Responsibilities
Name: Perry Hastings	- assisted in filling out the plan - advice Land Management of changes - facility inspections
Title: Manager	
Phone No.: 602-558-0846	
BY: <u><i>Perry Hastings</i></u>	
Name: Perry Hastings	Review and certify plan, inspections, and annual reports
Title: Manager	
Phone No.: 602-558-0846	
Name: Perry Hastings	- complete plan and maps - update plans as informed of changes - summarize inspections and submit, annual reports to CDH
Title: Manager	
Phone No.: 602-558-0846	



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## SECTION 2:

# FACILITY DESCRIPTION



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## SECTION 2: FACILITY DESCRIPTION

The activities checked below are activities that are presently performed on-site or are expected to be present in the future.

### STRIPPING

The overburden is removed and the material is either sold, hauled away or stockpiled. Stockpiles may be in the form of berms along mine perimeter or placed in the bottom of the mine for use when reclamation begins.

### STOCKPILING

#### Topsoil

Stockpiles will be placed along the excavated area in the form of earthen berms. These will be within the disturbed area of the mine.

#### Backfill Material:

Inert fill will be imported for use as bank armoring. It is classified as inert material consisting of large pieces of well aged tear out concrete.

### PROCESSING

The sand mined from this area will be processed by screening and washing. It will be stockpiled on the mine floor for later sales.

### RECLAMATION

Reclamation is an ongoing activity throughout the life of the mine once enough area has been opened to facilitate sloping and resoiling. It takes place in a contemporaneous fashion as is practicable. Reclamation involves proper sloping, seeding, erosion control and protection from off-site impacts.

Reclamation is covered under Rule 6 of MLRB regulations and by an approved MLRB Permit (M-2018-063).



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## SECTION 3:

## FACILITY MAP



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### SECTION 3: SITE MAP

The following numbers are used as a key for the map on the next page. This map show how we believe the area will look after the first year. It will be updated as needed yearly.

1 = Perimeter Control

2 = Excavated or Graded Areas

3 = Material storage

4 = Plant Site Area

5 = Undisturbed

6 = Topsoil Stockpile Area

7 = Revegetated Areas

8 = Bank Armoring

9 = Other \_\_\_\_\_

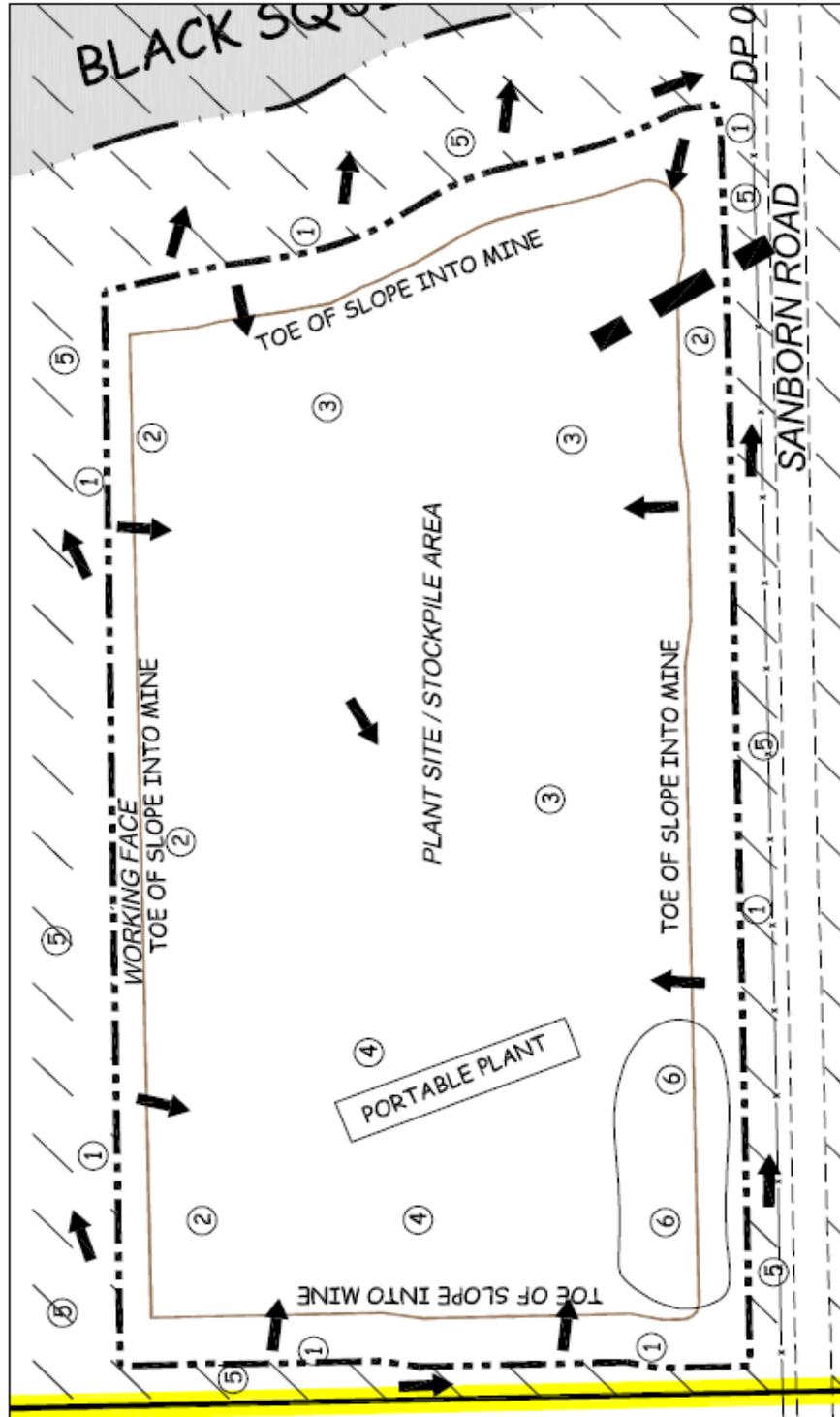


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**ELLICOTT SAND AND GRAVEL LLC.**  
**SCHUBERT RANCH SAND RESOURCE**  
DISCHARGE PERMIT SITE SKETCH MAP (active area)



- LEGEND**
- PERMIT LINE/AFFECTED LANDS
  - INTERNAL ROAD
  - ISOLATION BERM
  - FENCE
  - SURFACE DRAINAGE DIRECTION
  - SEE KEY ON NEXT PAGE



PREPARED BY: ENVIRONMENT, INC.

DATE: NOV. 03, 2021 - 14:58:41



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## SECTION 4:

# FACILITY INVENTORY AND ASSESS- MENT OF POLLUTANT SOURCES

Also includes:

ACTIVITIES AND EQUIPMENT, MATERIALS  
INVENTORY AND RISK IDENTIFICATION AND  
ASSESSMENT



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## **SECTION 4: DESCRIPTION OF POTENTIAL POLLUTANT SOURCES, MATERIALS INVENTORY, AND RISK IDENTIFICATION AND ASSESSMENT,**

### **RISK IDENTIFICATION AND ASSESSMENT**

Because of the nature of the activities within our industry, the potential for contributing pollutants is minimal.

Sources contributing pollutants to storm water discharges were covered in detail in:

Materials, methods, and management practices, Section 4 - Table A.

History of significant spills and leaks, Section 4 - Table B.

### **KEY FOR SECTION 3 - TABLE A**

**Significant materials that have been treated, stored, or disposed of in a manner to allow exposure to storm water:**

A = Significant material located on site

**Methods of on-site storage or disposal:**

B = Stockpiling

C = Enclosed containers

D = Containment areas

E = Treatment plants

F = Other methods (fill in on chart)

**Material management practices employed to minimize contact of the materials with storm water runoff:**

G = Enclosed areas

H = Stored on impervious surfaces

I = Graded excavations

J = Stock pile revegetation

K = Detention/Retention Area

L = Berms

M = Other practices (fill in on chart)

(Extra blanks are provided for additional significant materials not included on Table 3A)



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**SECTION 4 - TABLE A: SIGNIFICANT MATERIALS, STORAGE METHODS & MANAGEMENT PRACTICES**

DESCRIPTION OF SIGNIFICANT MATERIAL	ON- SITE	STORAGE METHODS					MANAGEMENT PRACTICES							
		A	B	C	D	E	F	G	H	I	J	K	L	M
Topsoil stock piles	X	X								X	X		X	
Gravel & sand piles	X	X								X			X	stored in excavated area below grade

DESCRIBE MATERIAL LOADING AND ACCESS AREA

<p>Loading are is in and around the plant site that is located below grade in the bottom of the mine. The floor will be a sand or gravel base an</p>
<p>to allow any stormwater to soak into the ground. No stormwater can leave this area. The access road will be domed and ditches will be</p>
<p>install on side to direct runoff back into the the mine area or will be retained on site inthe ditches until it can soak into the ground.</p>



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**SECTION 4 - TABLE B: LIST SIGNIFICANT SPILLS & LEAKS OF TOXIC OR HAZARDOUS SUBSTANCES**

Date	Spill or Leak
	None reported

Additional sheets may be attached if needed

**SECTION 4 - TABLE C: STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES**

X	Industrial Activity	Direction of Flow	Potential Pollutants Present
X	Topsoil stockpiling	To interior of excavated area	total suspended solids
X	Sand and gravel piles	"	total suspended solids
	Other (list below)		



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**SECTION 4 - TABLE D**

**SUMMARIZE ANY EXISTING DISCHARGE SAMPLING DATA  
DESCRIBING POLLUTANTS IN STORM WATER DISCHARGES**

None collected to date

**SECTION 4 - TABLE E**

**DESCRIBE EACH PROPOSED SAMPLING POINT,  
SHOULD MONITORING BE REQUIRED**

Sampling point	Description of Location
001	Out side the disturbed area at the low point in the mining stage in SE corner near Black Squirrel Creek.



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## SECTION 5:

# CONTROL MEASURES / BEST MANAGEMENT PRACTICES



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### SECTION 5: CONTROL MEASURES / BEST MANAGEMENT PRACTICES

The following practices are representative of measures employed within the Sand & Gravel Industry for limiting pollution associated with runoff. The specific practices listed below should not be construed as practices that are mandatory or that there is any need on the part of an operator to justify non-use of a particular practice. Obviously, the intent of BMP's is to effect a measure of control over the water quality of stormwater discharges. The practices selected by an operator to achieve this end may evolve with time.

PRACTICE EMPLOYED	AREA WHERE PRACTICE IS EMPLOYED	DATE OF IMPLEMENTATION
<b>VEGETATION MANAGEMENT:</b>		
Buffer Strips	Around perimeter and on undisturbed areas	at mine startup
Temporary Seeding	Topsoil stockpiles	as needed
Revegetate as Practicable	graded and resoiled areas	as needed
Other:		
<b>WATER MANAGEMENT: (INTERIM MEASURES)</b>		
Isolation Berms	around active mining areas	at mine startup
Isolation ditches	around active mining areas	at mine startup
detention ponds	central part of mining area on floor.	at mine startup
Other:		
<b>WATER MANAGEMENT (PERMANENT STRUCTURAL CONTROLS):</b>		
Site Grading	Entire site	at mine startup
Upstream Flow Diversion		
Channel Improvements		
Overland Flow Routing		
On site Flow Diversion		
Flow Storage/Detention		
Berming	Along active mining area and outer edges of permit area.	at mine startup
Earth Dike		
Check Dams		
Pipe Slope Drain		
Sediment Trap Area		
Flow Attenuation Area		
Infiltration Area	Mine floor	at mine startup
Water Bars		
Other (Describe)	Roadside ditches	at mine startup



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## SECTION 6:

### ADDITIONAL CONTROL MEASURES

Also includes:

GOOD HOUSEKEEPING, PREVENTATIVE MAINTENANCE, SPILL PREVENTION & RESPONSE, EMPLOYEE TRAINING, AND TESTING FOR NON-STORM WATER DISCHARGES, CONTROL OF NON-STORM WATER DISCHARGES





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**6c SPILL PREVENTION, CONTROL AND COUNTERMEASURE**

A SPILL PREVENTION A CONTROL AND COUNTERMEASURES PLAN IS NOT NEEDED FOR THIS FACILITY. NO HAZARDOUS MATERIALS SUCH AS MOTOR FUELS, OILS OR ANTI-FREEZE WILL BE STORED AT THE SITE.

**6d: EMPLOYEE TRAINING**

Training which explores the goals and basic components of the SWMP will be conducted for upper level management (superintendents and foremen) on an annual basis. Such training will include:

- Spill Prevention
- Spill Response
- Good Housekeeping Techniques
- Materials Management
- Sediment & Erosion Prevention

While operations are conducted on site it will be the responsibility of the superintendent or foreman in charge to train appropriate on-site personnel so that the goals of the SWMP are achieved. Yearly training will be done during the annual miner refresher training.





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6e: TESTING FOR NON-STORM WATER DISCHARGES, CONTROL OF NON-STORM WATER DISCHARGES

SECTION 6 - FORM A DETAIL OF NON-STORM WATER DISCHARGE NOTE: DISCHARGE MEANS WATER THAT RUNS OFF THE PROPERTY				
TYPES OF DISCHARGE	NO DISCHARGE	PERMITTED	UNPERMITTED	CONTROL MEASURES
<b>Process Water Discharges:</b>				
Topsoil stockpiles	X			directed to excavated area
Gravel & sand storage	X			directed to excavated area
Dust Control (Roads)	X			Ditches directed back into mined area
Other				
<b>OTHER INDUSTRIAL PROCESS DISCHARGE</b>				
Describe Source(s): _____ _____				
<b>SANITARY WASTE DISCHARGE: NONE</b>				
<b>Exempt Discharges:</b>	<b>IDENTIFIED ON SITE</b>		<b>COMMENTS</b>	
Irrigation Return Flows				
Other Agricultural Discharges				
Fire Fighting Discharges				
Foundation Draining (SUMP)				
Other _____				
ADDITIONAL COMMENTS: _____ _____ _____				



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SECTION 6 - FORM B  
STORM WATER QUALITY CONTROL  
TESTING FOR UNPERMITTED NON-STORM WATER DISCHARGES  
(DO NOT INCLUDE EXEMPT DISCHARGES)

Testing does not refer to water quality sampling and analysis. Testing is the visual observation of non-storm water discharges. The intent of this portion of the SWMP is to detail any discharge sources which might contaminate your storm water discharges. Detail the observation for the presence of unpermitted storm water discharges. Prepare this page for each unpermitted discharge source.

1. Date of testing: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
2. Describe method of testing:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
3. Description of non-permitted discharge and source of water (i.e well water for dust control):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
4. On-site drainage points observed during the test:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
5. Detail any pollution control measures for this source:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTE: When your facility does not have access to an outfall, i.e manhole or other point of access, to the conveyance which receives the unpermitted discharge, you may not be able to perform the testing or observation required. If this is the case, explain why it is not feasible for you to provide the above information:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THIS FORM SHOULD BE FILLED OUT FOR ANY NEW DISCHARGES OBSERVED



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## SECTION 7:

# COMPREHENSIVE INSPECTION



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PRACTICE EMPLOYED AREA WHERE PRACTICE IS EMPLOYED DATE OF IMPLEMENTATION		
<b>Vegetation Management:</b>		
Buffer Strips	Around mine perimeter and along Black Squirrel drainage	at mine startup
Temporary Seeding	Topsoil piles	as needed
Constructed Wetlands		
Revegetate as Practicable	Where resoiling is complete	as needed
Other (Describe)		
<b>Water Management: (Interim Measures)</b>		
Straw Bales		
Silt Fences		
Detention Ponds	on mine floor	at mine startup
Rip Rapping		
Other (Describe)		
<b>Water Management (Permanent Structural Controls):</b>		
Site Grading	On disturbed areas	at mine startup
Upstream Flow Diversion	around property lines	at mine startup
Channel Improvements		
Overland Flow Routing		
On site Flow Diversion	around active disturbed areas	at mine startup
Flow Storage/Detention		
Berming	along outer edges of active mining area	at mine startup
Earth Dike		
Check Dams		
Pipe Slope Drain		
Sediment Trap Area		
Flow Attenuation Area		
Infiltration Area	Mine floor	at mine startup
Water Bars		
Other (Describe)		



RPM, Inc.

**SWMP COMPREHENSIVE FACILITY INSPECTION REPORT**

OWNER: *Ellicott Sand & Gravel LLC*  
 FACILITY: *Schubert Ranch Sand Resource*  
 PERMIT NUMBER: *COG 502203*  
 PERMIT CONTACT: *Perry Hastings*

Inspector: \_\_\_\_\_ Signature: \_\_\_\_\_

Date of Inspection: \_\_\_\_\_

Type of Inspection:    **Normal**        **Incidental event**    (Circle one)

Weather: \_\_\_\_\_

NOTES: \_\_\_\_\_

DEFICIENCIES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ACTION TAKEN TO CORRECT: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Table A

AREA INSPECTED	INSPECTED & ACCEPTABLE		PROCEDURES TO BRING INTO COMPLIANCE	POTENTIAL POLLUTANTS		PREVENTION CONTROL MEASURES
	YES	NO		YES	NO	
Berm around site						
Detention areas						
isolation ditches						
Roads						
Topsoil Piles						
Sand and Gravel Piles						
General area						
Other (list below)						



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## SECTION 8:

# MONITORING PROCEDURES AND DOCUMENTATION



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**STORMWATER MONITORING**

PERMIT NUMBER	RESULTS	INTERPRETATIONS
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



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**Visual Monitoring Example Tracking Form**

ELLICOTT SAND AND GRAVEL, LLC  
Schubert Ranch Gravel Resource

<b>Visual Monitoring (One Sample per Form)</b>	
Year: _____	Quarter (circle one): 1 2 3 4      Date: _____
<i>Visual monitoring must be conducted once each quarter for the entire permit term. The permittee must collect a stormwater sample from each outfall (or a substantially identical outfall) and conduct a visual assessment of each sample.</i>	
<b>Required Documentation:</b>	
Personnel collecting the sample and performing visual assessment:	Print Name: _____
	Title: _____
	Provide Signature: _____
Sample location:	_____
Sample collection date and time:	_____
Visual assessment date and time:	_____
Nature of the discharge (i.e., runoff or snowmelt):	_____
Results of observations of the stormwater discharge:	_____
Probable sources of any observed stormwater contamination:	_____
If applicable, why it was not possible to take samples within the first 30 minutes:	_____
<i>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, and document the visual assessment results:</i>	
* Color	_____
* Odor	_____
* Clarity	_____
* Floating Solids	_____
* Settled Solids	_____
* Suspended Solids	_____
* Foam	_____
* OIL SHEEN	_____
* Other obvious indicators of stormwater pollution	_____
<b>Required Documentation Regarding Corrective Action:</b>	
If the visual monitoring indicates the control measures are inadequate or are not being properly operated and maintained, the permittee must conduct corrective actions.	
****Use the Corrective Action Summary Sheet to provide a summary and schedule of implementation of any corrective action(s) that has or will be taken based on this visual monitoring.	



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## SECTION 9:

# CORRECTIVE ACTION DOCUMENTATION



**RPM, Inc.**

**Corrective Action Example Tracking Form**

*Note: Modification of any control measure as part of the corrective action required by Parts I.K.1 and I.K.2 of the permit must be performed consistent with Part I.C (Control Measures) of the permit.*

Provide the Permit Reference: (Example: I.K.1.a)	Required 5-day documentation						
	Date the problem was identified	Description of the problem identified (i.e., What's wrong?)	The condition triggering the need for corrective action review (i.e., How was this discovered? Example, through visual inspection, Benchmark sampling)	Summary of corrective action taken or to be taken (or, for "triggering events" where the permittee determines that corrective action is not necessary, the basis for this determination)	Are SWMP modifications required as a result of this discovery or corrective action? (Yes/No)	Date corrective action initiated	Date corrective action completed or expected to be completed



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## SECTION 10:

# RECORD KEEPING & REPORTING



**RPM, Inc.**

### **Record Keeping:**

The sand and gravel mining and processing permit (Part I.N.3 [Page 41] of the permit) requires you to keep records of any activities at your site related to your compliance with the permit. As you conduct inspections, monitoring, corrective actions, and other permit implementation activities, you will generate additional records, such as inspection reports and monitoring reports. These additional documents must be kept on-site with your SWMP. Ensure these records are accessible, complete, and up-to-date.



RPM, Inc.

<b>INCIDENT REPORT</b>
------------------------

OWNER: *Ellicott Sand & Gravel LLC*  
FACILITY: *Schubert Ranch Gravel Resource*  
PERMIT NUMBER: *COG- 502203*  
PERMIT CONTACT: *Perry Hastings* \_\_\_\_\_ (602) 558-0846

Inspector: \_\_\_\_\_ Signature: \_\_\_\_\_

DATE OF INCIDENT: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DETAIL ANY SIGNIFICANT SPILL OR OTHER REPORTABLE DISCHARGE:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DETAIL QUALITY & QUANTITY OF STORMWATER WHICH CAME INTO CONTACT WITH POLLUTANT FROM SPILL:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DETAIL CORRECTIVE ACTIONS TAKEN:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





RPM, Inc.

SECTION 11:

ANNUAL REPORT



RPM, Inc.



**COLORADO**  
Department of Public  
Health & Environment

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

**COG500000 Annual Report Form**  
**Sand and Gravel Mining and Processing**  
**Applicable to Stormwater-only discharges**

<b>FOR INTERNAL USE ONLY</b>	
Reviewer: _____	
Further Review:    Yes    No	

<b>Part A: Permit Identification</b> General Permit Number: COG500000 Facility Certification Number COG50 <u>2203</u>	<b>Part B: Reporting Period Jan 1 through Dec 31</b> (Check one. Report due by February 28 of the following year.) 2021 <input type="checkbox"/> 2022 <input type="checkbox"/> 2023 <input type="checkbox"/> 2024 <input type="checkbox"/>
---	--

**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.





RPM, Inc.

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)	<input type="checkbox"/>	<input type="checkbox"/>
- Benchmark Monitoring (Part I.I.2)	<input type="checkbox"/>	<input type="checkbox"/>
- Water Quality Standards Monitoring (Part I.I.3)	<input type="checkbox"/>	<input type="checkbox"/>
- Additional Monitoring Required by Division (Part I.I.4)	<input type="checkbox"/>	<input type="checkbox"/>
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);	<input type="checkbox"/>	<input type="checkbox"/>
- Facility control measures are not stringent enough for the discharge to meet applicable water quality standards;	<input type="checkbox"/>	<input type="checkbox"/>
- Modifications to the facility control measures are necessary to meet the practice-based effluent limits in this permit;	<input type="checkbox"/>	<input type="checkbox"/>
- The permittee finds in a facility inspection, that facility control measures are not properly selected, designed, installed, operated or maintained.	<input type="checkbox"/>	<input type="checkbox"/>
- 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;	<input type="checkbox"/>	<input type="checkbox"/>
- The average of quarterly sampling results as described in Part I.I.2.e of this permit exceeds an applicable benchmark.	<input type="checkbox"/>	<input type="checkbox"/>
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](mailto:cdphe.wqrecordscenter@state.co.us)

11/2021



RPM, Inc.

## APPENDIX

# FACILITY FORMS INSTRUCTIONS FOR USE



RPM, Inc.

## SECTION 5: BEST MANAGEMENT PRACTICES

### DIRECTIONS FOR PREPARING SECTION 5:

#### GENERAL PERMIT REQUIREMENTS

- 4f. **Best Management Practices.** *The plan shall contain a narrative description of the appropriate stormwater management practices for the permittee's facility. Based on an assessment of the potential of various sources at the plant to contribute pollutants to stormwater discharges associated with industrial activity, the plan shall provide estimated dates of compliance for when the measures determined to be reasonable and appropriate shall be implemented and maintained. Any existing controls should also be discussed. The description of the BMPs shall include:*
1. **Stormwater diversion:** *Describe how and where stormwater will be diverted away from industrial areas to prevent stormwater contamination.*
  2. **Materials handling and spill prevention:** *Where materials can impact stormwater runoff, existing practices that reduce the potential for contamination shall be described. For example, materials should be stored and handled in covered areas to prevent contact with stormwater, and chemicals should be stored within berms or secondary containment devices to prevent leaks and spills from entering stormwater runoff.*
  3. **Sediment and erosion prevention:** *The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures taken to limit erosion.*
  4. **Other pollution prevention measures:** *The plan shall identify any other structural and non-structural measures for stormwater quality control on site.*

- **Copy the following form and fill in the information appropriate for your site. Insert the completed form in Section 9 of your Storm Water Management Plan.**



RPM, Inc.

**DIRECTIONS FOR PREPARING SECTION 5 ( continued):**

*In this portion of the SWMP you will detail practices that you utilize on site to effect drainage and water quality control. It is important that you only list those practices which you are actually going to implement and maintain. Items denoted in this section of the SWMP will be utilized for enforcement by the Water Quality Control Division. For instance, if you say that you will utilize straw bales in a particular area you may be cited for a violation of the SWMP if you neglect to implement that portion of your plan. Also if at some later date you decide to utilize a silt fence instead of straw bales be sure to make a notation of this change on the forms provided in Section 9.*

*In filling out the forms in Section 9 you will need to denote where you are employing a particular practice on site. Perhaps the simplest method to do this is to label areas on your site map which correspond with your management practices. For instance: You have a 100' undisturbed strip between the River and your operation. You might label this area on your site map as "A". Then in Section 9 of the SWMP you will place an "A" in the column labeled "Area where practice is employed" associated with BUFFER STRIPS. If you utilize this method you should make a notation somewhere on the Section 9 Forms that your site map provides the key to your reference codes.*

*Another way of approaching this Section of the SWMP is to provide a written key. An example of such a key that you might want to modify for your own purposes is as follows:*

**AREAS TARGETED FOR CONTROL**

- |                                 |                                |
|---------------------------------|--------------------------------|
| 1 = Perimeter Control           | 2 = Excavated or Graded Areas  |
| 3 = Crushing Area               | 4 = Aggregate Washing Area     |
| 5 = Asphalt Production Area     | 6 = Concrete Production Area   |
| 7 = Asphalt Storage Area        | 8 = Concrete Storage Area      |
| 9 = Product Loadout Area        | 10 = Topsoil Stockpile Area    |
| 11 = Overburden Stockpile Area  | 12 = Aggregate Stockpile Area  |
| 13 = Petroleum Product Storage  | 14 = Lime Storage Area         |
| 15 = Asphalt Additive Storage   | 16 = Concrete Additive Storage |
| 17 = Equipment Maintenance Area | 18 = Equipment Wash-out Area   |
| 19 = Parking Areas              | 20 = Other                     |

*If you choose to utilize this key approach, you can simply fill in the appropriate number in the column labeled "Area where practice is employed" for those practices which are implemented. For instance if you utilize a silt fence to effect perimeter control you would place a "1" in the column labels "area where practice is employed" corresponding to SILT FENCES. (Recommendation: If you choose to utilize this key approach, we suggest that you list only those critical areas that occur on your site. For instance: If you do not produce asphalt, do not include items such as 5, 7, & 15 on your list.)*

*(Note: Be aware that only the most common practices are listed on the forms provided in Section 9. There will be other practical and effective techniques not listed on the forms provided. When utilizing a technique not listed simply use the extra space provided on the forms to detail your own innovative control techniques.)*



**RPM, Inc.**

#### **SECTION 5: BEST MANAGEMENT PRACTICES**

The following practices are representative of measures employed within the Sand & Gravel Industry for limiting pollution associated with runoff. The specific practices listed below should not be construed as practices that are mandatory or that there is any need on the part of an operator to justify non-use of a particular practice. Obviously, the intent of BMP's is to effect a measure of control over the water quality of stormwater discharges. The practices selected by an operator to achieve this end may evolve with time.



RPM, Inc.

SECTION 6d: EMPLOYEE TRAINING

**GENERAL PERMIT REQUIREMENTS**

- 4g. **Employee Training:** *Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the SWMP. Training should address topics such as spill response, good housekeeping and material management practices. The SWMP shall identify periodic dates for such training. Contractor or temporary personnel shall be informed of plant operation and design features in*

■  
***Prepare a statement which details your employee training for purposes of implementing your Storm water Management Plan. Insert your statement in Section 10 of your Storm Water Management Plan.***

*A sample statement is included on the following page.*

SECTION 6d: EMPLOYEE TRAINING

Training which explores the goals and basic components of the SWMP will be conducted for upper level management (superintendents and foremen) on an annual basis. Such training will include:

- Spill Prevention
- Spill Response
- Good Housekeeping Techniques
- Materials Management
- Sediment & Erosion Prevention

While operations are conducted on site it will be the responsibility of the superintendent or foreman in charge to train appropriate on-site personnel so that the goals of the SWMP are achieved.



RPM, Inc.

## SECTION 6e: TESTING & CONTROL FOR NON-STORMWATER DISCHARGES

### GENERAL PERMIT REQUIREMENTS

- 4h. **Testing for Non-Stormwater Discharges.** *The Stormwater Quality Control section of the SWMP shall include a certification that the discharges have been tested or evaluated for the presence of non-stormwater discharges. The certification shall include a description of the results of any test for the presence of non-stormwater discharges, the method used, the date of any testing, and the on-site drainage points that were directly observed during the test.*
8. **Allowable Non-Stormwater Discharges.** *Except for flows from fire fighting activities, sources of non-stormwater listed in Part I.C.5.b of this permit [COR - 010000, Page 10] that are combined with stormwater discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.*

### DIRECTIONS FOR PREPARING SECTION 6e:

- **Copy the following forms and fill in the information appropriate for your site. Insert the completed forms in Section 6 of your Storm Water Management Plan.**

*This portion of the SWMP is designed to give information about all discharges associated with your site. The purpose of these forms is to help you determine the non-storm water discharges associated with your operation. We have attempted to note the most common types associated with the permits noted in the introduction. Some of these may not apply, and your particular facility may have discharges in addition to the ones we have noted. **Please use due diligence when preparing this form so as to note any other possible discharges from your facility.***

*The first part of Section 11 - Form A lists various typical process water discharges associated with sand and gravel operations, processing sites and mobile plants. On this form you will indicate the discharges that are present or may be present in the future at your site. If you have a permit covering process water discharges indicate that these discharges are PERMITTED by checking the relevant box on the form. If an activity (or discharge associated with the activity) does not take place on the site and you expect that it will not take place in the future you will check the appropriate NO DISCHARGE box. (Example: You operate a dry mining site. You do not anticipate intercepting ground water at any time during the life of the mine. You will place an "X" in the NO DISCHARGE column next to GRAVEL PIT DEWATERING.)*



RPM, Inc.

**DIRECTIONS FOR PREPARING SECTION 6 (continued):**

*The second part of Form A addresses "other industrial process discharges". Detail any other industrial discharges (which is not listed in the process water discharges section) which enters your site and may co-mingle (mix) with your stormwater or process water discharges. An example of this would be an upgradient property which has an industrial discharge that enters your property and may mix with your discharges.*

*In the third part of Form A you will list information about any sanitary waste discharges that are generated by your activities on the site.*

*The final portion of Form A requires information about exempt discharges (discharges that do not require permitting). If any of the activities listed in this section take place on the site mark and "X" in the appropriate box and make any comments that may apply. If these types of discharges are not present on the site place "NA" (not applicable) in the appropriate box. If there are discharges associated with your site that are not listed use the OTHER box to detail your unique situation. If more room is needed additional information can be added to separate sheets and attached to this form.*

**When filling out Section 6 - Form A use past observations to document historic discharges.**

**NOTE:** *A "discharge" is any water which enters "water of the state". A "discharge" is not restricted to water which leaves your property and enters other water. Be aware that the term "waters of the state" includes almost all water ways including irrigation ditches, dry gullies, borrow ditches, most woodlands, ponds, streams and rivers. Relevant exceptions to "waters of the state" are woodlands which are specifically designed for storm water management and control, wastewater treatment facilities, settling ponds and water which is withdrawn for beneficial use (specifically in exercising water right). So be aware you may be discharging to "waters of the state" even if your discharge never leaves your property.*



RPM, Inc.

## **SECTION 7: COMPREHENSIVE INSPECTION**

### **DIRECTIONS FOR PREPARING SECTION 7:**

*Most facilities are required to conduct a comprehensive inspection at least twice per year. It is recommended that you conduct your initial inspection when you are preparing your SWMP. Fill out the forms contained in this section to document your inspections and file them with your internal records. The comprehensive inspections will become the basis for the information submitted with your annual report. Additionally, your records of your inspections will need to be produced upon demand by the Colorado Department of Health, Water Quality Control Division.*

#### **GENERAL PERMIT REQUIREMENTS: SAND & GRAVEL PERMIT**

3. **Facility Inspection.** *Qualified personnel identified by the operator shall make a comprehensive inspection of their stormwater management system, at least twice per year (in the spring and fall), except as provided in paragraphs d and e, below. These comprehensive inspections must be documented and summarized in the annual report.*
  - a. *Material handling areas, disturbed areas, areas used for material storage that are exposed to precipitation, and other potential sources of pollution identified in the SWMP in accordance with Part I.C.2 of this permit shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural stormwater management measures, sediment and control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.*
  - b. *Based on the results of the inspection, the description of potential pollutant sources and pollution prevention measures identified in the plan shall be revised as appropriate within two weeks of such inspection. Such revisions shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 60 days after the inspection.*
  - c. *A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWMP, and actions taken in accordance with paragraph (b), above, shall be made and retained as part of the SWMP for at least three years. The report shall be signed in accordance with Part I.D.10 of this permit*
  - d. *Where semi-annual site inspections are shown in the plan to be impractical for sites where an employee is not stationed or does not routinely visit the site, inspections as required in this part shall be conducted at appropriate intervals specified in the plan, but never less than once in two years.*
  - e. *Where semi-annual site inspections are shown in the plan to be impractical for inactive sites (sites where industrial activity is no longer conducted), site inspections required by this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in three years. At least one site inspection required under this part shall be conducted prior to October 1, 1994 or the date two years after such site becomes inactive, whichever is earlier.*



RPM, Inc.

## SECTION 7: COMPREHENSIVE INSPECTION

### GENERAL PERMIT REQUIREMENTS: LIGHT INDUSTRIAL PERMIT

5. **Comprehensive Inspection.** *The SWMP shall identify qualified personnel that shall inspect designated equipment and plant areas. The procedures and intervals of the comprehensive inspection shall also be specified in the plan and shall be consistent with Part I.C.7. Except as provided in paragraph (d) and (e) of that part, comprehensive inspections shall in no case be completed less than twice a year ( in the spring and fall). The operator shall keep a record of such inspections. This record shall be made available to Division upon request and summarized in the annual report.*

*The SWMP may also identify routine (e.g., day-to-day, or weekly) inspection. Records on these inspections are not required to be kept under this permit.*

### DIRECTIONS FOR SECTION 7 - FORM A

*List of possible areas to be inspected:*

1. *Hot Plant Site*
2. *Concrete Plant Site*
3. *Crusher Site*
4. *Wash Plant Site*
5. *Overburden and Topsoil Stockpiles*
6. *Brush Barriers*
7. *Silt Fence*
8. *Straw and bale Barriers*
9. *Culvert*
10. *Sediment Trap*
11. *Berms & Dikes*
12. *Erosion & Sediment Control*

*In the left column on Form A make a list of the critical areas on your site. If there is difficulty with any area be sure you denote any corrective actions that you will take. If new practices will be employed or old practices discontinued, be sure to make a note in your Storm Water Management Plan (document).*



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## SECTION 10: RECORD KEEPING & REPORTING

### DIRECTIONS FOR SECTION 10:

These forms are designed to be used for routine site inspections (when you are not performing a comprehensive inspection). When a routine site inspection reveals that you may need to make changes to your Storm Water Management Plan, document the changes to be implemented as well as any elements of the existing plan which will be discontinued. Any physical changes to your Storm Water

### **GENERAL PERMIT REQUIREMENTS**

6. **Recordkeeping & Reporting.** *Incidents such as spills or other discharges, along with other information describing the quality and quantity of stormwater discharges, shall be included in the records. Inspections and maintenance activities shall be documented and recorded. The SWMP shall identify procedures for record keeping and internal reporting.*

Management Plan **MUST** be documented and filed with your SWMP on site in order to avoid future compliance problems.



RPM, Inc.

**SECTION 11: ANNUAL REPORT**

**GENERAL PERMIT REQUIREMENTS**

**4a. Annual Report - SWMP**

*The permittee will be required to submit an annual report, covering January 1 through December 31 of each year, on the overall compliance with the SWMP. The annual report will contain at a minimum:*

- 1) *Name of permittee, address, phone number, the permit certification number.*
- 2) *A report on the facility's overall compliance with the SWMP.*
- 3) *A summary of each comprehensive stormwater facility inspection made, including date, findings, and action taken.*
- 4) *Results and interpretations of any stormwater monitoring performed.*

*The annual report will be due on or before February 15, after the first full year of coverage under the permit. The exact date for the first annual report will be listed on the permit certification. In no case will an annual report be due before February 15, 1994, unless specifically directed by the Division. The Division reserves the right to require additional information in the report on a case-by-case basis, as needed.*

*All reports required for submittal shall be signed and certified for accuracy by the permittee (see Part I.D.10).*

*A signed copy of the above report forms shall be submitted to the following address:*

*Colorado Department of Health  
Water Quality Control Division  
WQCD-PE-B2  
4300 Cherry Creek Drive South  
Denver, Colorado 80222-1530  
Attention: Permits and Enforcement Section*



RPM, Inc.

**Attachment II**  
**Permit Application Approval Document**



RPM, Inc.



**COLORADO**  
Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman St. Room 215  
Denver, CO 80203

November 9, 2021

Perry Hastings  
Ellicott Sand & Gravel LLC  
235 Franceville Coal Mine Road  
Colorado Springs, CO 80929

**Re: Schubert Ranch Sand Resource (Permit No. M-2018-063)  
Permit Issuance  
Construction Material Operation**

Dear Mr. Hastings:

On November 9, 2021 the Division of Reclamation, Mining and Safety (Division) found Ellicott Sand & Gravel LLC to have satisfied the applicable requirements of C.R.S. 34-32.5-101 et seq. for obtaining a mining and reclamation permit. 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. It is your responsibility to comply with all of the terms of the permit.

1. All of the original application materials, as amended and supplemented, are an integral part of your permit and are 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 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 modification to the permit. We suggest consulting Rule 1 of the Construction Materials Rules and Regulations and/or contacting us to determine if a revision to the permit is necessary.
3. On your permit anniversary date each year, November 9, you must submit an annual fee and an annual report to the Division. The annual fee for this permit is \$791.00. Please consult the Act, Rules and Regulations, and your permit for specific annual report requirements applicable to your mine. Annual reports, maps, and fees must be filed electronically using the Division's ePermitting portal. If you have not done so already, you will need to sign up for electronic filing of your annual report, map, and fee by visiting the Division's web site (<https://colorado.gov/drms>) clicking on "ePermitting" on the home page, and then clicking on the "Sign up for Minerals Annual Report Electronic Filing" link.





**RPM, Inc.**

If you have any questions, please contact the Division.

Sincerely,

Virginia Brannon  
Division Director

Enclosure

cc: Tim Cazier, DRMS

Certified Mail No. : 7018 2290 0001 8923 4206



RPM, Inc.



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

1313 Sherman St. Room 215  
Denver, CO 80203

MINING AND RECLAMATION PERMIT  
CONSTRUCTION MATERIAL MINING OPERATIONS

Permit Number: M-2018-063  
Type of Permit: 112c  
  
Permit Date: November 9, 2021  
(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. The Permittee, Ellicott Sand & Gravel LLC, desires to conduct a mining operation known as Schubert Ranch Sand Resource, for the purpose of extracting Aggregate. Unless this permit is modified or a separate permit is issued to cover the mining and/or recovery of other minerals or extractive products, the Permittee will not mine or recover any other commodities at this site.
- B. On November 6, 2019 the Mined Land Reclamation Board (Board) approved the Permittee's application for this permit, fixed the amount of the financial warranty and directed that this permit be issued upon the filing with the Division of Reclamation, Mining and Safety (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. If the Permittee desires to extract materials other than those listed in (A), a separate permit or a permit modification may be required.
- D. On November 6, 2019 the Board made the following findings:
  - 1. The application for this permit complies with the requirements of the Colorado Mined Land Reclamation Act for the Extraction of Construction Materials, C.R.S. 34-32.5-101 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





RPM, Inc.

to the structure is to be compensated for by the Permittee or if such an agreement cannot be reached, an engineering analysis establishes no damage will occur to the structure to the satisfaction of the Division; and;

3. The proposed mining and reclamation operations can be carried out in conformance with the requirements of the Act, and the Construction Material Rules and Regulations.
- E. The Permittee has made a showing satisfactory to the Board that:
1. It will employ, during and after its underground mining and/or surface operations, procedures designed to minimize environmental disturbance from such operation
  2. It will provide for reclamation of the Affected Lands appropriate to the subsequent beneficial use of such lands; and
  3. 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.
- F. A copy of the Permittee's application, as amended and supplemented, has been approved by the Board and is, by this reference, incorporated herein.
- G. The issuance of this permit does not relieve the Permittee from having to 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 Permittee, to engage in the operations described in the application on certain lands lying in the County of El Paso, 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 Permittee 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 Permittee 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 Permittee 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 Permittee 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.



RPM, Inc.

- 4) The Board or its authorized representative may enter upon the lands of the permitted operation at all reasonable times for the purpose of inspection to determine whether the provisions of the Act, Rules and Regulations, and permit have been complied with pursuant to C.R.S. 34-32.5-121.
  - 5) This permit may be revoked or suspended for non-compliance with the Act or applicable rules or regulations promulgated by the Board, the permit, or by violation of a Board Order.
  - 6) a) Pursuant to 34-32.5-118(5) of the Act, the Board has a right of entry to reclaim the lands affected by the operation or to respond to an emergency as defined by C.R.S. 34-32.5-121(2).
  - b) The Board will enter the lands to perform reclamation only if the Board has determined that:
    - i. Reclamation required the permit, statute, or regulations to be performed upon such lands has not been performed, or
    - ii. Financial warranty forfeiture proceedings described in the Act or similar provisions of subsequent laws, if any, have been initiated.
  - c) The Division, acting for the Board, will enter lands to respond to an emergency only where the Division determines that any of the conditions of Construction Material Rule 8.4.2 exist.
- 7) The additional conditions set forth in the attached rider, if any, are incorporated herein by reference.
- / \_\_\_/      a) Rider is attached.
- / XX/      b) No rider is attached.

MINED LAND RECLAMATION BOARD  
COLORADO DEPARTMENT OF NATURAL RESOURCES

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Virginia Brannon  
Division Director



RPM, Inc.

## Attachment III

### EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) EL PASO COUNTY APPLICATION AND PERMIT

<i>APPLICANT INFORMATION</i>	<i>PERMIT NUMBER</i>
<b>Owner Information</b>	
Property Owner	Schubert Ranches, Inc., George H.
Applicant Name (Permit Holder)	Christine Wilson
Company/Agency	Ellicott Sand & Gravel LLC
Position of Applicant	Manager
Address (physical address, not PO Box)	1555 S. Baggett Rd. , 1550 S. Baggett Rd.
City	Calhan, Calhan
State	Colorado Colorado
Zip Code	80808, 80808
Mailing address, if different from above	Same as above
Telephone	NA
FAX number	719-683-3860
Email Address	ellicottsandgravel@gmail.com
Cellular Phone number	719-568-3164
<b>Contractor/Operator Information</b>	
Name (person of responsibility)	Christine Wilson
Company	Ellicott Sand & Gravel, LLC
Address (physical address, not PO Box)	235 Franceville Coal Mine Road
City	Colorado Springs
State	Colorado
Zip Code	80929
Mailing address, if different from above	NA
Telephone	NA
FAX number	719-683-3860
Email Address	ellicottsandgravel@gmail.com
Cellular Phone number	719-568-3164
Erosion Control Supervisor (ECS)*	Christine Wilson
ECS Phone number*	719-568-3164
ECS Cellular Phone number*	719-568-3164

\*Required for all applicants. May be provided at later date pending securing a contract when applicable.



RPM, Inc.

**PROJECT INFORMATION**

<b>Project Information</b>	
Project Name	Ellicott Sand and Gravel - Schubert Ranch Sand Resource
Legal Description	Part of the S1/2N1/2SE1/4, S1/2SE1/4, and SE1/4SW1/4 of Section 20, and the E1/2E1/2 and NW1/4NE1/4 and parts of the SW1/4NE1/4, SW1/4SE1/4, and NW1/4SE1/4 of Section 29, and the E1/2NE1/4, SW1/4NE1/4, and SE1/4NW1/4 and parts of the NW1/4NE1/4 and NE1/4NW1/4 Section 32, Township 14 South, Range 62 West, 6th P.M., El Paso County, Colorado, containing +-733.7 acres.
Address (or nearest major cross streets)	Just east of the intersection of East Ellicott Road South and Sanborn Road. Ranch address: 1555 S. Baggett Rd
Acreage (total and disturbed)	Total: acres +- 7337.7 Disturbed: acres +-513.5
Schedule	Start of Construction: Upon approval of required permits. Completion of Construction: 53 yrs to 80 yrs. dependent upon market Final Stabilization: As each stage is completed, stabilization will begin
Project Purpose	The operation will extract sand and gravel with on-site processing to wash and size into products for sale into El Paso County and surrounding markets.
Description of Project	A dry mining operation, using front end loaders, scrapers and trucks to remove raw material to the washing and screening plant. Products will be placed into stockpiles for loading into highway haul trucks.
Tax Schedule Number	2400000276 & 2400000275

**FOR OFFICE USE ONLY**

The following signature from the ECM Administrator signifies the approval of this ESQCP. All work shall be performed in accordance with the permit, the El Paso County Engineering Criteria Manual (ECM) Standards, City of Colorado Springs Drainage Criteria Manual, Volume 2 (DCM2) as adopted by the El Paso County Addendum, approved plans, and any attached conditions. The approved plans are an enforceable part of the ESQCP. Construction activity, except for the installation of initial construction BMPs, is not permitted until issuance of a Construction Permit and Notice to Proceed.

Signature of ECM Administrator: \_\_\_\_\_ Date \_\_\_\_\_



**RPM, Inc.**

## **1.1 REQUIRED SUBMISSIONS**

In addition to this completed and signed application, the following items must be submitted to obtain an ESQCP:

- Permit fees;
- Stormwater Management Plan (SWMP) meeting the requirements of DCM2 and ECM either as part of the plan set or as a separate document;
- Operation and Maintenance Plan for any proposed permanent stormwater control measures; and
- Signed Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement, if any permanent stormwater control measures are to be constructed.

## **1.2 RESPONSIBILITY FOR DAMAGE**

The County and its officers and employees, including but not limited to the ECM Administrator, shall not be answerable or accountable in any manner for damage to property or for injury to or death of any person, including but not limited to a permit holder, persons employed by the permit holder, or persons acting in behalf of the permit holder, from any cause. . The permit holder shall be responsible for any liability imposed by law and for damage to property or injuries to or death of any person, including but not limited to the permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder, arising out of work or other activity permitted and done under a permit, or arising out of the failure to perform the obligations under any permit with respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work or other activity, or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit.

The permit holder shall indemnify, save, and hold harmless the County and its officers and employees, including but not limited to the BOCC and ECM Administrator, from all claims, suits or actions of every name, kind and description brought for or on account of damage to property or injuries to or death of any person, including but not limited to the permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder and the public, resulting from the performance of work or other activity under the permit, or arising out of the failure to perform obligations under any permit with respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work or other activity, or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by state law. The permit holder waives any and all rights to any type of expressed or implied indemnity against the County, its officers or employees. It is the intent of the parties that the permit holder will indemnify, save, and hold harmless the County, its officers and employees from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault of or negligence, whether active or passive, primary or secondary, on the part of the County, the permit holder, persons employed by the permit holder, or persons acting in behalf of the permit holder.



RPM, Inc.

**1.3 APPLICATION CERTIFICATION**

We, as the Applicants or the representative of the Applicants, hereby certify that this application is correct and complete as per the requirements presented in this application, the El Paso County Engineering Criteria Manual, and Drainage Criteria Manual, Volume 2 and El Paso County Addendum.

We, as the Applicants or the representatives of the Applicants, have read and will comply with all of the requirements of the specified Stormwater Management Plan and any other documents specifying stormwater best management practices to be used on the site, including permit conditions that may be required by the ECM Administrator. We understand that the stormwater control measures are to be maintained on the site and revised as necessary to protect stormwater quality as the project progresses. We further understand that a Construction Permit must be obtained and all necessary stormwater quality control measures are to be installed in accordance with the SWMP, the El Paso County Engineering Criteria Manual, Drainage Criteria Manual, Volume 2 and El Paso County Addendum before land disturbance begins and that failure to comply will result in a Stop Work Order and may result in other penalties as allowed by law. We further understand and agree to indemnify, save, and hold harmless the County and its officers and employees, including but not limited to the BOCC and ECM Administrator, from all claims, suits or actions of every name, kind and description as outlined in Section 1.2 Responsibility for Damage.

Christine Wilson

Date: 10/17/2022

Signature of Owner or Representative

Christine Wilson

Print Name of Owner or Representative

Christine Wilson

Date: 10/17/2022

Signature of Operator or Representative

Christine Wilson

Print Name of Operator or Representative

Permit Fee \$ \_\_\_\_\_

Surcharge \$ \_\_\_\_\_

Financial Surety \$ \_\_\_\_\_

Type of Surety \_\_\_\_\_

Total \$ \_\_\_\_\_

Financial Surety posted with the Mined Land Reclamation Board



RPM, Inc.

## Attachment IV Stormwater Permits



### COLORADO

Department of Public  
Health & Environment

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

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

Certification Number: COG502203

This Certification to Discharge specifically authorizes:

Ellicott Sand & Gravel LLC  
to discharge from the facility identified as

Schubert Ranch Sand Resource  
to:  
Upper Black Squirrel Creek - Arkansas River

Facility Located at:	¼ mile west of S Baggett Rd on Sanborn Rd, Ellicott, El Paso County, CO 80808
	Center Point Latitude 38.801070, Longitude -104.355350

Defined Discharge Outfall(s) to Surface Water	Outfall(s) Lat, Long	Discharge Outfall(s) Description	Receiving Stream
Outfall Number 001-A	38.795440, -104.354875	Stormwater discharge from stage 1 from outlopes of isolation ditches and berms	Upper Black Squirrel 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.

#### Stormwater Monitoring Requirements

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 Schubert Ranch Sand Resource 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.3*

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.





**RPM, Inc.**

**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: 1/5/2022      Effective: 1/5/2022**

The general permit COG500000 expired 12/31/2021 and is administratively continued. This certification is also administratively continued. It will remain in effect until the general permit is renewed or other actions are taken.

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 - Work Group Lead  
Industrial & Natural Resource Extraction Permitting Unit  
Permits Section  
Water Quality Control Division





**RPM, Inc.**

Note: The full permit will be provided if requested:



**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 13<sup>th</sup> day of October 2016

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

**Janet S. Kieler**  
Digitally signed by Janet S. Kieler  
DN: dc=local, dc=dph, 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**