



July 10, 2019

J.C. York
J&T Consulting, Inc.
305 Denver Ave., Suite D
Fort Lupton, CO 80621

Re: DPG Pit, File No. M-2019-028, 112 Construction Materials Reclamation Permit Application, Preliminary Adequacy Review

Mr. York:

The Division of Reclamation, Mining and Safety (Division) has completed its preliminary adequacy review of the above referenced application submitted for the DPG Pit. All comment and review periods for the application began on May 30, 2019, when the application was called complete for filing purposes. The decision date for the application is set for August 28, 2019.

The review consisted of comparing the application content with specific requirements of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials. The Division has identified adequacy items requiring clarification or additional information. These items are identified below under their respective exhibit heading, and are numbered sequentially.

Application Form:

- 1) Throughout the application form, the Applicant/Operator or Company Name is written as “J-2 Contracting Co.” (pages 1, 3, and 8). However, the company name is registered with the Colorado Secretary of State as “J-2 Contracting Company”. The company name given in the application form must be written exactly the same as it is registered with the state. Therefore, please provide revised pages 1, 3, and 8 with the company name written as “J-2 Contracting Company”.
- 2) On page 2, under item no. 9, the applicant must provide location information for the center of the area where the majority of mining will occur. The applicant included Section 11, Township 5 N, Range 65 W, the NE quarter of the SW quarter. However, in reviewing the legal description and maps submitted for the proposed affected lands, it appears the center of the area where the majority of mining will occur would be more accurately described as the NE quarter of the NW quarter of Section 12. Please revise page 2 as necessary to reflect the correct location information.
- 3) On page 8, a corporate seal must be provided for a corporation. If a corporate seal is available for J-2 Contracting Company, please provide it on the revised page 8.



Exhibit A – Legal Description (Rule 6.4.1):

- 4) The first paragraph of the legal description states “A tract of land located in the north ½ of section 12, and the southwest ¼ of northeast corner of section 11...”. After reviewing the rest of the legal description and the maps submitted for the proposed affected lands, it appears the lands are actually located in the southeast ¼ of the northeast corner of section 11, and not the southwest ¼ of the northeast corner. Therefore, please revise the legal description accordingly.

Exhibit C – Pre-mining and Mining Plan Map(s) of Affected Lands (Rule 6.4.3):

- 5) On Exhibit C-1 – Pre-Mining Plan Map, the proposed permit boundary is difficult to trace, especially the western and southern boundaries. Considering this was the only Exhibit C map submitted that includes the entire proposed permit area, it is particularly important the boundaries are clearly delineated. Please submit a revised Exhibit C-1 map that legibly portrays the total proposed permit boundary.
- 6) Exhibits C-2 and C-3 Pre-Mining Plan Maps show the type and location of numerous structures contained on the area of affected land and within 200 feet of the affected land. However, the owner’s name is not shown for several of these structures, including for an existing gravel road, borrow ditch, irrigation pond, building, tank, and pond on Exhibit C-2 map; and for existing roads (i.e., Holly Avenue), diversion structures, pump house, fences, water structure, buildings, and pond on Exhibit C-3 map. Please revise Exhibits C-2 and C-3 maps to include the owner’s name for all permanent man-made structures located on and within 200 feet of the proposed affected lands.
- 7) Please indicate on Exhibits C-2 and C-3 Pre-Mining Plan Maps the owner(s) of the pipeline right-of-ways and pipeline easements located within the proposed permit area.
- 8) Exhibit C-5 – Mining Plan Map identifies a shop area located outside of the proposed southern permit boundary, adjacent to Holly Avenue, which is not shown on Exhibit C-3 – Pre-Mining Plan Map. Please state whether this shop area will be constructed for the operation.
- 9) Please show on Exhibits C-4 and C-5 Mining Plan Maps the anticipated location(s) for topsoil and overburden storage during operations.
- 10) Exhibits C-4 and C-5 Mining Plan Maps identify the location of a “Floodway” and a “Floodplain” for the Cache La Poudre and South Platte Rivers. Please specify the type of floodway and floodplain on these maps (e.g., 100-year, 500-year).
- 11) Please identify the proposed fuel storage location(s) on Exhibits C-4 and C-5 Mining Plan Maps.
- 12) The Phase 4 acreage shown on Exhibit C-4 – Mining Plan Map (44.1 acres) is different than the Phase 4 acreage shown on Exhibit C-5 – Mining Plan Map (45.4 acres). Please explain and/or correct this discrepancy on the appropriate map.

Exhibit D – Mining Plan (Rule 6.4.4):

- 13) The operator states the proposed permit area is 228.02 acres, with approximately 190.37 acres being mined, and the remaining area consisting of setbacks, road and utility right-of-ways, equipment storage, and plant site access. Please specify the proposed affected area if it differs from the proposed permit area, including all lands to be affected by the operation (e.g., mining, stockpiling, processing, slurry wall installation, stormwater control structures, sediment ponds, equipment storage, scale/scale house, improved or newly constructed access/haul roads).
- 14) Please specify the proposed maximum disturbance (in acres) for which the operator is proposing to post a financial warranty at this time. If this acreage does not include the entire proposed affected lands, please commit to submitting a Technical Revision to increase the maximum disturbed area and revise the bond estimate accordingly prior to creating additional disturbance.
- 15) If the proposed maximum disturbance at this time will occur in more than one of the five proposed mining phases, please specify the type and estimated amount of disturbance to occur in each phase (e.g., 45 acres – mining – Phases 1 and 2; 15 acres – processing/stockpiling – Phases 3 and 4). This information is needed to calculate the required financial warranty for the proposed operation.
- 16) Please confirm the proposed maximum mining depth for the operation is 114 feet (12 feet maximum overburden + 102 feet maximum aggregate deposit).
- 17) The operator proposes a designated concrete truck washout area consisting of a 30 foot by 20 foot three-cell concrete structure. The Division was unable to locate this proposed structure on the mining plan maps submitted. Please show the anticipated location for the concrete washout area(s) on the appropriate mining plan map(s). Additionally, please be sure to describe the proposed reclamation plan for this structure in Exhibit E, including whether it will need to be demolished or backfilled under the proposed maximum disturbance and bonding scenario. For example, if the operator is proposing to post a bond that covers disturbances in only particular phases at this time, during which the concrete washout structure will still be in use, then the reclamation plan (Exhibit E) and bond estimate (Exhibit L) must account for reclamation of this structure.
- 18) The operator proposes a 50 foot by 100 foot designated excess concrete product dumping area with an exterior berm. The Division was unable to locate this proposed area on the mining plan maps submitted. Please show the anticipated location for the excess concrete dumping area(s) on the appropriate mining plan map(s). Additionally, please be sure to describe the proposed reclamation plan for this feature in Exhibit E and include any costs for its reclamation in Exhibit L for the proposed maximum disturbance and bonding scenario.
- 19) The operator states that all local, State, and Federal rules and regulations will be followed for the storage and handling of any fuel, asphalt, cement, flyash, and admixtures required for the batching facilities. Given the location of the proposed operation within the 100-year floodplain of the Cache La Poudre and South Platte Rivers (and 100 feet from the Cache La Poudre River), it is especially

important the operation practice proper storage and handling procedures for the above listed materials. Please provide a spill prevention, control, and countermeasure plan for the proposed operation.

- 20) The operator states that since reclamation will occur concurrently with mining, it is not anticipated that overburden material will be stockpiled long-term prior to use in production of road base and potentially backfilling of pit areas that are not lined with a slurry wall. However, it is the Division's understanding the operator is proposing to construct a slurry wall enclosure around an area/phase prior to mining out the pit. Please clarify what is meant by potentially backfilling pit areas not lined with a slurry wall.
- 21) There is some discrepancy in the mining plan regarding the proposed mining slope. A 3H:1V slope is proposed throughout most of the plan, but then a 2H:1V slope is proposed in the last paragraph. Please specify the proposed mining slope to be maintained during operations. If the pit slopes will be steeper than the proposed final configuration of 3H:1V, please specify the maximum length of pit slope at any time to be steeper than 3H:1V. This information is needed to calculate the required financial warranty for the proposed disturbance. Additionally, if pit slopes will be steeper than 3H:1V, the slope stability report provided in this application should be revised accordingly.
- 22) The operator is proposing mining the site in five phases, creating a total of four pits, each enclosed by a slurry wall. The operator proposes installing inlet and outlet structures on the mined pits/reservoirs for final reclamation. However, the operator has not discussed flood control measures to be implemented during operations. Please provide the anticipated sequencing for installation of the inlet/outlet structures. For example, does the operation intend to install the proposed inlet/outlet structures on the Phase 1 and 2 pit/reservoir prior to mining the Phase 3 pit/reservoir, and so on? Or does the operation propose installing all structures after mining is completed at the site? Please describe all measures to be taken during operations to minimize disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quantity and quality of water in surface and groundwater systems, including preventing pit capture of the adjacent Cache La Poudre River during high flow events.
- 23) Please provide an approximate timetable to describe the mining operation, including an estimate of the periods of time which will be required for the various stages or phases of the operation, a description of the size and location of each area to be worked during each phase, and outlining the sequence in which each stage or phase of the operation will be carried out. Please be sure to include the proposed sequence for slurry wall installation as it relates to each mining phase.

Exhibit E – Reclamation Plan (Rule 6.4.5):

- 24) The operator provided a table showing the estimated reclamation acreages per final land use, including for reservoir water surface, access roads, and reclaimed vegetated land and undisturbed land. Please revise this table to differentiate the acreages for reclaimed vegetated land from undisturbed land.

- 25) Please provide the design specifications and quality assurance and control plan for the slurry wall enclosure to be installed under the proposed maximum disturbance and bond scenario. If this information is not available at this time, please commit to submitting a Technical Revision with this information prior to construction of the slurry wall. Additionally, please commit to submitting a final construction report for the installed slurry wall enclosure, including the results of any post-construction testing and as-built drawings.
- 26) The reclamation plan maps submitted in Exhibit F show four different types of riprap lined spillways (A-D) proposed to be installed on the reservoirs for reclamation. Please provide details on these proposed structures in Exhibit E, including an explanation for the different types, number, and locations proposed. The operator could always revise the proposed inlet/outlet structures at a later date through submittal of a Technical Revision, once the operational criteria for the reservoirs have been identified. However, the Division must hold bond costs for installing the proposed inlet/outlet structures, at a minimum, on the reservoir(s) to be mined within the proposed maximum disturbance scenario. Therefore, sufficient details for these structures must be provided to calculate the required financial warranty.
- 27) Please provide more details on reclamation of any recharge pond areas and sediment control structures, including the approximate volume of backfill material required. Additionally, please be sure any costs for reclaiming these features are included in the Exhibit L bond estimate.
- 28) Please provide details on reclamation of the dewatering pipe shown on the Exhibit C-4 – Mining Plan Map. Additionally, please be sure any costs for reclaiming this feature are included in the Exhibit L bond estimate.
- 29) Please provide details on reclamation of the proposed aggregate processing plant and concrete and asphalt batch plant. Will any structures (e.g., concrete foundations, buildings) require demolition for reclamation? Please be sure any costs for reclaiming these features are included in the Exhibit L bond estimate.
- 30) Please provide details on reclamation of the proposed truck scale and scale house. Will any structures (e.g., concrete foundations, buildings) require demolition for reclamation? Please be sure any costs for reclaiming these features are included in the Exhibit L bond estimate.
- 31) The proposed temporary stockpile seed mix includes Crested wheatgrass. While this grass species can be helpful for quick stabilization, it is not compatible with native grasses. If used for topsoil stabilization, this species would become part of the topsoil seedbase and potentially interfere with the growth of desired native grasses when the topsoil is used for reclamation. Please remove this species from the temporary stockpile seed mix, or replace it with a species that is more compatible with native grass species.
- 32) Please provide the expected time of year for reclamation seeding.

Exhibit F – Reclamation Plan Map (Rule 6.4.6):

- 33) Exhibits F-1 and F-2 Reclamation Plan Maps do not show any roads to remain around the reservoirs for reclamation. Does the operator propose leaving any roads within the affected lands for reclamation? If not, how will the proposed reservoirs be accessed for maintenance? Please be sure to show on the reclamation plan maps any roads to remain for reclamation.
- 34) Exhibits F-1 and F-2 Reclamation Plan Maps identify the location of a “Floodway” and a “Floodplain” for the Cache La Poudre and South Platte Rivers. Please specify the type of floodway and floodplain on these maps (e.g., 100-year, 500-year).

Exhibit G – Water Information (Rule 6.4.7):

- 35) Please provide a stormwater management plan for the proposed operation.
- 36) The proposed lined reservoirs are located within the 100-year flood plain of the nearby rivers. Therefore, please provide a flood analysis and control plan addressing how the operation will safely convey the expected 100-year flood event throughout the life of mine, including during reclamation. The flood analysis should quantify the velocity and volume of flows expected on site from a 100-year flood event, as well as the elevation of the 100-year base flood event and its relation to the elevation of any proposed spillways and reservoir embankments.
- 37) Please identify all known aquifers in the vicinity of the proposed operation.
- 38) Please provide a site map showing potentiometric elevations for groundwater in the proposed affected lands and surrounding areas in relation to the existing monitoring wells and proposed reservoirs. Please be sure to indicate approximate flow direction(s) on the map.
- 39) The operator states the operation will impact the South Platte River and the Cache La Poudre River in the form of depletions due to evaporation and operational losses associated with mining. Please describe how the operation is expected to impact the local groundwater regime during operations and during reclamation, including estimated drawdown, and anticipated areas of mounding and shadowing from slurry wall installation. This information may be best portrayed on a site map in this Exhibit. Additionally, please indicate any water resources (e.g., tributary water courses, wells, springs, stock water ponds, reservoirs, ditches) located on or in the vicinity of the proposed affected lands that may be impacted by the proposed operation, and describe what type of impacts would be expected at that resource.
- 40) Please provide more details on the groundwater monitoring plan, including the sampling frequency, the frequency of reporting the results to the Division, and the specific criteria that would require implementation of the groundwater mitigation plan.
- 41) The operator provided water level monitoring data from two sampling events (April 19, 2019 and May 8, 2019) for nine existing monitoring wells installed within and adjacent to the proposed

affected land boundary. Please commit to providing water level data collected from these wells during five successive calendar quarters prior to commencing with dewatering operations and/or slurry wall installation at the site.

- 42) The operator states the maximum exposed groundwater at the site during mining is estimated at 0.38 acres. However, elsewhere in this exhibit, the operator describes a dewatering ditch with a maximum surface area of 0.26 acres and a series of settling ponds totaling 8.5 acres, which would give a total surface area of 8.76 acres. Please specify the maximum amount of exposed groundwater to occur on site at any time.

Exhibit H – Wildlife Information (Rule 6.4.8):

- 43) The Screening Report for Federal and State Listed Threatened and Endangered Species prepared by Ecological Resource Consultants, Inc. includes the following recommendations regarding migratory birds and raptor nest sites in the survey area:
- a. Any future land use changes that occur in the survey area that remove vegetation during the active nesting season for most migratory birds in this region of Colorado (April 1 – August 31) should first ensure that active nests are not disturbed.
 - b. In accordance with CPW guidelines, no new disturbance should occur within 1/3 mile of the active red-tailed hawk nest between February 15 and June 15, or until the young have fledged. Once the nest becomes inactive, surface occupancy may resume within the 1/3-mile buffer and vegetation occupied by the inactive nest may be removed.
 - c. According to the USFWS Region 6 Migratory Bird Conservation Actions for Projects to Reduce the Risk of Take during the Nesting Season, an active nest survey should be performed “no more than 7-10 days prior to when work actually begins on the project site” to determine the presence and activity status of nests protected by the MBTA. If work for the project must begin prior to the nest becoming inactive within the 1/3-mile buffer, further agency coordination would be required.

Please incorporate these recommendations into the proposed mining plan, including commitments to performing the recommended surveys within the specified timeframes, to maintaining the recommended buffer zones during the specified timeframes, and to coordinating with CPW and/or USFWS as necessary.

Exhibit J – Vegetation Information (Rule 6.4.10):

- 44) The Aquatic Resource Delineation Report prepared by Ecological Resource Consultants, Inc. (ERC) identifies several aquatic resources within and nearby the proposed affected land boundary, some of which are likely non-jurisdictional, and others which are likely considered jurisdictional and subject to Section 404 Clean Water Act. The application states a request for an Approved Jurisdictional Determination is pending from the U.S. Army Corps of Engineers Denver Regulatory Office in order

to verify jurisdictional status of all aquatic resources on site. Please commit to not commencing with dewatering activities at the site until this determination has been received and a copy provided to the Division. Please be advised, if any of the identified aquatic resources are determined to be jurisdictional, the submittal of a permit revision may be required to comply with the requirements of Section 404 Clean Water Act, including demonstration of compliance with Rule 3.1.6(1) with regard to potential dewatering impacts to the jurisdictional aquatic resources.

Exhibit L – Reclamation Costs (Rule 6.4.12):

- 45) The operator proposes a phased and cumulative bonding approach, and has provided estimated costs for each of the five mining phases. However, it is not clear in the application what specific phases or maximum disturbance the operator wishes to be bonded for at this time. On the Exhibits C-4 and C-5 Mining Plan Maps, it appears the operation would have disturbances in multiple phases at the same time, including slurry wall installation and mining in Phases 1 and 2, access, truck scale, and scale house in Phase 3, stockpiling and processing in Phases 3 and 4, and settling ponds in Phase 5. Therefore, the proposed phasing appears to correlate more with the anticipated excavation sequence rather than the proposed bond scenario. Please specify the maximum disturbance (in acres) the operation proposes at this time (e.g., slurry wall installation, mining, stockpiling, processing, equipment/truck storage, stormwater control features, sediments ponds, scale/scale house, improved or newly created access/haul roads). Additionally, please specify the type and approximate amount of disturbance (in acres) to occur in each phase for the proposed maximum disturbance and bond scenario.
- 46) Please submit an Exhibit L map showing the proposed scenario for the reclamation bond. This map should depict the site at the point of maximum disturbance (as proposed at this time), and should correlate with the bond estimate provided. Please be sure the map shows expected locations of topsoil and overburden stockpiles at that point in time, so the Division can estimate haul distances.
- 47) Please provide costs for installing all components of the proposed inlet/outlet structures for the proposed point of maximum disturbance. For example, if the operator is proposing to be bonded at this time for only the Phase 1-2 Pit/Reservoir 1, then only the applicable inlet/outlet structures proposed for that reservoir would need to be included in the bond estimate at this time.
- 48) Please be advised, the Division must hold 100% of the costs for installing the 1st slurry wall enclosure until the operator demonstrates the liner has been approved by the SEO, at which time, the operator may request a surety reduction to include 20% of the construction costs for this enclosure. The Division must hold a minimum of 20% of the construction costs for each completed and SEO approved slurry wall enclosure until the reservoir has been released from the permit. Please confirm the 1st slurry wall enclosure will be installed around Phases 1 and 2, identified as Reservoir 1 on Exhibit F-1 Reclamation Plan Map. Additionally, please be sure the bond estimate includes 100% of the costs for installing at a minimum the 1st slurry wall enclosure.
- 49) The summary of unit costs specifies a dollar amount per foot for installation of each of the proposed five phases of slurry wall installation, including 0-50 feet at \$3/foot, 51-70 feet at \$4/foot, and 71-

95 feet at \$13/foot, and provides an estimated total cost per linear foot for each of the five phases. However, the Division is unable to confirm the total cost for each phase of slurry wall construction without knowing the depths of installation for each phase. Please provide the average depth of installation for each slurry wall enclosure.

Exhibit M – Other Permits and Licenses (Rule 6.4.13):

- 50) Will the operator be seeking SEO approval of the proposed slurry wall liners? If so, please include this “approval” in the list provided.
- 51) Will the operator be required to obtain a Section 404 permit from the U.S. Army Corps of Engineers in order to conduct the proposed mining and reclamation operations? If so, please include this “permit” in the list provided. The Division understands the operator may still be waiting on a jurisdictional determination from the USACE for the several aquatic resources identified on and nearby the proposed affected lands. In this case, the operator may state that a Section 404 permit may be required depending on the results of this determination.

Exhibit S – Permanent Man-made Structures (Rule 6.4.19):

- 52) Please provide a list of all permanent, man-made structures located on or within 200 feet of the proposed affected land boundary, and their respective owner(s).
- 53) On June 17 and 18, 2019, the operator provided the Division with copies of the structure agreements mailed (on June 18, 2019) to owners of structures located on or within 200 feet of the proposed affected land boundary, and Certified Mail Receipts for the mailings. The Division has the following questions regarding these materials:
 - a. While the operator provided a copy of the structure agreement sent to Xcel Energy, the Division could not find the associated Certified Mail Receipt. Please provide the Certified Mail Receipt demonstrating a structure agreement has been attempted with Xcel Energy.
 - b. While the operator provided a copy of the structure agreement sent to Extraction Oil & Gas, the Division could not find the associated Certified Mail Receipt. Please provide the Certified Mail Receipt demonstrating a structure agreement has been attempted with Extraction Oil & Gas.
 - c. While the operator provided a copy of the Certified Mail Receipt for SRC Energy Inc., the Division could not find the associated structure agreement. Please provide a copy of the structure agreement that was mailed to SRC Energy Inc.
 - d. While the operator provided a copy of the Certified Mail Receipt for PDC Energy Inc., the Division could not find the associated structure agreement. Please provide a copy of the structure agreement that was mailed to PDC Energy Inc.

- e. While the operator provided a copy of the Certified Mail Receipt for Kerr-McGee Oil & Gas Onshore LP, the Division could not find the associated structure agreement. Please provide a copy of the structure agreement that was mailed to Kerr-McGee Oil & Gas Onshore LP.
 - f. Until all structure owners have been identified on the Exhibit C maps, and the structure owner list (requested in item no. 52 above) has been provided, the Division cannot confirm that structure agreements have been attempted for all applicable structure owners. Please be sure that proof of such an attempt is provided for all permanent, man-made structures (not owned by J-2 Contracting Company) which are located on or within 200 feet of the proposed affected lands.
- 54) The application includes a Slope Stability Report (report) prepared by J&T Consulting, Inc., intended to satisfy the requirements of Rule 6.4.19(b) in the event that structure agreements cannot be reached. The Division has the following comments/questions regarding this report:
- a. No executed structure agreements have been submitted at this time for structures located on or within 200 feet of the proposed affected lands. Therefore, pursuant to Rule 6.4.19(b), the applicant shall provide an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation. However, the report submitted does not address all structures identified on the Exhibit C maps. Please be advised, for all structures located on or within 200 feet of the proposed affected lands, which the operator is unable to obtain an executed structure agreement, an appropriate engineering evaluation must be provided which demonstrates such structures will not be damaged by activities occurring at the mining operation.
 - b. The report does not suggest setbacks for several structures shown to be located within the proposed affected lands on the Exhibit C maps, including gas lines, gas tanks, fence lines, buildings, a pond, and Holly Avenue. Additionally, proposed setbacks for these structures are not shown on the Exhibit C maps. In fact, it appears the operation will mine through most of these structures. Please be advised, for any structures not owned by J-2 Contracting Company, which will be affected by the operation, the Division must receive a notarized agreement between the operator and the structure owner acknowledging as such.
 - c. The report states the design criteria used to establish the desired minimum safety factors for the proposed project include a Factor of Safety (FOS) of 1.3 for static conditions, and a FOS of 1.0 for pseudo-static conditions. The policy of the Mined Land Reclamation Board for Factors of Safety for Slope Stability/Geotechnical Analyses (see enclosed policy) recommends the following minimum FOS for non-critical structures (e.g., fences): a FOS of 1.3 for static conditions and a FOS of 1.15 for analyses using seismic parameters; and for critical structures (e.g., residences, utilities, dams, pipelines, irrigation canals, public roads): a FOS of 1.5 for static conditions and a FOS of 1.3 for analyses using seismic parameters. Please be advised, the Division considers the majority of the structures located on or within 200 feet of the proposed affected lands (including all structures assessed in the slope stability report) to be critical structures. Therefore, please revise the report to include design criteria

based on a FOS of 1.5 for static conditions and a FOS of 1.3 for analyses using seismic parameters.

- d. The report lists four recommendations for monitoring of slope stability, including, conducting a visual inspection of the excavated slopes on a weekly basis for the duration of mining, conducting a visual inspection after a major precipitation event that has saturated the ground using the same procedures, contacting qualified personnel to evaluate and recommend remediation work to stabilize the area in the event a visual inspection detects signs of potential slope failure, and if no visible signs of slope failure are detected during mining, reducing visual inspections to once every six months after mining completion, or after every major precipitation event. Please incorporate these recommendations into the proposed mining and reclamation plans.

Additional Item(s):

- 55) Pursuant to Rule 1.6.2(1)(b), the Applicant shall provide a signed affidavit with the application that notice signs have been posted at the location of the proposed mine site according to the provisions of this Rule. A sample notice and affidavit form (see enclosed) was provided in the 112c permit application package. However, the Division was not able to find the required signed affidavit in the application materials submitted. Therefore, please submit a signed affidavit that satisfies the requirements of Rule 1.6.2(1)(b).
- 56) On June 17 and 18, 2019, the operator provided the Division with copies of the notices required by Rule 1.6.2(1)(f), and Certified Mail Receipts for the mailings. The Division has the following questions regarding these materials:
 - a. While the operator provided a copy of the notice sent to Kerr-McGee Oil & Gas Onshore LP, the Division could not find the associated Certified Mail Receipt. Please provide the Certified Mail Receipt demonstrating the notice was mailed to Kerr-McGee Oil & Gas Onshore LP.
 - b. While the operator provided a copy of the notice sent to PDC Energy Inc., the Division could not find the associated Certified Mail Receipt. Please provide the Certified Mail Receipt demonstrating the notice was mailed to PDC Energy Inc.
 - c. While the operator provided a copy of the notice sent to SRC Energy Inc, the Division could not find the associated Certified Mail Receipt. Please provide the Certified Mail Receipt demonstrating the notice was mailed to SRC Energy Inc.
 - d. While the operator provided a copy of the Certified Mail Receipt for Xcel Energy, the Division could not find the associated notice. Please provide a copy of the notice that was mailed to Xcel Energy.

- 57) The comment letters received thus far on the application are enclosed for your review. Please inform the Division of how the operator intends to address any jurisdictional concerns expressed in these letters.
- 58) Please remember that, pursuant to Rule 1.6.2(1)(c), any changes or additions to the application on file in our office must also be reflected in the public review copy which was placed with the County Clerk and Recorder. Pursuant to Rule 6.4.18, you must provide our office with an affidavit or receipt indicating the date this was done.

This concludes the Division's preliminary adequacy review of your application. Please ensure the Division sufficient time to complete its review process by responding to these adequacy items no later than two weeks prior to the decision date, by **August 14, 2019**.

If you have any questions, you may contact me by telephone at 303-866-3567, ext. 8129, or by email at amy.eschberger@state.co.us.

Sincerely,



Amy Eschberger
Environmental Protection Specialist

Encls: Sample notice and affidavit form for compliance with Rule 1.6.2(1)(b)
Policy of the Mined Land Reclamation Board for Factors of Safety for Slope Stability/
Geotechnical Analyses
Comment from Division of Water Resources, received on June 5, 2019
Comment from Town of Kersey, received on June 11, 2019
Comment from History Colorado, received on July 2, 2019

Cc: Chris Leone
J-2 Contracting Company
105 Coronado Ct., Unit A-101
Fort Collins, CO 80525

Michael Cunningham, DRMS

proposed mining operation. The following is a sample of the Notice required for Rule 1.6.2(1)(b) that you may wish to use.

NOTICE

This site is the location of a proposed construction materials operation. (Name of the Applicant/Operator) _____, whose address and phone number is (Address and Phone Number of the Applicant/Operator) _____, has applied for a Reclamation Permit with the Colorado Mined Land Reclamation Board. Anyone wishing to comment on the application may view the application at the (County Name) _____ County Clerk and Recorder's Office, (Clerk and Recorder's Office Address) _____, and should send comments prior to the end of the public comment period to the Division of Reclamation, Mining, and Safety, 1313 Sherman St, Room 215, Denver, Colorado 80203.

Certification:

I, _____, hereby certify that I posted a sign containing the above notice for the proposed permit area known as the (Name of Operation) _____, on (Date Posted) _____, .

SIGNATURE

DATE

be inspected at least once every two years, or more frequently if deemed necessary.

20.7.5 – Notices of Intent

The Board directs the Division to inspect all operations for which a NOI has been submitted to and approved by the Division in accordance with section 34-32-113 and 34-32.5-113, C.R.S. as set forth below.

20.7.5.1 – Pre-operational Inspections. The Division shall evaluate whether to conduct a pre-operational inspection of any new NOI operation or any modification to an existing NOI operation on a case by case basis. The Division shall conduct a pre-operational inspection of any new NOI or any modifications to an existing NOI operation at which historic or pre-law features are to be disturbed or re-established. When sites are on land managed by a federal agency, a joint inspection with the federal agency is advised. The Division may determine not to conduct an inspection of any NOI operation which the Division determines to have minimal disturbance area or no potential to impact either the environment or the prevailing hydrological balance, provided that the NOI includes photographic documentation of pre-activity conditions.

20.7.5.2 – Potential for Environmental Impact. The Division shall inspect any active NOI operation that the Division determines to have no potential to affect the prevailing hydrological balance or have any other environmental impacts at least once every four years. The Division shall inspect any active NOI operation that may affect the prevailing hydrological balance or have any other environmental impacts as the Division deems necessary, but no less than once every four years.

20.7.5.3 – NOI Operations in Reclamation. The Division shall inspect all active NOI operations that are in any phase of reclamation: (a) once during the first year following the Division's receipt of notice of reclamation to ensure reclamation is progressing; and (b) once during the fourth year of reclamation to evaluate whether additional tasks must be accomplished to achieve final reclamation release. The Division may adjust the frequency of inspections as the Division deems necessary to ensure adequate monitoring of operations that are either sensitive areas or that may require particular environmental protection measures.

20.7.5.4 – Abandoned NOI Operations. Any active NOI operation for which an annual report is not submitted for two consecutive years shall be considered abandoned. The Division shall inspect an NOI operation that is considered abandoned for the purpose of ensuring that the financial warranty is sufficient to complete reclamation.

30.0 – Factors of Safety for Slope Stability/Geotechnical Analyses

30.1 – Definitions.

Factor of Safety – Ratio of forces resisting movement to those driving movement.

Slope Failure – the movement (sliding or collapsing) of rock and/or soil in response to gravitational stresses, often under the influence of a rainfall or seismic activity.

Slope Stability – the resistance of inclined surface to failure by sliding or collapsing.

Slope Stability Analysis – performed to assess the safe design of a human-made or natural slopes (e.g. open-pit mining, excavations, embankments, road cuts, etc.) and the equilibrium conditions.

30.2 – Declaration of Purpose

The Division of Reclamation, Mining and Safety Minerals Program (Division) issues this memorandum to promote the orderly development of the state's natural resources while considering the industry's "standard of care" relative to Factors of Safety with the intent to:

- i. Protect and promote the safety and general welfare of the people of Colorado,
- ii. Ensure reclamation of lands affected by mining to beneficial use, and
- iii. Aid in the protection of aquatic resources and wildlife.

30.3 – Background

In the past, the Division has typically accepted a factor of safety (FS) greater than 1.0 for slope stability analyses to demonstrate "that such structures shall not be damaged by activities occurring at the mining operation" pursuant to Rules pertaining to permanent man-made structures and geotechnical stability: Construction Materials Rules 6.3.12(b) and 6.4.19(b) and 6.5 and Hard Rock Rules 6.3.12(b), 6.4.20(b) and 6.5. This practice was based on the oversimplified concept that a slope with a FS > 1.0 is stable. This is technically true **IF** there is a comprehensive and complete understanding of all the geologic, hydraulic, land use, and other conditions that influence the forces and stresses determining whether or not the slope in question can or will fail. However, this is very rarely possible or feasible, particularly in a mining application. An FS must account for uncertainties (geologic setting, groundwater conditions, mining parameters, etc.), and the selection of an appropriate FS for slope stability should consider the following factors:

1. Magnitude of damages (potential risk to human safety, environmental impact and property damage),
2. Reliability of geologic information such as the proximity to faults, orientation of jointing, and subsurface soil and water data,

3. Changes in soil properties due to mine operations and variability in subsurface material,
4. Accuracy (or approximations used) in developing design/ analysis methods,
5. Additional considerations if relevant: Construction tolerances, Relative change in probability of failure by changing the factor of safety, and Relative cost of increasing or decreasing the factor of safety.

The Division engineering staff has researched the standard of care for factors of safety accepted by the industry, including literature searches, regulatory agency requirements/guidelines, and departments of transportation standards. In order to be consistent with other Colorado State agencies, we also considered FS standards used by the Colorado Department of Transportation (CDOT) and the Colorado Geological Survey (CGS). CDOT uses the AASHTO minimum FS of 1.3 for construction slopes near roadways and utilities. CGS uses a minimum FS of 1.5 for residential areas when using "generalized" strength values, or 1.3 for analyses when good quality site-specific soil parameters are known. It should be noted that most industry standards assume a permanent slope configuration, ignoring the temporary conditions that are frequently observed in the mining industry.

30.4 – Guidance for Stability Criteria and Use of Minimum Factors of Safety

The permittee should either follow the criteria in Table 1 for all stability analyses submitted to the Division; or, alternatively, the permittee may submit stability analyses based on site-specific engineering analysis performed in consideration of good practices as specified in relevant industry guidelines and/or professional standards and reviewed by the Division on a case-by-case basis.

Slope stability analyses for existing facilities may also be reviewed on a case-by-case basis, subject to the criteria described herein.

Table 1. Recommended Minimum Factors of Safety for Slope Stability Analyses for Operations and Reclamation

Type of Structure/Consequence of Failure	Generalized, Assumed, or Single Test Strength Measurements	Strength Measurements Resulting from Multiple Tests ⁽¹⁾
<u>Non-Critical Structures</u> (e.g., fences) No imminent danger to human life, minor repair costs, and minor environmental impact if slope fails	1.3 (1.15) ⁽²⁾	1.25 (1.1) ⁽²⁾

Table 1. Recommended Minimum Factors of Safety for Slope Stability Analyses for Operations and Reclamation

<p><u>Critical Structures</u> (e.g., residences, utilities, dams, pipelines, irrigation canals, public roads, etc.) Potential human safety risk, major environmental impact, and major repair costs if slope fails (includes Environmental Protection Facilities/EPFs, such as tailings facilities, heap leach pads, process effluent ponds, milling facilities, overburden/waste rock storage facilities, and hazardous/toxic material storage facilities, etc.)</p>	<p>1.5 (1.3)⁽²⁾</p>	<p>1.3 (1.15)⁽²⁾</p>
<p>(1) The number of tests required to provide a high degree of confidence in the strength parameters used depends on the variability of the material being tested and the extent of disturbance.</p> <p>(2) Numbers without parentheses apply for analyses using static conditions. Those within parentheses apply to analyses using seismic parameters. Based on site specific conditions, seismic analyses may be required and parameters selected shall be consistent with the risk and duration of the condition being considered.</p>		

* The values presented in Table 1 are not intended to supersede standards required by other agencies.

40.0 – Reserved.

50.0 – Reserved.

60.0 – Reserved.

70.0 – Board Administrative Procedures.


70.1 – Rotation of Board Chair

The position of Chair of the Board shall rotate among all members with the exception of the Department Executive Director or the Executive Director's designee and the member appointed by the State Conservation Board. Each Board member shall serve as Chair of the Board for a term of six months, beginning in April and October annually.

70.2 – Authority of Board Chair



Response to 112c Construction Materials Reclamation Permit Application Consideration

DATE: June 5, 2019
TO: Eric Scott, Environmental Protection Specialist (eric.scott@state.co.us)
FROM: Sarah Brucker, P.E. 
RE: DPG Pit, File No. M-2019-028
Applicant: J-2 Contracting Co.
Contact: Chris Leone, (970) 392-0694
Sections 1, 11 & 12, Twp 5 North, Rng 65 West, 6th P.M., Weld County
Division 1, Water Districts 2 & 3

CONDITIONS FOR APPROVAL

- ☒ The proposed operation will consume groundwater by: ☒ evaporation, ☒ dust control, ☐ reclamation, ☒ water removed in the mined product, ☐ processing, ☐ other: _____.
- ☒ **Prior to initiation of these uses of groundwater, the applicant will need to obtain either a gravel pit or other type of well permit, as applicable. However, prior to obtaining a permit, an approved substitute water supply plan or decreed plan for augmentation is required.**
- ☒ Prior to approving a well permit, the applicant must conduct a field inspection of the site and document the locations of all wells within 600 feet of the permit area. The applicant must then obtain a waiver of objection from all well owners with wells within 600 feet of the permit area or request a hearing before the State Engineer.
- ☒ Any storm water runoff intercepted by this operation that is not diverted or captured in priority must infiltrate into the ground or be released to the stream system within 72 hours. Otherwise, the operator will be required to make replacements for evaporation.
- ☒ A dewatering system well permit must be obtained prior to construction of the perimeter drain.

COMMENTS: The subject application is for a surface mining operation on 228 permitted acres located approximately two miles northwest of Kersey, Colorado. The primary commodities to be mined at the site are sand and gravel. The site is proposed to be reclaimed to developed water resources upon completion of this mining operation.

The site is proposed to be dry mined, with a slurry wall constructed around the perimeter of the Phase 1 and prior to Phase 2 being mined. The slurry wall will be constructed to meet the SEO's performance standard. Dewatering trenches will be excavated around the perimeter of each mining area in Phases 1-5 prior to the commencement of mining. It is expected that minimal dewatering will be required after installation of the slurry wall. The applicant has indicated that they will obtain a well permit and substitute water supply plan from this office to prior to exposing any groundwater at the site.

According to Exhibit G, water use at the site will include evaporation from exposed groundwater surface areas, dust control, and water retained in the mined material. The consumptive use of groundwater at the site for evaporation, dust control, and water retained in the mined product was estimated to total 55.05 acre-feet per year for Phase 1. In addition, the Mining Plan (Exhibit D) indicated that an aggregate processing plant, concrete and asphalt batch plant, and concrete truck washout would be located on the site. The source of



water for these uses was not identified. If groundwater will be used for processing, concrete batching, or truck washing, these uses must be identified and accounted for in the proposed well permit and substitute water supply plan. If other water will be used for these purposes, the applicant will need to identify the source of this water and document that the water was obtained from a legal source or diverted in priority under a water right decreed for such mining/industrial use.

The Applicant intends to use monitoring wells to monitor groundwater levels on and near the site both during and after mining. A monitoring hole notice acknowledgement or monitoring well permit must be obtained prior to the construction or installation of any new monitoring holes/wells at the site.

Recharge ponds and/or ditches may be constructed on site to maintain groundwater levels during mining. If needed, a perimeter drain may be installed to move groundwater around the mined area after the liner is installed. A dewatering system well permit must be obtained from this office prior to the construction/installation of the perimeter drain.

The Division of Reclamation, Mining and Safety and/or the Applicant may contact the State Engineer's Office with any questions.

From: **Barb Brunk** <BBrunk@kerseygov.com>
Date: Tue, Jun 11, 2019 at 3:24 PM
Subject: DPG Pit M-2019-028
To: eric.scott@state.co.us <eric.scott@state.co.us>
CC: Christian Morgan <CMorgan@kerseygov.com>, Julie Piper <JPiper@kerseygov.com>

Eric,
The Town of Kersey received notice of the above application. This site is located within the Town of Kersey Planning Area and adjacent to WCR49 which is included in the Kersey Town limits. The property is also located within the Kersey, Evans and Greeley Cooperative Planning Area.
Per the Weld County Property Search web site, a significant portion of the property lies within a designated floodway. It appears that there are planned stockpiles and processing equipment located in the flood way. Has the applicant accounted for this in the permit documents?
The Town does not have any additional comments at this time. Please keep us informed as the application proceeds through the review process and let us now when you issue your adequacy review and receive updated documents from the applicant so that we can continue to monitor the application.
The Town of Kersey reserves the right to comment on new and updated information as the application proceeds through the DRMS review process. Thank you for your consideration.
Barb

Barbara Brunk, Town Planner
Town of Kersey
P.O. Box 657
Kersey, CO 80644
Office: 970-353-1681
Cell: 303-775-6180
www.kerseygov.com
bbrunk@kerseygov.com

PLEASE NOTE: This email message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and /or exempt from disclosure. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately.

P Think Green before printing this e-mail





RECEIVED
JUL 02 2019
DIVISION OF RECLAMATION
MINING AND SAFETY

Eric Scott
Division of Reclamation, Mining and Safety
1313 Sherman St., Room 215
Denver, Colorado 80203

JUN 26 2019

Re: DPG Pit, File No. M-2019-028 (HC#76077)

Dear Mr. Scott:

Thank you for your correspondence dated May 30, 2019, received by our office on June 3, 2019, for the referenced project. Our comments are provided in accordance with the Colorado State Register Act (Colorado Revised Statute CRS 24-80.1).


A search of the Colorado cultural resource inventory database indicated one previously recorded sites in the area of proposed action:

Site #	Name/Type	National/State Register Eligibility	Recording/Assessment Date
5WL-7349	Ketchman Farm (Rural Historic Landscape)~DPG Bird Farm	Officially Not Eligible	10/03/2013

As none of the above properties have been nominated for inclusion in or accepted by the state register, additional protection is not required by this act. Nevertheless, we recommend avoidance of all officially eligible, field eligible, and officially needs data sites, if possible. Please keep in mind that our files contain incomplete information for this area, as most of Colorado has not yet been inventoried for cultural resources. As a result, there is the possibility that as yet unidentified cultural resources exist within the proposed permit area. Should human remains be discovered during mining activities, the requirements under State law CRS 24 80 part 13 apply and must be followed.

Thank you for the opportunity to comment. If we may be of further assistance, please contact Holly McKee-Huth, Cultural Resource Information/Section 106 Compliance at (303) 866-4670/holly.mckee@state.co.us.

Sincerely,


Steve Turner, ATA
State Historic Preservation Officer