

Department of Natural Resources 1313 Sherman Street, Room 215 Denver, Colorado 80203

October 31, 2017

Steve O'Brian Environment, Inc. 7985 Vance Dr. #205A Arvada, CO 80003

Re: 22 West Pit, File No. M-2017-032, 112c Construction Materials Reclamation Permit Application, Preliminary Adequacy Review

Mr. O'Brian:

The Division of Reclamation, Mining and Safety (Division) has completed its preliminary adequacy review of the above referenced application. All comment and review periods for the application began on August 18, 2017 when the application was called complete for filing purposes. The decision date for the application is set for November 16, 2017.

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 issues requiring clarification or additional information. These items are identified under their respective exhibit heading, and are numbered sequentially.

Application Form:

1) On page 8 of the Application Form, in the notary acknowledgement section, the year is missing from the date. Please submit a replacement page 8. Be sure the date of notary acknowledgement matches the date of the applicant/operator signature.

Exhibit A – Legal Description (Rule 6.4.1):

- 2) The latitude and longitude coordinates given in this exhibit for the main site entrance are different than the coordinates given on page 2 of the Application Form. Additionally, these coordinates appear to be incorrect as they plot somewhere north of Ordway and Sugar City, and not in the area of the proposed mine site. Please submit a replacement Exhibit A including the correct coordinates for the mine site entrance.
- 3) Pursuant to Rule 6.4.1(2), the main entrance to the mine site shall be located based on a USGS topographic map showing latitude and longitude or Universal Transverse Mercator (UTM). The coordinates of latitude and latitude shall be specified in degrees, minutes, and seconds, or in decimal degrees to an accuracy of at least 5 decimal places. For UTM, the operator will



need to specify North American Datum (NAD) 1927, NAD 1983, or WGS 84, and the applicable zone, measure in meters. Please submit the required map.

Exhibit B – Index Map (Rule 6.4.2):

4) To better show the regional location of the affected land, please submit a replacement map that indicates the location of the nearest city, Rocky Ford, and labels the Arkansas River.

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

- 5) Please submit replacement map(s) with the following corrections:
 - a. Show the name and location of Co Rd 22.
 - b. Show the owner's name, type of structure, and location of Co Rd 22 to the east, the ditch and fencing present to the north, the barbed wire fence present to the west, and the overhead electric lines and fencing present to the south.
- 6) Additionally, please provide the following clarifications regarding the two maps submitted in this exhibit:
 - a. The Exhibit C1 Mining Plan Map indicates "Reclaimed New/Existing" areas both inside and outside of the proposed permit boundary, colored green. Please provide clarification for why these areas are shown on the mining plan map, why one section is located outside of the proposed southern permit boundary, and if the existing reclaimed areas will be redisturbed by the operation.
 - b. The Exhibit C1 Mining Plan Map includes a cross-section at the top-right corner which appears to show a proposed grading plan for pond shorelines. Please provide a title for this cross-section.
 - c. The Exhibit C1 Mining Plan Map legend includes a symbol (red) for "Stripped/Partially Mined" areas. However, the Division could not located an area colored red on the map. To reduce confusion, please either use the symbol on the map or remove it from the legend.
 - d. On the Exhibit C1 Mining Plan Map, a tiny box is shown at the far southwestern portion of the proposed affected land boundary, and is labeled "Concrete". This feature is not shown on the Exhibit C Pre-Mining Map. Please describe this feature, including its intended use for the operation, if any. Is it an existing feature or one to be constructed? If it is an existing feature, please be sure to include it on the Exhibit C Pre-Mining Map.



- e. In comparing the two maps submitted, it appears the applicant proposes extracting material to connect the two ponds, leaving a sliver of shoreline along the southern boundary. Please provide clarification as to how the applicant intends to do this without causing offsite damage to occur along the proposed southern affected land boundary. How much land does the applicant intend to leave along this portion of the southern shoreline? What is the anticipated disturbance setback from the southern permit boundary? Will the operation maintain a 3H:1V or flatter slope gradient for this portion of the shoreline?
- f. Please label on Exhibit C1 Mining Plan Map any material stockpiling and/or equipment storage areas, and overburden and topsoil storage areas for the operation.
- g. Please indicate on Exhibit C1 Mining Plan Map any proposed setbacks for the operation, including from the ditch to the north, and from proposed permit boundaries.
- h. For any proposed affected land boundary corners that exist or will exist inside of a pond, please provide coordinates of latitude and longitude, and describe how the boundary corners will be delineated in the field.

Exhibit D – Mining Plan (Rule 6.4.4):

- 7) The proposed mining plan suggests this will be a phased operation, in which material will first be extracted from the area between the two ponds, then the pond will be expanded westward, and later, the northeastern pre-law disturbed area with old overburden/topsoil stockpiles may be mined and the growth material used for reclamation of pond shorelines. However, the mining plan does not specify phases. If this will be a phased operation, please specify phase numbering in the mining plan, including in the mining timetable.
 - Additionally, please provide Exhibit C Mining Plan Maps that correlate with the phases, specifying the areas to be disturbed during each phase. These maps should also indicate overburden and topsoil storage areas, material and equipment storage areas, and approximate maximum pond surface area during each phase.
- 8) Pursuant to Rule 6.4.4(d), please specify the area(s) to be worked at any time. The maximum amount of land to be disturbed at any time should include ponds, mined areas, stockpiling/storage areas, and roads. This disturbance should correlate with the phase during which disturbance will be at its maximum (prior to final reclamation).
- 9) Pursuant to Rule 6.4.4(f)(i), please clarify the maximum mining depth to occur (from existing ground surface to bottom of deposit to be mined).
- 10) The mining plan indicates the operation will maintain a 25 foot mining setback from the proposed permit boundary. However, on Exhibit C1 Mining Plan Map, the pond appears to



- be expanded to the southern permit boundary. Please provide clarification, and correct the map if necessary. Please be sure any proposed setbacks are included on the mining plan maps.
- 11) On page 10 of the application, the applicant states that no processing will take place at the mine as all mined material will be sold as pit run construction fill. However, in a few paragraphs down from that, the applicant states that most water will be used for dust control on haul roads and the <u>processing site</u>. Please explain or correct this discrepancy.

Exhibit E – Reclamation Plan (Rule 6.4.5):

- 12) Pursuant to Rule 6.4.5(2)(a), please indicate acreage to receive grading (specifying approximate length and width of shoreline to be graded to 3H:1V, and to be graded to 5H:1V) and retopsoiling. These acreages should be estimated for the mining phase of maximum disturbance.
- 13) Please explain how the applicant intends to reclaim the sliver of southern shoreline to remain, without causing offsite damage. According to the Exhibit F Reclamation Plan Map, there will be no land access to this shoreline within the proposed permit area.
- 14) Pursuant to Rule 6.4.5(2)(e), please correlate the reclamation timetable with the mining phases (to be added to the mining timetable), specifying size and location of each area to be reclaimed during each phase.
- 15) It appears the applicant is proposing two reclamation plans, depending on whether or not the northeastern area is redisturbed. If the northeastern area (where old overburden and topsoil stockpiles are stored) is mined, the applicant proposes using the overburden and topsoil for reclamation of pond shorelines and the 25 foot buffer zone. If the northeastern area is not mined, it is unclear whether the operation would still utilize the stockpiled overburden and topsoil for reclamation. In either case, the operation would use any topsoil salvaged prior to expansion of the pond westward for reclamation. However, the applicant states that topsoil in the area is minimal or of poor quality. Please provide clarification on where topsoil will be obtained to spread 5-7 inches across disturbed land if the northeastern area is to not be redisturbed. (The Division recommends the applicant submit an alternative Exhibit F Reclamation Plan Map for the situation where the northeastern area is not redisturbed).
- 16) The applicant submitted a proposed seed mixture on page 15 of the application which includes yellow sweetclover. This species is now considered to be invasive (possibly a noxious weed) in Colorado. Therefore, please remove or replace this species from the proposed seed mixture.
- 17) On page 16 of the application, the applicant states that if needed, materials existing on site in the Plant Site may be used to armour the lake slopes or as fish habitat in the lake. This material may consists of broken concrete or other materials suitable for that purpose. Please be advised, if these materials are to be used for reclamation (slope armouring or pond backfill), costs for completing this task(s) must be included in the reclamation bond estimate. Otherwise, the



Division must include bond costs for hauling these materials off site for proper disposal. Please be sure to include costs in Exhibit L for handling the existing materials on site, whether for reclamation use or removal from the site.

Please be aware that if any material existing outside of the permit area is used for reclamation of the permitted area, the Division would consider this to be offsite damage.

- 18) On page 18 of the application, the temporary grass species proposed for topsoil stabilization is Crested Wheatgrass. Although 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 replace this species with one that is more compatible with native grasses.
- 19) The applicant proposes storing topsoil salvaged from the western half of the site along the northern edge of the excavation. Please show proposed locations for topsoil storage on the Exhibit C mining plan map(s).
- 20) In previous inspections of the site, the Division observed a layer of concrete along the northwestern shoreline of the smaller pond (covering approximately 0.32 acres). This was apparently used as a concrete wash pond many years ago for the batch plant operation associated with Permit No. M-1977-560. Please clarify what the operation intends to do with this area for reclamation. According to Exhibit C1 Mining Plan Map, a portion of this area will be reclaimed as a swim area with 5H:1V slopes and include a boat ramp. Does the operation intend to rip up the concrete and grade this area? If so, will the concrete rubble be placed in the pond? Will the area be revegetated? Please be sure to include any reclamation tasks associated with this concrete covered area in the reclamation plan and reclamation bond estimate.
- 21) Please revise the reclamation timetable submitted on page 18 of the application to correlate with the mining phases, giving estimated maximum acreages to be reclaimed per phase. Please include estimated acreages to be graded, retopsoiled, and revegetated per phase. Please be sure to include all proposed reclamation tasks in the timetable.

Exhibit F – Reclamation Plan Map (Rule 6.4.6):

22) After the mining phases have been established (as requested above), and the mining and reclamation timetables have been revised accordingly, please be sure the reclamation plan map(s) reflect these changes. For example, it appears the proposed mining plan will consist of three primary mining phases, starting with connection of the two ponds, then expansion of the pond westward, then possibly mining the northeastern pre-law disturbed area, expanding the pond eastward. The applicant has proposed concurrent reclamation, whereby disturbed areas that will not be redisturbed are reclaimed as the operation moves to a different area. Therefore,



- the Division recommends the applicant provide three reclamation plan maps showing reclamation to be completed at the end of each mining phase.
- 23) Please be sure all reclamation plan maps indicate proposed slope gradients for all reclaimed areas (as was done on Exhibit C1-Mining Plan Map).
- 24) The Exhibit F Reclamation Plan Map submitted has a symbol in the legend for "Reclaimed", colored green. Does this mean that all areas colored green will be graded, retopsoiled, and revegetated with the proposed grass seed mixture? If not, please differentiate these areas on the maps with separate symbols/colors.

Exhibit G – Water Information (Rule 6.4.7):

- 25) On page 20 of the application, the applicant states the pre-1981 disturbance located south and outside of the proposed southern permit boundary will not be disturbed again by mining, but that the landowner may do work on their property not associated with the mine. Please be advised any work that could be related to the permitted operation in any way, including mining or reclamation related activities, might be considered offsite damage. The Division has some concerns about the proposed southern permit boundary, as it crosses water bodies and excludes portions of the property in a manner that could cause confusion for the operator and the Division down the road. Please acknowledge that no operation related activities are to occur outside of the proposed permit area, including but not limited to, stockpiling, equipment storage, mining, road construction, and removal of material for reclamation of affected lands.
- 26) The Division understands there is existing post-1981 exposed groundwater within the proposed permit area. The applicant estimates there to be a total of 12.65 acres of exposed groundwater, including 1.05 acres of the smaller pond, and 11.6 acres of the larger pond. Please be informed, the Division has identified four approaches for operators to gain compliance for groundwater exposure on site:
 - a. File a financial warranty to ensure backfilling of the pit to cover exposed groundwater to a depth of two feet above static water level, or
 - b. Obtain a water court approved augmentation plan prior to exposing groundwater, or
 - c. File a financial warranty to cover the costs of installing a clay liner or slurry wall that meets DWR requirements for preventing groundwater exposure, or
 - d. Obtain approval from DWR that acknowledges compliance with the SEO's requirements pursuant to C.R.S.37-90-137(11).

The application indicates a water court approved augmentation plan is not currently in place for the existing 12.65 acres of groundwater exposed on site. Therefore, prior to the application decision date, the applicant must either submit a revised Exhibit L to include costs for



backfilling the pits to a depth of two feet above static water level, or provide documentation from the SEO confirming the operator has committed the appropriate amount of water shares toward an augmentation plan for the site.

Based on information provided in the application, backfilling the existing post-1981 exposure would require costs to backfill the larger pond (11.6 acres) to a depth of approximately 20 feet, and the smaller pond (1.05 acre) to a depth of approximately 15 feet.

Please keep in mind, prior to expanding the pond, the Division will require one of the same two options given above for the increased exposure. Given that the first mining phase would include connecting the two ponds, the Division recommends the applicant, at a minimum, commit water shares to cover estimated groundwater exposure through the first mining phase.

- 27) Pursuant to Rule 6.4.7(5), please affirmatively state that you have acquired or applied for a National Pollutant Discharge Elimination System (NPDES) permit from the CDPHE Water Quality Control Division, if necessary.
- 28) Please provide the following corrections for the Exhibit G Well Map:
 - a. Either label or provide a legend that explains the line drawn around the proposed permit area, colored blue with the number 6 repeated. Does this line represent a 600 foot offset from the proposed permit boundary? In the water information text, the applicant states this map shows wells located within 200 feet of the proposed boundary. However, this blue line clearly exceeds the 200 foot offset.
 - b. Either label or provide a legend that explains the area outlined in purple. The Division understands this to be the proposed permit boundary, but it should be clearly labeled as such on the map.
 - c. Revise the symbol used to indicate well locations as it is difficult to see against the background graphics. Perhaps filling the symbol background with white or yellow would be sufficient. Also, please be sure to label or provide in a legend an explanation of what the symbol represents.
 - d. Label the Arkansas River.

Exhibit L – Reclamation Costs (Rule 6.4.12):

29) On page 62 of the application, the applicant states the bond estimate was based on the worst case scenario when it would be most expensive to reclaim the site, with no more than 11.90 acres needing reclamation at any time. Please correlate this scenario with a mining phase, and be sure it is depicted in an Exhibit C – mining plan map.



- 30) The applicant proposes having no more than 350 feet of shoreline requiring sloping at any time. Based on the Exhibit F Reclamation Plan Map submitted, the Division estimates a maximum shoreline of approximately 5,350 feet to be created at full pond expansion. Please depict the scenario where no more than 350 feet of shoreline requires reclamation on Exhibit C mining plan maps for all mining phases.
- 31) Please specify the maximum amount of shoreline to require grading to 3H:1V, and the maximum amount to require grading to 5H:1V. Please be sure the shoreline grading costs provided in the bond estimate are broken down accordingly.
- 32) Please break the reclamation costs down into the major phases of reclamation as correlated with the mining phases. Because the applicant is proposing concurrent reclamation where limited reclamation is required at any time, the reclamation plan should be consistent with the mining phases, clarifying what reclamation will be completed at each phase. For each mining phase, the applicant should include details such as location(s) of topsoil to be used with estimated haul distances, amount of shoreline requiring grading (specifying slope gradient), and acreage(s) requiring grading, retopsoiling, and revegetation.
- 33) Please include costs for removing and disposing of any junk or old equipment stored on the site that will not be used by the operation.
- 34) Please include costs for ripping up the concrete along the northwestern portion of the small pond and pushing the concrete rubble into the pond (or hauling off site for disposal).
- 35) The bond estimate submitted on page 63 of the application does not provide enough information for the Division to calculate the required financial warranty for the proposed operation. Please provide the following details:
 - a. Type of mulch and rate of application
 - b. Method of fertilizer application (e.g., hydro spreader, tractor towed spreader)
 - c. Type of fertilizer and rate of application
 - d. Average depth of topsoil placement
 - e. Push or haul distance for topsoil (for each mining phase)
 - f. Acreages to be graded, separated by industrial area, shorelines, and other areas such as buffer zones. The applicant states that no more than 11.90 acres will require reclamation at any time; however, the bond estimate includes costs for grading 22.82 acres. Please clarify.



- g. Costs for hauling off and disposing of any old junk or equipment stored on site that will not be used by the operation
- h. Costs for ripping up the concrete along the northwestern shoreline of the small pond and pushing the rubble into the pond (or hauling off site for disposal)
- i. Costs for backfilling the post-1981 exposed groundwater to two feet above static water level will be required if the applicant is unable to provide a letter from the SEO demonstrating the appropriate amount of water shares have been committed for augmentation. In this case, the applicant will need to submit additional information in this exhibit, including source of backfill material, push or haul distance for transporting backfill material to reclamation areas, and estimated volume of backfill material required. To be adequately bonded for commencement of the first mining phase where the ponds are connected, the applicant would need to provide costs for backfilling the additional groundwater exposure.

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

36) In the list provided on page 64 of the application, Item no. 3 states that only a well permit and Substitute Water Supply Plan will be obtained to cover the post-1981 exposed groundwater. However, the Division will require a water court approved augmentation plan be obtained to cover all exposed groundwater on site prior to final release. Please revise this item accordingly.

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

- 37) Please be sure all water wells located within 200 feet of the proposed affected land boundary (identified in Exhibit G) are included in the structure list.
- 38) Please be sure all structures and structure owners identified in this exhibit are clearly labeled on an Exhibit C map. The Division was unable to locate all identified structures on the Exhibit C maps submitted.
- 39) In the structure agreement submitted for Valco, Inc:
 - a. Under Notary for Permit Applicant, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction.
 - b. Under Notary for Structure Owner, the notary acknowledgement date is August 22, 2015, while the structure owner signature date is August 22, 2016.



Because of these errors, the Division does not consider the agreement to be properly executed. Please submit a new structure agreement for Valco, Inc. that is properly executed, including notary acknowledgement dates that are consistent with signature dates.

Additionally, please be sure to include in the agreement the water well identified in Exhibit G, if it is located within 200 feet of the proposed affected land boundary.

- 40) In the structure agreement submitted for Otero County Commissioners:
 - a. Under Notary for Permit Applicant, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction.
 - b. Under Notary for Structure Owner, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction.

Because of these errors, the Division does not consider the agreement to be properly executed. Please submit a new structure agreement for Otero County Commissioners that is properly executed.

- 41) In the structure agreement submitted for Southeast Colorado Power Association:
 - a. Under Notary for Permit Applicant, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction. (It should be noted, the date was corrected similarly in the notary acknowledgement section for the Structure Owner; however, in this case, the notary provided initials near the correction as required).

Because of this error, the Division does not consider the agreement to be properly executed. Please submit a new structure agreement for Southeast Colorado Power Association that is properly executed.

- 42) In the structure agreement submitted for Don Hansen:
 - a. Under Notary for Permit Applicant, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction.
 - b. Under Notary for Structure Owner, the notary acknowledgement date is September 1, 2015, while the structure owner signature date is September 1, 2016.



Because of these errors, the Division does not consider the agreement to be properly executed. Please submit a new structure agreement for Don Hansen that is properly executed, including notary acknowledgement dates that are consistent with signature dates.

- 43) In the structure agreement submitted for Daniel L. Lytle:
 - a. Under Notary for Permit Applicant, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction.
 - b. Under Notary for Structure Owner, the structure owner did not provide a date of signature
 - c. Under Notary for Structure Owner, the notary acknowledgment date was corrected from 2015 to 2016. However, it is unclear who made this change, as no initials were provided near the correction.

Because of these errors, the Division does not consider the agreement to be properly executed. Please submit a new structure agreement for Daniel L. Lytle that is properly executed.

- 44) The applicant provided structure agreements for 5 of the 7 structure owners identified in Exhibit S. (These agreements require revision as detailed above). Structure agreements for City of Aurora and Donald Memeda were not submitted. Please be advised that prior to the application decision date, the applicant must submit either:
 - a. Properly executed structure agreements for all owners of structures located within 200 feet of the proposed affected land boundary, or
 - b. An appropriate engineering evaluation that demonstrates such structures shall not be damaged by activities occurring at the mining operation

Additional Items:

45) On August 24, 2017, the Division received an Inert Fill Notice and Affidavit for the permit number assigned to this application. Please be informed, this type of notice is required to be submitted as a Technical Revision to a permit, including the appropriate revision fee. However, in this case, a permit has not yet been issued for the operation, as the application is still under review. Therefore, any information related to the proposed mining plan or reclamation plan (including importation of backfill material for reclamation) must be submitted under the appropriate exhibit in the permit application.

If the applicant wishes to import inert backfill material for reclamation, the following exhibits will need to be revised accordingly:



- a. Revise Exibit C mining plan maps to indicate location(s) where imported backfill material will be stored during each mining phase.
- b. Revise Exhibit D to describe where imported backfill material will be stored during each mining phase.
- c. Revise Exhibit E to describe inert backfill material to be imported for use in reclamation, including type of material, where it will be stored, estimated volumes, estimated depth of placement, and anticipated areas to receive this backfill material for reclamation. Please be sure to provide all information required by Rule 3.1.5(9).
- d. Revise Exhibit F to indicate area(s) where inert backfill material may be placed for reclamation.
- e. Revise Exhibit L to include costs for using the imported backfill material for reclamation. Please be sure to include an estimated volume of material to be used as backfill, and the haul or push distance for transporting the material to the reclamation area(s). Additionally, please clarify whether this backfill material will be used to achieve the final reclamation slope gradient, or if it will be placed on graded slopes for another purpose (e.g., bank armouring, wildlife habitat).
- 46) Please review the agency comments received by the Division (see enclosed), and provide responses as applicable. Please be sure to address any concerns identified by the agencies, and explain how any recommendations or requirements will be incorporated into the permit.

This concludes the Division's preliminary adequacy review of your application. If you are unable to satisfactorily address any concerns identified in this review before the decision date, currently set for November 16, 2017, it will be your responsibility to request an extension of the review period. Please ensure the Division sufficient time to complete its review process by responding to these adequacy issues at least one week prior to the decision date, by November 9, 2017.

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

Enclosures: Comments from History Colorado Office of Archaeology and Historic Preservation, received September 14, 2017

Comments from Department of the Army, received September 21, 2017 Comments from Colorado Parks and Wildlife, received September 26, 2017



Steve O'Brian October 31, 2017 Page 13 of 13

CC: Chris Tomky

20330 County Road CC Rocky Ford, CO 81067

Wally Erickson, DRMS



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

Response

Re: Consideration of 112c Construction Materials Reclamation Permit Application, 22 West Pit, Permit No. M-2017-032 (HC #72778)

Dear Ms. Eschberger:

We received your correspondence dated August 21, 2017 on August 23, 2017 initiating consultation with our office under the State Register of Historic Places Act (CRS 24-80-1 et seq.) for the above referenced undertaking.

A search of our database indicates that no cultural resource inventory has been conducted within the proposed permit area and no properties of historical significance have been recorded therein. As most of Colorado has not been inventoried for cultural resources, our files contain incomplete information. Consequently there is the possibility that as yet unidentified cultural resources exist within the proposed permit area. The requirements under CRS 24-80 part 13 apply and must be followed if human remains are discovered.

We thank you for the opportunity to comment. If we may be of further assistance, please contact Bob Cronk, Section 106 Compliance Manager, at (303) 866-4608 or robert.cronk@state.co.us.

Sincerely,

Steve Turner, AIA

State Historic Preservation Officer

1200 Broadway

Denver, CO 80203



DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, OMAHA DISTRICT **1616 CAPITOL AVENUE OMAHA NE 68102-4901**

September 11, 2017

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DIVISION OF RECLAMATION MINING AND SAFETY

Planning, Programs, and Project Management Division

Ms. Amy Eschberger Colorado Division of Reclamation, Mining and Safety Department of Natural Resources 1313 Sherman Street, Room 215 Denver, Colorado 80203

Response M-2017-032

Dear Ms. Eschberger:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated August 21, 2017 (received August 28, 2017) regarding the environmental review of the Deep Cut LLC application to conduct a surface mining and reclamation project near Rocky Ford, Otero County, Colorado. The project area is land located outside of the Corps, Omaha District's civil works boundary; therefore, we cannot provide specific comments on impacts to Corps owned or operated lands or environmental-based comments on the project. For these type of comments you will need to contact our Kansas City District as they have civil works jurisdiction over this area. Please direct all future correspondence regarding this project to the following address:

> U.S. Army Corps of Engineers, Kansas City District Attention: Mr. Jason Farmer, CENWK-PM-PR Richard Bolling Federal Building 601 E. 12th Street Kansas City, Missouri 64106

This project is located within the Corps' State of Colorado regulatory boundary. As such, any proposed placement of dredged or fill material into waters of the United States will require Department of the Army authorization under Section 404 of the Clean Water Act. Inquiries on Section 404 permit requirements should be directed to the Denver Regulatory Office. Preliminary and final project plans should be sent to the following address:

> U.S. Army Corps of Engineers Denver Regulatory Office Attention: Mr. Kiel Downing, CENWO-OD-R-CO 9307 South Wadsworth Boulevard Denver, Colorado 80128

If you have any questions, please contact Ms. Amee Rief of my staff at (402) 995-2544 or amee.l.rief@usace.army.mil and reference PD# 7084 in the subject line.

Sincerely,

Eric A. Laux

Chief, Environmental Resources and Missouri River Recovery Program Plan Formulation Section



Department of Natural Resources

Lamar Service Center 2500 South Main Street Lamar, CO 81052 P 719.336.6600 + F 719.336.6623

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DIVISION OF RECLAMATION MINING AND SAFETY

September 13, 2017

Ms. Amy Eschberger EPS
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

RE: 22 West Pit, File No. M-2017-032

There is suitable habitat on the site for nesting raptors and migratory birds. The observed presence of a Swainson's Hawk nest and a Great horned Owl nest will require avoidance of these raptors nesting areas, and all active nests should be left undisturbed. Colorado Parks and Wildlife (CPW) recommends the use of pre-construction surveys, as well as continuation of those surveys during construction, to identify all raptor nests within the project area and implementation of appropriate restrictions, as follows. CPW recommends adherence to the recommended buffer distances and timing stipulations identified in the attached document "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors". Removal or relocation of any active raptor nest requires consultation with CPW and the US Fish and Wildlife Service prior to disturbance. Both active and potential raptor nest sites, as well as winter night roosts should be considered when evaluating disturbance during construction.

CPW recommends that the development plan retain existing mature trees on the site as much as possible and that all landscaping or reclamation plans utilize native trees and avoid non-native vegetation. CPW recommend the development and implementation of a noxious weed control plan for the site. There are several noxious weed species identified on the site and the construction plans should include measures to prevent the spread of those weeds to adjacent areas. All disturbed soils should be monitored for noxious weeds and noxious weeds should be actively controlled until native plant revegetation and reclamation is achieved.

Respectfully

Travis Black Colorado Parks and Wildlife Area Wildlife Manager 2500 South Main Street

Lamar CO, 81052





RECOMMENDED BUFFER ZONES AND SEASONAL RESTRICTIONS FOR COLORADO RAPTORS

Tolerance limits to disturbance vary among as well as within raptor species. As a general rule, Ferruginous Hawks and Golden Eagles respond to human activities at greater distances than do Ospreys and America Kestrels. Some individuals within a species also habituate and tolerate human activity at a proximity that would cause the majority of the group to abandon their nests. Other individuals become sensitized to repeated encroachment and react at greater distances. The tolerance of a particular pair may change when a mate is replaced with a less tolerant individual and this may cause the pair to react to activities that were previously ignored. Responses will also vary depending upon the reproductive stage. Although the level of stress is the same, the pair may be more secretive during egg laying and incubation and more demonstrative when the chicks hatch.

The term "disturbance" is ambiguous and experts disagree on what actually constitutes a disturbance. Reactions may be as subtle as elevated pulse rate or as obvious as vigorous defense or abandonment. Impacts of disturbance may not be immediately evident. A pair of raptors may respond to human intrusion by defending the nest, but well after the disturbance has passed, the male may remain in the vicinity for protection rather than forage to feed the nestlings. Golden eagles rarely defend their nests, but merely fly a half mile or more away and perch and watch. Chilling and over heating of eggs or chicks and starvation of nestlings can result from human activities that appeared not to have caused an immediate response.

A 'holistic' approach is recommended when protecting raptor habitats. While it is important for land managers to focus on protecting nest sites, equal attention should focus on defining important foraging areas that support the pair's nesting effort. Hunting habitats of many raptor species are extensive and may necessitate interagency cooperation to assure the continued nest occupancy. Unfortunately, basic knowledge of habitat use is lacking and may require documentation through telemetry investigations or intensive observation. Telemetry is expensive and may be disruptive so a more practical approach is to assume that current open space is important and should be protected.

Although there are exceptions, the buffer areas and seasonal restrictions suggested here reflect an informed opinion that if implemented, should assure that the majority of individuals within a species will continue to occupy the area. Additional factors, such as intervening terrain, vegetation screens, and the cumulative impacts of activities should be considered.

These guidelines were originally developed by CDOW raptor biologist Gerald R. Craig (retired) in December 2002. To provide additional clarity in guidance, incorporate new information, and update the conservation status of some species, the guidelines were revised in January 2008. Further revisions of this document may become necessary as additional information becomes available.

RECOMMENDED BUFFER ZONES AND SEASONAL RESTRICTIONS

BALD EAGLE

Nest Site:

No surface occupancy (beyond that which historically occurred in the area; see 'Definitions' below) within ¼ mile radius of active nests (see 'Definitions' below). Seasonal restriction to human encroachment (see 'Definitions' below) within ½ mile radius of active nests from October 15 through July 31. This closure is more extensive than the National Bald Eagle Management Guidelines (USFWS 2007) due to the generally open habitat used by Colorado's nesting bald eagles.

Winter Night Roost:

No human encroachment from November 15 through March 15 within ¼ mile radius of an active winter night roost (see 'Definitions' below) if there is no direct line of sight between the roost and the encroachment activities. No human encroachment from November 15 through March 15 within ½ mile radius of an active winter night roost if there is a direct line of sight between the roost and the encroachment activities. If periodic visits (such as oil well maintenance work) are required within the buffer zone after development, activity should be restricted to the period between 1000 and 1400 hours from November 15 to March 15.

Hunting Perch:

Diurnal hunting perches (see 'Definitions' below) associated with important foraging areas should also be protected from human encroachment. Preferred perches may be at varying distances from human encroachment and buffer areas will vary. Consult the Colorado Division of Wildlife for recommendations for specific hunting perches.

GOLDEN EAGLE

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within ¼ mile radius of active nests. Seasonal restriction to human encroachment within ½ mile radius of active nests from December 15 through July 15.

OSPREY

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within ¼ mile radius of active nests. Seasonal restriction to human encroachment within ¼ mile radius of active nests from April 1 through August 31. Some osprey populations have habituated and are tolerant to human activity in the immediate vicinity of their nests.

FERRUGINOUS HAWK

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within ½ mile radius of active nests. Seasonal restriction to human encroachment within ½ mile radius of active nests from February 1 through July 15. This species is especially prone to nest abandonment during incubation if disturbed.

RED-TAILED HAWK

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within 1/3 mile radius of active nests. Seasonal restriction to human encroachment within 1/3 mile radius of active nests from February 15 through July 15. Some members of this species have adapted to urbanization and may

tolerate human habitation to within 200 yards of their nest. Development that encroaches on rural sites is likely to cause abandonment.

SWAINSON'S HAWK

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within ¼ mile radius of active nests. Seasonal restriction to human encroachment within ¼ mile radius of active nests from April 1 through July 15. Some members of this species have adapted to urbanization and may tolerate human habitation to within 100 yards of their nest.

PEREGRINE FALCON

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within ½ mile radius of active nests. Seasonal restriction to human encroachment within ½ mile of the nest cliff(s) from March 15 to July 31. Due to propensity to relocate nest sites, sometimes up to ½ mile along cliff faces, it is more appropriate to designate 'Nesting Areas' that encompass the cliff system and a ½ mile buffer around the cliff complex.

PRAIRIE FALCON

Nest Site:

No surface occupancy (beyond that which historically occurred in the area) within ½ mile radius of active nests. Seasonal restriction to human encroachment within ½ mile radius of active nests from March 15 through July 15.

NORTHERN GOSHAWK

No surface occupancy (beyond that which historically occurred in the area) within ½ mile radius of active nests. Seasonal restriction to human encroachment within ½ mile radius of active nests from March 1 through September 15.

BURROWING OWL

Nest Site:

No human encroachment within 150 feet of the nest site from March 15 through October 31. Although Burrowing Owls may not be actively nesting during this entire period, they may be present at burrows up to a month before egg laying and several months after young have fledged. Therefore it is recommended that efforts to eradicate prairie dogs or destroy abandoned towns not occur between March 15 and October 31 when owls may be present. Because nesting Burrowing Owls may not be easily visible, it is recommended that targeted surveys be implemented to determine if burrows are occupied. More detailed recommendations are available in a document entitled "Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls" which is available from the Colorado Division of Wildlife

Recommended Buffer Zones and Seasonal Restrictions Around Raptor Use Sites

Species and Use	Buffer	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Bald Eagle										T '			
ACTIVE NEST - No Surface Occupancy	1/4 Mile	1 m											
ACTIVE NEST - No Human Encroachment	½ Mile												
ACTIVE WINTER NIGHT ROOST without a direct line of sight- No Human Encroachment	1/4 Mile												
ACTIVE WINTER NIGHT ROOST with a direct line of sight - No Human Encroachment	½ Mile												
HUNTING PERCH - No Human Encroachment	Contact CDOW												
Golden Eagle													
ACTIVE NEST - No Surface Occupancy	1/4 Mile												
ACTIVE NEST - No Human Encroachment	½ Mile	4000	140000				12.12.12.1						
Osprey													EPROVERS
ACTIVE NEST - No Surface Occupancy	1/4 Mile												
ACTIVE NEST - No Human Encroachment	1/4 Mile								0.000		THE ROYALD A	53*505065055063	204-90-00-00-00-00-00-00-00-00-00-00-00-00-
Ferruginous Hawk													
ACTIVE NEST - No Surface Occupancy	½ Mile				and the second								
ACTIVE NEST - No Human Encroachment	½ Mile										ALTERNATION.		
Red-tailed Hawk													
ACTIVE NEST - No Surface Occupancy	1/3 Mile				10.4° (3.1°		ggaran I.a				10-5		
ACTIVE NEST - No Human Encroachment	1/3 Mile												
Swainson's Hawk													
ACTIVE NEST - No Surface Occupancy	1/4 Mile								1945 (1955 - 1976) 1950 (1956 - 1976)				
ACTIVE NEST - No Human Encroachment	1/4 Mile												
Peregrine Falcon													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile											200000 200000 200000	
Prairie Falcon													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
Northern Goshawk													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
Burrowing Owl													
ACTIVE NEST - No Human Encroachment	150 feet												
		= tim	e period	for wh	ich sea	sonal re	strictions	are in r	lace.				

DEFINITIONS

<u>Active nest</u> – Any nest that is frequented or occupied by a raptor during the breeding season, or which has been active in any of the five previous breeding seasons. Many raptors use alternate nests in various years. Thus, a nest may be active even if it is not occupied in a given year.

Active winter night roost – Areas where Bald Eagles gather and perch overnight, and sometimes during the day in the event of inclement weather. Communal roost sites are usually in large trees (live or dead) that are relatively sheltered from wind and are generally in close proximity to foraging areas. These roosts may also serve a social purpose for pair bond formation and communication among eagles. Many roost sites are used year after year.

<u>Human encroachment</u> – Any activity that brings humans in the area. Examples include driving, facilities maintenance, boating, trail access (e.g., hiking, biking), etc.

<u>Hunting perch</u> – Any structure on which a raptor perches for the purpose of hunting for prey. Hunting perches provide a view of suitable foraging habitat. Trees are often used as hunting perches, but other structures may also be used (utility poles, buildings, etc.).

<u>Surface occupancy</u> – Any physical object that is intended to remain on the landscape permanently or for a significant amount of time. Examples include houses, oil and gas wells, tanks, wind turbines, roads, tracks, etc.

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