



HARD ROCK MINE REGULATIONS

**Colorado Counties Inc.
Winter Meeting**

November 30, 2011

ORGANIZATION CHART



DEPARTMENT OF NATURAL RESOURCES
Mike King, Executive Director

DIVISION OF RECLAMATION, MINING & SAFETY
Loretta Pineda

**MINED LAND
RECLAMATION BOARD**

**Information
Technology**

**OFFICE OF ACTIVE &
INACTIVE MINES**

Bruce Stover

**Inactive Mine
Reclamation
Program**

**Non-point Source
Program**

**Mine Subsidence
Protection Prog.**

**Mine Safety
and Training
Program**

**Coal Mine
Board of
Examiners**

**OFFICE OF MINED LAND
RECLAMATION**

David Berry

**Coal
Regulatory
Program**

Tony Waldron

**Minerals
Regulatory
Program**

**FISCAL MGMT.
Administration**

Jill McLemore

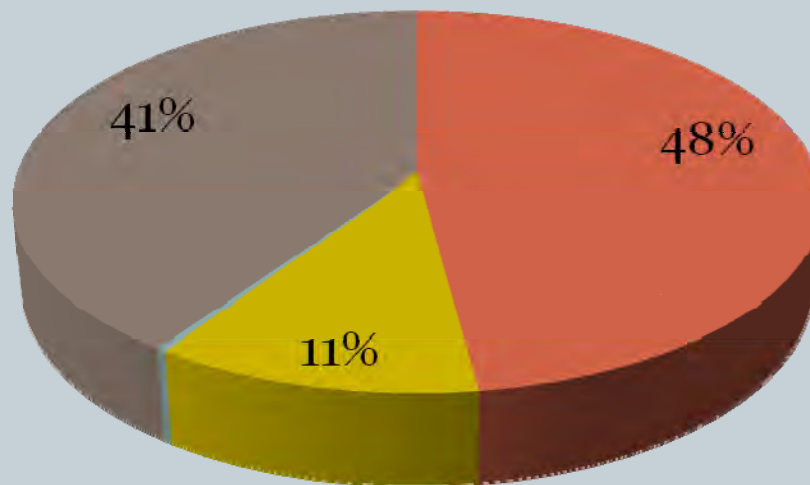
**Accounting
Board Support**

Division of Reclamation, Mining and Safety Funding Sources



Non-Appropriated Federal
Funds Inactive Mine
Reclamation Program
\$11.2 million

Total Full Time Employees
70.9



- Cash Funds-Sev Tax - \$4,496,468
- Cash Funds-Fees - \$1,061,164
- Reappropriated Funds \$ 30,000
- Federal Funds - \$3,797,498

Mined Land Reclamation Board



- Multi-interest Citizen Board which establishes regulations, standards and policies that guide the Division
- Created in 1976 by Colorado General Assembly
- Members appointed by the Governor and confirmed by the Legislature (four years)

Regulatory Programs

Minerals Regulatory Program



ENVIRONMENTAL STANDARDS

The Minerals Mine Regulatory Programs provides protection to the people and environmental resources of Colorado by ensuring that mining operations are conducted in a manner that mitigates damage to resources through sound mining and reclamation plan permitting and inspection. This includes rigorous reclamation bonding (financial assurance) requirements.

Program Statistics



	Minerals Program
Mine Sites (2/2011)	1539
Exploration Sites (2/2011)	245
Permitted Acreage (2/2011)	181,000
Permitting Actions (FY 09-10)	596
Inspections (FY 09-10)	629
Enforcement Notices (FY 09-10)	26
Total Bond Amount (2/2011)	\$423,000,000

Minerals Program



- Program authority is pursuant to the Colorado Mined Land Reclamation Act (C.R.S. 34-32-101) and
- Colorado Land Reclamation Act for the Extraction of Construction Materials (C.R.S. 34-32.5-101).

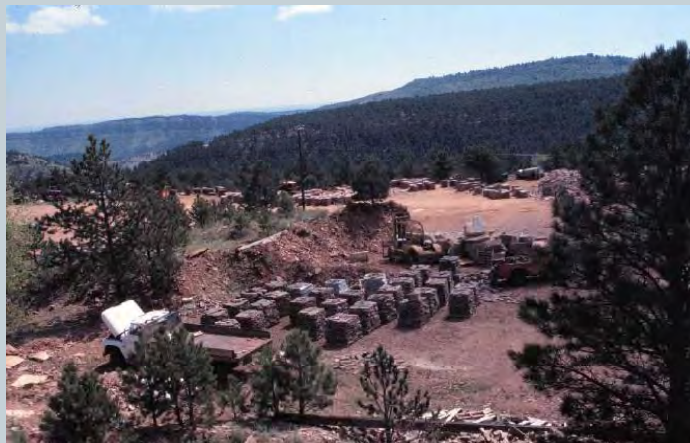
Cripple Creek and Victor Gold Mine



Gravel Mines



Flagstone Quarry



Molybdenum Mine- Climax



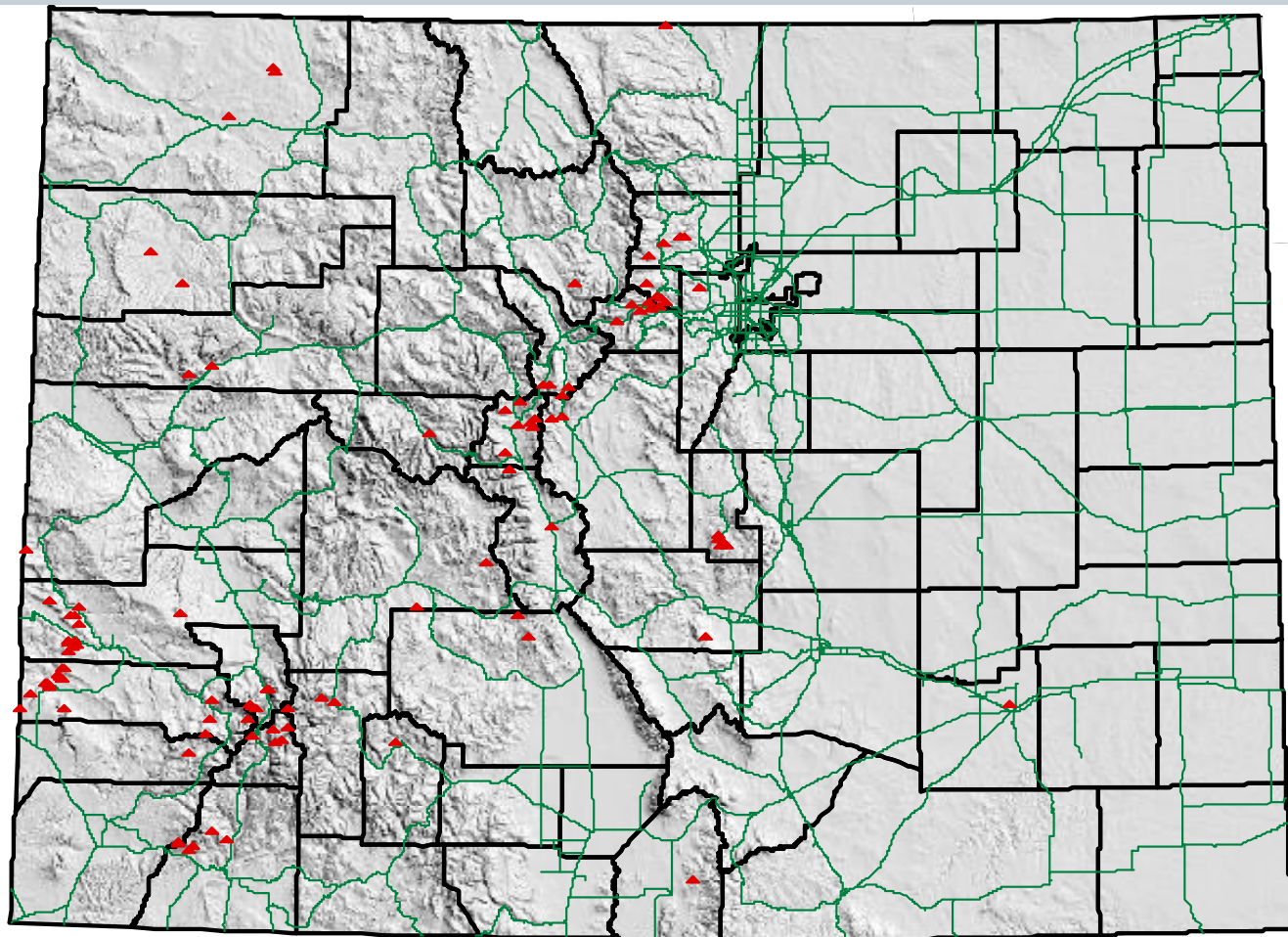
Minerals Program



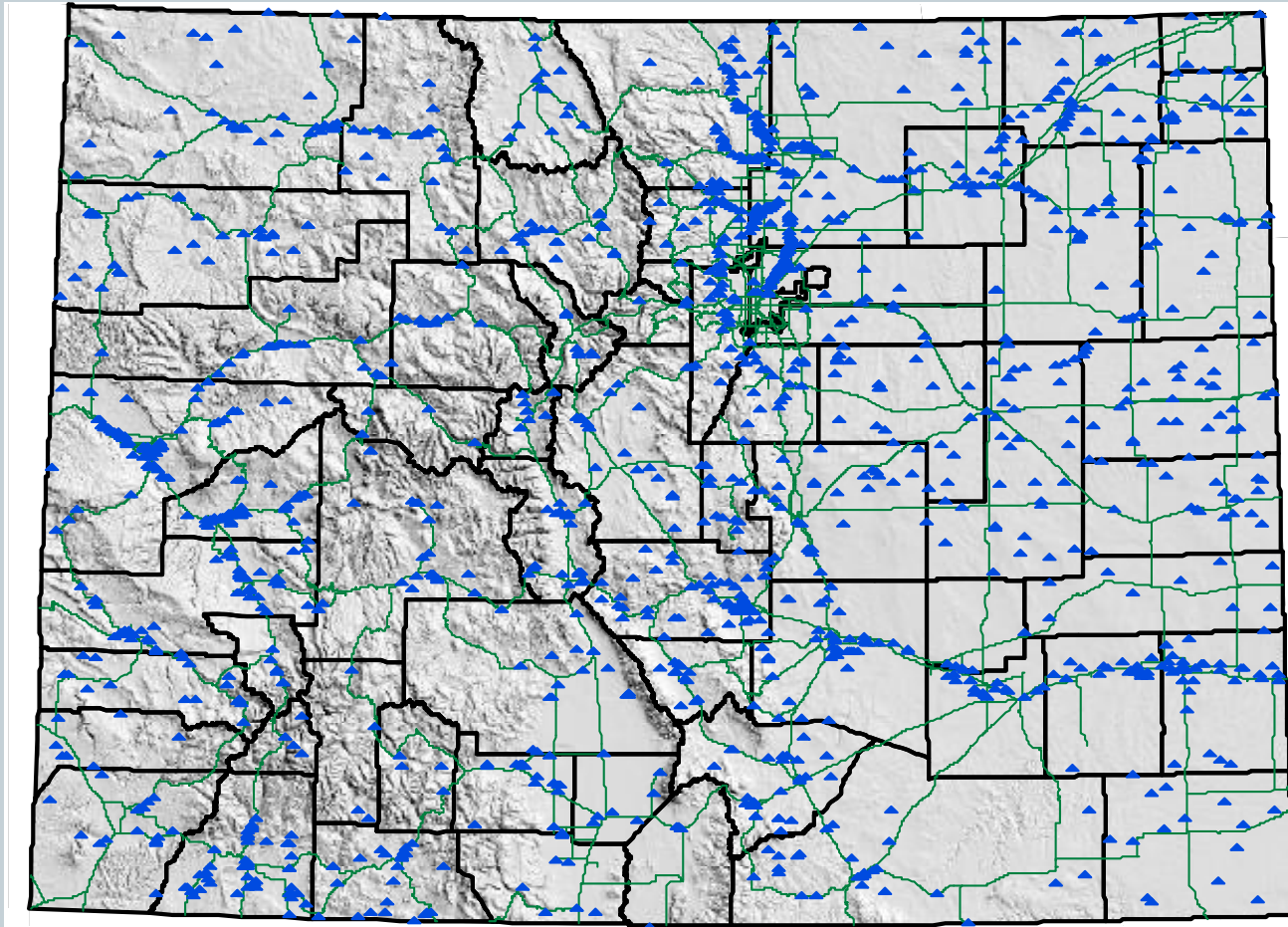
Henderson Mill

- Regulates 1,539 permitted mining operations (all commodities but coal)
- 23% are county operations
- 245 Prospecting Notices
- Inspects each Designated Mining Operation quarterly and other sites once every five years
- Issues enforcement actions to maintain compliance
- Reviews new permit applications, permit amendments and technical revisions

Active Hard Rock Sites



Active Construction Materials Sites



DRMS Jurisdiction



- The Mined Land Reclamation Board is the expert agency established by the General Assembly to promulgate mining operation permit regulations and reclamation standards which includes identifying what is or not a reclamation standard.
- DRMS –Oversees technical aspects of reclamation and off-site damage.
- Bonding – DRMS is the only authorized agency to require bonding/financial warranty.

DRMS Jurisdiction



CRS 34-32-109 (6)

No governmental office of the state, other than the board, nor any political subdivision of the state shall have the authority to issue a reclamation permit pursuant to this article, to require reclamation standards different than those established in this article, or to require any performance or financial warranty of any kind for mining operations.

DRMS Jurisdiction



CRS 34-32-109 (6) (cont'd)

The operator shall be responsible for assuring that the mining operation and the postmining land use comply with city, town, county, or city and county land use regulations and any master plan for extraction adopted pursuant to section [34-1-304](#) unless a prior declaration of intent to change or waive the prohibition is obtained by the applicant from the affected political subdivisions. Any mining operator subject to this article shall also be subject to zoning and land use authority and regulation by political subdivisions as provided by law.

County Authorities



- DRMS - does not decide: “Should a mine be in this place?”
- DRMS - no jurisdiction over matters controlled by other agencies, i.e. noise, dust, traffic, visual impacts, aesthetics.
- Counties have the authority to permit all aspects of land use for mining, including the location of mining operations.

Local Government Approval

- Mining can only be conducted on land approved for mining by special use permit or zoned for mining by local governments.
- Operators may get a permit from DRMS before they receive a permit from the local government but ...

Mining cannot commence until an operator has received approval from the local government

Hard Rock / Metal Mining



Types of Applications **Hardrock - Construction**

- Notice of Intent to Conduct Prospecting (NOI)
- 110 Limited Impact Permit denotes an operation limited in size of acreage (less than 10 acres) that can be disturbed, and for hard rock operations, the tons of material that can be mined on a yearly basis
- 110d - Designated Mining Operations (DMO) deals with permits issued to operations considered to be of higher environmental risk than 110 Limited Permits or 112 Regular Permits. They generally mine and disturb materials that are toxic or acid producing, and may include toxic chemicals in on-site processing. Permitting and bonding requirements are more rigorous.

Hard Rock / Metal Mining



Types of Applications – cont'd Hardrock - Construction

- 111 - Special permits are issued only for use on projects where the material is sand, gravel, or aggregate and such material is used exclusively on a government contracted highway or utility project.
- 112 Regular Permit is a permit issued for operations disturbing more than 10 acres, and for hard rock operations mining more than 70,000 tons per year.
- 112d - Designated Mining Operation (DMO) which affects 10 acres or more or extracts 70,000 tons or more of mineral, overburden or combination of the two per calendar year and uses or stores designated chemicals or acid-producing materials or has the potential to cause acid mine drainage.

Notices of Intent to Conduct Prospecting



- Prospecting – the act of searching for or investigating a mineral deposit. Prospecting includes but is not limited to sinking shafts, tunnel, drilling core and bore holes and digging pits or cuts and other works for the purpose of extracting samples prior to commencement or
- The term does not include any single activity which results in the disturbance of a single block of land totaling 1600 square feet or less of the land surface, not to exceed two such disturbances per acre; except that the cumulative total of such disturbances will not exceed five acres statewide in any prospecting operation extending over 24 consecutive months” (*Rule 1.1.43*).

Prospecting on Federal Land



- The Division has entered into cooperative agreements with the U.S. Bureau of Land Management (BLM) or the U.S. Forest Service (USFS) to coordinate the review of NOIs and the posting of financial warranties.
- The primary goal is to ensure that the agencies minimize duplication of functions and thereby minimize regulatory duplication imposed upon prospecting operations. The Division assumes the primary responsibility for the administration, review, and permitting of NOIs.
- The prospector is required to document that the NOI has been sent to the BLM or the USFS. Upon receipt of the NOI, the Division will notify the appropriate BLM or USFS office and forward a copy of the NOI.

Recent Changes to Prospecting



- **Senate Bill (SB) 228 became law on June 2, 2008. SB 228 revised portions of C.R.S. 34-32-113 pertaining to confidentiality and filing requirements and requiring that certain aspects of Prospecting Notices will no longer be confidential.**
- **Notices are posted on the DRMS website.**
- **In addition, Rule 5.1.2 (m) (i) & (ii) identifies a new requirement for prospectors to notify the Local Boards of County Commissioners at the time of application submittal for an NOI and to provide certification that such notice was submitted.**

Minerals 110 Applications



- Application must meet the minimum requirements of the Act and Rules
- Publish once in newspaper
- DRMS decision due within 30 days /extend 60 days if complex
- Bond set by Division equal to reclamation liability
- 110D – Designated Mining Operation

Minerals 112 Application



- Application must meet the minimum requirements of the Act and Rules
- Publish 4 times in newspaper
- DRMS decision due within 90 days /extend by 60 days if complex
- If objectors, issue will be scheduled before the MLRB before the 120th day /180th day if complex
- Bond is actual cost of reclamation
- 112d – Designated mining operation

Designated Mining Operations



- Mines that use toxic or acid forming materials (cyanide)
- Mines that disturb toxic or acid forming materials (sulfide ores)
- Mines that generate acid mine drainage
- Mines that have a likely potential to release contaminants
- Construction Material mines not included

Stronger Environmental Compliance Requirements



- Environmental Protection Plan
- Engineering certification required for environmental protection facilities
- Inspection milestones - similar to “building permit inspections”
- Emergency Response Plans
- Emergency Response Fund

Minerals New Application Requirements - Rule 6

- Legal Description
- Index Map
- Pre-Mining & Mining Plan Maps
- Reclamation Plan
- Reclamation Plan Map
- Water Information
- Wildlife Information
- Soils/Vegetation/Climate
- Reclamation Costs
- Other Permits/Licenses
- Legal Right of Entry
- Owners of Surface/Mineral
- Municipalities in 2-Miles
- Proof of Notice to County Comm. & SCD
- Proof of Filing w/County Clerk
- Permanent Man-Made Structures
- Geotechnical Stability
- Environ. Protection Plan for DMO's

Reclamation Plan Review



- Evaluates whether the plan will meet the stated end land use
- Assures the plan has enough detail to calculate an adequate reclamation bond
- Ensures that environmental compliance continues even if the mine is not in operation
- Makes sure that no maintenance will be needed after reclamation

Minerals Other Permitting



- Permit Amendments- change that increases acreage or significant change to reclamation plan. Follows new application procedures including public notice and participation
- Technical Revisions- minor change to the mining and/or reclamation plan
- Conversions- change from one permit type to another
- Permit Transfer and Succession of Operator
- Bond Release Request- no phases/fees

Types of Notifications by Operator

- County
- Municipalities
- Property owners within 200 feet of the mine's permit boundary
- Proof of Notice to County Commission
- Proof of Notice to Soil Conservation District
- Proof of Filing permit documents w/County Clerk

Division Notification



At a minimum, the following agencies must be contacted

- The Colorado Historical Society regarding properties of historical significance including the need for an archeological survey, procedures for requesting a file search, and inventory forms to identify structures
- Colorado Division of Water Resources with regard to the administration of water rights
- Colorado Department of Health, Water Quality Control Division, with regard to the discharge of pollutants into the water of the State
- Colorado Department of Health, Air Pollution Control Division, with regard to the need for a fugitive dust permit

Division Notification



At a minimum, the following agencies must be contacted (cont'd)

- U.S. Bureau of Land Management or the U.S. Forest Service for proposed operations on federal lands
- U.S. Army Corps of Engineers regarding a dredge and fill (404) permit
- The County Planning Department for the county or counties in which the proposed operation is located (Section 34-32-109(6), C.R.S.1984, as amended) requires a mining operator to be responsible for assuring that the mining operation and the post-mining land use comply with local land use regulations and any master plan for extraction adopted pursuant to Section 34-1-304.

Public Participation



- Comments and objections are allowed on all applications, revisions, bond releases, etc.
- Consideration is limited to jurisdictional issues as dictated by the Act
- Timeframes for comment consideration are defined by law
- Any decision by DRMS can be appealed to the Mined Land Reclamation Board

Bonding/Cost For Reclamation



- Based on approved reclamation plan
- What it would cost the State of Colorado to fully reclaim in the event operator could not fulfill obligation under the approved permit and the permit is revoked and bond forfeited
- Indirect Costs (profit, administration fees, project mgmt. fees, insurance) are included in the bond amount

DRMS Inspections



- Inspect once every four years if active (policy)
- High priority/DMO sites inspected every year, particularly during critical construction and as necessary to maintain compliance
- Bond release/reduction requests- within 60 days of receipt
- Citizen Complaint inspection- within 30 days of receipt
- Operator Request

Enforcement Procedures



- Inspectors cannot find violations, only collect evidence to prove violations
- Only the Board finds violations
- Aimed at compliance and reclamation completion, not punishment
- Progressive discipline approach used

Bond Release Process



- Operator must request release in writing (partial or total)
- Operator must send by certified mail and include names of landowners
- DRMS notifies landowners, county and agencies
- DRMS inspects within 60-days

Contact Information



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Denver, CO 80203

(303)866-3567 Phone

(303)832-8106 fax

<http://mining.state.co.us>

