

SANTA FE COUNTY

Ordinance No. 1993-3

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An Ordinance amending the Santa Fe County Land Development Code, 1992-1, Article III, Section 5 relating to Hardrock Mining.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF SANTA FE COUNTY:

Article III, Section 5 of Santa Fe County Ordinance 1992-1 is hereby deleted, and the following is hereby adopted in its place, effective April 22, 1993:

SECTION 5 - MINERAL EXPLORATION AND EXTRACTION

5.1 General Provisions

5.1.1 Applicability

A. Any person who conducts or intends to conduct a mineral exploration or extraction activity or an expanded use of a mining land use within Santa Fe County shall be subject to the provisions of this Code, as applicable, and this Section 5.

B. Applicants seeking to obtain an exploration or extraction permit will also be subject to all state and federal requirements and permits, as well as review by state agencies, as applicable, and as required by the Code Administrator. Applicants who receive an extraction or exploration permit under this Section will be deemed to have been approved for a mining land use for the purposes of zoning, since this Section contains zoning submittal requirements and review standards that are necessary for any type of development in Santa Fe County.

C. Existing exploration or mining operations which are in operation or in a state of temporary cessation prior to the effective date of this Code, as amended, may continue operations, provided the operator submits to the County a description of operations and a reclamation plan pursuant to Section 5.4.1 A. and provided further that the operator does not conduct any expanded use of the existing mining land use.

D. In order to preserve the welfare, health, safety and environment of its residents, the County shall, unless specifically preempted, require that a mineral exploration or extraction use permitted on state or federal lands be subject to, and coordinated with, the provisions of

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this Section 5 for the purpose of imposing certain of its regulations. Such regulations pertain to, but are not limited to, blasting, flood hazards, water quality, and archaeological sites.

E. Patented lands shall be treated as any other private property.

F. A permit is not required pursuant to Article III, Section 5, for prospecting.

5.1.2 Preemption

A. Nothing in this Code shall be construed to supersede or contravene the authority which the state or federal governments or their agencies have with respect to the management, protection and utilization of the lands and resources under their jurisdiction. The regulations in this Code shall apply to state or federally owned lands unless they are specifically preempted from having authority in this area by state or federal law.

B. Provisions of this Code which do not conflict with state or federal law shall be enforceable on the state and federal lands insofar as this Code merely regulates and does not prohibit mining.

C. Revisions to this Code, including those resulting from changes to applicable regulations promulgated by state or federal agencies which administer permits for mineral exploration or extractions, may be proposed from time to time.

D. This Section applies to all mining land uses, notwithstanding the provisions of Article I, Section 8.1 of the Code, except for sand and gravel mining operations, which are regulated elsewhere in this Code.

E. The County recognizes that on or about July 1, 1993, the State of New Mexico will have enacted and have in effect the New Mexico Mining Act ("Act"). There is no provision in the Act which preempts the County from regulating zoning and reclamation of mining land uses in the County, nor which preempts zoning authority or police powers previously granted to counties by the State. This Article III, Section 5 of the Code is both a zoning and reclamation ordinance. The County recognizes that it has concurrent jurisdiction with the State in those areas which are regulated by the Act. Any provision

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of the Act which has been satisfied by the applicant will be reviewed by the Code Administrator, who shall determine whether such action by the applicant satisfies the requirements of this Section. The applicant must comply with any portion of the Code which imposes additional requirements beyond the requirements of the Act. It is the intention of the County that any portion of this Section which pertains to the County's use of its police and zoning power shall remain in full force and effect if any other portion of this Section be found to be preempted by state federal law.

5.1.3 Purpose and Intent

The policy of the County regarding mineral exploration and extraction is:

A. To protect the health, safety and welfare of the citizens of Santa Fe County as that relates to its quality of life, its economy, its cultural heritage, history or traditions, its infrastructure or its natural resources;

B. To protect the environment of Santa Fe County and its residents from the harmful, hazardous, and toxic effects or nuisances resulting from mineral exploration and extraction, including but not limited to degradation of: air quality, ground water quality, visual quality, erosion of soils; adverse noise and vibration; toxic matter; fire or explosive hazards; adverse traffic and road conditions; and any adverse effects of solutions, chemicals, and other mining processes;

C. To assure that mineral exploration or extraction activities are compatible with other uses in the County, including but not limited to: traditional patterns of land use, recreational uses, and existing or planned urban or metropolitan areas;

D. To assure that the reclamation of affected areas which are the subject of mineral exploration or extraction activities meet the standards and objectives of this Section 5;

E. To assure that off-site improvements to roads or utilities required as a result of mineral exploration or extraction activities are funded and implemented;

F. To provide for a fair and efficient system for the regulation of mineral exploration and extraction activities;

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G. To assure protection of wildlife and wildlife habitat, and native biological diversity;

H. To protect the scenic quality of Santa Fe County, its environment and its residents from significant adverse effects of mining;

I. To discourage development of incompatible land use relationships; and

J. To provide an applicant with the opportunity for advance notification that such a reduction may be imposed on the applicant, which may affect the economics of the proposed mining land uses, since early stages of the application process may reveal issues or potential adverse impacts that would allow the Board to reduce the size of the affected area.

5.1.4 Provision of Services by Local Government

Where it is determined by the County that a mineral exploration or extraction use, or mining land use will have an adverse fiscal impact on the provision of services by local government, resulting from demographic changes which are directly attributable to the exploration or mining use, such as housing supply, capacity of schools, local water supplies, transportation systems, utilities expansions, health care facilities, law enforcement and fire protection, such impact will be addressed through cooperative effort toward financing of public improvements by the developer, such as phasing of the project, and cooperation with local government for impact fees, or other programs.

5.2 Definitions

Abandoned - means a mining land use which the applicant, permittee or operator has either: a) ceased performing with the intent not to recommence the mining land use for at least three (3) consecutive years; or b) ceased performing any significant mining land use activity for at least three (3) consecutive years, when such interruption is not caused by war or an Act of Congress. A permittee or operator conducting exploration and extraction activities can be deemed to have abandoned either exploration or extraction activities, or both, depending on the type of activity on the mine site during any three (3) year period.

Adjacent area - means land located outside the affected area, permit area, or mine plan area, depending on the context in which adjacent area is used, where a mine site has a direct impact on

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enjoyment of property and aesthetic values, air quality, surface or ground water quality, fish, wildlife, vegetation or other natural resources.

Affected area - means an area, either surface or subsurface, within a permit area where existing resources are impacted as a result of mineral exploration, extraction activities, or other mining land uses conducted in accordance with a permit issued under Article III, Section 5 of the Code.

Applicant - means a person who desires to perform mining land use activities in the County, and such mining activities do not include prospecting.

Beneficiation - means the process of liberating and concentrating a mineral from ore.

County - means the County of Santa Fe, New Mexico.

Direct impact - means an effect directly attributable to the mineral exploration or mining operations or rehabilitation activities which impact, injure or create hazards to the public health, safety or welfare, including but not limited to, geological, hydrological, visual, auditory activities, emissions, discharges or vibrations.

Engineered materials - means any material that has been evaluated by sound and generally accepted mining or engineering practices to be capable of ensuring the structural integrity of a structure or a designed entity.

Existing mine - means any exploration or extraction operation which existed prior to the effective date of this Code as amended.

Expanded use - means any mining land use which the Code Administrator determines intensifies or increases a prior existing mining land use, and includes but is not limited to: increasing the length or magnitude of any surface or subsurface activity; increasing the size of a mine site or the area of land disclosed to the Code Administrator pursuant to Section 5.4.1 A. or approved under an exploration or extraction permit pursuant to this Section 5; conducting extraction activities when operating with only an exploration permit; or utilizing exploration or extraction techniques, processes, or solutions which were not previously used or permitted on the mine site.

Exploration - means the act of searching for or investigating a mineral deposit. "Exploration" includes, but is not limited to, geophysical, geochemical or geological surveying and sampling, drilling or rotary drilling of core and bore holes, and digging pits, trenches or cuts and other works for the purpose of extracting samples prior to commencement of mine development or extraction

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operations, and the building of roads, access ways, and other facilities related to such work.

Extraction - means the removal of minerals and/or overburden from places of natural occurrence for purposes of beneficiation.

Geosynthetic - means a manufactured liner material.

Harmful materials - means materials that, when present on a permit area in sufficient quantity or concentrations, may be noxious, pernicious, or likely to cause illness or damage to the environment, but not including hazardous wastes regulated by the Federal Resource Conservation and Recovery Act, in its latest revision.

Hazardous materials - means any hazardous chemical or extremely hazardous substance as defined or listed in the Federal Emergency and Community Right-to-Know Act of 1986, 40 CFR Part 300 Volume 51, No. 221 (inclusive), as periodically amended but in no case is the hazardous content of solid waste from the extraction, beneficiation and processing of ores and minerals to be excluded from the meaning of hazardous waste.

Highwall - means the boundary surface of a pit as a result of mining.

Impermeable - means an engineered material having a saturated hydraulic conductivity (K) value equal to or less than 1×10^{-7} cm/sec.

Life of the Mine - includes the period of time necessary to develop, mine and reclaim the mine site including that period after cessation necessary to complete reclamation as required by the County, until such time as the County releases, in writing, the operator from further reclamation obligations regarding the affected land, declares the operation terminated, and releases all applicable warranties of performance.

Master Plan - means a report, plans, and other submittals as required by this Code for a proposed subdivision or zoning or re-zoning of land, showing the development proposal in a manner comprehensive enough to evaluate the scope, size, intensity, compatibility, benefits, relationships, and impacts of a project and including submittals as set forth in Article V, Section 5.2 and as otherwise required by this Code for the specific land use or zone district proposed.

Mine - means any tract or parcel of land which is zoned for a mining land use, pursuant to a Master Plan approved by the County.

Mine development - means the construction of declines or shafts, roads or access ways, buildings or other facilities in anticipation of or used in a mineral extraction activity.

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Mine site - means the area of land in which the exploration, mine development, or extraction activities will be situated, or the land upon which any mill, recovery plant, crushers, buildings, structures, improvements, wells, excavations, dumps, waste piles, tailings ponds and other features normally utilized in mining operations are located and shall include all of the area of land containing the same, similar or related mineral bodies or deposits which the mine operator may excavate and mine which is lying within the same tract which has been zoned for mining land use pursuant to the Code.

Mineral - means an inanimate constituent of the earth in solid, liquid, or gaseous state which when extracted from the earth, is usable in its natural form or is capable of conversion into a usable form of metal, or metallic compound, a non-metal, a non-metallic compound, a chemical, an energy source, or a raw material for manufacturing, or oil, oil shale, natural gas, geothermal resources, but shall not include surface water, or subsurface water, sand or gravel regulated by Article XI of this Code.

Mining land use - means drilling, drillholes, and other levels of exploration or mine development activities or the operation of a placer mine, a shaft mine (including any underground disturbance), previously disposed or abandoned mining waste when used to obtain useful minerals, in situ mining, minerals transportation within the County, concentrating, milling, evaporation, leaching, and other processing, an open pit mine, or the processing or moving of overburden or other excavation activities from which minerals, ore or other mineral substances are sought to be removed or taken, and the processing or storage of such minerals, ore or mineral substances. Mining land use also includes all reclamation activities.

Mining waste - means waste material commonly connected with the extraction of or exploration for ores and minerals.

Operator - means any person engaged in a mineral exploration, a mining operation, or a mining land use.

Overburden - means all of the earth which lies above a mineral deposit and includes such earth and other materials disturbed from their natural state in the process of mining. Suitable plant growth material, including topsoil, salvaged for reclamation shall not be considered overburden.

Permit - means an authorization to conduct mining land uses issued by the County pursuant to the requirements of the Code and conditions of approval imposed by the County.

Permit area - means the area of land indicated on the approved map submitted by the permittee with his

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or her application, which area of land shall be covered by the permittee's warranty of performance as required by Code.

Permittee - means any person holding a permit.

Person - means a natural person, corporation, partnership, joint venture, association or any such entity, including any agent or employee of such an entity or natural person.

Pit - means an area within a mine site from which overburden has been or is being removed for the purpose of surface mining.

Prospecting - means mining activities which cause no or very little surface or subsurface disturbance, such as airborne surveys and photographs, use of instruments or devices which are hand carried or otherwise transported over the surface to make geophysical, radioactive, or other tests and measurements, boundary or claim surveying, location work, or other work which causes no significant land disturbance.

Rebuttable presumption - means a presumption that can be overturned upon the showing of sufficient proof.

Reclamation - means the restoration of the affected area during or after any or all phases of an exploration or extraction activity, or mine development, pursuant to a reclamation plan approved by the Board, including but not limited to, protection of water quality, stabilization and re-contouring of slopes, protection and re-introduction of top soil, installation and establishment of vegetation, restoration of habitat and/or mitigation of adverse impacts on habitat such that the land can support the biological diversity associated with specific life zones, removal of buildings and other structures, and measures to reduce, neutralize, and otherwise reclaim mining waste.

Reclamation plan - means a report or document and maps, approved by the Board, which sets forth a plan for reclamation of the proposed mining land use site.

Solid waste facility - means the regional or County designated landfill.

Solution - means any chemical, natural or man-made, which is used to extract minerals from the ore or from any other material in which the mineral is found, or to neutralize the potential effects of other chemicals, solutions or processes on the mine site.

Structural integrity - means rocks or other materials or aspects of the earth's crust that demonstrate a rigid adherence to an approved code or standard of values and soundness for the purposes for which they are intended to be used.

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Tailings impoundment - means the final depository for processed ore and components of the process, discharged from a mill.

Toxic - means a material or a condition which, when present on a permit area in sufficient quantities or concentrations, may impair the health or safety of persons, plants or animals, or may be harmful to the environment, including, but not limited to any toxic pollutant listed pursuant to Section 307 (a) of the Federal Water Pollution Control Act, or any recodification or amendment thereto, and/or those substances which, upon exposure, ingestion, inhalation or assimilation into any organism will cause death, disease, cancer, genetic mutations or physical deformations in such organisms or their offspring.

WAD - means weak acid dissociable.

5.3 Review Procedures, Past Performance Review, Amendments or Revisions to Plans; Permit Transfers; New or Additional Permits; Appeals; Notice Requirements; Financial Warranties; Fees; Temporary Cessation; Inspection and Monitoring; Local Land Use Plans; Penalties and Sanctions

5.3.1 Review Procedures

A. Zoning Approvals

1. Pre-application

Prior to submittal of an application pursuant to this Section 5, an applicant may arrange for an apparent completeness review of his or her application with the County Code Administrator.

2. Review by Code Administrator

Upon receipt of an application pursuant to this Section 5, the Code Administrator shall review it in accordance with the procedure established by Article II, Section 2. An application is not complete and shall not be accepted by the County until all submittals have been reviewed by the Code Administrator, and he has determined that all submittal requirements have been substantially complied with. The Code Administrator may refer the submittals to the MPRB, or to others, to assist in his determination. Nothing herein shall be construed to permit a person who has conducted exploration activities only to qualify to conduct extraction activities under ordinance provisions that predate the effective date of this amendment to the Land Development Code, or under current ordinance provisions.

3. Mining Plans Review Board

a. In order to assure that the technical components of environmental assessments or impact statements are appropriately reviewed, operations and reclamation plans are feasible and that cost estimates for reclamation are reasonable and

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adequate for the purpose of financial warranties, a Mining Plans Review Board (MPRB) shall be appointed by the Board of County Commissioners.

b. The MPRB shall consist of nine (9) members, shall meet on a case-by-case basis, shall review all operations, reclamation and environmental assessment plans, and environmental impact statements when required, and make recommendations to the CDRC and the Board based on its findings.

1) Members of the MPRB shall have the following credentials:

a) two (2) members from the County of Santa Fe to represent the interests of the general public;

b) one (1) member from the faculty of the New Mexico Institute of Technology Mining, Environmental and Geological Engineering Department at Socorro, NM;

c) one (1) member who is a graduate engineer specializing in mining engineering and who has a minimum of five (5) years of experience in mining engineering;

d) one (1) member with expertise in the field of geo-hydrology;

e) one (1) member from the Soil and Water Conservation District staff;

f) one (1) member with expertise in the field of biology or ecology;

g) one (1) member specializing in the field of socio-economic analysis;

h) one (1) member from the New Mexico Department of Game and Fish staff;

i) each member shall have a similarly qualified alternate;

j) members may be considered who have a minimum of five (5) years recent experience with ten (10) years preferred.

2) Each member shall be appointed for a term of two (2) years. In the event a member develops a conflict of interest, such member shall file a statement of disclosure as set forth by this subsection. Upon filing of such disclosure statement, the Board shall, at its next regularly scheduled meeting, determine whether the conflict of interest is cause for removal.

3) Meetings of the MPRB shall be held on an as-needed basis and shall be coordinated by the administrative staff of the County with the applicant.

4) The MPRB shall be convened within sixty (60) days of receiving an application for mineral exploration or extraction. An application may be scheduled for a public hearing before the CDRC after the MPRB submits its review of

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the environmental assessment, and/or the operations and reclamation plans, with its findings, with its recommendations on financial warranties, and with its recommendations, if any, for modifying the boundaries of the permit area.

5) Fees for convening the MPRB shall be based on the complexity of the plans to be reviewed, shall be reasonable but adequate, and shall be paid by the applicant.

6) Each member of the MPRB shall submit his or her written findings and conclusions, in his or her area of expertise, to the MPRB and to the CDRC. The MPRB shall then submit its final conclusions and recommendations to the CDRC.

7) Review of environmental assessments, operations and reclamation plans shall be done pursuant to the provisions of this Section 5 and the County Land Development Code. Findings shall be based on the responsiveness of the applicant to the requirements of this Section 5, appropriateness of the plans to the types and scales of the operation proposed, and reasonableness of executing such plans. The findings of the MPRB shall be submitted to the CDRC within 15 days of the concluding meeting of the MPRB.

8) The findings and conclusions of the MPRB shall not be set aside, unless new or additional technical or factual information which has a technical bearing is presented to the CDRC or the Board for additional review. At the public hearing convened pursuant to subsection 4, members of the public shall have the right to question MPRB members requested by the CDRC or the Board to be present to respond to technical evidence.

9) In the event the MPRB is unable to convene or be formed, the Board of County Commissioners may contract with appropriate experts to review and find on the submittals, with such review to be done in the same manner and procedure as is required of the MPRB.

10) All members of the MPRB, or experts contracted by the County under the preceding paragraph, shall be required to file a conflict of interest statement prior to appointment by the Board of County Commissioners. No members of the MPRB or experts shall receive or shall have received, during the previous two years (2), a significant portion of their income directly or indirectly from permit holders, operating mining companies or applicants for a permit, or persons seeking to participate in the permitting process. All members or experts shall, upon acceptance of their appointment and prior to the performance of any of their duties, file a statement of disclosure with the County

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disclosing any amount of money or item of value, and its source, that they received directly or indirectly from permit holders, operating mining companies or applicants for permits. No MPRB member or expert with a significant financial interest affected or potentially affected by a permit action may participate in any decision pertinent to that permit action.

4. The CDRC

In arriving at its determination to recommend the granting or denial of a permit for mineral exploration or extraction, the CDRC shall review all pertinent material including but not limited to:

- a. The recommendations of the Code Administrator;
- b. The recommendations of the MPRB or of experts contracted pursuant to subsection 5.3.1 A. 3., supra;
- c. The Master Plans for development;
- d. The operator information and legal data required by Section 5.4.3 B.3.;
- e. The report responding to Environmental Protection Performance Standards as required by Section 5.4.3 B.4.;
- f. The schedule of activities required by Section 5.4.3 B.5.;
- g. Any environmental impact statements or socioeconomic analysis required by this Section 5;
- h. The water use report provided pursuant to Section 5.5.3;
- i. The reports or recommendations of state and federal agencies to which the application has been referred;
- j. Any other submittals which may have been requested pursuant to Section 5.4.3 B. and required pursuant to Section 5.4.1 D and 5.4.3 C.
- k. The testimony and evidence presented to it pursuant to the public hearing(s) held on the application.

5. Approvals.

Mining land use or mineral exploration activity may be permitted if it is determined that:

- a. The application satisfies the submittal requirements of this Section 5 of the Code;
- b. The proposed mining land use or mineral exploration activity meets the performance and development standards established by this Section 5 of the Code;
- c. The applicant for the proposed mining land use or mineral exploration activity is

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able to obtain the necessary permits and approvals required by state or federal agencies for such use or activity;

d. The proposed mining land use or mineral exploration activity is compatible with the purpose and intent of the Santa Fe County General Plan, of the Code or of this Section 5, as such purposes and intent are therein expressed and amended from time to time.

6. Denials.

No mining land use or mineral exploration activity will be permitted if it is determined by the Board that the use will have a significant adverse affect on health, safety, morals or general welfare of the County or its residents, based upon findings of fact and conclusions of law which the CDRC or Board, as applicable, must provide to the applicant in writing, within seven (7) days of the Board's hearing on this matter.

7. Conditions and Limitations.

a. Approval Conditioned Upon Reduction in Affected Area.

In its discretion, the MPRB and/or the CDRC may recommend, and/or the Board of County Commissioners may approve and grant an exploration and/or extraction permit which reduces the size of the affected area from the size proposed by the applicant, when it is found to be in the interest of health, safety, or welfare of the County of Santa Fe, its residents or its environment; when the proposed development is found to be incompatible with present land uses; or when it is found that site-specific conditions justify such a reduction. A person who desires to perform a mining land use in the County may request a hearing before the Board to ascertain whether the Board would anticipate reducing the proposed affected area, provided that the hearing may be delayed until such person has provided sufficient information which would satisfy the reasonable need to the Board for relevant information concerning the permit application.

b. Concurrent Reclamation.

The MPRB and/or the CDRC may recommend, and the Board may require any of the following:

- 1) That the applicant conduct reclamation activities concurrent with any exploration or extraction activities;
- 2) That such concurrent reclamation activities be required on any phase or part of a mining land use or a mine site;
- 3) That such concurrent reclamation include reclamation of piles of waste material or other disturbed areas by any of the

following methods: Contouring on an ongoing basis, reseeding, limiting the size of the pile of wasterock, limiting the tonnage of wasterock allowed on the mine site.

c. Other Limitations on Exploration or Extraction Permits.

In considering an application for an exploration or extraction permit, the MPRB and/or the CDRC may recommend, and the BCC may require any of the following:

1) That an applicant be permitted to disturb only a certain number of tons of material at the mine site for any mining land use;

2) That exploration and extraction activities be permitted in defined phases;

3) That any permit expire at the end of a certain period;

4) That contamination of ground water or surface water during any mining land use be contained on the mine site, and that the failure to achieve containment will result in immediate revocation of the permit;

5) That an inspection of the mine site and review of the permit be conducted on a semi-annual basis, or other appropriate length of time.

d. The MPRB and/or CDRC may recommend and/or the Board may approve an application for mining land use subject to such other conditions and modifications which are designed and imposed to meet the purposes, performance and development standards established in the Code.

B. Past Performance Review.

1. In determining whether any application, permit request, or submittal pursuant to this Section 5 shall be approved, the MPRB, the CDRC, and the Board shall consider any violations of federal, state, and local laws regulating or pertaining to mining and the environment concerning the applicant/permittee's mining operations in the United States. The Board shall consider the past performance of the applicant in any of its previous mining operations since 1970, located anywhere throughout the world. The applicant shall submit the following: a statement of all mining operations owned, operated, or directly controlled by the applicant, and the names and the addresses of regulatory agencies with jurisdiction over the environmental aspects of those operations. The County may use these submittals to obtain information regarding past performance, and may also require the applicant to produce relevant documentation. The County shall consider conditions involving toxic waste spills; environmental problems or dangers caused by the applicant; the success of the

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applicant's prior reclamation activities; destruction caused by the applicant to fauna, flora, water supplies, and adjacent properties; as well as any measures, if any, the applicant took to correct or alleviate those problems. The applicant shall provide, upon request by the Code Administrator, CDRC, MPRB, or the Board, any and all relevant documents relating to any of the applicant's other mining operations, in existence or terminated, which the County reasonably correlates to any mining land use which the applicant is proposing to conduct in Santa Fe County. The applicant shall also allow any representative(s) of the County to make site visits to any existing or closed mine site of the applicant, at the expense of the applicant, if the County so chooses, when the County reasonably concludes that such visits are necessary in order to properly consider the proposed application.

2. An application may be denied approval if:

a. it is determined that, based upon the applicant's submittals under this section, and past performance of the applicant anywhere throughout the world, that the applicant's proposed mining activity in Santa Fe County would more probably than not, as a standard of proof, result in conditions which would adversely impact the health, safety or welfare of the County of Santa Fe, its residents, and its environment, in a significant way, and;

b. the applicant has not established that there would be sufficient safeguards to assure that adverse conditions created or caused by the applicant anywhere throughout the world would not happen at the proposed mine site.

C. Amendments or Revisions to Plans;
Permit Transfers

1. Minor revisions. Minor permit revisions or minor changes in procedures can be approved by the Code Administrator or can be reviewed by consultants employed by the County who shall provide recommendations to the Code Administrator. The Code Administrator shall review the proposed revisions and determine whether such modifications may be dealt with administratively or warrant review by the MPRB, CDRC, and Board pursuant to the procedures set forth in this Code.

2. Major revisions. Extensive or substantial amendments or revisions to approved plans as determined by the Code Administrator, shall be subject to review by the CDRC and review and approval by the Board. Major revisions of an approved plan or major revisions of a technical nature require the MPRB to convene and to re-submit its findings to the CDRC.

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Procedures for convening the MPRB are found in Section 5.3.1 A.3., et seq., supra.

a. A revision to a permit is not minor and approval of the CDRC and Board must be obtained:

1) For changes in the mining or reclamation operations described in the permit, when such changes constitute a departure from the method of conduct of mining or reclamation operations contemplated by the permit. Departures as used herein include but are not limited to:

a) Changes in the permit area boundary;

b) Changes in the method of extracting minerals from the earth (for example, a change from surface to underground mining);

c) Experimental practices as that term is used in part 10 and Section 69-25A-33 NMSA 1978;

d) Changes which would require a variance;

e) Changes which may have an adverse effect at any time on the environment of a nature not originally covered by the approved permit; or

f) Changes which may have an effect on financial warranty requirements.

2) For a change in financial warranty, including but not limited to, the cancellation or material reduction of the liability insurance policy, or performance bond. Continued operation after a change in the financial warranty may occur only after approval of the CDRC and the Board, or after modification of financial warranty by the CDRC and the Board.

3) As otherwise required by the Code.

b. A permittee who wishes to make a minor modification in its mining land use or its mining procedures shall notify the Code Administrator, who shall review the proposed change and, if he finds that the proposed change is minor, modify the permit accordingly and notify the permittee and any interested party that a new permit is not necessary. The Code Administrator's decision can be appealed to the CDRC.

c. All other revisions can be done by the Code Administrator.

3. Permit transfer.

a. Transfer of a mineral exploration and/or extraction permit to succeeding operators must be approved by the Board at a public hearing before the transferee can commence any mining land use. Succeeding operators and the transferor

shall satisfy the County that all liabilities relating to performance and financial warranties associated with the development permit issued by the County for the specific mining land use are maintained in an amount and with sufficient and reasonable safeguards, and the Board may re-evaluate and require adjustment in financial warranties in order to assure compliance with the Code.

b. Transferees of a mine site or permit which has been abandoned or temporarily out of operation for more than three (3) years after February 15, 1991 must obtain a new and separate mining permit, in the name of the transferee, and shall be subject to zoning requirements of the Code.

c. In all cases of transfers of real property from a mining land use to a non-mining land use, the parties to the transaction must: 1) reclaim the property to be conveyed, and must otherwise clean up any harmful, hazardous, or toxic condition present in, on, or under the property to be conveyed, or 2) submit a revised reclamation plan for approval by the County. Failure to maintain the financial warranties or to submit a revised reclamation plan creates a lien in favor of the County on the property for the cost of completing the cleanup. In all such cases, the transferor must place disclosures on the deed and the plat of the property conveyed which states that the property was previously associated with a mining land use, and that harmful, hazardous, or toxic conditions may be present on the property; and that the buyer be alerted to any property rights retained by the transferor.

d. A mine site, permit, an exploration activity, or extraction activity which is or has been out of operation or inactive for thirty-six (36) consecutive months after February 15, 1991 creates a rebuttable presumption of abandonment. A mine site or permit is inactive if it is determined by the Code Administrator that there has been no significant exploration or extraction activity during the time period stated above. In making a determination of abandonment, the County shall consider all relevant, substantiated, and objective factors as they affect the mining activity at the mine site, including but not limited to: the number of days that exploration or extraction have taken place; the amount of ore and minerals taken from the mine site; the amount of surface or underground disturbance at the mine site during any period of apparent abandonment; the amount of gross sales from minerals extracted from the mine site; the number of employees working at the mine site; the amount of equipment used; underground disturbance; the erection of buildings or other development; business records and

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logs which give evidence of mining activity; tax reports; evidence that the permittee is willing but unable to conduct mining land uses, because of appeals or regulatory delays in the permit process not caused by the permittee (however, the running of the thirty-six month period is not tolled when any regulatory process is commenced because of any harmful, hazardous, or toxic condition on the permit area); credible testimony; receipts or bills of sale issued by the applicant/ permittee in the course of business. The County shall give no weight to unsubstantiated claims or statements of witnesses.

D. Requirements for New or Additional Permits.

1. Any permit issued pursuant to Article III, Section 5 of this Code does not in any way exempt the applicant or preempt any other part of this Code, or any other law, which would require the applicant to obtain additional permits for construction of roads, buildings, or developments, on or off of the permit area.

2. Before an applicant/permittee makes any significant change in its mining land use, including, without limitation, expanding the use of a mining land use from exploration to extraction activities, exploration into areas not previously permitted, or extracting additional quantities of ore or minerals than originally permitted, the applicant/permittee shall reapply to the County for a new permit, requesting approval for the new or expanded mining land use. See also subsection 5.3.1 C.

3. Any application or permit approvals given by the County do not in any way constitute further obligation or assent by the County for additional or subsequent extraction, exploration permits or expansion of mining land uses.

E. Appeals

1. Appeals of findings or decisions by the CDRC shall be made to the Board of County Commissioners, pursuant to Article II of the Code. The Board shall hear the application de novo.

2. Appeals of the Board of County Commissioners' decisions shall be filed in the First Judicial District Court, within 30 days of such decision.

F. Notice Requirements

1. Mineral exploration and extraction applications shall be subject to the notice requirements set forth by the Code for public

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hearings, for notice to adjacent property owners, and for re-zoning of property.

2. When an incorporated neighborhood association has filed a request in writing with the Code Administrator, notice shall also be given to such association.

5.3.2 Financial Warranties.

A. After an exploration or extraction permit application has been approved, but before the permit is issued, the applicant shall file with the Board financial warranties for performance conditioned upon faithful performance of all of the requirements of the permit.

1. The financial warranties shall cover that phase or area of land within the permit area upon which the operator will initiate and conduct mineral exploration, extraction and reclamation operations within the initial term of the permit. As succeeding increments or phases of operations are to be initiated and conducted within the permit area, the permittee shall file with the County additional financial warranties to cover such increments in accordance with this Section 5. All financial warranties shall be indexed for inflation and may be reviewed and re-evaluated from time to time and during any phase of a mining land use. In particular, the financial warranties can be increased pursuant to requirements of this Section 5.

2. The amount of the financial warranties required for each area shall depend upon the reclamation requirements of the approved permit; shall reflect the probable difficulty of reclamation giving consideration to such factors as offsite impact, topography, geology of the site, hydrology and revegetation potential, and shall be recommended by the operator and determined by the County.

3. The amount of the financial warranties shall be sufficient to assure the completion of the reclamation plan if the work would have to be performed by the County or an independent contractor hired by the County.

4. The financial warranties shall be in an amount sufficient to ensure that any foreseeable hazardous, harmful or toxic conditions created by the mining operation which would adversely affect the residents or the environment of County (excluding groundwater and drinking water sources of County residents) will be substantially mitigated or eliminated. The financial warranties will assure that the potentially harmful, hazardous or toxic conditions created by mining land uses as they affect groundwater and drinking water are eliminated.

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B. The liability under performance sureties or other financial warranties shall continue until such time as they are released in their entirety by the Board.

C. In determining the form of financial warranties to be provided by the permittee, the operator shall propose a form of financial warranty consistent with the requirements of subsection 5.3.2, and the Board shall approve or deny the proposal, and the Board's approval shall not be unreasonably withheld.

1. Financial warranties may be provided by the permittee, the operator, by any third party, or by any combination of these persons.

2. Financial warranties shall consist of any one or more of the following:

a. A surety bond, not issued by the permittee, issued by a corporate surety authorized to do business in this state, payable to the County of Santa Fe;

b. An irrevocable letter of credit secured by funds on deposit and issued by a bank authorized to do business in the United States, payable to the County of Santa Fe;

c. A certificate of deposit payable to the County of Santa Fe;

d. A reclamation trust fund held by an independent trustee.

3. All financial warranties required in Section 5 must meet the following criteria:

a. assurance of funds sufficient to cover the costs for which the financial warranties are required;

b. assurance that the funds will be available and made payable to the County, as needed;

c. assurance that the funds will be fully valid, binding, and enforceable under state and federal law; and

d. assurance that the funds will not be dischargeable through bankruptcy.

4. If a financial warranty should lapse for any reason, the permittee shall obtain a replacement in an equivalent amount within five (5) working days. Notice to the Board by the applicant is required for any circumstance that would impair such financial warranties or require their revocation.

D. Financial warranties shall be maintained in good standing for the entire life of the permit, plus up to twenty (20) additional years, provided that the Code Administrator may determine,

based upon inspections and monitoring, that a financial warranty should be maintained for an additional period of time. The twenty-year period will run concurrently with the thirty-year financial warranties required in subsection 5.5.8 B.5 and/or subsection G below.

E. The Code Administrator and/or the Board may, in their discretion, hire experts in the areas which will be covered by the financial warranties, in order to review the applicant/permittee's submittals under this Section, for the County to be able to establish the amounts of the financial warranties necessary to guarantee completion or reclamation of the permit requirements, and may consider amounts comparable to whatever are current reclamation and/or cleanup costs for similar mines using similar processes. The cost of hiring such consultant shall be paid by the applicant.

F. Re-evaluation of financial warranties.

All financial warranties will be re-evaluated for adequacy pursuant to this section every four (4) years or on a schedule tied to construction and inspection of key phases of the operation and reclamation plan as set forth in the approved exploration or extraction permit. In addition, the Board may review and re-evaluate and may adjust the amount of the financial warranties for any mining land use permit or any phase of a permitted operation whenever:

1. An applicant seeks approval of a transfer of a mineral exploration and/or extraction permit;

2. Amendments or revisions of an approved plan are proposed;

3. Evidence is found through the on-going inspection and monitoring of a mining operation or reclamation that an approved financial warranty may not be adequate because of actual site conditions which were not anticipated, discovered, or addressed during the initial permit application process or because changing conditions affecting the costs of implementing the approved plan exceed projected costs; or

4. It is discovered that a violation of the Code or requirements of an approved permit has occurred which involves any toxic, hazardous, or harmful materials, solutions, or conditions of the mining land use.

G. Chemical or Processing Bond.

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1. Any applicant/permittee who uses or proposes to use any harmful, toxic or hazardous organisms or materials, including any solutions or chemicals such as those used in cyanide heap leaching operations, at any mine site may be required by the Board, upon recommendation of the MPRB and the CDRC, to file with the County a financial warranty, know as a "Chemical or Processing Bond." The financial warranty shall be in an amount sufficient to assure cleanup, reclamation and repayment for any loss, damage or injury proximately caused by chemicals, organisms, or procedures used or proposed to be used by the applicant/permittee at the mine site.

2. Factors that the MPRB, CDRC and the Board may consider in determining the amount of the financial warranty include, but are not limited to: characterization of water quality; direction and velocity of groundwater flow; depth to water and geology of the proposed site; supervision; mobilization; costs of equipment; equipment capability; costs of labor; removal or disposition of debris, junk, equipment, structures, foundations and unwanted chemicals; reduction of hazards such as: in-water slopes, highwalls, and landslides or other mass failure; seismic activity; subsidence; disposition of oversize, rejects, scalplings, and overburden; backfilling, contouring or regrading and topsoil replacement; draining, establishment of drainage, and erosion control; soil tests; long term stabilization, control, containment or disposal of waste solids and liquids; costs of remedial measures identified to clean up releases of contaminants associated with mining; and processes of beneficiation that are reasonably likely to cause a threat to public health, safety or the environment.

5.3.3 Fees

Fees for reviews and permitting of mining districts, and any other fees shall be reasonable but adequate and set by a resolution of the Board of County Commissioners. Extraordinary fees for consultants or the MPRB shall be reasonable but adequate and paid by the applicant. Reasonable but adequate review fees shall be assessed by the County to the applicant for the review of the annual report and other documents of the applicant, site inspections, maintenance of all warranties, including forfeited warranties, warranties of performance, and inspections.

5.3.4 Temporary Cessation

A. Owners and/or operators of mineral exploration or extraction operations that sustain a

temporary cessation for any reason shall be subject to and be responsible for the following:

1. Giving notice to the County within thirty (30) days before temporarily ceasing operations for any period exceeding six (6) months, the reasons therefor, if not proprietary, the date operation will cease, and an estimate of when operations will resume. Such notice shall also include posting on the mine property and mailing certified letters to all known adjacent property owners as they are disclosed by the records of the Santa Fe County Tax Assessor, and to neighborhood associations on record with the Code Administrator under this Section 5.

2. Providing protection and security of the site from damage by erosion, surface drainage, ground water and surface water contamination, and maintaining the performance standards of the Code.

3. Reclamation of areas designated in the approved plan, or as modified by the Board, financial warranties, annual reporting, inspections, and monitoring shall continue during the temporary cessation period.

4. Taking whatever means are reasonable to assure that access to the mine site is prevented to any person except the permittee and his designees, and to appropriate County officials and citizen representatives.

B. The period of temporary cessation may not extend longer than three (3) years from the date notice is given to the County, pursuant to Section 5.3.4 A., unless the permittee is unable to resume operations because of ongoing regulatory or judicial proceedings. In such cases, the three-year period shall be tolled until the regulatory process is concluded. In order to rely on this subsection, the permittee must file an annual notice with the County, identifying the area of temporary cessation, and the status of the pending judicial or regulatory proceeding. Any mineral exploration, extraction or mining operation which exceeds the three (3) year period of temporary cessation set forth herein shall be recognized and considered as an abandoned exploration, extraction, or mining land use and before any future mineral exploration, extraction, or mining land use can recommence, an applicant, permittee or other person must obtain a new permit. One factor which can be considered to toll the period of temporary cessation is the receipt by the Code Administrator of a permit application which is deemed complete by the Code Administrator, provided that the applicant is diligently pursuing any necessary permits from state agencies which are necessary for County approval of the application. For the purpose of this

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subsection, a mine site or other area on which has occurred no significant mineral exploration, excavation, or mining operation for thirty-six (36) consecutive months during any period of time after February 15, 1991 creates a rebuttable presumption of abandonment. The Board of County Commissioners shall consider all relevant and objective factors to determine whether a mining land use has been abandoned. These factors to be considered include, but are not limited to the following: business records and logs which give evidence of mining activity; tax reports; evidence that the permittee is willing but unable to conduct mining land uses, because of regulatory delays in the permit process not caused by the permittee (however, the running of the thirty-six month period is not tolled when any regulatory process is commenced because of any harmful, hazardous, or toxic condition on the permit area); credible testimony; actions taken to secure permits required by this Section; and receipts or bills of sale issued by the applicant in the course of his business. The Board of County Commissioners may draw logical conclusions from those factors which tend to prove that a mine site, permit, exploration activity, or extraction activity has been abandoned, and the Board shall give no weight to unsubstantiated claims or statements of witnesses. A mine site, permit, exploration activity, or extraction activity which is or has been inactive or without sufficient activity to overcome the presumption of abandonment for thirty-six (36) consecutive months is deemed to be abandoned. No mining land use or expanded use will be permitted until a new mining land use permit is obtained, pursuant to this Code.

C. For purposes of this subsection, sporadic or intermittent mining or exploration activity shall not constitute an interruption of the three (3) year cessation period. Applications may be submitted to extend the time of temporary cessation for a period not to exceed three (3) additional years, provided the application complies with 5.3.4 A. and B.

D. If it is determined at any time by the County or the permittee that the operation is terminated and closure of the mine site is required, the County may, at its sole option, call and exercise the warranties of performance to reclaim the mine site, in accordance with the approved reclamation plan.

5.3.5 Inspection and Monitoring

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A. Each person who has obtained an approved mineral exploration or extraction permit from the County shall:

1. Establish and maintain permit documents, as reasonably required by the Code Administrator;

2. Make yearly reports to the Code Administrator; such reports shall consist of:

a. An estimate of the acreage affected during the last twelve (12) month period.

b. An estimate of the acreage to be affected during the next twelve (12) month period. Note: The anniversary of the twelve (12) month period is the date on which the development permit was issued.

c. A listing of the number of employees currently employed or subcontracted at the site and any change in such employment.

d. Updated maps which show the permit area, the affected area, the area to be affected, the area undergoing reclamation, and areas within the permit area that are not to be disturbed.

e. A re-evaluation of financial warranty requirements and a justification for any change in such requirements.

f. Results of monitoring pursuant to subsection 5.3.5, infra, including all procedures used for sampling, sampling data, and copies of laboratory analytical reports and chain of custody documentation for any samples analyzed.

g. A report on the amount of annual use of water.

h. A notarized statement signed by the owner, operator, or permittee or by the person preparing the report for the owner, operator or permittee, stating that he or she is personally familiar with the information submitted in the report, and that the report is true and correct.

3. Install, use, repair and maintain any necessary monitoring equipment or methods;

4. Provide such other information relative to the mineral exploration or extraction and reclamation operations as the County, by regulation, deems reasonable and necessary.

5. As determined by the County, some items of the above may not be applicable for mines in temporary cessation.

B. For those mining and reclamation operations which may adversely impact aquifers or significantly injure the water supply for water users either on or off the mining site, the County may require the permittee to provide and

perform the following, as set forth by the approved Master Plan:

1. Monitoring sites to record the quantity and quality of surface drainage above and below the mine site as well as in the potential zone of influence;

2. Monitoring wells to record the quantity and quality of ground water and aquifers potentially affected by the mining;

3. Monitoring of the mine site to record precipitation;

4. Collection and analysis, using appropriate laboratory or field analytical methodology, of samples of soil, water, and rock;

5. Notification of the Code Administrator at least twenty-four (24) hours in advance of the collection of any soil, water, or rock samples that may be required to be collected and analyzed under subsection 4, above, in order to give the County the opportunity to collect and analyze a split or duplicate sample for verification purposes.

6. Payment of the laboratory costs for analysis of any split or duplicate soil, water, or rock sample submitted for analysis by the County under this subsection shall be made by the applicant /permittee.

C. The monitoring data collection and analysis required by this subsection shall be conducted according to standards and procedures set forth by the Code or by the Code Administrator in order to assure their reliability and validity.

D. The authorized representatives of the County, without advance notice and upon presentation of appropriate credentials, shall:

1. Have the right of entry to, upon or through any mineral exploration, extraction, mining operation, or reclamation operation, on any premises at any time to determine if the applicant is in compliance with the permit requirements and conditions, or for any other good reason; and

2. At reasonable times, and without delay, have access to and copy any records associated with permitting and compliance, and inspect any monitoring equipment or method of operation required under the Code; provided, however, that before entry to, upon or through any mineral exploration, extraction, mining operation or reclamation operation, on any premises, the authorized representative is properly safety trained, is equipped with proper safety equipment and devices, is knowledgeable about current safety hazards, and is accompanied at all times by an authorized representative of the operator

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or permittee, who will, at all times, be present on the mine site during normal business hours.

E. The Board may, in its discretion, allow three (3) persons chosen from the Board, CDRC, or the MPRB and one (1) citizen of Santa Fe County, approved jointly by the Board and the permittee, to have the right of entry, as a group, at any reasonable time of the day, announced or unannounced, upon any exploration, extraction, or reclamation operation on any premises, provided such individuals are properly equipped with the proper safety equipment and devices, are knowledgeable about current safety hazards, and are accompanied at all times by an authorized representative of the operator or permittee, who will, at all times, be present on the mine site during normal business hours. The permittee shall provide free safety training for such County representatives. After such a site visit as set forth herein, and if a majority of the County representatives finds that a violation of this Code has taken place, then the County representatives shall alert the Code Administrator in writing, of such a condition, and the Code Administrator shall, within sixty (60) days of receipt of such notice, respond to the written notice by stating how the County has responded to the report.

F. The inspections shall:

1. Occur as necessary to insure compliance with the Code, or any condition of a permit issued under the Code. The frequency of inspection shall be determined by the extent of the operation, rate of mining, degree of actual or potential environmental impact, and the operator's past record of compliance;

2. Occur without prior notice to the permittee or his agents or employees except for necessary on-site meetings with the permittee; and

3. Include the filing of inspection reports adequate to enforce the requirements of and to carry out the terms and purposes of the Code.

G. Each permittee shall conspicuously maintain at the entrances to the mining and reclamation operations a clearly visible sign which sets forth the name, business address and phone number of the permittee and the permit number of the mining and reclamation operation.

H. Copies of any record, reports, inspection materials, sampling data or laboratory results, or information obtained under these Code provisions, except for competitively sensitive, cost

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and other financial data or material required by law to be kept confidential, shall be made immediately available to the public upon request.

5.3.6 Local Land Use Plans, Community, Neighborhood or Sector Plans and Code Amendments

This section establishes additional procedures to create an amendment to the County General Plan for the purpose of designating agricultural, residential, commercial, industrial, mineral extraction, recreational, or other use areas to assure the locational suitability and compatibility of a wide range of existing and future land uses in greater detail than is provided by the County General Plan and Land Development Code.

A. Amendments to the Land Development Code (1992-1) relating to zoning may be proposed to the Board, provided a local land use plan, community, neighborhood or sector plan or other general plan amendment is adopted by the Board.

B. Components of local land use or sector plans must address a full range of land use classes for relationship, compatibility and intensity of types of uses and suitability of locations, including but not limited to, roads and utilities, a mix of housing types, commercial districts, industrial resource areas, natural resource areas, open space areas, institutional uses, recreational uses, cultural properties, mineral extraction and lands unsuitable for development.

C. Applications for local, community, neighborhood or sector plans should address special needs or conditions which justify the plan; outline required studies and results; describe procedures for implementation; and map the proposed planning area boundaries.

D. All public participation proceedings shall be recorded and participation must represent a cross section of County residents, ethnic, cultural, economic and property interests, and other interested persons.

E. Reports shall clearly identify and discuss major land use and development issues of the community and neighborhoods.

F. The plan document shall include goals and objectives, the methodology used for analysis and be derived from current planning practice and techniques.

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G. Submittals for local land use, neighborhood, community or sector plans shall be reviewed in accordance with Article VI, Section 4, and according to the public hearing procedures in Article II of the Code. The Board shall make any general plan amendment based on clear and convincing evidence that such an amendment is in the best interests of the County, without working a hardship on residents of the area sought to be rezoned.

5.3.7 Penalties and Sanctions.

A. Failure to comply with this Section 5 of the Code shall be subject to penalties as set forth in Article II, Section 5, Enforcement of the Code.

B. Penalties may also include suspension or revocation of the mineral exploration and/or mining land use permit or the calling and exercise of the financial warranties. The penalties in this subsection will be imposed only after a hearing before the Board.

C. The Board may, in its discretion, conduct a hearing to determine whether:

1. any of the requirements of approval as established by the Board, have not been complied with by the applicant;

2. an exploration activity has developed into an extraction activity without requisite permits;

3. an applicant has missed a deadline, such as a reclamation schedule; or

4. the applicant has exceeded the limitations of its exploration or extraction permit, as established by the Board. Upon such a finding that the applicant is in noncompliance, the Board may require compliance within a limited period of time; require the applicant to cease all exploration or extraction activities until compliance is established; or require such other remedy as is appropriate.

D. Emergency Cessation.

1. The Code Administrator may require the permittee or operator of any mining land use in the County to immediately cease all or part of mining land uses (except for reclamation, which shall continue uninterrupted) if there exists a condition, practice, or permit violation which creates an imminent danger to the health or safety of the public or the environment, or is causing or is reasonably expected to cause significant, imminent harm to wildlife, land, air, environment, or water resources. Any such condition, practice or permit violation must

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be reported by the permittee by telephone to the Code Administrator within 24 hours, regardless of weekends or holidays, followed by a written report. In such case, a hearing of the Board shall be convened within five (5) days of the cessation to determine whether all or part of the mining land use shall cease, as well as when and for how long the cessation will last. In implementing this provision, the County may follow the principles and precedents established under federal Surface Mining Control and Reclamation Act of 1977, as amended from time to time. In addition, the County can require cessations of any and all mining land uses for any of the following conditions: failure to comply with section 5.3.2; failure to promptly meet the requirements and decisions of a court of competent jurisdiction; inoperative or incomplete monitoring equipment, as required by this Section, when such condition would cause a significant safety risk; contamination of ground water and drinking water caused by the mining land use; lack of water rights or water availability; or blastings that cause structural damage to the dwelling units or other permanent structures on the property of residents of Santa Fe County when the owner of the structure establishes, to the satisfaction of the Code Administrator, that the damage was proximately caused by the permittee.

2. If any of the toxic or hazardous materials, solutions, or conditions of mining land uses should leave the permit area, which would cause harm or risks of harm to the health, safety, or welfare of the residents of Santa Fe County or its environment, for any reason, despite the best efforts of the permittee or his operator to contain such conditions on the permit area, then the permittee shall immediately, but in no case later than four (4) hours after such an event, contact the County Manager or Code Administrator to inform the County of such an occurrence, followed by a written report.

5.4 Submittals

To obtain a mining permit for the purpose of mineral exploration or extraction, the following shall be required:

5.4.1 Submittals for Types of Mines and Operations

Each application for a mineral exploration or extraction permit or by a mine operator who proposes an expanded mining land use shall be evaluated for the purpose of establishing the type of mine that is proposed. The type and size of mining land use and mine site will then be evaluated by the

Code Administrator to determine which submittals will be required of the applicant. Objections to the findings of the Code Administrator can be appealed by any interested person to the CDRC.

A. Existing Mines and Operations

1. Existing mines are defined in Section 5.2.

2. Existing mines shall submit the following:

a. A description of current operations, which sets forth the following:

1) All areas which the operator is currently mining and all areas which are in a temporary state of cessation. This description shall be either a legal description, or a designation on a US Geological Survey map or comparable map, outlining, to the satisfaction of the County, the area of operation;

2) The type of mining operation;

3) The date the mining interest was acquired;

4) The nature of the title of the ownership or possessory interest (fee simple, lease, and mining location) all of which are to be submitted no later than June 18, 1991;

5) Number of employees;

6) Mining processes used, including solution processes; and

7) Plans used to prevent acid drainage.

8) The requirements set forth in Sections 5.4.1 A. 2. a. 5), 6), and 7) must be submitted by July 1, 1993.

b. A reclamation plan for the current operations which provides for the following requirements:

1) On all affected areas, the operator in consultation with the surface estate owner and mineral estate owner where possible, and in agreement with the County, whose agreement will not be unreasonably withheld, shall determine which parts of the affected area shall be reclaimed.

2) A detailed description of how the reclamation is to be achieved;

3) A detailed description of techniques proposed to be used in reclamation, pursuant to the environmental performance standards in Section 5.5.5;

4) A detailed timetable for each phase of reclamation;

5) An estimated cost of accomplishing the reclamation plans, or an explanation

of how the reclamation is to be done, with any bonding or financial responsibility requirements to be decided by the Code Administrator on a case-by-case basis;

6) A detailed description of the measures to be taken during the reclamation process to provide for the protection of the quantity and quality of surface and ground water systems, both on and off site, from adverse effects of the mining and reclamation processes; all of which (1 through 6) are to be submitted on or before August 18, 1992.

7) In order for the County to determine present environmental conditions on land that the operator of a mining operation claims to be a pre-existing mining use under this subsection and on which such mining operator intends to conduct mining activities, the operator shall submit:

a) Where such information can be lawfully obtained, a description of all streams, creeks, arroyos, and bodies of water within 1000 feet of the boundaries of the current mining land use;

b) A detailed description and maps of the tailings, mineral waste, and geologic conditions on the tract;

c) A scaled plan in cross-section by length and height, showing existing profiles of slope of the affected area; and

d) An inventory and detailed description of existing vegetation, wildlife and wildlife habitat according to species and density of occurrence.

3. All existing mining land uses shall keep the effects of the mining operation, including vibration, noise, air contamination, and water contamination, on the permit area. Any violation of this requirement will be cause for the County to require the existing mining operation to cease operation until the harmful, hazardous, or toxic effects of the mining land use are removed, the condition of the adjacent lands is returned to the same condition as existed before the violation, and there are reasonable assurances made that the violations will not recur.

4. All owners or operators of existing mining land uses shall allow County representatives to enter onto the permit area, at reasonable times, and without delay to have access to and copy any records associated with the mining operation which pertain to its compliance with this Section; provided that the authorized representative is properly safety trained, is equipped with proper safety equipment and devices, is knowledgeable about current safety hazards, and is accompanied at all

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times by an authorized representative or the operator of the mine.

5. The information required by the operator of the mine will be submitted on a form supplied by the County.

6. A person who has conducted any sort of mining land use and who desires or who does modify those activities in such a way as to intensify those activities beyond those set forth in his submittals to the County pursuant to Section 5.4.1 A, or who desires or who does progress from exploration activities into extraction activities must apply for a new exploration or extraction permit pursuant to Sections 5.4.1 B, C and/or D, as applicable.

B. Exploration Operations

1. Exploration activities are defined by Section 5.2.

2. Persons desiring to undertake exploration activities shall be required to submit an environmental assessment, a Master Plan and a reclamation plan pursuant to Sections 5.4.2 and 5.4.3.

3. Exploration activities shall be subject to the performance standards of this Section 5, to warranties of performance, and the review procedures of Section 5.3.

4. Past performance submittals, as required by Section 5.3.1 B.

C. Mineral Extraction and Mine Development

1. Mineral extraction and mine development activities are defined by Section 5.2.

2. Submittals shall include:

a. An environmental assessment pursuant to Section 5.4.2.

b. A Master Plan for development pursuant to Section 5.4.3.

3. Mineral extraction uses shall be subject to the performance and development standards, warranties of performance and the review procedures of this Section 5.

4. Past performance submittals, as required by Section 5.3.1 B.

D. Mining Land Uses which Use Certain Harmful, Hazardous or Toxic Processes or Materials.

1. Permit Required.

An applicant proposing to construct a new mining operation, commencing to operate an existing non-permitted operation, or proposing to substantially modify or expand an existing operation and who proposes to use solutions or hazardous, harmful, or toxic materials or processes

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in any stage of the mining operation shall first apply for, and receive, a permit from the County for such uses and operations.

2. Submittals shall include:

a. An environmental assessment pursuant to 5.4.2.

b. A Master Plan for development and accompanying reports pursuant to 5.4.3.

c. Additional reports and submittals specified pursuant to 5.4.3 C, if applicable.

d. All permits required by Section 5 may be applied for simultaneously and submittals need not be duplicated as long as the reports or data are cross-referenced to specify the requirement(s) or standard it is intended to fulfill.

3. Mining land uses which use certain harmful, hazardous, or toxic processes or materials shall be subject to the performance and development standards of Section 5.5.8 in addition to the general performance and development standards, warranties of performance and review procedures of this Section 5.

5.4.2 Environmental Assessments; Environmental Impact Statements

The following analysis shall be considered by the County with the assistance of the Mining Plans Review Board, the reviewing agencies and/or consulting professionals to the County:

A. Environmental assessments shall be required. Environmental assessments shall contain the following:

1. The location and extent of area to be affected.

2. An inventory of existing conditions on the site, including, but not limited to, degree of slope, soil types, extent and location of water resources, geologic or other hazards, flood zones, eroded areas, wildlife and wildlife habitat, vegetation types and extent of cover and a description of the extent to which the exploration, extraction or reclamation will impact those conditions.

3. A description of chemical substances, solutions, and hazardous materials and technical methodologies contemplated for use or to be produced by either the mineral exploration or the mining operation and a detailed plan for containment and disposal of such materials.

4. A description of the mineral exploration activity and any proposed or resulting mining operation, including but not limited to a description of trenching, shaft sinking, bulk

sampling, assay work and the like for exploration; existing structures and improvements, and their intended uses, and proposed structures and improvements and their respective locations; improvements to roads, including County roads, to be used to access the property, and roads to be utilized or constructed on the property; a description of areas to be subjected to blasting, drilling, excavation, grading, impoundment of materials for processing or milling, and of mining waste or tailing impoundments, and drainage control structures and earth stabilization techniques.

5. The location of any site listed on the National Historic Register, a site of significant archaeological value, a public park, or other cultural resource. For purpose of this Section 5, a reconnaissance survey pursuant to Article VI, Section 3 shall be required for all applications.

6. The presence on the site of a rare or endangered species of animal, plant, or habitat of such species.

7. The presence on the site of prime farm land, wetlands, wild and scenic rivers, or an ecologically critical area.

B. Upon a finding of significant impact to any of the items listed in 2, 5, 6, or 7 above by the MPRB, the Code Administrator may require the submittal of an Environmental Impact Statement which shall be reviewed by the MPRB for additional recommendations before CDRC review, which will reasonably amend the timing requirements in Section 5.3.1, supra. The Environmental Impact Statement shall be prepared by a third party approved by the Code Administrator and paid by the applicant.

C. Guidelines for the contents of an Environmental Impact Statement (EIS) are found in the Regulations of the National Environmental Policy Act, 40 CFR Parts 1500-1508.

D. Socio-economic assessments may be required of projects requiring an EIS. Such assessments shall analyze the effects of the project on the socio-economic characteristics of the County or its services and infrastructure, and should include anticipated employment, tax revenues, orders to local suppliers for goods and services, and similar items. Socio-economic assessments shall be evaluated according to the following types of criteria:

1. That expansion of services such as fire and police protection rendered to the project by the County will not result in a negative fiscal impact to the County.

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2. That the project will not affect, in a negative manner, the rate, distribution and demographic characteristics of the County as that relates to the provision of roads, water supply, sewage disposal, housing, schools, landfills, health facilities, recreation and local business.

5.4.3 Submittals for Mineral Exploration or Extraction

A. Submittal of a Master Plan as set forth in Article V, Section 5.2, Master Plans. The master plan submittal shall be accompanied by a market analysis, an economic impact report and a fiscal impact report; a traffic report described by Article III, Section 4.4.1, shall include documentation of truck traffic and type of materials and weight of loads to be carried by trucks on roads on and off the site.

B. Other submittals include:

1. Operations Plans shall consist of the following:

a. Maps, plans and graphics descriptions, timetables, and reports which correlate and specify:

1) a detailed description of the method(s) or technique(s) of mining to be employed in each stage of the operation where any surface disturbance on affected lands will occur;

2) pursuant to the standards in Section 5.5.5 B, a description of all earthmoving activities which includes backfilling of cuts, and leveling or compaction of overburden;

3) the location and size of all water diversions and impoundments or discharge of water used in mine operations;

4) the size and location of area(s) to be disturbed, which includes excavations, overburden spoils, topsoil stockpiles, driveways and roads;

5) location and size of areas to be used for tailings impoundments, leaching dumps or storage of mine waste materials;

6) areas to be used for storage of equipment, vehicles, chemicals, and solutions;

7) location and size of structures;

8) areas designated to be reclaimed;

9) hours of operation and a description of outdoor lighting;

10) fire protection plans; and

11) proposed emergency training and procedures.

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b. A general description of the nature of the ore body or minerals to be mined; the volume and depth of the overburden to be removed and the size of the area to be affected or disturbed; and the nature and thickness of the geologic stratum beneath the surface except when information related to the ore body or minerals to be mined is considered by the Code Administrator to be proprietary.

c. A description of how ore or materials will be processed on the site.

d. A description of how minerals, processed ore, or other materials will be removed from the site.

e. A description of how each phase of exploration or extraction correlates to the reclamation plan.

f. A detailed time table for each phase of operations and reclamation.

g. A detailed description of the steps to be taken to comply with applicable air and water quality laws and regulations and any applicable health and safety standards.

h. A drainage control plan showing methods which will be utilized to avoid erosion on and adjacent to the affected lands.

i. A description of all hazardous, harmful, and toxic materials to be used or transported in connection with the mining or mineral exploration activity and a description of steps that will be taken to insure that the use of such materials will have no adverse impact on the residents or environment of Santa Fe County.

2. Reclamation Plans.

A reclamation plan shall be required for each phase of the exploration or extraction and reclamation activity and shall consist of the following:

a. On all affected areas, the operator in consultation with the County, surface estate owner and mineral estate owner where possible, subject to the approval of the County, shall determine which parts of the affected land shall be reclaimed.

b. A detailed description of how the reclamation is to be achieved;

c. The detailed description of mining techniques proposed to be used in reclamation pursuant to the environmental performance standards in Section 5.5.5, infra;

d. A detailed estimated timetable for each phase of the mineral exploration or mining operation;

e. An estimated cost of accomplishing each major step in the mineral exploration, extraction and reclamation plan;

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f. A statement explaining how the reclamation plan is consistent with any applicable state and local land use plans and programs;

g. A description of the manner in which the reclamation plan is consistent with local physical environmental and climatological conditions as follows:

1) A description of all streams, creeks, arroyos, and bodies of water within 1000 feet of the boundaries of mine site.

2) A detailed description and maps of the existing soils, mineral constituents, and geologic conditions on the mine site.

3) A scaled plan in cross-section by length and height, showing existing and planned profiles of slope of the affected area before and after the proposed mineral exploration or mining operation, and after reclamation;

4) An inventory and detailed description of existing vegetation, wildlife and wildlife habitat according to species and density of occurrence;

5) A plan for revegetation of affected lands including the location and depth of soil types, degree of slope, precipitation patterns, density of each species of vegetation to be used, methods for stockpiling, protecting and restoring topsoil and adding other growth mediums where required, time of planting, method(s) of planting, proposed seed rates and/or density of planting, and if necessary, use of fertilizers.

6) A plan for the reclamation of tailings and mine waste, sediment ponds and areas of stored overburden.

7) A detailed description of the measures to be taken during the reclamation process to provide for the protection of the quantity and quality of surface and ground water systems, both on and off site, from adverse effects of the mining and reclamation processes;

3. A listing of surface and sub-surface owners of record of and anyone claiming an interest in the property proposed for mineral exploration or extraction, and of property adjacent to the mine site, and of lease holders of the sub-surface minerals as follows:

a. The name, address and telephone number of the person or operator engaging in the mineral extraction or mining activity.

b. The name, address and telephone number of the local representative responsible and in the employ of the person or operator engaging in the mineral extraction or mining activity.

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c. A description by township, range and section, using metes and bounds, of the lands subject to exploration or extraction activity including the estimated acreage of surface area which will be disturbed as a result of the mineral exploration and/or extraction activity.

d. If the surface and mineral estates are separately owned, a description of the legal arrangements under which the proposed exploration or mining use would occur.

4. A report which responds in detail to the Environmental Protection Performance Standards in Section 5.5.5.

5. A schedule which specifies the following:

a. The anticipated date upon which mineral exploration would commence.

b. A certification that the abandonment and plugging procedures of all surface drill holes shall conform to all applicable federal and New Mexico State Laws and Regulations.

c. The date by which reclamation of the mineral exploration or extraction activity and all phase thereof will be completed.

6. Any additional submittals required by the County.

7. A listing of the permits required to be obtained to engage in the mining land use on the mine site. Upon obtaining copies of the required permits, the applicant shall submit a copy of each of these permits to the Code Administrator. Copies of the submittals or other data presented to obtain required permits shall be provided to the Code Administrator upon request, with the name of the regulatory agency under which this permit is required.

C. Additional Submittals for Exploration or Extraction Operations which Use Certain Harmful, Hazardous, or Toxic Processes or Materials.

1. The permit application shall fully describe the mine site and its environmental conditions, with an analysis of how the proposed mining operation and the proposed use of solutions, materials, or processes as set forth in this subsection will affect the site and its environment, and how the proposed mining land use complies with the requirements of this subsection.

2. Data required by this subsection which is already part of another required submittal need not be submitted twice, but the applicant may cross-reference the data to fulfill the requirements of this subsection, provided the cross-reference is specific and detailed.

3. The permit application shall, in addition to the information described in Paragraph (a) above, include the following information, unless the information has been otherwise submitted:

a. Climate/meteorology characterization, such as prominent wind direction and speed, rainfall and ambient temperature ranges, with supporting data;

b. Surface and subsurface soils, and shallow bedrock characterization, with supporting data;

c. Surface water and groundwater hydrology studies, with supporting data;

d. Characterization of surface water and groundwater quality in three dimensional representation;

e. Inventory of surface water and groundwater beneficial uses;

f. Hydrogeologic characterization of groundwater, with supporting data;

g. A geotechnical study, including information pertinent to landslides, subsidence and formation instability, with supporting data;

h. Characterization of proposed materials and wastes which include, for example, overburden, wasterock, stockpiled ore, leached ore and tailings. Characterization of mine materials and wastes shall include, but are not limited to the following:

1) Chemical and mineral analysis related to toxicity or harmfulness to humans and wildlife;

2) Determination of the potential for acid water formation;

3) Determination of the potential for and quantification of long-term leaching of toxic or harmful materials from any of the mining operations, including any of the wastes generated;

i. Characterization of wastewater (quantity, chemical, and physical quality) to be produced by the mining land use operation; and

j. Assessment of the potential for acid-water formation from waste disposal facilities, low-grade ore stockpiles, waste rock piles and for surface water or groundwater accumulation in open pits that will remain after mining is ended.

4. Plans and Specifications.

a. An applicant constructing or commencing to operate a mining land use or substantially modifying or expanding an existing mining operation and which proposes to use solutions or harmful, hazardous, or toxic materials or processes shall first submit plans and specifications, signed by

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an engineer registered in the State of New Mexico, with experience in mining, to the County for construction, operation and maintenance of the facilities intended for storage, containment, treatment, control, and disposal of solutions, chemically-treated or contaminated materials, and wastes.

b. The plans shall address all applicable requirements of this subsection, and shall include, but not be limited to, the following:

1) A description of the facilities to be constructed, including tanks, pumps, pipes and other storage and conveyance means for processing solutions, chemically treated or impacted materials, and wastewaters;

2) A management plan for control of surface water and groundwater which effectively eliminates the possibility that surface water and groundwater would be contaminated with any harmful, hazardous or toxic solution, chemical, or process and which would then flow out of the permit area;

3) A management plan for treatment and disposal of excess wastewater, including provisions for reuse and wastewater minimization;

4) A facility construction plan including, as applicable, the design of low-permeability soil barriers, the type of geosynthetics to be used and a description of their installation methods, any manufacturer's warranties for any equipment or material used on the permit area, the design of wastewater treatment facilities and processes, a quality assurance plan for applicable phases of construction and a listing of construction certification reports to be provided to the County;

5) A preliminary closure plan;

6) A preliminary post-closure monitoring and maintenance plan which assures that monitoring will continue for thirty (30) years beyond the closing of the mine site;

7) A spill containment and control plan which must assure that any spills will be contained on the permit area; and

8) Plans for heavy machinery and equipment maintenance shops, including plans for properly storing and disposing of petroleum products, solvents, and other harmful, hazardous or toxic materials.

c. The County must approve the plans, in writing, and issue a development permit pursuant to this subsection, before construction of any facilities may be started.

5. Design, Construction, Operation and Closure Requirements.

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a. All chemical processes, solutions, and waste disposal facilities and facilities for mixing, distribution, and application of solutions and chemicals associated with on-site mining operations; ore preparation and beneficiation facilities; and processed ore disposal facilities shall be designed, constructed, operated and closed in accordance with the guidelines contained in this subsection and all other pertinent provisions of the Code.

b. Alternative facilities and methods of control of wastes and potential pollutants may be approved by the County if the permit applicant can demonstrate that the alternate facilities and methods will provide environmental protection that is fully equivalent or better than that achieved by the facilities specified in this Code. The burden of proof of fully equivalent protection lies with the applicant.

c. A groundwater monitoring plan shall be submitted to, and be approved by the County. Monitoring wells shall be installed and groundwater samples shall be collected and analyzed in order to detect groundwater contamination as required by the Board.

5.5 Performance and Development Standards for Mineral Exploration and Extraction

The following criteria shall be considered by the County in determining the suitability of the proposed mine site for approval.

5.5.1 Location Criteria

Unless mitigated or buffered pursuant to the provisions of section 5.5.1 D, no exploration or extraction permit shall be granted if the application indicates that any of the following uses are located within the noted distances of the permit area:

A. The existence of any residential, institutional, or recreational uses within one-half mile (2640 ft.) of the proposed mine site.

B. The location of any of the following conditions within five hundred (500) feet of the mine site:

1. A groundwater re-charge area or wetland as defined by the current standards of the US Army Corps of Engineers;
2. The limits of a one hundred (100) year floodplain;
3. Any water well off of the mine site.

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C. The presence of geologic hazards or other dangerous conditions where off-site impacts such as landslides or subsidence may occur as a result of blasting or earth moving activities.

D. Mitigation or buffering pursuant to section 5.5.6 may be required to offset impacts relating to location or existing conditions of the mine site.

E. A mining land use application may be denied if it is determined that the mining land use would not be compatible with existing land uses in the vicinity of the mine site.

5.5.2 Traffic Generation

A. The amount of traffic generated by the exploration or extraction activity shall not at any time impede traffic flow, cause public roads to operate at less than a Level of Service (LOS) C, of the American Association of State Highway Transportation Officials, "Highway Capacity Manual," or cause deterioration to public roads as a result of the activity, without just compensation to the County.

B. If it is determined by the traffic report submitted with the Master Plan that the development will increase the burden or cause deterioration to any public roads, the permittee or operator shall be required to undertake his or her pro-rata share of the cost of improvements or repairs to the public roads which are shown to be caused by the proposed use.

5.5.3 Well Reports and Water Budgets

A. General Provisions.

All exploration or extraction activities must have a water source. This source may be either an imported supply or an on-site well, or wells. A report shall be submitted to the Code Administrator containing a water budget for the proposed development and any information required by Article VII, Section 6 - Water Supply of the County Land Development Code.

Water supplied by an on-site well shall demonstrate water availability by the submission of a geohydrologic report prepared according to Article VII, Section 6 of the County Land Development Code. The report shall relate total water use to lot size or water budget according to the Hydrology Appendix to the Code.

The report shall document all proposed uses of water including sanitary uses, irrigation of landscaping, dewatering of shafts or pits, and the

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mining land use, and shall use standard engineering methods to quantify proposed water uses. The report shall also describe any water conservation measures proposed. Proposals with water budgets exceeding the limitations of a three acre-foot well (NMSA, Section 72-12-1, 1978, as amended) shall be required to supply from the State Engineer evidence of water rights that are appurtenant to the well or wells proposed for development in sufficient amounts to sustain the proposed use.

If a dewatering permit is required from any State agency, the applicant shall produce such permit.

B. Proof of Water Availability.

All applicants must produce, for approval by the Code Administrator, proof that, prior to review by the MPRB, the applicant possesses sufficient water rights, with proven water availability, to accommodate all of the normal operating and emergency requirements of the proposed development use. If the water supply and/or availability ever becomes insufficient to provide for all of the needs of the mining operation, the permittee must immediately acquire all additional water rights and demonstrate water availability according to this Code, in order to continue operation; otherwise, the County shall require that all mining land use cease immediately.

C. Assurances.

All applicants shall agree and provide assurances to the County that if any activities of the applicant impair the potability of any domestic water source in the County, that the applicant will implement immediate and complete measures to return such affected water sources to safe drinking quality, and, during the interim time that remedial actions are taking place, the applicant/permittee shall provide an alternate supply or replacement supply of potable water to anyone affected by the impairment.

5.5.4 Maximum Height

Structures on a mine site shall be limited to a maximum height of thirty-six (36) feet from the highest point of the surface of the ground at the perimeter of the structure. This height limitation shall also apply to temporary or portable drilling equipment. Use of conveyor belts or other mine structures or equipment which exceed the height limitations set by the Code shall require approval of a variance. The variance procedure is set forth in Article III, Section 3 of the Code.

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5.5.5 Environmental Protection Performance Standards

The exploration or extraction activities shall utilize standard techniques currently available in order to minimize noise, vibration, smoke and other particulate matter; odorous matter; toxic or noxious matter; radiation hazards; fire and explosive hazards; and electromagnetic interference. The Code Administrator shall refer an application to the New Mexico Environment Department or to appropriate experts under contract with the County for comment concerning the performance standards. If it is determined that the development will create any dangerous, injurious, noxious or otherwise objectionable condition, noise, vibration, smoke, dust, odor, or other form of air pollution, electrical or other disturbance, glare or heat, in a manner which causes a direct or primary impact to the adjacent areas, such effects or impacts shall be mitigated. (See Sec. 5.5.6, infra, for types of mitigation.)

A. Any permit issued under the Code to conduct exploration or extraction activities shall be required to meet all applicable performance standards. Operations shall be conducted in compliance with all applicable federal and state statutes, regulations and standards.

B. Performance standards shall apply to all lands affected by the exploration, mining operation, or reclamation operation as follows:

1. Disturbances to the prevailing hydrologic balance of the affected area and of the adjacent area and to the quality and quantity of water in surface and ground water systems both during and after the exploration and extraction activities and during reclamation shall be avoided, to the greatest extent practicable using the best available current technology.

2. The quality of water discharged from the exploration, extraction, or reclamation operation shall meet the standards set by the U.S. Environmental Protection Agency, the New Mexico Environmental Department and the New Mexico Water Quality Control Commission.

3. The affected area shall be restored to standards set forth in the approved reclamation plan.

4. Grading, recontouring or backfilling shall be done according to the approved grading and drainage plan, shall create a final topography pursuant to an approved reclamation plan, and shall:

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a. Be conducted as contemporaneously as possible with exploration and extraction operations;

b. To the greatest extent possible, blend in with the topography of the surrounding terrain. Reclamation of slopes shall be no steeper than a horizontal to vertical ratio of 2:1; except that slopes adjacent to drainage areas or standing water shall be no steeper than 3:1, or as otherwise determined by the reclamation plan;

c. Protect, and if necessary, re-establish any existing drainage system in order to prevent pollution or diminution of the quantity and quality of the surface water and groundwater, to prevent soil erosion, or to protect the water rights of downstream users; and

d. Create structurally stable slopes by compaction, the use of vegetation and/or engineered materials.

5. When backfilling of open pits is part of a reclamation plan, such backfilling or earthmoving operations shall be conducted so as to assure both stability of the materials and prevention of leaching of harmful, hazardous or toxic materials. Highwalls may be retained provided that they will not create a hazard to public health and safety, will be sufficiently stable so as to not damage adjoining property and will ensure structural integrity.

6. Where highwalls, tailings impoundments, earth dams or incised impoundments are constructed, and in order to control erosion, reduce sedimentation, and prevent spillage, such impoundments shall be designed, located, constructed, maintained and removed or abandoned in accordance with established engineering principles and shall comply with all applicable local, state and federal laws, rules and regulations. Upon final reclamation, all tailings impoundments not designed for retention of fluids must be free-draining. Drainage from such impoundments must not cause erosion, interfere with post-closure monitoring systems, and must meet applicable local, state and federal water quality standards. Access to the mine site during post-mining operations shall be limited if impoundments retaining water contaminated with harmful, toxic or hazardous materials and/or hazardous conditions or materials would remain on the site.

7. Mine waste piles or impoundments shall be located so as to prevent surface water runoff from entering the mine site, and any structures to be established shall divert surface water runoff from mine waste piles or impoundments containing water which has been contaminated during mine operations. Protection of groundwater from seepage of leachate

from mine waste piles or from impoundments shall be accomplished through the use of liners or other specific technologies or locational and design factors as determined by the approved reclamation plan.

8. All mine waste shall be placed, stored and disposed in a designated area to ensure that leachate and surface water runoff do not degrade surface or groundwater, that fires are prevented, and that the area remains stable. The designated area should be a naturally stable area as outlined in Section 5.5.5 B 4.

9. Mine waste which may retain hazardous, harmful or toxic chemical residues shall be detoxified or removed. For purposes of this section, detoxified shall mean that wastes are 1) not hazardous wastes as defined by local, state and federal regulations, 2) stabilized or treated such that potential for groundwater contamination cannot occur, and 3) capable of supporting natural vegetation and biota.

10. Mine waste shall be treated, stored and disposed in accordance with all local, state and federal requirements and regulations. Mine waste not used for backfilling shall be covered and graded to allow surface drainage and ensure long term stability.

11. In the revegetation part of the approved reclamation plan, topsoil or other suitable rooting medium shall be replaced and the affected land shall be revegetated in such a way as to establish a diverse, effective, and long lasting vegetative cover that is capable of re-seeding itself or spreading, is at least equal in extent of cover to the natural vegetation of the surrounding area, and is capable of supporting the range of wildlife associated with the particular life zones affected. Native species should receive first consideration, but appropriately introduced species that are non-sterile hybrids may be used in the revegetation process. In order to assure the success of the revegetation program, the planting and seeding shall take place when natural precipitation will assist in establishing the plants and shall be supplemented with an irrigation program. Plants that die or are not established after a two (2) year period shall be replaced; revegetation shall be monitored for a minimum of five (5) years. Success rate of re-seeding and re-vegetation shall be determined by the MPRB.

12. In the revegetation part of the approved reclamation plan, topsoil shall be removed from the affected land and segregated from other material. If such topsoil is not replaced on a backfill area within a time short enough to avoid

deterioration of the topsoil, vegetative cover or other means shall be employed so that the topsoil is preserved from wind and water erosion, remains free of any contamination by other acid or toxic material, and is in a usable condition for sustaining vegetation when restored during reclamation. If it is determined that such topsoil is of insufficient quantity or is of poor quality for sustaining vegetation, or if other strata can be shown to be as suitable for vegetation requirements, the operator shall remove, segregate, and preserve in a like manner such other strata which are best able to support vegetation.

13. Drainage control structures shall be used as necessary to control runoff and to minimize erosion, sedimentation and flooding.

14. Areas outside of the affected area shall be protected from slides or damage occurring during the mining operation and reclamation. Mining land uses shall be confined to the permit area.

15. All surface areas of the affected area shall be stabilized and protected so as to effectively control erosion and attendant air and water pollution.

16. Since the County finds time to be of the essence in reclamation matters, reclamation must begin as soon as technologically practicable after extraction or exploration activities commence and must continue as concurrently as possible until such time that the mining land use is terminated and all of the affected area is reclaimed. In-progress reclamation should be scheduled to coincide with the site development schedule in the approved operations plan.

17. Planting shall not be required on any affected area where the chemical and physical characteristics of the surface and immediately underlying material of such affected area are, through no fault of the operator, toxic, deficient in plant nutrients, or composed of sand, gravel, shale, or stone to such an extent as to seriously inhibit plant growth and such condition cannot economically be remedied by chemical treatment, fertilization, replacement of overburden, natural weathering or like measures. In those cases where planting is not required, the permittee shall still be required to stabilize the affected area so that all applicable local, state and federal laws and regulations are not violated.

18. To the greatest extent possible, and using the best technology currently available, mining land uses shall be conducted to mitigate or avoid disturbances and direct impacts to fish, wildlife and their habitats or migratory habits. In addition, the design, construction, maintenance and

post mining conditions of access roads into and across the site of operations shall be configured to control or prevent erosion and siltation, to prevent pollution of water or damage to fish or wildlife or their habitat.

19. Explosives shall be used only in accordance with state and federal law and local regulations. Notice to adjacent property owners of blasting activities shall be required.

20. Proposed hours of operation and outdoor lighting will be reviewed in order to determine if night operations will create nuisances to neighbors. If it is determined that such nuisances may occur, these shall be mitigated accordingly.

21. Upon cessation of mining operations, all buildings, structures, impoundments, drainage control structures, mining waste piles, and other related items not necessary for environmental protection of the mine site shall be removed, reclaimed or stabilized according to the approved reclamation plan. The affected area shall be graded to the approved final topography and the area revegetated if revegetation is part of the reclamation plan.

22. Adverse visual impacts due to the exploration or extraction activity shall be avoided or minimized to the extent practical through the following location or site design techniques:

a. Minimizing the area of disturbance due to the mining activity pursuant to a phasing program;

b. Minimizing excavation in visually sensitive areas;

c. Avoiding location of structures, machinery and equipment storage and repair areas, utility lines, access roads and driveways, mined material stockpiles, and mine waste impoundments in visually sensitive areas;

d. Locating, designing or screening excavated portions of the mine site, structures, machinery, equipment storage and repair areas, utility lines, access roads and driveways, mined material stockpiles, and mine waste impoundments in a manner sensitive to the natural color, form and texture of the surrounding area;

e. Visually sensitive areas are areas visible along highways, and state, county or federally designated scenic areas.

23. Fire protection plans shall include type of construction for structures and full disclosure of types of chemicals to be stored on the site and their location. These disclosures shall include:

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- a. Minimum hazardous doses or exposures;
- b. Immediate and delayed signs and symptoms of exposure;
- c. Emergency and extended treatments for exposures;
- d. Complete breakdown of health risks based on minimum to maximum doses or exposures, and short to long term effects on human physiology;
- e. Chemical life data detailing dilution or reduction time requirements and materials which will detoxify the chemical (if any); and
- f. Fire hazard risk of chemicals, including but not limited to flammability, explosion potential and effect of mixing with water and fire extinguishing agents.

24. Where applicable, monitoring wells shall be installed and soil and groundwater samples shall be collected and analyzed for the purpose of determining quantity and quality of surface drainage or underground water resources.

C. If the use of hazardous materials or a chemical mining process is proposed by the applicant, the applicant must demonstrate that the use of such materials, or chemical mining processes, will not have an adverse impact upon the public health, safety, welfare and environment and meet the additional performance and development standards of Section 5.5.8.

D. If the applicant proposes to dispose of tailings or materials that have been chemically processed and/or have been milled to a particle size fine enough to liberate heavy metals, the applicant shall be required to demonstrate that the practice will not have an adverse impact on the public health, safety, welfare and environment and where applicable, meet additional standards of Section 5.5.8.

5.5.6 Mitigation Criteria and Buffer Zones

A. The feasibility of protection from or mitigation of any impacts to such existing conditions or uses listed in this Section 5 which may be affected by any exploration or extraction operations and/or rehabilitation activities, both on and off the mine site shall be considered.

B. Protection or mitigation may consist of any of the following:

1. Avoiding the location;
2. Limiting the degree of activity;
3. Restoration or rehabilitation of the impacted location;

4. Reducing the impact over time by preservation and maintenance during the life of the activity;
5. Buffering or screening the activity;
6. Relocation of the affected mining land use;
7. Permanent protection of wetlands or other environmental resources;
8. Provision, if applicable of traffic control devices.

C. Exploration and extraction uses shall, where applicable, establish buffer zones for adjacent uses of at least 2640 feet and/or provide a mitigation plan which provides for measures to reduce negative or direct impacts to adjacent uses including a statement of the legal responsibility for mitigating these impacts by the operator, his contractors and the permittee.

5.5.7 Solid Waste

For the purposes of this Section 5, solid waste means garbage, refuse or discarded material generated by the mine operations that is not mining waste. Such solid waste may not be stored or buried on the mine site. Solid waste must be removed on a scheduled basis to a county designated landfill or authorized transfer station.

5.5.8 Additional Performance and Development Standards for Mining Land Uses which Use Certain Solution Processes.

A. Purpose and Policies.

1. The purpose of the standards and guidelines in this Section is to prevent water pollution and protect the quality of the environment and public health in Santa Fe County, consistent with the policies of the Code, by requiring application of all available and reasonable methods for control, containment, and complete containment of all concentrations of harmful, hazardous or toxic materials, solutions, and processes (except as such concentrations occur in nature) relative to design, construction, operation, and closure of mining operations which use solutions or processes to extract metals or metal-bearing minerals from the ore and which produce wastes or wastewaters containing toxic, harmful or hazardous materials.

2. The following policies are established to provide further guidance regarding the level of environmental protection these rules are intended to achieve:

a. Liner, leak detection and leak collection systems ("systems") are necessary for heap leach pads, solution ponds, and tailings facilities to assure that any leak will be detected before toxic, harmful or hazardous materials escape from the liner system and are released to the environment. For purposes of these standards, the environment is considered to begin at the bottom of the first liner. These systems shall assure that a leak is found, and that sufficient time is available to allow for the repair of the leak and cleanup of any leaked material before there is a release to the environment. Natural conditions, such as depth to groundwater, subsurface soil/ lithologic conditions, and net rainfall, shall be considered as additional protection but not in lieu of the protection required by the engineered liner system.

b. The harmfulness or toxicity of mine tailings and the potential for long-term toxic solution and/ or material release from mine tailings shall be reduced to the greatest degree practicable through removal, reuse, or destruction of solutions prior to placement of tailings in the tailings disposal facility. If cyanide is used in any mining operation, the permittee shall assure that no water leaving the permit area shall have a concentration of cyanide of greater than .2 parts per million.

c. The closure of heap leach pads, ponds, overburden piles and tailings disposal facilities shall prevent future release to the environment of residual potentially harmful, hazardous or toxic solutions.

B. General Provisions.

1. Any mining land use which is required to obtain a permit pursuant to Article III, Section 5.4.1. B 2. shall also comply with the performance and development standards set forth in this subsection.

2. Permitted operations shall not discharge wastewater or process solutions to surface water, groundwater or soils, except as expressly allowed by the permit.

3. A buffer zone (a minimum of 200 feet wide) shall be established between waste disposal facilities and surface waters.

4. All chemical and solution conveyances (ditches, troughs, pipes, etc.) shall be equipped with secondary containment and leak detection means for preventing and detecting release of chemicals to surface water, groundwater or soils.

5. Acid water accumulation in open pits resulting from the mining land use must be prevented by appropriate mining practices, by measures

taken in the closure process, or be treated to control pH and to control and eliminate toxicity. The permittee shall monitor this condition, according to the terms of the permit issued pursuant to this Section 5, and provide such information to the County for thirty (30) years beyond the closure of the mining operation. If the permittee has not abided by all the terms of the permit, or if any required cleanup or harmful, hazardous, or toxic condition continues to exist on the permit area or any property damaged by the mining operation, then any financial warranties maintained by the permittee shall be either retained by the County until all conditions required by the permit are complied with, as well as all harmful, hazardous, or toxic conditions, as described above, are remedied to the satisfaction of the County, or the financial warranties shall be used by the County to remedy the permit violations and/ or the harmful, hazardous, or toxic conditions described above.

6. Construction of surface impoundment liner systems shall conform generally to the principles and practices described in EPA/600/2-88/052, Lining of Waste Containment and Other Impoundment Facilities, September 1988.

7. The County shall hire, at the expense of the permittee, a third-party contractor to perform the functions set forth below:

a. Review and evaluate the design and construction specifications of all mined materials disposal facilities permitted under this section for functional adequacy and conformance with Code requirements. The County shall not approve construction of the disposal facilities until the design and construction specifications have been evaluated.

b. Monitor the course of construction of all mined materials facilities for compliance with the approved design and construction specifications. The third-party contractor shall regularly document the progress of construction and the County shall require the permittee to take corrective action if construction does not satisfactorily conform to the approved design and construction specifications.

c. Provide on-site inspections during ongoing operations, including but not limited to the loading of the heap, to assure protection of the integrity of the liner system and other environmental protection measures.

d. Monitor the mine site to insure the integrity of the system, including the liners, and the leak detection system, during the life of the mining operation and for up to thirty (30) years thereafter, to be reviewed every five (5) years.

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8. All monitoring equipment maintained on the permit area shall be inspected quarterly (four times per year) by the permittee, and the results shall be submitted to the County which may, in its sole discretion, utilize the third party contractor, described in subsection (7), above, to review, analyze, and report on the information supplied by the permittee, and, if deemed necessary by the County, to make a site inspection of the monitoring equipment maintained by the permittee, who will fully comply with the requests made by the contractor regarding the inspection.

C. Control of Surface Water

Run-on and Run-off.

1. Surface water run-on and run-off shall be controlled such that it will not endanger the mine site or become contaminated by contact with process materials or loaded with sediment. The control systems shall be designed to accommodate a 200-year, 24-hour storm event, or the largest storm occurrence within the general area within the previous twenty (20) years from the date of application, whichever is greater, as well as any other defined climatic event that is more appropriate to the site, and be placed so as to allow for restoration of the natural drainage network, to the maximum extent practicable, upon facility closure.

2. All mined materials shall be properly placed and protected from surface water and precipitation so as not to be eroded and contribute sediment to site stormwater run-off or to otherwise contaminate surface water.

D. Physical Stability of Retaining Structures and Emplaced Mine Materials.

1. Permit applicants must demonstrate to the County that the design of chemical processing facilities or any solution operations are adequate to ensure the stability of all structural components of the facilities during operation, closure and post closure.

2. Retaining structures, foundations and mine materials emplacements shall be designed by a qualified, registered professional and be constructed for long-term stability under anticipated loading and seismic conditions.

E. Protection of Wildlife.

All vertebrates and all other wildlife considered endangered by federal or state governmental authorities shall be prevented by the

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permittee from contact with chemicals, solutions, and wastewaters containing chemicals.

F. Guidelines for Design, Construction, and Operation of Heap-leach Facilities.

1. Heap-leach facilities and other mining land uses which use pads will be permitted to use on-off, reusable pads, when properly detoxified and inspected before installation and before moving spent ore.

2. The heap-leach facility (pad and associated ponds, pipes and tanks) shall be sized to accommodate a 200-year, 24-hour storm event, or the largest storm occurrence within the general area within the previous twenty (20) years, whichever is greater.

3. TABLE 1 of this Section establishes minimum capacity-sizing criteria for leach-pad and ponds. The pad and ponds may be designed to act separately or in conjunction with each other to obtain the required storage volumes. Other design criteria may be used, with County approval, if local conditions warrant. The best available climatic data shall be used to confirm the critical design storm event and estimate the liquid levels in the system over a full seasonal cycle. The liquid mass balance may include provision for evaporation.

4. The heap leach pad liner system shall be designed, constructed, and operated to meet the following criteria:

a. A primary liner consisting, at a minimum of a continuous flexible-membrane of suitable synthetic material or other impermeable substance shall be used. This liner shall function together with the process chemical collection system installed immediately above this liner to remove process chemicals from the heap.

b. A leak detection system shall be installed immediately below the primary liner for the purpose of detecting loss of process solutions by leakage through the primary liner. The leak detection system shall be capable of detecting leakage through the primary liner of 400 gallons/day-acre within ten weeks of leak initiation. The leak detection system shall consist of appropriately sized collection piping placed within a minimum thickness of 12 inches of permeable material (minimum permeability of 10^{-2} cm/sec) that is capable of withstanding the anticipated weight of the heap without loss of function.

c. A secondary liner shall be placed below the leak detection system to provide assurance that any leakage through the primary liner

during the operation of the heap and following closure of the heap is not released to the environment. The secondary liner shall be of a composite design with a continuous flexible membrane of suitable synthetic material in direct contact with an engineered, stable, low permeability soil/clay bottom liner (maximum permeability of 10^{-7} cm/sec).

d. Each liner system component described in subsections (4)(a)-(c) above addresses a specific need and purpose with respect to environmental protection. An alternative may be approved if the level of environmental protection intended by each separate liner system component is achieved either within the individual component or on a cross component basis.

e. If any leak is discovered in the liner or any of the system, the permittee and his operator shall immediately stop all mining operations at the mine site, and shall immediately contact the County. Mining operations shall not recommence until the permittee has cleaned up all hazardous, harmful, and toxic effects of the mining operation.

5. The processing chemical pond liner system shall be designed, constructed, and operated to meet the following criteria:

a. A primary impermeable liner consisting, at a minimum of a continuous flexible-membrane of suitable synthetic material shall be provided. This liner shall provide for positive containment of processing chemical solutions.

b. A leak detection system shall be installed immediately below the primary liner for the purpose of detecting loss of process chemical solutions by leakage through the primary liner. The leak detection system shall be capable of detecting leakage through the primary liner of 400 gallons/day-acre within ten weeks of leak initiation. The leak detection system shall consist of appropriately sized collection piping placed within a layer of permeable material (minimum permeability of 10^{-2} cm/sec).

c. A secondary liner shall be placed below the leak detection system to provide assurance that any leakage through the primary liner during the use of the pond is not released to the environment. The secondary liner shall be of a composite design with a continuous flexible-membrane of suitable synthetic material in direct contact with an engineered, stable, low permeability soil/clay bottom liner (maximum permeability of 10^{-7} cm/sec).

d. Each liner system component described in subsections (5)(a)-(c) above addresses a specific need and purpose with respect to

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environmental protection. For purposes of evaluating alternative facilities and methods of control, an alternative may be approved if the level of environmental protection intended by each separate liner system component is achieved either within the individual component or on a cross component basis.

6. Emergency ponds may be constructed as an alternative to larger pregnant and barren ponds. The emergency pond may be constructed to a lesser standard, with the limitation that it is to be used only infrequently and for short periods of time. The County will specify reporting and use limitations for the ponds in the permit.

7. The emergency-pond liner shall consist of:

a. An engineered, stable, low permeability soil/clay bottom liner (maximum permeability of 10^{-6} cm/sec) with a minimum thickness of twelve (12) inches, and

b. An impermeable single flexible-membrane synthetic top liner of suitable material.

8. The permittee shall respond to leakage collected by the heap-leach and processing-chemical storage pond leak-collection systems according to the process defined in TABLE 2.

9. The permittee shall determine the acid-generating potential of the spent ore by acid/base accounting and other appropriate static and dynamic laboratory tests. If the spent ore is shown to be potentially acid generating under the conditions expected in the heap at closure, the permittee shall submit a plan for acid correction for County approval prior to loading the heap.

G. Guidelines for Disposal of Mine Tailings.

1. Mine tailings shall be treated by solution removal, re-use, or destruction prior to disposal to reduce the amount of solution introduced into the tailings ponds to the lowest practicable level. The permittee shall conduct monthly laboratory column tests on mine tailings to determine the efficacy of permittee's measures to detoxify the mine tailings, and other efforts to render the mine tailings non-harmful to humans, animals, plants and to the environment. In the case of a mining operation which used cyanide, the permittee shall determine the lowest practicable concentration to which the weak acid sociable cyanide can be reduced. In no event shall the permitted WAD cyanide concentration in the liquid fraction of the tailings be greater than 30 ppm.

2. The permittee shall determine the potential for acid-water formation from the tailings and waste rock by means of acid-base accounting and other suitable laboratory static and dynamic tests. The mine plan shall include provisions which are demonstrated to prevent acid rock drainage.

3. The disposal facility shall be lined with a composite double liner consisting of a flexible-membrane synthetic top liner in tight contact with an engineered, stable, soil/clay bottom liner (maximum coefficient of permeability of 10^{-7} cm/sec).

4. The disposal facility shall be provided with a leachate collection system above the liner suitable for monitoring, collecting and treating potential acid drainage.

5. If the permittee has caused any underground disturbance, then the permittee shall provide information regarding subsidence and underground acid rock drainage, in a form acceptable to the County.

H. Guidelines for Disposal or Storage of Wasterock, Low-grade Ore and Other Mined Materials.

The permittee shall determine the acid-producing and metals-release potential of the wasterock, low-grade ore or other mined materials by acid/base accounting and other appropriate static and dynamic laboratory tests. If the mined materials are shown to be potentially acid forming, or capable of releasing toxic metals, the permittee shall submit a plan for correction and disposal for County approval prior to placing the materials, either temporarily or permanently.

I. Guidelines for Heap-leach and Tailings Disposal Facility Closure.

1. An updated closure plan and post-closure monitoring and maintenance plan shall be submitted to the County by the permittee at least 180 days prior to beginning closure operations or making any substantial changes to the operation.

2. Chemical conveyances (ditches, troughs, pipes, etc.) not necessary for post-closure monitoring shall be removed and/or reclaimed. The secondary containment systems shall be checked before closure for process-chemical or solution contamination, and contaminated soil or other materials, if any, shall be removed to an acceptable disposal facility.

3. Closure of the heap-leach and spent ore facility.

a. The heap shall be detoxified over a suitable period of time prior to

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closure, using rinse/rest cycles of rinsing and chemical oxidation, if necessary, as approved or required by the County. The WAD cyanide concentration in the rinsate shall be no greater than 0.2 ppm.

b. Following detoxification as defined in (a) above, the heap shall be closed by covering the heap with a cover designed to prevent water and air infiltration. The cover should consist, at a minimum, of a low-permeability layer and suitable drainage and soil layers to prevent erosion and damage by animals and to sustain vegetation growth.

c. The ponds associated with the heap or spent ore shall be closed by folding in the synthetic liners and filling and contouring the pits with inert material. Residual sludge or spent ore may be disposed of in one of the on-site waste disposal facilities, provided it meets the criteria for such wastes in these guidelines. The process chemical collection system of the heap shall be maintained in operative condition so that it can be used to monitor the amount and quality of infiltrated water, if any, draining from the heap.

4. The tailings disposal facility shall be closed by covering it with a composite cover designed to prevent water and air infiltration and be environmentally stable. Tailings shall be isolated from the environment. The cover should consist, at a minimum, of a low-permeability layer and suitable drainage and soil layers to prevent erosion and damage by animals, and to sustain vegetation growth.

J. Post-Closure Monitoring.

1. The County may continue its permit in force for thirty (30) years, which will be reevaluated every five (5) years after closure of the operation and will include permit requirements for periodic monitoring to determine if a release of toxic, harmful or hazardous materials or pollutants is occurring.

2. Monitoring data will be supplied to the County by the permittee in the annual report required pursuant to subsection 5.3.5 A. 2., and as requested by the County, and shall be reviewed by the County to determine the effectiveness of closure of the disposal facilities. The County may, in its sole discretion, hire one or more professionals to review and analyze the information supplied by the permittee, and the cost of hiring such persons shall be paid by the permittee. The County will not release financial warranties that would otherwise be needed to correct problems resulting from ineffective closure.

K. Land Disposal of Wastewater.

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1. To qualify for land disposal of excess wastewater, the permit applicant shall demonstrate to the County that the applicant's proposed process has been designed to minimize the amount of excess wastewater that is produced, through use of water-efficient processes, wastewater treatment and reuse, and reduction by natural evaporation. Excess wastewater that must be released shall be treated and disposed of to land under the conditions specified in the permit.

2. A disposal plan shall be submitted as part of the permit application that, at a minimum, includes:

- a. Wastewater quantity and quality characterization;
- b. Soils characterization and suitability analysis;
- c. Drainage and run-off characteristics of the site relative to land application of wastewater;
- d. Proximity of the disposal site to groundwater and surface water and potential impact;
- e. Wastewater application schedule and water balance;
- f. Disposal site assimilative capacity determination for the specific compounds that will be disposed at the site;
- g. Soils, surface water and groundwater monitoring plan;
- h. Potential impact on wildlife or plant species.

3. The County will evaluate the disposal plan and set site-specific permit conditions for the wastewater discharge.

L. Guidelines for Open-pit Closure.

1. Open pits that will be left as a result of the mining operation shall be assessed prior to, and following, mining land use for the potential to contaminate water to the extent that it might not meet water-quality standards due to build-up of acid, toxic metals, or other toxic, hazardous, or harmful conditions.

2. If the County finds that the potential for water accumulation in the pit(s) exists, the permit applicant shall submit a closure plan for the pit that will address contamination prevention and possible remedial treatment of water. The closure plan shall, at a minimum, examine the following alternatives:

- a. Avoidance, during mining, of acid-generating materials that can be left in

place, rather than being exposed to oxidation and weathering;

b. Removal from the pit and disposal, during or after the mining operation, of residual acid-generating materials that would otherwise be left exposed to oxidation and weathering;

c. Protective encapsulating in-situ of residual acid-generating materials;

d. Treatment methods for correcting acidity and toxicity of accumulated water;

e. Backfilling of the pit(s) to the level necessary to, in conjunction with other appropriate control measures, prevent oxidation of residual acid-generating materials;

f. Innovative technologies for stabilizing waste materials with subaqueous disposal within the pit.

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TABLE 1Heap-Leach Liquid Storage Criteria

<u>Component</u>	<u>Pregnant-Solution Pond</u>	<u>Barren-Solution Pond</u>
Operating Volume	Minimum necessary to maintain recirculation	Minimum necessary to maintain recirculation
Operational Surge	Anticipated draindown and rinse volume	Anticipated draindown and rinse volume
Climatic Surge	200-yr, 24-hr storm plus 10-yr snowmelt	200-yr, 24-hr storm plus 10-yr snowmelt
Safety Factor	2-ft dry freeboard	2-ft dry freeboard

TABLE 2Required Responses to Leakage Detected from the Leach Pad and Processing Chemical Storage Ponds

<u>Leakage Category</u>	<u>Response</u>
Zero leakage to 200 gal/day-acre	Notify the County & N.M. Environment Department; increase pumping and monitoring
Leakage from 200 gal/day-acre to 400 gal/day-acre	Change operating practices to reduce leakage; stop applying all cyanide to heap.
Leakage in excess of 400 gal/day-acre	Repair leaks under schedule to be established by the County.

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PASSED, APPROVED AND ADOPTED, THIS 22 DAY OF
MARCH, 1993.

SANTA FE COUNTY BOARD OF COUNTY COMMISSIONERS

Raymond M. Chavez
RAYMOND CHAVEZ, CHAIRPERSON

ATTEST:

Jona G. Armijo
JONA G. ARMIJO, COUNTY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY
TERRENCE P. BRENNAN,

Terrence P. Brennan
SANTA FE COUNTY ATTORNEY

808,312
COUNTY OF SANTA FE
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed
for record on the 26 day of March A.D.
19 93 at 9:12 o'clock A m.
and was duly recorded in book 908
page 637 - 699 of the records of
Santa Fe County.

Witness my Hand and Seal of Office
Jona G. Armijo
County Clerk, Santa Fe County, N.M.

Veronica Clayton
Deputy

