



Water Risks in the Mining Sector¹

New Mexico

As of April 2016

1. Overview of legal framework in New Mexico

New Mexico was admitted to the union of the United States as the 47th state on January 6, 1912. Its state courts apply state common law, and its federal courts apply federal common law.

Mining activities on state, federal and private land located in New Mexico are regulated by the **Mining and Minerals Division (MMD)** of the State of New Mexico. Permits are required to be obtained for exploration and mining activities. Mining activities on tribal lands in New Mexico are generally governed by the relevant Indian tribes. However, where a tribe has not yet developed its own laws and regulations to manage leasing, drilling and mining activities on its territory, the U.S. Bureau of Indian affairs may be handling these permits.

In addition, if a mine is located on state land, a State Trust Land Lease must be obtained for mineral exploration and development activities from the Commissioner of Public Lands of the New Mexico State Land Office.

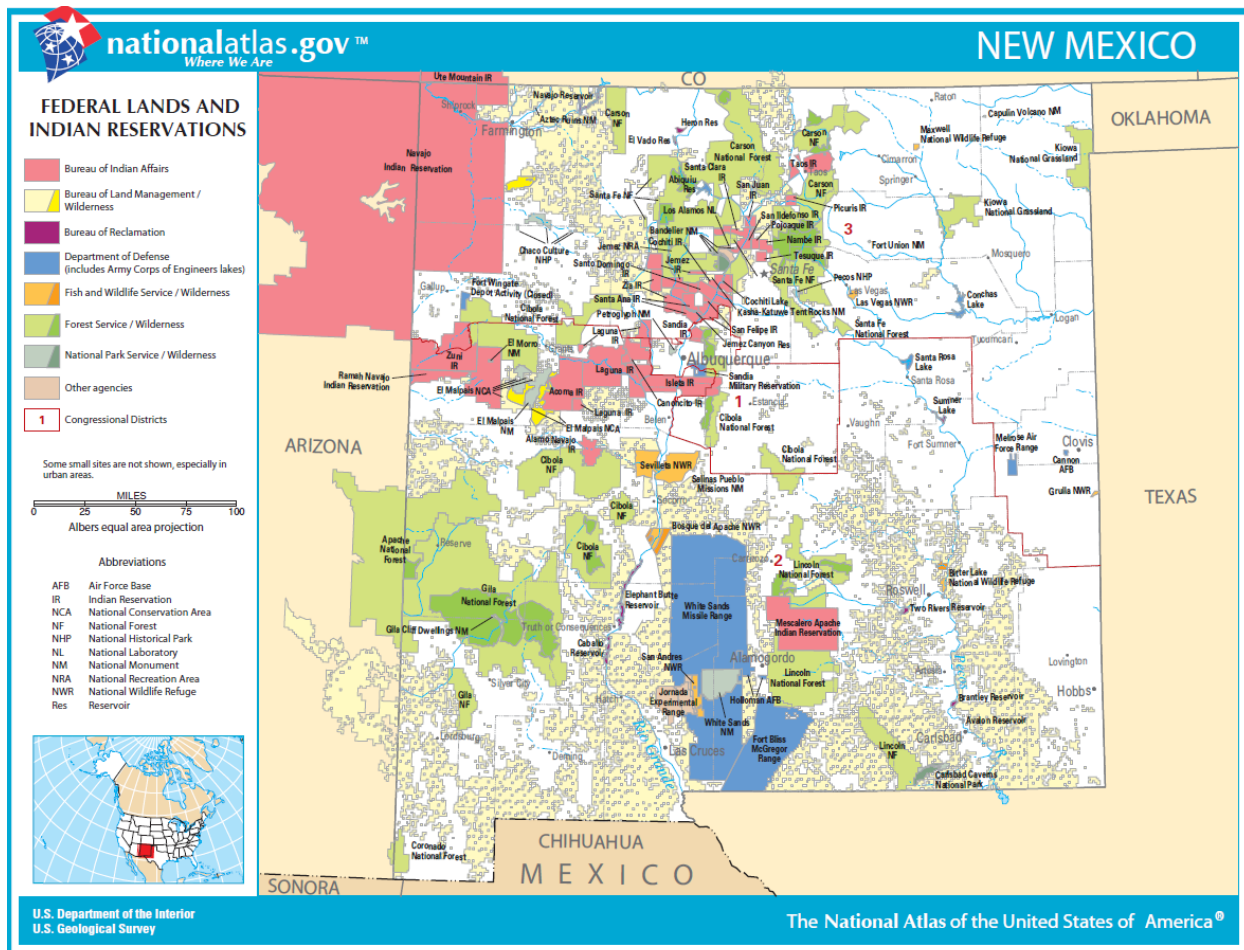
A large percentage of land in New Mexico is federally-owned (see next page). No additional permits are required for United States citizens and mining companies wishing to mine federal lands pursuant to the so-called self-initiation or free access provision (Mining Law of 1872). However, where the federal land in question is also classified as a national parks, national monument, military reservation, wildlife protection area, scientific testing area, and/or an area designated as a “wild and scenic river” or falling within the jurisdiction of the National Wilderness Preservation System, additional permitting procedures may be required by the Bureau of Land Management (BLM) and the Forest Service (USFS) to conduct mining activities.

¹ This project was managed by CCSI Senior Legal Researcher, Sophie Thomashausen. Research was conducted by Esmeralda Colombo, Diana M Nielsen, and Sophie Thomashausen. New Mexico officials were interviewed for the purpose of conducting the present research. Their names and relevant departments are available under Section 8 of this document.



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Source: U.S. Fish and Wildlife Service. Retrieved from [http://www.fws.gov/southwest/NAL/nm\[1\].pdf](http://www.fws.gov/southwest/NAL/nm[1].pdf) (last visit: March 12, 2016).

Water permits are required, both for sourcing (appropriating) water and for discharging hazardous waste from mining activities into the environment. Water permits to source water in New Mexico are issued at a state level by the New Mexico Office of the State Engineer (OSE). Water discharge permits are issued at the federal level, but require state certification.

Please see the Annexures for a description of the relevant legislation and institutions regulating water use.



2. Regulation of water use in mining in New Mexico

Water Quantity questions		
No	Question	Answer
1.	Which authority is responsible for water allocation?	In New Mexico, the Water Rights Unit of the New Mexico Office of the State Engineer (“OSE”) is responsible for issuing permits to appropriate public surface and groundwater waters of New Mexico.
2.	Water appropriation process - How is water granted to a mining concessionaire/ permit holder? Is there a water licensing/ permitting process? A water market?	<p>The allocation of rights to use water (or “water rights”) in the United States is determined at a state level according to the riparian doctrine, the appropriation doctrine, or a hybrid model of the two doctrines depending on the state.</p> <p>In New Mexico, all ground and surface waters belong to the public and are allocated by the OSE pursuant to the doctrine of prior appropriation.² Any person wishing to appropriate water must file an application on a form prescribed by the OSE. See here for more information.</p> <p>The Water Resources Allocation Program (WRAP) at the OSE is responsible for processing water rights applications in relation to surface or ground water. The permit is obtained by contacting the local district office.</p>

² The **prior appropriation doctrine** states that water rights are determined by priority (“first use in time, first in right”) and beneficial use. This means that the first person to use water or divert water for a beneficial use or purpose at a specified rate of flow can acquire individual rights to the water. Moreover, the right continues as against subsequent users as long as the appropriator puts the water to beneficial use. For these purposes, **beneficial use** is defined as “the use of water by man for any purpose which benefits are derived, such as domestic, municipal, irrigation, livestock, industrial, power development, and recreation. **Under the New Mexico constitution beneficial use** is the basis, the measure and the limit of the right to use water; therefore, beneficial use of public water diverted or impounded by manmade works is an essential element in the development of a water right.” See New Mexico SOE Glossary of Water Terms, available at: <http://www.ose.state.nm.us/WR/glossary.php>. See also Charles T. DuMars, “New Mexico Water Law: An Overview and Discussion of Current Issues,” available online at: http://lawschool.unm.edu/nri/volumes/22/4/24_dumars_newmexico.pdf.



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		<p>When evaluating an application for a new water right or to change the place and/or purpose of use of an existing water right, the State Engineer must:</p> <ul style="list-style-type: none"> • Determine that water is available; • The appropriation will not impair existing rights; • The intended use meets state water conservation efforts; and • The intended use is not detrimental to the public welfare. <p>The law also requires the applicant to publish the application in a newspaper and give anyone with a legitimate objection the opportunity to contest the application.</p> <p>A database of New Mexico’s water rights is available here: http://www.ose.state.nm.us/WRAB/index.php</p> <p>Since almost all of New Mexico’s water has already been appropriated, companies needing additional water can buy water rights from existing water users. The OSE must approve each of these transfers, so there is no free market concerning water appropriation.</p> <p>Mine dewatering is considered to be neither an appropriation of water nor waste. No water right may be established solely by mine dewatering (see here, at 62-63).</p>
3.	<p>Scope of a water allocation permit/ license</p> <p>(a) Requirements separate water rights permit – is a separate water permit required? What is the process for obtaining the permit</p>	<p>A permit to use/appropriate water is required separately from and in addition to the general mining permit.</p> <p>1. Surface water (see here, at 57-59)</p> <p>To be allowed to use surface water, a mining company must file an application to use a specific quantity of surface water for a beneficial purpose under the WRAP (Water Resource Allocation</p>



			<p>Program) with the Water Rights Division of the OSE (See 19.26.2.13 NMAC (Proof of application of water to beneficial use)). For these purposes, mining is generally considered to be a beneficial use of water. ³</p> <p>2. Underground Waters (see here, at 59-61)</p> <p>Underground waters are usually accessed through wells or boreholes. Once a basin is declared, all new groundwater appropriations, alterations to existing uses, and drilling of supplemental or replacement wells require a permit from the relevant State Engineer.</p> <p>In New Mexico, a permit to appropriate underground water from a particular water basin must be filed with the Water Rights Division of the OSE. The date of the application establishes priority (19.27.1.9 NMAC). The annual quantity of water that can be requested in a single application is limited to the annual amount that can reasonably be expected to be extracted and applied to a <i>beneficial use</i> from a single well constructed at a particular point, in the manner, and for the purpose set forth in the application (19.27.1.10 NMAC).</p> <p><i>Note</i> that only those persons with a valid water well driller's license issued by the OSE may drill for underground water in New Mexico. The Water Rights Division of the OSE is responsible for issuing these licenses (NMSA 1978, Chapter 72).</p>
		<p>(b) Time required to obtain permits – how long does it generally take?</p>	<p>Generally, the timing depends on the quantity of water a person wishes to appropriate. There is no prescribed timing.</p>
		<p>(c) Duration of water permit</p>	<p>Generally, it depends on the request, the availability and impediment on other users. It might be temporary or non-temporary. If it is temporary, before the expiration day the company must file an</p>

³ A permitted or declared right is considered to be a valid water right only to the extent water has been legally placed to beneficial use ([19.26.2.7 EE](#)).



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			<p>extension to continue to appropriate, then it must apply to a new permit.</p> <p>Limitations on the duration of a water right:</p> <p>(1) You snooze you lose: A permitted or declared right is considered to be a valid water right only to the extent the water is being put to beneficial use (19.26.2.7 EE).</p> <p>(2) Shortened duration for leased water rights: An owner of a water right may lease all or any part of their right for a period not to exceed ten years pursuant to Section 7263 NMSA except that a water right may be leased for a period not to exceed forty years by a forty year planning entity as provided in Section 7219 NMSA (19.26.2.18).</p> <p>(3) Forfeiture and abandonment of a water right: A water right may be lost for nonuse in two ways. First, the right may be forfeited pursuant to Section 72-5-28 NMSA or Section 72-12-8 NMSA. Alternatively, the right may be abandoned. Abandonment is a judicial doctrine 19.26.2.20.</p> <p>The permit may be cancelled on two grounds, namely i) in case the proof of beneficial use is not shown within the time allotted by the OSE; or ii) if the applicant fails to comply with the provisions of the permit.</p> <p>The ground water appropriation permit is cancelled if the applicant fails to comply with the provisions of the permit within the time specified in such permit or to secure an extension of time within which to do so.</p>
		<p>(d) process for permit renewal</p>	<p>The process for permit renewal is the same process applicable for application in the first place. When a permittee is unable to construct the necessary works or apply water to beneficial use within the time authorized, the permittee may request a time extension from the OSE</p>
<p>4.</p>		<p>How does the process of securing a water allocation relate to the general</p>	<p>The process of securing a water right is separate from the general mining permit. An environmental</p>



<p>mining permit approval process (i.e. is a water permit required before a mining permit, or is information about water use required for an EIA or a closeout plan which is required for a mining permit)?</p>	<p>evaluation is not required for requesting water appropriation.</p> <p>However, to obtain a mining permit, a closeout plan that addresses water quality issues and a certificate from the department of the environment must be submitted.⁴</p> <p>An environmental evaluation (EE) is required to be conducted for all new mining operations under Part 6 of the New Mexico Mining Act Rules. The State of New Mexico does not have a standardized environmental review process. However, this EE guidance document generally follows the New Mexico Environment Department (NMED) State Environmental Review Process (SERP), which is a similar process utilized to evaluate environmental impacts from potential infrastructure construction projects. It shall include an analyses of the reasonably foreseeable impacts of proposed activities on the pre-mining and post-mining environment and the local community, including other past, present and reasonably foreseeable future actions, regardless of the agency or persons that undertake the other action or whether the actions are on private, state or federal land. The EE will be prepared by (or on behalf of) MMD as part of the Permit Application Package (PAP). MMD will determine, based on the review of the EE and PAP, and pursuant to the other requirements of 19.10.6 NMAC, whether the PAP is approvable or not approvable.</p> <p>A written certification from NMED is needed for wet general permits. In accordance with the New Mexico Mining Act, the NMED must provide to Mining and Minerals Division a written certification stating that the water quality standards are expected to be met if the operation is conducted as described. As such, upon submittal of the general permit-wet application</p>
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⁴ See: "Guidance Document for Part 3 Permitting Under the New Mexico Mining Act," *Energy, Minerals and Natural Resources Department* (2011), available at: http://www.emnrd.state.nm.us/MMD/MARP/Documents/Part_3_Guidelines_October2011_.pdf.



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		<p>to MMD, a copy of the application must also be submitted directly to the New Mexico.</p> <p>To qualify for a minimal impact new operation permit, the disturbed area must be less than 10 acres in total. The project must also meet the definition of Minimal Impact in 19.10.1.M.(2) NMAC. In accordance with the New Mexico Mining Act, the permit applicant or operator must provide to MMD a written determination from the Secretary of the Environment Department stating that the permit applicant has demonstrated that the activities to be permitted or authorized will be expected to achieve compliance with all applicable air, water quality and other environmental standards if carried out as described. Once the written determination is received from NMED by the applicant, a copy of the determination must be sent to MMD before MMD can approve a permit. If NMED does not issue a written determination for the proposed activities, the project does not qualify for a minimal impact mining permit.</p>
5.	<p>Tariffs for water use</p> <p>Do mines have to pay for water usage? If yes, who sets the tariffs?</p>	<p>There is no tariff for water use in New Mexico.</p>
6.	<p>Requirements for recycling water</p>	<p>There is currently no water recycling requirements in New Mexico, notwithstanding the scarcity of water resources in the state⁵.</p> <p>However, there is a financial incentive for returning water to rivers or aquifers: If water has been used for commercial purposes and the water rights holder has returned clean water to a river or aquifer, the water</p>

⁵ Note that The New Mexico Office OSE has initiated the Water Conservation Program, which coordinates water conservation activities for the State of New Mexico. The program goals are to increase awareness regarding the value of the state's water resources; provide assistance to entities initiating water conservation plans and programs and, to assist in the development of state government policies which will encourage the implementation of water conservation measures in various water use sectors.



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		<p>rights holder may be eligible to receive “return flow credits.”</p> <p>Drilling and water conservation: A form of water quantity protection is in place for drilling. Approval of drill hole plugging is required by the Water Rights Division of the OSE. The objective is to ensure that water encountered during drilling activities is confined to the aquifer in which it was encountered.</p> <p>Dewatering: Mine dewatering is permitted, but not required. The Water Rights Division of the OSE is responsible for issuing mine dewatering permits pursuant to the Mine Dewatering Act.</p> <p>For open pit copper mines, water generated from within the perimeter of the open pit and pit dewatering activities must be managed according to a mine operation water management plan, which must be submitted for approval in a discharge permit application for a new copper mine facility or in an application for a discharge permit renewal (NMAC, Title 20: 20.6.7.24 C)</p>
7.	<p>What rights, if any, does the relevant Authority have to change the amount of water allotted to a mine? Is the mining company allowed compensation for such changes?</p>	<p>There are some exceptions that might be interesting to note: See (1) Federal reserved rights on p. 14 and public interest on p. 16: http://srwgis.tamu.edu/media/2264/hurd.pdf</p>

3. Regulation of water quality and waste water discharge in mining in New Mexico

Water Quality questions		
No	Topic	Answer
1.	<p>Requirements for a permit for mine waste discharge</p> <p>Does a mine have to apply for a permit to discharge waste/ waste water into surrounding water courses? If so, what</p>	<p>A number of permits are required at both the state and the federal level for maintaining the quality of New Mexico waters.</p> <p>A. State-level permits</p>



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<p>permits are required? What is the permitting process?</p>	<p>Notice of intent of discharge: At the state level, a notice of intent to discharge must be filed with the Ground Water Quality Bureau for discharges that may affect ground water, and/or the Surface Water Quality Bureau for discharges that may affect surface water (20.6.2.1201).</p> <p>The relevant Bureau’s secretary then has 60 days to notify the applicant if a discharge permit is required. Copper mines always require a discharge permit to discharge leachate from their facilities (NMAC, Title 20, 20.6.7.8). This does not relieve a copper mine facility owner, operator or permittee from complying with the requirements of other applicable local, state and federal regulations or laws.</p> <p>An application for a discharge permit for a copper mine must provide information about (i) pre-discharge total dissolved solids concentration in ground water, (ii) a determination of the maximum daily discharge volume of process water and tailings; and (iii) the concentration of tailings in its discharge permit application (NMAC, Title 20, 20.6.7.11.G)]</p> <p>If the holder of a discharge permit submits an application for discharge permit renewal at least 120 days before the discharge permit expires (or 270 for a copper mine – 20.6.7.10C), and the permit holder is not in violation of the discharge permit on the date of its expiration, then the existing discharge permit for the same activity will not expire until the application for renewal has been approved or disapproved (see 20.6.2.3106 (it relates to 26.6.2.1201 through the linchpin of 20.6.2.3106.B).</p> <p>B. Federal level</p> <p>At the federal level, a NPDES permit and/or dredge-and-fill permits are required according to the type of activity undertaken on site. Both</p>
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	<p>types of permits need to be certified at the state level.</p> <p>1. National Pollutant Discharge Elimination System (NPDES) permit⁶ Section 402 of the CWA requires all point source discharges from mining operations⁷ including discharges from associated impoundments, be authorized under an NPDES permit</p> <p>NPDES permits are issued by states that have obtained EPA approval to issue permits or by EPA Regions in states without such approval. New Mexico does not have approval to issue the permits - the Regulatory Division of the US Army Corps of Engineers issues and authorizes the NPDES permits.</p> <p>For mining activities on tribal lands, a tribal permit for the discharge of waste will be required. Tribal permits in New Mexico are also managed by EPA Region 6.</p> <p>The CWA limits the length of NPDES permits to five years. NPDES permits can be renewed (reissued) at any time after the permit holder applies. In addition, NPDES permits can be administratively extended if the mining company reapplies more than 180 days before the permit expires, and EPA or the state regulatory agency that issued the original permit, does not renew the permit before its</p>
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⁶ For more information on the NPDES permitting process, see the EPA’s “Water permitting 101”, available at: <https://www3.epa.gov/npdes/pubs/101pape.pdf>.

⁷ EPA explanation of waste from ore mining: “Mine operators extract **ores** (metal-bearing rock) from underground mines and surface mines using machinery, explosives and chemicals. Extraction processes include dressing (picking, sorting, washing of ores), milling (crushing, grinding, etc.) and beneficiation (processing to improve purity/quality). Wastewater is generated during the mining process from groundwater produced during ore extraction, from water used by operators for equipment cooling and dust control, and from precipitation entering mines. Wastewater is also produced during the ore milling and beneficiation processes (e.g., chemical leaching), and from contaminated stormwater at storage facilities.” See EPA website on Ore Mining and Dressing Effluent Guidelines at: <http://www.epa.gov/eg/ore-mining-and-dressing-effluent-guidelines>.



		<p>expiration date through no fault of the permit holder.⁸ Under § 402 CWA.</p> <p>State certification of NPDES: NPDES permits are subject to state certification, which is intended to certify that the draft federal permit will comply with applicable state water quality standards (20.6.2.2001). State certification generally takes around 45 days from the date a request to grant (20.6.2.2001, G). Such a certification lasts for a fixed term not to exceed 5 years.</p> <p>2. Dredge-and-Fill permit If the mining site needs to discharge either dredged or fill material into any body of water, then a section 404 permit is also required from the U.S. Army Corps of Engineer.</p> <p>State certification is also required for the dredge-and-fill permit. The final certification will generally be issued within 60 days from the date a request to grant, deny, or waive certification is received by the New Mexico Environment Department. Such a certification is valid for up to 5 years.</p> <p>Satisfaction of requirements for water quality specified under each permit is made with reference to state water quality standards mandated under section 303 of the Clean Water Act. In New Mexico, the Integrated Report is designed to satisfy the statutory requirements of Section (§) 303(d) and the reporting requirements of §§ 305(b) and 314 of the CWA. It is also designed to serve as a source of basic information on water quality and water pollution control programs in New Mexico.</p> <p>Where a federal agency maintains jurisdiction over 402 or 404 permits, like in New Mexico, an</p>
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⁸ EPA: “NPDES Frequent Questions”, available at: <http://www.epa.gov/npdes/npdes-frequent-questions>.



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		<p>environmental impact statement/environmental assessment⁹ must be carried out prior to review of the section 402 or 404 permit. The NEPA review provides information for the federal agency decision to issue or deny the permit pursuant to the Clean Water Act.</p>
2.	<p>Other licensing/permitting processes that cover water quality/discharge</p>	<p>No other permitting process is known at the level of New Mexico Environment Protection Department.</p>
3.	<p>Nexus with environmental impact assessments/ statements</p> <p>What is the process for obtaining an environmental impact assessment? At which stage of the mining process must it be obtained? To what extent are water issues covered in it?</p>	<p>A state environmental evaluation is required for obtaining a general mining permit in New Mexico, which is administered at the state level for mining activities on federal, state and private land (see Part 3).</p> <p>Since Section 402 and 404 permits qualify as major federal actions that may significantly affect the environment, an environmental assessment will most likely be undertaken at a federal level under NEPA when such permits are requested. The NEPA analysis must be performed prior to review of the section 402 or 404 permit. The NEPA review provides information for the federal agency decision to issue or deny the permit pursuant to the Clean Water Act.</p> <p>There is no set timing for a NEPA analysis being it contingent on the complexity of the evaluation. However, permittees are required to file an application for a new NEPA analysis and a new permit whenever they intend to undertake any change, for instance a new mine is to be opened.</p> <p>The New Mexico Mining Act also requires the Secretary of the Environment Department to</p>

⁹ **Environmental Impact Statements** are detailed written statements that are required by section 102(2)(C) of NEPA for a proposed major Federal action significantly affecting the quality of the human environment.



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		<p>make a determination that the applicant submitting the close out plan has demonstrated that the proposed mining activities will comply with all air, water and environmental standards (69.36.11.B). Guidance for this determination is provided in appendix 1 of the New Mexico close out plan guidelines.</p>
<p>4.</p>	<p>Are there regulations regarding the storage of tailings/ waste water by mines?</p>	<p>During the permit application process (either under section 402 or 404 of the CWA), the USACE will determine the need for water waste storage facilities (CWA, Section 102(b)(2)). In New Mexico, it is the New Mexico Environment Department (NMED) that has the authority to determine the need and specifications for water waste storage facilities during the permit application process.</p> <p>For copper mining, there are regulations that stipulate the design and storage requirements for tailings impoundments (see NMAC 20.6.7.22).</p>
<p>5.</p>	<p>Acid mine drainage¹⁰ regulations</p>	<p>.The New Mexico Closeout Plan Guidelines provide some guidance on addressing acid mine drainage as part of the reclamation and closeout plan (See p. 16 of the Guidelines as well as Appendices 1 and 2 available here .)</p> <p>Copper mining is subject to additional requirements regarding acid mine drainage. Mining companies must submit a material characterization plan for approval to the New Mexico energy, minerals, and natural resources department that sets out a method for evaluating the potential of all stored, deposited and disposed of waste rock at a copper mine facility to generate acid and release water</p>

¹⁰ Acid mine drainage is defined in Title 20 of the New Mexico Administrative Code as: “water that is discharged from an area affected by mining exploration, mining, or reclamation, with a pH of less than 5.5 and in which total acidity exceeds total alkalinity as defined by the latest edition of standard methods for the examination of water and wastewater,” available at: <http://164.64.110.239/nmac/parts/title20/20.006.0007.htm>.



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		contaminants in excess of New Mexico’s water quality standards in 20.6.2.3103 NMAC (NMAC 20.6.7.21) characterization plan that includes the following.
6.	Recycling requirements – Are there any requirements/ incentives for mines to recycle water/ minimize water discharge?	State authorities do not appear to require recycling water (see also 4.4).
7.	Any specific regulation of waste for copper and/or gold mining?	Copper mining operations are subject to more stringent requirements in relation to discharge from their facilities as set out in NMAC 20.6.7.10 .

4. Regulation of water issues related to post mine closure

Post-mine closure questions		
No	Question	Answer
1.	Requirements for closure	A mining and reclamation plan and financial assurance must be submitted and approved prior to initiation of mining operations within the application for the mining permit.
	(a) Closure plan: What are the requirements for a closure plan?? Who approves it, if anybody?	<p>A close out plan must be submitted as part of an application for a mining permit (New Mexico Mining Act at 69.36.11 and New Mexico Mining Act Rules). The requirements for a mine closure plan are clarified in the closeout plan guidelines available here. Specific guidance in relation to compliance with water requirements is available in appendix 2 to the guidelines.</p> <p>The relevant approving body is the New Mexico Energy, Minerals and Natural Resources Department.</p>



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		<p>(b) Bond requirements</p>	<p>Financial assurance (in the form of a surety bond, letter of credit, etc.) must be provided by a person applying for a mining permit in an amount adequate to complete the proposed reclamation or closeout plan, or specific increments of reclamation, if the work has to be performed by a third party contractor with the state. The form and amount of the financial assurance will be determined by the director of the Mining and Minerals Division (MMD) and take into account, but not be limited to, the estimated cost submitted by the applicant. The amount will also be subject to a periodic review to account for any inflationary increases and anticipated changes in reclamation or closure costs (NM ST § 69-36-7).</p> <p>See Appendix 4 of the New Mexico Closeout Plan Guidelines available here.</p>
		<p>(c) Water quality/ Tailings dam requirements</p>	<p>Some tailings dam design requirements are included in Appendices 1 and 2 of the New Mexico Closeout plan guidelines for existing mines (1996) available here.</p>
2.	<p>Post-mine closure monitoring requirements</p>		<p>A monitoring plan should be incorporated into the reclamation plan submitted.</p> <p>After closing out a mine site, companies need to monitor the site for 12 years and prove they have met the required environmental standards (e.g. re-vegetation) before the financial assurance can be released. The criteria of environmental preservation comes under the heading of “self-sustaining eco systems”, by which monitoring is to be provided by the company every year while final controls are carried out by the New Mexico Energy, Minerals and Natural Resources Department at the end of the 12-year period.</p>
3.	<p>Liability period - For how long, if at all, is a mine liable for water contamination after a mine has closed?</p>		<p>Surface water quality standards apply at all times. A mining company remains liable for violations of discharge permits (Section 402 and 404 of Clean</p>



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		Water Act) (see enforcement section 7.6 of this template).
4.	Are there any reporting requirements in relation to a mine's preparation for post-closure?	



5. Enforcement/ Regulatory actions

General questions		
No	Topic	Answer
1.	What enforcement actions, if any, can government/ public authorities/ citizens take for breach of any of the relevant laws/ regulations	<p>A. Federal permits</p> <p>1. Violations of section 402 NPDES permit Penalties for violation of NPDES permit conditions may be criminal, civil and administrative (see template on federal law for more information).</p> <p>2. Violation of the dredge-and-fill permit For violations of section 404 permits, permit provisions are enforced by New Mexico Environment Department in accordance with state law and by the USACE or any other person in accordance with federal law. State-only provisions are enforceable only in accordance with state law.</p> <p>Violations of the dredge-and-fill permit may also trigger liability under Section 107 CERCLA.</p> <p>In cases in which dredge or fill material are discharged into U.S. waters without a 404 permit, the EPA and USACE jointly determine the appropriate agency to lead an enforcement action.</p> <p>B. State permits In case of violation of state permits (both quantity and quality permits), the permit may be subject to cancellation. Moreover civil and administrative sanctions may also be imposed.</p> <p>C. Actions at common law Private parties and the relevant state authority may also bring a claim under either private or public nuisance law. Injunctive reliefs, costs and damages might be recovered.</p>



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<p>2.</p>	<p>Which body is responsible for taking regulatory enforcement actions against mines? What is the procedure?</p>	<p>The EPA’s Office of Enforcement and Compliance Assurance is responsible for enforcing section 402 violations. New Mexico’s Environment Department officials usually carry out inspections on the part of the EPA. On average, they inspect facilities of major dischargers yearly and facilities of minor dischargers biannually.</p> <p>Any enforcement action for violation of section 404 is headed by the Army Corps of Engineers (COE) under a MOA between the EPA and COE. A section 404 permit allows the New Mexico Environment Department to enter upon the permittee’s premises to monitor mining activities, to access documents, and to inspect the facilities.</p> <p>CERCLA actions are administered by the EPA.</p> <p>Enforcers go to court only for the most egregious violations since judicial procedures are more costly. More than 95% of violations are dealt with administratively through administrative order: see CWA §309(g) (Sackett case).</p> <p>State actions are enforced by either the SOE or the New Mexico Environment Protection Department.</p> <p>Nuisance actions are brought to the relevant state court by either private people or state authorities (see here).</p>
<p>3.</p>	<p>Is there a database that collates information on any penalties/ fines that mining companies have to pay for a breach of legislation in relation to water use in the mining sector?</p>	<p>Not specifically under NM administrative practices.</p> <p>Civil and criminal decisions regarding violations of Sections 402 and 404 of the Clean Water Act are available as a matter of public record.</p> <p>Information on National Priorities List (NPL) locations, as prioritized by the EPA under CERCLA, is available on the EPA website.</p>
<p>4.</p>	<p>Briefly outline the procedure for bringing a case and specify which court the case would be brought to.</p>	<p>1. Section 402 and 404 permits 1.1 Criminal, Civil and Administrative Procedures The relevant regional office of EPA's Criminal Investigation Division may initiate an investigation into</p>



		<p>permit violations (under section 402 or 404). Such violations may be prosecuted by the U.S. District Attorney in a District Court. The Administrator can bring civil enforcement actions before the relevant federal judge, whereas administrative sanctions are imposed at agency's level and may undergo a review proceeding in case they are challenged.</p> <p>1.2 Citizens' suits Citizens may bring a suit against any person alleged to be in violation of water-related permits,¹¹ immediately for violations of NPDES or toxic effluents standards,¹² and in general after 60 days from when the plaintiff has given notice of the alleged violation to the Administrator, the State, and the alleged violator.¹³ Nonetheless, any such action is barred if the Administrator or State "has commenced and is diligently prosecuting a civil or criminal action."¹⁴</p> <p>1.3 CERCLA actions For action under CERCLA to be taken, a mining site must be listed on the National Priorities List (NPL). Section 300.425(c) of CERCLA's implementing regulations designate the ways in which sites may be placed on the list.</p> <p>2. State permits New Mexico SOE may cancel the permit and impose sanctions relating to the violation of quantity permits. Conversely, New Mexico Environment Protection Department is competent for imposing sanctions for the violation of quality permits.</p> <p>3. Nuisance actions at common law A public nuisance action may be brought by the relevant state authority for an unreasonable interference with a right to the general public.</p>
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¹¹ Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. § 505 (2012).

¹² Clean Water Act § 505 (b).

¹³ Clean Water Act § 505 (b) (A).

¹⁴ Clean Water Act § 505 (b) (B).



		<p>A private nuisance action is brought by a private person for the non-trespassory invasion of his/her interest in the private use and enjoyment of land.</p>
<p>5.</p>	<p>Who has standing to bring a case?</p>	<p>Standing is particularly relevant for citizens’ suits and private nuisance actions.</p> <p>1. Citizens’ suits Citizens need to prove (1) an injury in fact; (2) an injury that is fairly traceable to the challenged action of the defendant; and (3) redressability by a favorable judicial decision. A fourth prong has recently been introduced as a non-constitutional but only judicial requirement, and is prudential standing (zone of interests test), whether the kind of injury the plaintiff is complaining of is within the <i>zone of interest</i> protected by the statute (<i>Comer v. Murphy Oil</i>, 2013).</p> <p>Citizens often sue through environmental NGOs. Standing has been increasingly limited for such NGOs, and the following elements are required: 1) at least one member would have standing to sue individually; 2) the interests the organization seeks to protect are “germane” to the organization purposes; 3) neither the claims asserted nor the relief requested requires the participation in the lawsuits of individual members (<i>Int’l Union</i>, 1986).</p> <p>2. Private nuisance actions entail:</p> <ul style="list-style-type: none"> i. A showing of substantial harm; and ii. A showing that interference is intentional and unreasonable or unintentional and otherwise actionable under the rules controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities.
<p>6.</p>	<p>What is the relevant statute of limitations?</p>	<p>The CWA does not provide a statute of limitations for either citizens’ or government’s enforcement actions, leaving it to the relevant judge, if any, to decide whether and what statute of limitations is applicable.</p> <p>For CERCLA- related violations, the statute of limitations period depends on how an action has been</p>



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		<p>characterized. Indeed, a CERCLA civil suit could be a contribution action (three years), a cost recovery removal action (three years after completion of the removal action, or a cost recovery remedial action (six years after the initiation of physical on-site construction of the remediation).¹⁵ .</p> <p>The statute of limitations for most violations of the state wastewater disposal permit is generally six years.</p> <p>In private nuisance actions, the statute of limitations differs depending upon whether the activity is a "permanent" or "continuing" nuisance. No specific information was found on Alaska common law. However, the statute of limitations for actions based upon a "permanent" nuisance is usually three years from the date original creation of the nuisance. Similarly, actions based upon a "continuing" nuisance carry a statute of limitations of generally three years from the most recent repetition and/or continuation of the offensive activity.</p>
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8. Contacts

General permit and reclamation: Mr Holland Shepherd, (505) 476-3437

Water resource and allocation: (505) 827-6120

NPDES & Other Permits: Mr Bruce Yurdin, (505) 827-2795

Dredge-and-Fill Permits: Mr Abe Franklin, (505) 827-2793

¹⁵ Sections 106-7 of CERCLA.



ANNEXURES

A. Relevant Legislation (policies, laws, and regulations) governing water issues in the mining sector in New Mexico¹⁶

No.	Name of Legislation	Brief description of how it applies
Mining Laws		
1.	New Mexico Mining Act of 1993	The Act outlines regulations related to mining permitting and closeout plans, as well as creating the New Mexico Mining Commission. The Act is administered by the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department.
Environmental laws		
2.	Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“ CERCLA ” or “ Superfund ”)	<p>CERCLA¹⁷ broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA::</p> <ul style="list-style-type: none"> • Sets out requirements concerning closed and abandoned hazardous waste sites; • Authorizes the EPA to seek out those parties responsible for any release and assure their cooperation in the cleanup; • Establishes a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment; and • Requires the EPA to clean up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act.. <p>The EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the</p>

¹⁶ Specifically copper and gold, which are hard rock minerals. Also note that there may be some references to water use, environmental/ water discharge, and post-closure obligations in the mining code/ general mining legislation.

¹⁷ See the EPA website for more information on CERCLA at: <https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act>.



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		<p>state environmental protection or waste management agencies.</p> <p>CERCLA was amended by the Superfund Amendments & Reauthorization Act (SARA) of 1986. SARA, among other things, increases the level of state involvement in CERCLA remediation.</p>
3.	<p><u>Federal Water Pollution Control Act</u> of 1972 ((The “Clean Water Act” or “CWA”) (33 U.S.C. § 1251 et seq.)</p>	<p>The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.</p> <p>Under the CWA, the EPA has implemented pollution control programs such as setting wastewater standards for industry and water quality standards for all contaminants in surface waters.</p> <p>The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained.¹⁸ EPA's National Pollutant Discharge Elimination System (“NPDES”) permit program controls discharges.</p> <p>Pursuant to the CWA, mining companies must obtain:</p> <ul style="list-style-type: none"> • Section 402 NPDES permits if their discharges go directly to surface waters; and • Section 404 permits for any dredge and fill operations in bodies of water.
4.	<p><u>The National Environmental Policy Act of 1969</u> (“NEPA”) (42 U.S.C. §§ 4321-4327)</p>	<p>NEPA requires federal agencies to assess the environmental impacts of their proposed actions prior to taking a decision.</p> <p>The range of actions covered by NEPA includes:</p> <ul style="list-style-type: none"> - Making decisions on permit applications (such as the NPDES permits); - Adopting federal land management actions; and - Constructing highways and other publicly-owned facilities.¹⁹

¹⁸ Point sources are discrete conveyances such as pipes or man-made ditches. See the EPA’s website on the CWA at: <https://www.epa.gov/laws-regulations/summary-clean-water-act>.

¹⁹ For more information, see the EPA’s summary of NEPA at: <https://www.epa.gov/nepa/what-national-environmental-policy-act>.



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5.	Resource Conservation & Recovery Act of 1976 (“RCRA”)	<p>The RCRA authorizes the EPA to control hazardous waste from the "cradle-to-grave."²⁰ This includes the generation, transportation, treatment, storage, and disposal of hazardous waste.</p> <p>The RCRA also set forth a framework for the management of non-hazardous solid wastes.</p>
6.	Safe Drinking Water Act of 1974 (“SDWA”) (42 U.S.C. § 300 et seq.)	<p>The main federal law that ensures the quality of drinking water in the U.S. It focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources.²¹</p> <p>Under SDWA, the EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. To enforce this act, administrative orders, either with or without penalty, may be issued by an executive agency of the state or federal government. Judicial actions include civil and criminal court cases.</p>
7.	Ore Mining and Dressing Effluent Guidelines and Standard	<p>EPA promulgated the Ore Mining and Dressing Effluent Guidelines and Standards (40 CFR Part 440) in 1975, and amended the regulation in 1978, 1979, 1982 and 1988.</p> <p>The regulation covers wastewater discharges from ore mines and processing operations. The Ore Mining Effluent Guidelines and Standards are incorporated into the NPDES permits.</p>
8.	Title 20 New Mexico Administrative Code (“NMAC”)	<p>Title 20 of the New Mexico Administrative Code is devoted to environmental protection.</p>
Land Management Laws		
9.	Federal Land Policy and Management Act (“FLPMA”) (43 U.S.C. §§ 1701-1782)	<p>The FLPMA governs the way the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) administer public lands, including mining on public lands.</p>

²⁰ For more information on the RCRA, see the EPA’s summary at: <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

²¹ EPA summary of the SDWA, available at: <https://www.epa.gov/laws-regulations/summary-safe-drinking-water-act>.



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		<p>Under the FLPMA, any actions related to land use made by the BLM or U.S. Forest Service are subject to the process of the National Environmental Policy Act of 1969 (“NEPA”). Federal land managers generally require Plans of Operation, which include reclamation plans and provide details of the proposed operations.</p>
Water Laws		
10.	New Mexico Water Quality Act	<p>The New Mexico Water Quality Act regulates water quality management in New Mexico.</p> <p>The Act establishes the Water Quality Control Commission (WQCC) and authorizes it to adopt water quality standards and to direct programs consistent with the federal Clean Water Act.</p>
11.	2006 New Mexico Statutes - Section 72-12A-5 (“Mine Dewatering Act”)	<p>The New Mexico Mine Dewatering Act aims to promote maximum economic development of mineral resources while ensuring that such development does not impair existing water rights. Any dewatering action requires the issuance of a permit on the part of the Water Rights Division of the Office of the State Engineer. Mine dewatering is neither an appropriation of water nor waste. No water right may be established solely by mine dewatering.²²</p>

²² Most large open pit mine operations encounter groundwater since they are generally developed vertically. In order to prevent groundwater inflow, mining companies have devised a series of dewatering techniques and thus require the issuance of a permit to operate in New Mexico.



B. List of relevant authorities involved in the regulation of water in the mining sector in New Mexico

No.	Name (In English and local language)	Brief description of its role
Mining agencies		
1.	<u>New Mexico Energy, Minerals and Natural Resources Department, Mining & Minerals Division</u> (“MMD”)	The MMD is responsible for administering and enforcing legislation relating to mine safety, coal surface mine reclamation and abandoned mine lands Reclamation more generally (§9-5A-4.D, NMSA 1978).
2.	<u>New Mexico Mining Commission</u> (“NMMC”)	The NMMC was created in the 1993 New Mexico Mining Act as the rulemaking and administrative review body for the Act.
3.	<u>New Mexico Environment Department, Mining Environmental Compliance Section</u> (“MECS”)	<p>The MECS conducts all of the permitting, spill response, abatement and public participation activities for mining facilities in New Mexico in accordance with the Water Quality Control Commission (WQCC) Regulations (20.6.2 NMAC).</p> <p>In addition, the MECS participates in the implementation of the New Mexico Mining Act and Non Coal Mining Regulations by reviewing and commenting on mine permits and closeout plans, coordinating environmental protection requirements at mine sites with the Mining and Minerals Division of the Energy, Minerals and Natural Resources Department, and providing determinations that environmental standards will be met after closure of mining operations in New Mexico.</p> <p>The MECS currently manages over 55 active mining permits.</p>
Environmental agencies		
4.	<u>Environmental Protection Agency</u> (EPA)	<p>The central coordinating agency for implementation of environmental quality standards legislation. The EPA:</p> <ul style="list-style-type: none"> • Administers the National Pollutant Discharge Elimination System (NPDES) (as authorized by the Clean Water Act) in collaboration with State environmental agencies; • Issues underground injection control permits, as authorized by the Safe Drinking Water Act; and



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		<ul style="list-style-type: none"> Issues hazardous waste identification numbers pursuant to RCRA. <p>New Mexico falls into EPA Region 6 (South Central).</p>
5.	Solid Waste Bureau (“SWB”) of the New Mexico Environment Department	<p>The SWB of the New Mexico Environment Department (NMED) oversees solid waste management (including special wastes such as asbestos, ash, and infectious waste) by administering the Solid Waste Facility Permit and Registration process under the authority of the New Mexico Solid Waste Act, and the federal Resource Conservation and Recovery Act (RCRA) subtitle D provisions for municipal solid waste landfills. It is generally required of mining companies.</p> <p>The NMED asserts jurisdiction over all industries in New Mexico that are not subject to the jurisdiction of any federal safety agency other than the federal Occupational Safety and Health Administration (OSHA).</p>
6.	U.S. Army Corps of Engineers – New Mexico (“USACE”)	<p>The USACE administers discharge permits under Section 404 of the Clean Water Act.</p> <p>The USACE New Mexico office is located in Albuquerque.</p>
7.	U.S. Fish and Wildlife Services – Southwest Region	<p>The Fish and Wildlife Service has jurisdiction over a variety of areas designed primarily for species protection, such as National Fish and Wildlife Refuges.</p> <p>Although mining operations are generally prohibited in these areas, the agency has some statutory and regulatory authority for controlling allowed mineral development, including mineral development rights such as valid mining claims that had vested before the lands were designated as protected areas.</p>
Land		
8.	Bureau of Land Management (“BLM”)	<p>The BLM administers over 258 million surface acres of public lands, most of which is located in the 12 Western states, and over 700 million acres of sub-surface minerals throughout the country pursuant to the FLPMA. For more information see the BLM’s publication on Mining Claims and Sites on Federal Lands.</p>



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		<p>The BLM’s manages a program on Abandoned Mine Lands (AML), which seeks to improve water quality by reducing or eliminating the effects of past hardrock mining in the Western United States.</p> <p>BLM maintains an inventory of known abandoned mine lands on public lands that can be accessed here: http://www.abandonedmines.gov/wbd_hm.html.²³</p> <p>The BLM New Mexico site is accessible here: http://www.blm.gov/nm/st/en.html</p>
9.	<p>New Mexico Environment Department, Surface Water Quality Bureau (“SWQB”)</p>	<p>The Point Source Regulation Section (PSRS) of the SWQB is responsible for the protection of surface water quality through implementation of Ground and Surface Water Protection Regulations dealing with point source discharges, spill reporting, etc. The PSRS::</p> <ul style="list-style-type: none"> • Assists the US EPA in implementing its NPDES permitting program; • Conducts and maintains a comprehensive surface water quality monitoring program for New Mexico’s regulated community of industrial and municipal effluent dischargers; • Assures all point source discharges within the State comply and are compatible with applicable State law, State water quality standards and the State’s Water Quality Management Plan.
10.	<p>New Mexico Environment Department, Ground Water Quality Bureau (“GWQB”)</p>	<p>The role of the GWQB is to protect the environmental quality of New Mexico's ground water resources as mandated by the Water Quality Act and the Water Quality Control Commission (WQCC) regulations (20.6 NMAC), and to identify, investigate and clean-up contaminated sites which pose significant risks to human health and the environment.</p>

²³ Most of the sites are abandoned hardrock mines. As of April 18, 2014, the inventory contained nearly 46,000 sites and 85,000 features. Approximately 23% of the sites have either been remediated, have reclamation actions planned or underway, or do not require further action. The remaining 80% require further investigation and/or remediation. The BLM and its partners are working on sharing and displaying AML spatial data within a National Mine Land Inventory. See BLM website at: http://www.blm.gov/wo/st/en/info/About_BLM.html. The National Park Service also maintains an inventory of abandoned mine lands on national park service units, available at: <http://www.nature.nps.gov/GEOLOGY/aml/inventory/index.cfm>.



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11.	New Mexico Environment Department, Hazardous Waste Bureau (“HWB”)	The HWB has the responsibility to issue the Hazardous Waste Permit (Treatment, Storage and Disposal) and the Hazardous Waste Handlers Permit (generators, storage, treatment and disposal), which is generally required of mining companies. It receives its statutory authority from the New Mexico Hazardous Waste Act and, as the state program authorized to implement the federal program, from the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA).
12.	U.S. Forest Service (“USFS”)	Exploration and mining activities on lands administered by the USFS are subject to the regulations in 36 CFR 228(A). Any proposed operation that is likely to cause significant disturbance of surface resources must obtain the prior approval of the USFS.
Water agencies		
13.	New Mexico Water Quality Control Commission	The commission is the state water pollution control agency for all purposes of the federal Clean Water Act and the wellhead protection and sole source aquifer programs of the federal Safe Drinking Water Act . The duties and powers of the commission include, among others, the adoption of water quality standards, a comprehensive water quality management program, ; and regulations "to prevent or abate water pollution in the state or in any specific geographic area or watershed of the state (..) or for any class of waters."
14.	New Mexico Office of the State Engineer (“OSE”)	The Office of the State Engineer is charged with administering the state's water resources. The State Engineer has authority over the supervision, measurement, appropriation, and distribution of all surface and groundwater in New Mexico, including streams and rivers that cross state boundaries. The Water Resources Allocation Program (WRAP) with the Office of the State Engineer is responsible for processing water rights applications, conducting the scientific research for making those water rights. decisions, maintaining water rights records, and enforcing any conditions or restrictions on water use.
15.	New Mexico Interstate Stream Commission	The Interstate Stream Commission is part of the Office of the State of Engineer (OSE) and has broad powers to investigate, protect, conserve, and develop New Mexico’s waters including both interstate and intrastate stream systems. The eight unsalaried members of the Commission are appointed



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		<p>by the Governor. The ninth member is the State Engineer who under state law is the secretary of the Commission. The Interstate Stream Commission Director serves as the deputy state engineer.</p>
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