### 9.1 SAND, SOIL AND GRAVEL MINING

#### **9.1.1** Purpose:

It is the intent of Archuleta County to ensure that sand, soil, and gravel are available to the public and that mining and related uses for sand, soil, and gravel occur without compromising the goals and objectives of the Archuleta County Land Use Code. It is the intent of Archuleta County to assure that these requirements are addressed without duplication of, or contradiction with, pertinent state or federal requirements for such mining. Archuleta County reserves the right to assume the functions of external agencies involved with sand, soil and gravel mining if such agencies are eliminated or their operations are curtailed.

#### 9.1.2 Applicability:

Any Resource Extraction, Processes and Sales Use is subject to review and approval by the Development Services Department. This includes: 1

- **9.1.2.1** Mining of sand, soil or gravel.
- **9.1.2.2** Temporary borrow pits to extract sand, soil or gravel.
- **9.1.2.3** Project which includes any of the following:
  - (1) Accessory uses and structures associated with mineral extraction.
  - (2) Crushing, screening, stockpiling of extracted materials.
  - (3) Processing or batching of materials into other products such as asphalt and concrete.
  - (4) Outdoor storage of equipment and materials used for mineral extraction.

# 9.1.3 Mining Operations That Do Not Require A Permit:

If the proposed operation does not satisfy any one of the following subsections then a permit is required. In no instance will use of County Roads be allowed without a permit.<sup>2</sup>

- **9.1.3.1** The use is for an agricultural operation where no material would be exported from the parcel and is for landowner's use on his own property. The associated equipment may only operate on roads on the landowner's property within the parcel boundaries where the operation takes place. All associated operations, screening and loading must be at least 1,000 feet from the nearest residence not owned by the landowner.
- **9.1.3.2** The activity is approved as a mining activity by the County under separate permit, such as landfill sites, foundation excavations, building or subdivision developments, or water or road tunnel developments;

<sup>&</sup>lt;sup>1</sup> Amended May 2019 (Res. 2019-39)

<sup>&</sup>lt;sup>2</sup> Amended Dec 2010 (Res. 2010-10)

9.1.3.3 If for an approved building or subdivision, the disturbed area is located within and immediately surrounding the footprint of an approved building, road, or recreational facility and for sand or soil only.

#### 9.1.4 Minor Sand and Gravel permit:

Certain small mining operations may be reviewed and approved administratively, with conditions, or denied, by the Development (Planning) Director, after consultation with the County Engineer.3

- **9.1.4.1** A project may qualify as a Minor Sand & Gravel operation when:
  - (1) The extraction site is adjacent to the project area for another approved Land Use Permit and is owned or controlled by the same person, company or agency; or
  - (2) The operation serves a specific one-time major construction project; or
  - (3) The site will be limited to a maximum of ten (10) acres.
- 9.1.4.2 A Minor Sand & Gravel operation should only be located in an area where there are no existing mining operations which could serve the project without creating significant impacts on the road system or to surrounding areas.
- **9.1.4.3** Specific Performance Standards for a Minor Sand & Gravel Operation:
  - (1) The operation will be reclaimed within one (1) year of completion of all mining activities. In the case of a multi-cell operation, reclamation of each cell will be made within one (1) year of completion of mining activities in said cell.
  - (2) The project site shall not be visible from adjacent residences, or will be mitigated to have reduced visibility from adjacent residences.
  - (3) The mine shall be located in proximity to the construction project which it is intended to serve, and will cause minimum impacts to the roads used from the mine to the project site.
  - (4) Roads used to access the construction site from the mine will be upgraded to withstand the additional traffic, and the permittee will prevent road damage and mitigate dust, under the supervision of the County Road and Bridge Supervisor.
  - (5) Flagmen and traffic control signs will be used during the construction project to assure safe traffic detours and to minimize conflicts with truck traffic serving the project.
- 9.1.4.4 Crushers and/or batch plants will be allowed at a site permitted under this Section 9.1.4 only under a separate Conditional Use Permit approved by the Board.

<sup>&</sup>lt;sup>3</sup> Amended May 2019 (Res. 2019-39)

### 9.1.5 Major Sand & Gravel Permit:

Unless exempt under Section 9.1.3 or allowed as a minor sand and gravel administrative permit under Section 9.1.4, all sand, soil and gravel mining operations must obtain a Conditional Use Permit as a Major Sand & Gravel operation.

# 9.1.6 Performance Standards for All Operations:

- **9.1.6.1** Compatibility of sand, soil, or gravel mining operations with surrounding uses shall be determined by review of the following criteria:
  - (1) Surrounding uses are primarily agricultural, forestry, or industrial.
  - (2) Truck traffic will not access the mining operation through residential, recreational or commercial areas, or such traffic will be mitigated.
  - (3) The mining site will not be visible to adjacent surrounding residences or will be mitigated to the extent reasonably possible, to have reduced visibility. Placement of the operation a sufficient distance from public roadways, behind natural landforms and existing major vegetation, and/or away from growth centers will minimize visual contact.
  - (4) Equipment used for the operation will not be visible from adjacent surrounding residences or will be mitigated to reduce visual impact.
  - (5) The operation will not generate noise or vibration apparent to surrounding residences, or such impacts will be effectively mitigated, to the extent required by the performance standards at Section 5.4.2.1.

#### 9.1.6.2 Air Quality:

- (1) Gravel, water or chemically stabilize public and private access roads, stripped areas, and excavations to minimize dust.
- (2) Increase watering operations immediately in response to periods of high wind or to dust complaints.
- (3) Plant stripped areas and soil stockpiles that are planned to remain uncovered for more than one (1) season with rapid growing vegetative cover to minimize dust, erosion, and weeds.
- **(4)** Cease aeration operations at commercial wastewater ponds during periods of high wind.

#### 9.1.6.3 Visual Amenities and Scenic Quality:

- (1) Use low profile permanent equipment, and/or permanent equipment painted to "blend with surroundings", and/or effective screening of permanent equipment. Permanent equipment shall be construed as that equipment left in place for one (1) year or more. Color selection shall be reviewed and approved by the Director of County Development.
- (2) Maintain weed control and watering programs to keep landscaping and vegetation viable.
- (3) Proposed landscaping, screening, fencing or other visual impact mitigation shall be approved by the Director of County Development prior to operation.
- (4) New long-term (more than one (1) year) mining operations will not be visible along highways.
- (5) The proposed mining operation will be located a sufficient distance from other mining operations so as not to create cumulative impacts to roads, air and water quality, or other resources and amenities.

# 9.1.6.4 Crushing, Processing, Batching, and Hot Mix operations shall meet the following criteria:

- (1) Current Colorado Department of Public Health and Environment (CDPHE), Air Pollution Emissions permits shall be obtained for all processing equipment.
- (2) Visual impacts from batch plants to adjacent and surrounding residences must be mitigated to the extent reasonably possible.
- (3) Batch plants shall not be located within a one-hundred (100) year floodplain unless all requirements of the National Flood Insurance Program can be complied with.
- (4) Recirculation ponds associated with batch plants or other processing equipment shall be lined with impervious material, or enclosed recirculation tanks shall be used to prevent intermingling of processing water with groundwater. Surface runoff water shall be diverted away from batch plant areas.
- (5) All stationary sources shall meet current Colorado Department of Public Health and Environment emissions standards for air and water. More stringent requirements may be set by the Board of County Commissioners in certain locations.
- **(6)** Results of relocation and annual inspections of batch plants by the Colorado Department of Public Health and Environment shall be submitted to the Planning Department.
- (7) The Board of County Commissioners may approve a mining operation for a specific period of time, not to exceed twenty (20) years, with a five (5) year review by

Planning Commission and the Board. The compatibility and size of the project will be considered in determining the appropriate length of time for the mining operation. Renewals of the permit may be granted upon a new permit review, and subject to new and additional conditions.

(8) The Board of County Commissioners will require a performance guarantee in addition to the bond required by the Colorado Division of Minerals and Geology (CDMG) to insure that certain conditions of a permit will be complied with. The County will require a certified copy of the bond required by the CDMG.

# 9.1.7 Submittals for Sand, Soil, and Gravel Mining Operations:

- **9.1.7.1** Copy of application submitted to the Colorado Division of Minerals and Geology (CDMG) [Division of Reclamation, Mining and Safety—CDRMS], including:
  - (1) Site Plan
  - (2) Operations Plan
  - (3) Road Use Plan
  - (4) Reclamation Plan
  - (5) Copy of Bond
  - (6) Wildlife, soils, geology, hydrology, and other environmental information.
- **9.1.7.2** The application shall include (by reference to information submitted as part of other permit applications and copies of same) the following items:
  - (1) Maps and Sketches:
  - (2) Quadrangle Map of site and surrounding areas within a one (1) mile radius, including:
    - a. An outline of the proposed site
    - b. Location of adjacent residences and other buildings
    - **c.** Property lines, water wells, irrigation ditches, oil/gas wells, other
    - **d.** Gravel mines, and County and private access roads.
  - (3) Site Plan of all proposed equipment and facilities, stockpiles, and other features of the exploration operation.
  - (4) Grading Plan to show grading during and after the extraction operations, pre- and post- disturbance drainage, and final grading.
  - (5) Two (2) foot contour map of the existing site and final contours.

- (6) Site Description: Written description of location of the existing site, including:
  - a. Existing vegetative types
  - **b.** Existing land use of the site and surrounding areas
  - **c.** Location of extraction areas, stockpiles, topsoil and overburden piles, nearest waterways, nearest residences, proposed or existing fencing.
- (7) Written description of access roads to be used, including:
  - a. Surface type, width, geometry, structure, bridges and intersections
  - **b.** Anticipated impacts, existing and proposed traffic volumes
  - c. Residential, recreational, commercial areas along the proposed route
  - d. Location of internal haul roads
- (8) Project Description: Written description of the proposed operation, including:
  - a. Size and timing of phased extraction areas
  - **b.** Depth of topsoil and overburden
  - **c.** Maximum area to be disturbed at any one time, including stripping of topsoil and overburden
  - **d.** Methods of extraction, dates, days and hours of operation, number of employees.
  - **e.** Expected volume of minable gravel and annual volume of materials to be removed.
  - f. Outdoor storage and weed control plan
- **(9)** Blasting plan and information to include:
  - a. Type and kind of explosives to be used
  - **b.** Amounts of explosives per shot
  - c. Number of shots per blast
  - d. Location of explosives storage magazine
  - **e.** Name and address of person or company in charge of blasting (if other than permittee)
- (10) Reclamation Plan describing:
  - a. Proposed final land use
  - b. Timing of reclamation
  - **c.** Topsoil salvage, overburden salvage, topsoil and overburden redistribution and/or disposal
  - **d.** Soil Conservation Service and/or Mined Land Reclamation Board recommendations for seeding and revegetation.
  - e. Weed control plan
- (11) Environmental and vicinity impact analysis to include:
  - a. Soils information
  - **b.** Visual impacts, including distances, areas, neighborhoods, and public roads from which the project will be visible
  - c. Wildlife habitat and population information,
  - **d.** Site-specific geologic, floodplain, wildfire hazards
  - **e.** Potential air pollution, water pollution, noise, surrounding drainages, and water rights

- f. climatological data
- g. Surrounding property uses and land values.

#### (12) Proposed impact mitigation plan to include:

- a. Visual impact mitigation plan
- **b.** Wildlife mitigation plan
- c. Plan to address geologic hazards, floodplains, hydrologic hazards
- **d.** Air pollution emissions permit
- e. Water quality and quantity protection and water augmentation plan
- **f.** Methods of preservation of significant vegetation

# (13) A Fugitive Dust Control Plan shall be submitted which shall:

- **a.** Comply with requirements of the Colorado Air Quality Control Planning Commission
- **b.** Be approved by the Colorado Air Quality Control Division
- **c.** Address site-specific areas of concern, such as stockpiles and wind breaks.
- **d.** Be implemented by the operator and/or hauling contractor at the mine and on all haul roads.

#### 9.1.8 Mitigation for Sand, Soil, and Gravel Mining Operations:

Mitigation required by the Colorado Division of Minerals and Geology (CDMG) [CDRMS], and other state and federal agencies will be reviewed by the County to insure that the plans adequately address potential impacts. Archuleta County does not intend to duplicate or conflict with federal or state requirements. Where mitigation plans do not appear to address potential impacts, additional mitigation plans will be required by the Planning Department. The County maintains a list of mitigation techniques as suggestions in the Planning Department. Some or all of these techniques may be applied to the permit. Additional techniques may be required or may be proposed by the applicant. All mitigation required shall be at the operator's expense, unless otherwise approved by the Board of County Commissioners.