

## Editor's Note

Welcome to the summer issue of the NREEL *Vista* newsletter. It is with great pleasure that I take over editing this twice-yearly publication from Sally Paez, who, ironically, also preceded me as editor-in-chief of the *Natural Resources Journal* at University of New Mexico School of Law. She sets a high bar, and I hope to keep up the tradition of bringing you topics of interest during my tenure.

Although not by design, the three articles featured in this issue share a common theme: water. First, attorney Tomas Garcia provides a summary of key legislation considered during the 2013 New Mexico legislative session, including a new law meant to close a loophole that allowed double-dipping of water supplies for land development. Second, attorneys Jeffrey Wechsler and Lara Katz examine the evolution of the often-controversial rules on copper mines and what constitutes a “place of withdrawal” for measuring water quality standards. Finally, UNM law student

*continued on page 18*

## 2013 Legislative Update

*Tomas J. Garcia\**

New Mexico—and much of the western United States, for that matter—continues to endure a punishing drought. With the lapse of key provisions in the federal Reclamation States Emergency Drought Relief Act (“Drought Relief Act”) in 2012, the U.S. Bureau of Reclamation has been divested of certain authorities to help mitigate drought-related water shortages, such as the authority to drill new wells and provide temporary water supplies.<sup>1</sup> Unless Congress acts on pending legislation to reauthorize the Drought Relief Act through 2018,<sup>2</sup> state governments’ role in managing already scarce water supplies will have an even bigger impact on New Mexico residents and businesses.

With this reality—and the concern that fossil fuel dependence contributes to global warming trends that will worsen drought conditions in our region—it is not surprising that the New Mexico Legislature sought to address water allocation, among other natural resources management issues, during the 2013 legislative session.<sup>3</sup> Many of the environmental and natural resources bills proposed during the 2013 legislative session are noteworthy to the legal community. This article summarizes that legisla-

tion while focusing on three bills—two of which seek to close a legal loophole that allowed large landowners and developers to “double dip” into limited water supplies and another that promotes the development of a sustainable energy resource.

### **I. No Double Dipping: Senate Bill 479 – Adequate Subdivision Water Supplies; Senate Bill 480 – Subdivision Water Permits (Both Sponsored by Senator Peter Worth)**

With bipartisan support, the Legislature passed two bills intended to prevent developers from double dipping into New Mexico’s limited water supplies.<sup>4</sup>

## Inside this Issue

2013 Legislative Update .....	1
Understanding New Mexico’s Copper Rules.....	7
Regulating Hydraulic Fracturing: New Mexico and National Trends .....	13
News and Updates .....	17

Senate Bill (“SB”) 479 changes the requirements for subdivision plat approval for properties upon which the landowner has severed appurtenant irrigation water rights. Specifically, the bill requires the subdividing landowner to prove that adequate water supplies for indoor and outdoor domestic water use are available through an existing service commitment with a water provider before subdividing the land.<sup>5</sup> The bill prohibits counties



*Dry acequia near the Rio Grande in Albuquerque.*

from approving final plats for such properties that are supplied water from domestic wells instead of through service commitments from water providers.<sup>6</sup> In essence, SB 479 “prevent[s] landowners who sell off irrigation rights from their property from later subdividing the property and getting state permits to drill domestic water wells without acquiring new water rights”<sup>7</sup> based on the New Mexico domestic well statute, NMSA 1978, Section 72-12-1.1 (2003).

The domestic well statute provides that “[a] person, firm or corporation desiring to use public underground waters . . . for . . . domestic use shall make application to the state engineer for a well on a form to be prescribed by the state engineer. Upon the filing of each application describing the use applied for, the state engineer *shall issue a permit* to the applicant to use the underground waters applied for.” Section 72-12-1.1 (emphasis added). The mandatory language in the statute requires the state engineer to issue domestic well permits to applicants even if they originally had appurtenant water rights sufficient to meet their domestic water needs but chose to sell those rights and tap into public underground water instead. The domestic well statute is currently the subject of pending litigation, with senior water rights holders concerned about impairment to their rights from overuse of groundwater by new permit applicants in fully appropriated water basins.<sup>8</sup>

Proponents favored SB 479 for protecting New Mexico’s limited water supplies because it prevents large landowners and developers from gaining twice from the same water source: first by selling the water rights to the land at high market values, then by constructing major subdivisions on the land that rely entirely on domestic wells.<sup>9</sup> However, the Office of the State Engineer (“OSE”) criticized SB 479 as creating “a new burden to the subdivision review process” given the 30-day time limit within which the OSE is required to review subdivisions for issues related to water quantity.<sup>10</sup> The OSE maintained that “[i]f there are additional requirements placed on this review, it will be very difficult to provide an accurate review within the 30 day requirement.”<sup>11</sup>

As a companion bill to SB 479, SB 480 limits the use of domestic wells in subdivisions with ten or more parcels, one of which is two acres or less in size. SB 480 mandates that before a county can approve a final plat for subdivision, the subdividing landowner must provide (a) proof of a service commitment from a water provider or (b) a copy of a permit obtained from the state engineer for the subdivision water use.<sup>12</sup> The bill further requires the subdividing landowner to obtain an opinion from the state engineer that the subdivided property will have access to a sufficient amount of water to meet the domestic water needs for the proposed subdivision,<sup>13</sup> rather than relying on domestic well permits issued according to Section 72-12-1.1.

Supporters of SB 480 lauded it as being a positive step toward ensuring that subdivisions will have adequate supplies of water without overreliance on domestic wells, “which cumulatively may impair senior water rights holders.”<sup>14</sup> The Attorney General’s Office (“AGO”) noted a minor ambiguity in the language of SB 480 as drafted.<sup>15</sup>

Despite the OSE's administrative concerns about SB 479 and the AGO's concerns about ambiguous language in SB 480, Governor Susana Martinez signed both bills into law.<sup>16</sup>

## II. Promoting Sustainable Energy: House Bill 85 – Geothermal Resource Leasing (Sponsored by Representative Brian F. Egolf, Jr.)

With unanimous support in both the House and the Senate, the Legislature also passed a bill to promote the development of geothermal energy resources.

House Bill (“HB”) 85 is intended to make New Mexico more attractive for companies that wish to develop and utilize geothermal energy resources. The bill amends the Geothermal Resources Act to make the development of certain energy sources exempt from mandatory fees under the Act. Among other energy sources, HB 85 excludes “the heating and cooling capacity of the earth . . . as may be used for the heating and cooling of buildings through an on-site geoexchange heat pump or similar on-site system” from the definition of “geothermal resources.”<sup>17</sup> By excluding this energy source from the definition of “geothermal resources” and, thus, from being subject to fees for geothermal resource development under the Act, HB 85 seeks to encourage development and innovation in the heat-exchange, or geoexchange, industry for on-site heating and cooling of buildings.<sup>18</sup> HB 85 also encourages the State Land Office (“SLO”) to adopt rules and regulations consistent with the goal of preserving geothermal resources for long-term return to the state trust funds.<sup>19</sup> Additionally, HB 85 aligns New Mexico's billing procedures for geothermal resource leasing with the federal government's billing procedures so that companies that develop geothermal resources in New Mexico do not have to maintain different types of accounts for state and federal billing purposes.<sup>20</sup>



*Animas, New Mexico.*

© Photo by Patrick Alexander available at <http://www.flickr.com/photos/aspidocells/850241176/> under a Creative Commons Attribution 2.0. Full terms at <http://creativecommons.org/licenses/by/2.0>.

Proponents of HB 85 tout geothermal energy as being “a highly efficient and clean energy resource that harnesses naturally existing heat from the earth, rather than through combustion of fossil fuels.”<sup>21</sup> Thus, supporters praised HB 85 for “facilitating geothermal leasing and development on state lands, while authorizing [the SLO] to establish protections against geothermal resource depletion.”<sup>22</sup>

The geothermal industry is fairly new; thus, the long-term impact of HB 85 is, to some degree, unknown. However, the SLO noted that failure to enact HB 85 would leave New Mexico “with a cumbersome lease process potentially causing developers to avoid state lands,” which “could have unforeseen consequences, up to and including the indirect draining of the state's resources without remuneration.”<sup>23</sup>

Governor Martinez signed HB 85 into law on April 2, 2013.<sup>24</sup>

## III. Other Notable Legislation<sup>25</sup>

### A. Bills That Passed

#### **HB 21 (Sponsored by Representatives James E. Smith & Daniel Ivey-Soto)**

Title: Public Meeting Agendas 72 Hours in Advance  
Purpose: Amends the Open Meetings Act to increase the time that public bodies must make the final agenda avail-

able from at least 24 hours prior to a meeting to at least 72 hours, except in the case of an emergency or for public bodies that ordinarily meet more frequently than once a week.<sup>26</sup>

**HB 267 (Sponsored by Representative James R.J. Strickler)**

Title: Utility Energy Efficiency & Load Management

Purpose: Amends the Efficient Use of Energy Act to add a definition for “program costs” and change the definition for “total resource cost test” to a definition for “utility cost test” with the alteration that the cost test references monetary costs borne only by public utilities and not participants. Additional references to the total resource cost test are replaced with references to the utility cost test. Also amends language to require public utilities to acquire cost-effective and achievable energy efficiency and load management resources without requiring the utilities to acquire all such resources. Amends the “Cost Recovery” section to cap the costs of the energy efficiency and load management program for electric utilities at the lower of three percent of customer bills (excluding gross receipts taxes and franchise and right-of-way access fees) or \$75,000 per customer per year. Program costs for gas utilities are capped at the lower of three percent of annual revenues or \$75,000 per customer per year.<sup>27</sup>

**SB 163 (Sponsored by Senator Carlos R. Cisneros)**

Title: Change Board and Commission Sunset Dates

Purpose: Changes the effective date for the sunset of the Water Quality Control Commission (“WQCC”) from July 1, 2014 to July 1, 2019.<sup>28</sup> The WQCC approves variances for water quality regulations and hears appeals of water pollution permits and is the only entity in New Mexico authorized to enact rules pursuant to the federal Clean Water Act or to set water quality standards.<sup>29</sup>

**B. Bills That Did Not Pass**

**HB 47 (Sponsored by Representative Thomas C. Taylor)**

Title: PRC Qualifications

Purpose: Would have required persons elected or appointed to the Public Regulation Commission (“PRC”) to possess qualifying levels of education, experience, or a combination of the two, and would have further required PRC commissioners to complete 80 hours of continuing education in their first year of service, and at least 40 hours in subsequent years.<sup>30</sup>

**HB 136 (Sponsored by Representative Brian F. Egolf, Jr.)**

Title: Disclosure of Fracturing Fluid Composition

Purpose: Would have added a new section to the Oil and Gas Act to require the Oil Conservation Commission to adopt rules requiring the disclosure of the composition of hydraulic fracturing fluids used in hydraulic fracturing treatments in wells.<sup>31</sup>

**HB 163 (Sponsored by Representative Cathryn N. Brown) / SB 175 (Sponsored by Senator Carroll H. Leavell)**

Title: Utility Company First Right of Refusal

Purpose: Would have allowed for the incumbent public electric utility or incumbent generation and transmission cooperative to exercise a right of first refusal to construct, own, and maintain a transmission facility that has been identified as being eligible for regional cost allocation and that has been approved for construction by a regional transmission organization or to which it is already interconnected.<sup>32</sup>

**HB 181 (Sponsored by Representative Nate Gentry) / SB 309 (Sponsored by Senate Phil A. Griego)**

Title: Lease of Water Rights for Streamflow

Purpose: Would have created a new section of the Water-Use Leasing Act prescribing the requirements and procedure for the state engineer to approve water leases for streamflows that maintain or enhance fish and wildlife resources.<sup>33</sup>

**HB 259 (Sponsored by Representative Emily Kane)**

Title: Recover Damages for Natural Resource Injuries

Purpose: Would have amended the Natural Resources Trustee Act to expand the scope of the Act by authorizing the Natural Resources Trustee to pursue actions on behalf of the state to recover damages for injury to natural resources resulting from the release of injurious substances into the environment that are not in compliance with a license or permit issued by the state or federal government that is in effect at the time of the release.<sup>34</sup>

**HB 266 (Sponsored by James R.J. Strickler)**

Title: Renewable Energy Procurement Limits

Purpose: Would have made two significant changes to the Renewable Energy Act to expand the application of a cost threshold for customers of a public utility. First, the bill would have removed the limitation excluding governmental customers from the levying of additional costs of

the renewable portfolio standard on a customer. Second, the bill would have removed the exemption for the cost threshold for customers with consumption less than 10 million kilowatt-hours per year.<sup>35</sup>

**HB 335 (Sponsored by Representatives Brian F. Egolf, Jr. & Michael S. Sanchez)**

Title: Water Resource Testing & Damage Remedies  
Purpose: Would have required owners of oil and gas operations who conduct hydraulic fracturing operations to conduct a hydrologic and geologic assessment of the potential risks to ground and surface waters within a 2,000 meter radius of a well head to a depth of 1,000 feet below the well's target depth. The bill would have also created a cause of action for damage caused by hydraulic fracturing, with a three-year statute of limitations. A prevailing plaintiff would have been entitled to an award of attorney fees and punitive damages.<sup>36</sup>

**HB 429 (Sponsored by Representative Georgene Louis)**

Title: Environmental Private Right of Action  
Purpose: Would have amended the Oil and Gas Act and added new material to the Environment Act and Water Quality Act to create a private right of action to pursue enforcement of environmental laws against violators or agencies failing to enforce existing laws.<sup>37</sup>

**HB 458 (Sponsored by Representative Gail Chasey)**

Title: Consolidated Environmental Review Act  
Purpose: Would have required an environmental assessment to be conducted by a state agency for state-funded projects and by applicants for projects funded by the state or for a lease, permit, license, certificate, or other entitlement issued by the state.<sup>38</sup>

**HB 576 (Sponsored by Representative Stephanie Garcia Richard)**

Title: Return Water Flows During Irrigation Season  
Purpose: Would have required that when the flow of natural surface waters is fully diverted from a stream for a beneficial use and can be recycled by the appropriator, the appropriator must return the flow to the stream as treated effluent and recycled water during the growing seasons in May, June, July, August, and September.<sup>39</sup>

**SB 204 (Sponsored by Senator Phil A. Griego)**

Title: Renewable Energy Certificates for Thermal  
Purpose: Would have amended the Rural Electric Cooperative Act and the Renewable Energy Act to allow

Renewable Energy Certificates to be issued for thermal energy originating from forest-based biomass material (organic material that is available on a renewable or recurring basis) used to generate electricity.<sup>40</sup>

**SB 245 (Sponsored by Senator Jacob Candelaria)**

Title: Utility Info Disclosure to Customers  
Purpose: Would have added a new section to the public utilities code, Chapter 62, Article 8, NMSA 1978, requiring public utilities furnishing electricity in New Mexico to disclose to its retail customers the composition of its retail electricity sales by fuel type, the percentage of each fuel type, the cost per kilowatt-hour including costs for capacity, air pollutants emitted per kilowatt-hour, water consumed per kilowatt-hour, and any other significant environmental impacts.<sup>41</sup>

**SB 547 (Sponsored by Senator William Soules)**

Title: Ban Horizontal Oil & Gas Fracturing  
Purpose: Would have created a new section of the Oil and Gas Act prohibiting the combination of horizontal drilling and multistage hydraulic fracturing for the purpose of extracting oil and natural gas.<sup>42</sup>

**SB 563 (Sponsored by Senator Sue Wilson Beffort)**

Title: Export of Water from Critical Management Area  
Purpose: Would have added a new section to the water code, Chapter 72, Article 12, NMSA 1978, requiring the state engineer, when acting upon an application to change the place of use of a groundwater right whose point of diversion is within a declared underground water basin to a location outside that underground water basin, to consider and make findings regarding the proposed change in place of use upon that basin.<sup>43</sup>

---

Endnotes

\* Tomas J. Garcia is a 2011 J.D. graduate from the Georgetown University Law Center and currently serves as a law clerk to the Honorable Justice Charles W. Daniels on the New Mexico Supreme Court. He joins the Modrall Sperling Law Firm as an associate attorney in September 2013.

<sup>1</sup> See Reed D. Benson, *Drought Legislation Is Vital Right Now*, ALBUQUERQUE JOURNAL (Mar. 10, 2013), available at <http://www.abqjournal.com/main/2013/03/10/opinion/drought-legislation-is-vital-right-now.html> (discussing the lapse of the Drought Relief Act).

<sup>2</sup> H.R. 518, 113th Cong. (2013) (as introduced by the House, Feb. 5, 2013).

<sup>3</sup> John Fleck, *Senate Measures Tackle Water Problems in State*, ALBUQUERQUE JOURNAL (Feb. 13, 2013), available at <http://www.abqjournal.com/main/2013/02/13/news/science/senate-measures-tackle-water-problems-in-state.html>.

<sup>4</sup> *Legislative Roundup: March 15, 2013*, SANTA FE NEW MEXICAN (Mar. 14, 2013), available at [http://www.santafenewmexican.com/news/legislature/article\\_97adb467-009a-5c3c-a80f-ff173f30ce77.html](http://www.santafenewmexican.com/news/legislature/article_97adb467-009a-5c3c-a80f-ff173f30ce77.html) (last visited May 31, 2013).

<sup>5</sup> SB 479, 51st leg., 1st sess. (N.M. 2013), available at <http://www.nmlegis.gov/Sessions/13%20Regular/final/SB0479.pdf> (last visited May 31, 2013).

<sup>6</sup> *Id.*

<sup>7</sup> *Supra* note 4; see also *supra* note 5.

<sup>8</sup> See *Bounds v. State*, 2011-NMCA-011, 149 N.M. 484, 252 P.3d 708, cert. granted, 2011-NMCERT-001, 150 N.M. 558, 263 P.3d 900 (involving a challenge to the constitutionality of Section 72-12-1.1 because it requires the state engineer to issue domestic well permits upon application, but without prior notice to senior water rights holders and without any prior evaluation by the state engineer of the effect, if any, on senior water rights holders in a fully appropriated basin). This case was submitted to the New Mexico Supreme Court following oral argument on October 13, 2011.

<sup>9</sup> *Results from 2013 Legislative Session*, Conservation Voters of New Mexico, <http://www.cvn.org/Scorecard/Legislative-Agenda.html> (last visited May 31, 2013).

<sup>10</sup> Fiscal Impact Report for SB 479, at 3-4, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0479.pdf>.

<sup>11</sup> *Id.* at 4.

<sup>12</sup> SB 480, 51st leg., 1st sess. (N.M. 2013), available at <http://www.nmlegis.gov/Sessions/13%20Regular/final/SB0480.pdf> (last visited May 31, 2013).

<sup>13</sup> *Id.*

<sup>14</sup> *Supra* note 9.

<sup>15</sup> See Fiscal Impact Report for SB 480, at 2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0480.PDF> (stating that “it is unclear whether the term ‘permit application’ . . . refers to the state engineer’s approval of the subdivision or to the state engineer’s approval of the required permits to appropriate water or change the place and purpose of use of a water right.”).

<sup>16</sup> See Press Release, State of New Mexico, Governor Susana Martinez, *Governor Susana Martinez Signs Legislation to Ease Tax Burden on Elderly and Disabled New Mexicans* (Apr. 4, 2013), <http://governor.state.nm.us/>

[uploads/PressRelease/191a415014634aa89604e0b4790e4768/Governor\\_Susana\\_Martinez\\_Signs\\_Legislation\\_to\\_Ease\\_Tax\\_Burden\\_on\\_Elderly\\_and\\_Disabled\\_New\\_Mexicans.pdf](http://governor.state.nm.us/uploads/PressRelease/191a415014634aa89604e0b4790e4768/Governor_Susana_Martinez_Signs_Legislation_to_Ease_Tax_Burden_on_Elderly_and_Disabled_New_Mexicans.pdf); see also Press Release, State of New Mexico, Governor Susana Martinez, *Governor Susana Martinez Signs State Budget, Capital Outlay, and PERA Solvency Legislation* (Apr. 5, 2013), [http://governor.state.nm.us/uploads/PressRelease/191a415014634aa89604e0b4790e4768/Governor\\_Susana\\_Martinez\\_Signs\\_State\\_Budget\\_\\_Capital\\_Outlay\\_\\_and\\_PERA\\_Solvency\\_Legislation\\_1.pdf](http://governor.state.nm.us/uploads/PressRelease/191a415014634aa89604e0b4790e4768/Governor_Susana_Martinez_Signs_State_Budget__Capital_Outlay__and_PERA_Solvency_Legislation_1.pdf).

<sup>17</sup> See HB 85, 51st leg., 1st sess. (N.M. 2013), available at <http://www.nmlegis.gov/Sessions/13%20Regular/final/HB0085.pdf> (last visited May 31, 2013).

<sup>18</sup> See Fiscal Impact Report for HB 85, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0085.pdf>.

<sup>19</sup> See *id.*

<sup>20</sup> See *id.*

<sup>21</sup> *Supra* note 9.

<sup>22</sup> *Id.*

<sup>23</sup> Fiscal Impact Report for HB 85, <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0085.pdf>.

<sup>24</sup> See Press Release, State of New Mexico, Governor Susana Martinez, *Governor Signs Locomotive Fuel Gross Receipts Tax Exemption Legislation* (Apr. 2, 2013), [http://governor.state.nm.us/uploads/PressRelease/191a415014634aa89604e0b4790e4768/Governor\\_Signs\\_Locomotive\\_Fuel\\_Gross\\_Receipts\\_Tax\\_Exemption\\_Legislation.pdf](http://governor.state.nm.us/uploads/PressRelease/191a415014634aa89604e0b4790e4768/Governor_Signs_Locomotive_Fuel_Gross_Receipts_Tax_Exemption_Legislation.pdf).

<sup>25</sup> The text of the bills discussed in this section, and all other bills introduced during the 2013 legislative session, are available online at <http://www.nmlegis.gov/les/bill-finder/number.aspx> (select the appropriate chamber and enter the bill number, then press “search”).

<sup>26</sup> See Fiscal Impact Report for HB 21, at 1-2, available at [www.nmlegis.gov/Sessions/13%20Regular/firs/HB0021.pdf](http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0021.pdf).

<sup>27</sup> See Fiscal Impact Report for HB 267, at 1-2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0267.pdf>.

<sup>28</sup> See Fiscal Impact Report for SB 163, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0163.pdf>.

<sup>29</sup> See *supra* note 9.

<sup>30</sup> See Fiscal Impact Report for HB 47, at 2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0047.pdf>.

<sup>31</sup> See Fiscal Impact Report for HB 136, at 1-2, available

*continued on page 12*

# Understanding New Mexico's Copper Rules

Jeffrey J. Wechsler\* and Lara Katz\*\*

The New Mexico Water Quality Control Commission (“WQCC” or “Commission”) is in the process of establishing regulations for the copper mining industry under the New Mexico Water Quality Act (“WQA”).<sup>1</sup> In this rulemaking proceeding, the WQCC is faced with the difficult task of balancing two important interests to the people of New Mexico: protecting the quality of the state’s underground waters and ensuring the continued viability of the state’s copper mining industry. These interests have collided throughout the long and complex history preceding the so-called “Copper Rules,” and the issues spawned during that history continue to play out in the rulemaking proceeding currently before the WQCC. This article provides a review of that history, as well as an overview of the issues involved in the current WQCC proceedings.

## Copper Mining in New Mexico

There are three existing copper mines in New Mexico. Only two of these mines—the Chino mine located in Hurley, and the Tyrone mine located just south of Silver City—are currently active. The Cobre mine, located east of Silver City, has been inactive since 1999 but is being evaluated for possible resumption of some mining activity.<sup>2</sup> All three mines are located in Grant County and are owned and operated by Freeport-McMoRan, Inc., which acquired the mines as part of its merger with Phelps Dodge, Inc. in 2007.<sup>3</sup> Additionally, the New Mexico Copper Corporation currently has a permit application pending before the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department for a fourth mine, the Copper Flat mine, to be located in Sierra County, New Mexico.<sup>4</sup>

Copper mining is a large-scale enterprise involving large tracts of land, significant financial expenditures, and potential long-lasting environmental impacts if not handled properly. Discharges associated with mining processes—



*The Chino copper mine near Silver City.*

such as leach solutions from ore leaching, discharge of tailings to tailing impoundments, seepage of leachate from waste rock stockpiles, and impacted storm water—can have significant impacts on groundwater underlying the mine sites.<sup>5</sup> Consequently, copper mining operations require complex permitting actions under the WQA. There are currently 27 discharge permits in place for New Mexico copper mining facilities.<sup>6</sup> One such permitting action for the Tyrone mine—an action that began more than a decade ago—became the impetus for the current rulemaking proceeding.

## The Tyrone Permit Proceedings

The WQA provides that an application for a discharge permit shall be denied if the discharge would cause or contribute to water contaminant levels in excess of any state or federal standard.<sup>7</sup> The WQA further specifies that the determination of the effect of a discharge on groundwater “shall be measured at any place of withdrawal of water for present or reasonably foreseeable future use.”<sup>8</sup> In 2002, a dispute arose between the New Mexico Environment Department (“NMED” or “Department”) and Phelps Dodge Tyrone, Inc. (“Phelps Dodge”) over this provision of the WQA as it pertained to certain condi-

tions in the groundwater discharge permit for the Tyrone mine. The permit required Phelps Dodge to regrade its leach ore and waste rock piles to slopes no steeper than 3:1 and to completely cap the piles with at least three feet of alluvium. The WQCC upheld these conditions based in part on a determination that the entire “Tyrone mine facility” was a “place of withdrawal . . . for present or reasonably foreseeable future use” under Section 74-6-5(E) (3) of the WQA.<sup>9</sup> On appeal to the Court of Appeals, Phelps Dodge challenged the WQCC’s determination that the “Tyrone mine facility” was the “place of withdrawal . . . for present or reasonably foreseeable future use,” arguing that this overly broad interpretation of what water must be protected under the WQA led the Commission to incorrectly determine that the permit conditions were reasonable and lawful.<sup>10</sup>

The Court of Appeals agreed that the WQCC’s finding that the entire Tyrone mine site was a “place of withdrawal” was overly broad, explaining as follows:

Although the mine is a place where water is withdrawn for present use, it would be incorrect to conclude that, as a consequence, the entire mine is a measuring point and must meet water quality standards everywhere. Not only is such a conclusion overbroad, it is also unrealistic to require all water at the Tyrone mine site to meet drinkable water standards. Thus, even though it is a conclusion that is arguably within the plain language of the statute, we reject such a broad and impractical interpretation of the [WQA]; so interpreted, it would not reflect a balance between the competing policies of protecting water and yet imposing reasonable requirements on industry.<sup>11</sup>

To correct this overbroad interpretation, the Court of Appeals remanded the case to the WQCC with instruction to “create some general factors or policies to guide its determination” of what constitutes a “place of withdrawal.”<sup>12</sup>

As directed by the Court of Appeals, the WQCC held extensive hearings on the “place of withdrawal” as part of the Tyrone permit proceedings on remand, and ultimately reached the same result. In its Decision and Order on Remand, issued February 4, 2009, the WQCC determined that “[a] ‘place of withdrawal of water’ refers to any area where the hydraulic conductivity of the underlying aquifer is at least 0.05 ft/day and is capable of producing

water in sufficient amounts to support beneficial use.”<sup>13</sup> The WQCC further concluded that the WQA “does not establish any specific ‘point(s) of compliance’ for compliance with water quality standards,”<sup>14</sup> and thus “[a] place of withdrawal . . . need not be a [drilled] well.”<sup>15</sup> After reviewing the parties’ proposed criteria for determining “place of withdrawal,” the WQCC adopted the following criteria:

1. Site hydrology and geology;
2. Quality of ground water prior to any discharge from a facility;
3. Past and current land use in the vicinity of the facility;
4. Future land use in the vicinity of a facility;
5. Past and current water use in the vicinity of the facility;
6. Potential future water use and potential future water demand in the vicinity of the facility; and
7. Population trends in the vicinity of the facility.<sup>16</sup>

These are factual criteria that must be applied in a case-specific context to determine the “place of withdrawal” at any given site. Thus, while the WQCC determined that places within the mine site could be “places of withdrawal,”<sup>17</sup> it instructed NMED to “identify places of withdrawal of water for present or reasonably foreseeable future use, and identify appropriate locations at which [Freeport-McMoRan]’s<sup>18</sup> discharges’ effects on ground water shall be measured.”<sup>19</sup>

Freeport-McMoRan again appealed the WQCC’s decision to the Court of Appeals in March of 2009. That appeal is currently stayed pending implementation of a Settlement Agreement and Stipulated Final Order between NMED and Freeport-McMoRan, finalized on December 20, 2010.<sup>20</sup>

### **The Current Regulatory Scheme**

The discharge permitting process for copper mines is currently governed by the general regulations for discharge permits.<sup>21</sup> These rules were promulgated prior to the 2009 amendments to the WQA discussed below. At that time, the WQA stated that the WQCC’s regulations “shall not specify the method to be used to prevent or abate water pollution.”<sup>22</sup> Thus, the rules do not give guidance regarding the measures that must be taken to protect groundwater, providing simply that an applicant must submit a proposed plan for protection of groundwater to the Department for review on a site-specific basis.<sup>23</sup> The ap-

plicant must demonstrate that the plan would not cause an exceedance of the WQCC's groundwater quality standards.<sup>24</sup> The Department can approve a plan as proposed, approve the plan by issuing a discharge permit with conditions, or disapprove the plan.<sup>25</sup> If it is infeasible to meet water quality standards associated with particular mining operations, the applicant can petition for a variance<sup>26</sup> or for alternative abatement standards.<sup>27</sup> The resulting process can be difficult, often entailing protracted and time-consuming negotiations between the Department and the applicant. Further, over time, NMED's standard discharge permit template has come to include dozens of permit conditions.<sup>28</sup>

### **The 2009 WQA Amendments**

Concerned that the general permitting regulations have created a cumbersome process and do not provide a consistent, predictable scheme for regulating groundwater at copper mining sites and other industrial sites, the copper mining industry, along with the dairy industry, sought legislative action to amend the WQA for two primary purposes: (1) to allow the WQCC to promulgate industry-specific regulations, and (2) to require the WQCC to adopt specific rules for copper mines and dairies. NMED supported the proposed amendments because it believed that industry-specific rules would make the permitting process more efficient, effective, and transparent and would provide more certainty to discharge permit applicants, thereby enhancing groundwater protection.<sup>29</sup> Consequently, in 2009 the New Mexico Legislature amended the WQA to allow the adoption of industry-specific regulations and to require the WQCC to promulgate regulations specific to the copper and dairy industries.<sup>30</sup> The amendments provide that such regulations "shall specify . . . the measures to be taken to prevent water pollution and to monitor water quality,"<sup>31</sup> and once regulations have been adopted for a particular industry, permits for facilities at industrial sites "shall be subject to conditions contained in [those] regulations."<sup>32</sup>

The amended statute thus sets forth a new, streamlined approach to permitting, whereby, instead of applicants submitting a proposed plan under the general permitting regulations, the contents of discharge permits for copper mines (and other industries for which the WQCC promulgates specific regulations) will now be governed by regulations setting forth standard provisions applicable to all facilities, with NMED retaining the authority to add additional conditions for individual facilities. According to NMED, the rulemaking process required by the new

amendments "is designed to systematically capture in rule what used to be included as conditions of approval in discharge permits."<sup>33</sup> The amendments further mandate a process for developing industry-specific regulations that includes establishment of an advisory committee of experts and stakeholders to advise NMED in drafting proposed regulations and opportunity for public input and stakeholder negotiations on those draft regulations prior to bringing them before the WQCC for adoption.<sup>34</sup>

### **The Ongoing WQCC Proceedings on the Copper Rules**

Following the advisory committee and stakeholder process provided for in Section 74-6-4(K) of the WQA, NMED initiated the current rulemaking proceeding before the WQCC in October of 2012 by filing a petition to adopt proposed rules 20.6.7 and 20.6.8 NMAC ("Petition").<sup>35</sup> The proposed rules are comprehensive and include provisions addressing discharge permit applications; design, construction, and operational requirements, both generally and for specific mine operations; monitoring and reporting; and closure and post-closure requirements. Although the legislatively-mandated process was designed to produce a consensus rule, NMED's proposal has proven to be just as controversial as the Tyrone permit, with industry groups appearing in support of the proposed rules and a number of parties, including environmental groups, the New Mexico Attorney General's Office, and even NMED's own private consultant hired to advise about the rules,<sup>36</sup> appearing in opposition to the proposed rules.

Despite the passage of more than a decade since the initiation of the Tyrone permitting action, the phrase "place of withdrawal for present or reasonably foreseeable use" in Section 74-6-5(E)(3) of the WQA remains at the heart of the controversy surrounding the proposed Copper Rules. Historically, NMED has treated all areas with underlying groundwater as "places of withdrawal," thereby necessitating individual applicants to petition for a variance any time a given mining operation will cause exceedance of drinking water standards. The new regulations represent a departure from this approach by attempting to define by regulation what constitutes a "place of withdrawal" where water quality standards must be met for copper mines. The key controversial provisions of the proposed rules would exempt certain operations and facilities at a copper mine site from applicability of water quality standards because they are not "places of withdrawal for present or reasonably foreseeable future use,"<sup>37</sup> and would require

installation of monitoring wells surrounding and hydrologically downgradient of certain mining operations<sup>38</sup> at which compliance with water quality standards would be measured.<sup>39</sup>

The opposition groups argue that such provisions, among others, violate the WQA by allowing discharges from copper mines to exceed water quality standards without a variance or a determination that a particular mine site is not a “place of withdrawal,” and would establish a “point of compliance” regulatory framework that is not authorized by the WQA.<sup>40</sup> According to the opposition groups, these provisions “would authorize unlimited pollution within certain areas, arbitrarily defined by transient hydraulic gradients, without regard to whether these areas qualify as Places of Withdrawal of Water under the [WQA].”<sup>41</sup> Of particular concern to the opposition groups is the applicability of the regulations to future mine sites, which they argue would effectively give new mining operations a license to pollute potentially useable groundwater supplies.<sup>42</sup>

NMED and the industry groups argue that the proposed rules balance competing interests by providing strong protections for groundwater quality while also recognizing the practical reality that copper mining necessarily involves some impact to groundwater and that it is not feasible to maintain drinking water quality throughout a mine site at all times during the mining process. Rather than granting a “license to pollute,” as the opposing parties argue, NMED and industry groups view the copper rules as an attempt to recognize, consistent with the Court of Appeals’ decision in the *Phelps Dodge Tyrone* case, that not every place at a copper mine is “a place of withdrawal for present or reasonably foreseeable use,” and define by regulation what is meant by that phrase, thereby resolving decades of controversy and uncertainty.<sup>43</sup> Under this interpretation, the copper rules recognize that copper mines, particularly “areas of open pit hydrologic containment,”<sup>44</sup> are not a “place of withdrawal for present or reasonably foreseeable use” that must meet drinking water standards, thereby obviating the need for each individual applicant to obtain a variance for such operations. The Department and industry groups also contend that a point of compliance regulatory framework, where monitoring wells surrounding mining facilities measure compliance with water quality standards, is appropriate and authorized under the WQA.<sup>45</sup>

At the time of this writing, the technical hearings and public comment phase of the proceedings have concluded. Following post-hearing procedures, the WQCC is expected to deliberate on the proposed copper rules at its regular meeting in August of this year. The outcome of these deliberations is potentially of interest beyond the copper industry, particularly with respect to how the WQCC decides the “place of withdrawal” issue, given that the WQCC now has authority to adopt regulations for particular industries.

---

#### Endnotes

\* Jeffrey J. Wechsler is a shareholder in the Santa Fe office of Montgomery & Andrews, P.A., practicing in the areas of water, environmental, and natural resources law, public utility regulation, and complex litigation.

\*\* Lara Katz is an associate in the Santa Fe office of Montgomery & Andrews, P.A., practicing in the areas of water, environmental, and natural resources law, and appellate and complex litigation.

<sup>1</sup> NMSA 1978, §§ 74-6-1 to -17 (1967, as amended through 2009); Notice of Docketing, WQCC 12-01(R) (Jan. 3, 2012), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/12-01RNoticeofdocketing.pdf>.

<sup>2</sup> *See* New Mexico Office of Natural Resources Trustee, “Final Groundwater Restoration Plan for the Chino, Cobre, and Tyrone Facilities,” at 2-2 through 2-13 (Jan. 4, 2012), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/NMEDExhibit13.pdf>.

<sup>3</sup> *See* Press Release, “Freeport-McMoRan Copper & Gold Inc. and Phelps Dodge Corp. Shareholders Approve Acquisition” (March 14, 2007), <http://www.fcx.com/news/2007/031407.pdf>.

<sup>4</sup> *See* Permit S1027RN Copper Flat Mine, *available at* <http://www.emnrd.state.nm.us/MMD/MARP/Permit-SI027RN.html> (last visited May 7, 2013).

<sup>5</sup> *See* Written Testimony of John Brack in WQCC 12-01(R), 24-31 (filed Feb. 22, 2013), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/DirectTestimony-Brack-Final.pdf> (describing mine development and production); New Mexico Environment Department (NMED) Public Meeting Power Point Presentation, “Groundwater Protection Rules for Copper Mines,” slides 5-6, *available at* <http://www.nmenv.state.nm.us/wqcc/documents/NMEDExhibit7.pdf>.

<sup>6</sup> *See* NMED Power Point, *supra* note 5, at slide 5.

<sup>7</sup> Section 74-6-5(E)(3).

<sup>8</sup> *Id.*

<sup>9</sup> See *Phelps Dodge Tyrone, Inc. v. New Mexico Water Quality Comm'n*, 2006-NMCA-115, ¶ 2, 140 N.M. 464, 143 P.3d 502.

<sup>10</sup> *Id.* ¶ 26.

<sup>11</sup> *Id.* ¶ 33 (citation omitted).

<sup>12</sup> *Id.* ¶ 35.

<sup>13</sup> Decision and Order on Remand, WQCC 03-12(A) and 03-13(A) (Consolidated), Finding of Fact No. 92, at 24 (Feb. 4, 2009), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/AttachmentB.pdf>.

<sup>14</sup> *Id.*, Conclusion of Law No. 27, at 80.

<sup>15</sup> *Id.*, Conclusion of Law No. 32, at 81; *see also* Decision and Order on Remand, *supra* note 13, Finding of Fact No. 92, at 24.

<sup>16</sup> *Id.*, Conclusion of Law Nos. 15-21, at 78-79.

<sup>17</sup> *Id.*, Conclusion of Law No. 33, at 81 (stating that “NMED has demonstrated by a preponderance of the evidence that the regional and alluvial aquifers underlying portions of the Tyrone Mine site are places of withdrawal of water for present or reasonably foreseeable future use pursuant to Section 74-6-5(E)(3)”).

<sup>18</sup> On remand, Freeport-McMoran took the place of Phelps Dodge, as it had acquired Phelps Dodge in 2007.

<sup>19</sup> Decision and Order on Remand, *supra* note 13, at 84.

<sup>20</sup> Settlement Agreement and Stipulated Final Order (Dec. 20, 2010), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/NMAGExh10.pdf>.

<sup>21</sup> *See* 20.6.2 NMAC.

<sup>22</sup> NMSA 1978, § 74-6-4(D) (amended in 2009 to delete this language).

<sup>23</sup> *See* 20.6.2.3106 NMAC.

<sup>24</sup> 20.6.2.3106(C) NMAC.

<sup>25</sup> 20.6.2.3109(B) NMAC.

<sup>26</sup> Section 74-6-4(H); 20.6.2.1210 NMAC.

<sup>27</sup> 20.6.2.4103(F) NMAC.

<sup>28</sup> *See* Written Testimony of Tom Skibitski, WQCC 12-01(R), 4-5 (filed Feb. 22, 2013), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/TestimonyofTomSkibitski.pdf>.

<sup>29</sup> *See id.* at 6.

<sup>30</sup> Section 74-6-4(K).

<sup>31</sup> *Id.*

<sup>32</sup> Section 74-6-5(D).

<sup>33</sup> Testimony of Tom Skibitski, *supra* note 28, at 7.

<sup>34</sup> *Supra* note 30.

<sup>35</sup> *See* Petition to Adopt 20.6.7. and 20.6.8 NMAC and Request for Hearing, WQCC 12-01(R) (filed Oct. 30, 2012), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/>

WQCC1201Rpetition.pdf. NMED submitted an amended petition on February 18, 2013, in which it withdrew proposed 20.6.8 NMAC in its entirety, and made revisions to 20.6.7 NMAC. *See* Notice of Amended Petition, WQCC 12-01(R) (filed Feb. 18, 2013), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/NMEDAmendedPetition.pdf>.

<sup>36</sup> The participation of NMED’s private consultant in the rulemaking proceedings has been contested by the Department. *See* New Mexico Environment Department’s Notice of Objection to William C. Olson’s Notice of Intent to Present Technical Testimony, WQCC 12-01(R) (filed March 12, 2013) *available at* <http://www.nmenv.state.nm.us/wqcc/documents/NMEDnoticeofobjection.pdf>.

<sup>37</sup> *See* Attorney General’s Motion to Remand the Proposed Copper Mine Rule to NMED, WQCC 12-01(R), 15-16 (filed Dec. 14, 2012), *available at* <http://www.nmenv.state.nm.us/wqcc/documents/AGMotiontoRemandtheProposedCopperMineRuletoNMED121412.pdf>. These rules include proposed 20.6.7.24.(A)(4) NMAC (“During operation of an open pit, the standards of 20.6.2.3103 NMAC do not apply within the area of hydrologic containment”); proposed 20.6.7.28(B) NMAC (establishing monitoring wells); and proposed 20.6.7.33(D)(1) NMAC (“If an open pit is determined to be a hydrologic evaporative sink, the standards of 20.6.2.3103 do not apply within the area of hydrologic containment.”). *See* Notice of Amended Petition, *supra* note 35, at 25, 26, 35.

<sup>38</sup> *See* proposed rule 20.6.7.28(B) NMAC in Notice of Amended Petition, *supra* note 35, at 26. Such operations include open pits, leach stockpiles, waste rock stockpiles, tailing impoundments, process water impoundments, and impacted stormwater impoundments.

<sup>39</sup> *See id.* at 26, 35. These rules include proposed 20.6.7.28(B) NMAC (establishing monitoring wells “around the perimeter and downgradient of each open pit, leach stockpile, waste rock stockpile, tailings impoundment, process water impoundment, and impacted stormwater impoundment”); proposed 20.6.7.33.(D)(2) (measuring for compliance with water quality standards for a flow-through open pit upon closure “at monitoring well locations specified by 20.6.7.28 NMAC”).

<sup>40</sup> *See generally*, Attorney General’s Motion to Remand, *supra* note 37; Gila Resources Information Project (GRIP), Amigos Bravos, and Turner Ranch Properties, Inc.’s Joint Motion to Dismiss Petition for Rulemaking, WQCC 12-01(R) (filed Dec. 13, 2012),

---

available at <http://www.nmenv.state.nm.us/wqcc/documents/12-01RJointMotiontoDismissPetitionforRulemaking.pdf>.

<sup>41</sup> GRIP, Amigos Bravos, and Turner Ranch's Reply to Freeport-McMoRan's Response to Joint Motion to Dismiss Petition for Rulemaking, WQCC 12-01(R), 2 (filed Jan. 25, 2013), available at <http://www.nmenv.state.nm.us/wqcc/documents/12-01ReplytoFreeportMcMoran.pdf> (last visited May 7, 2013).

<sup>42</sup> See, e.g., Attorney General's Motion to Remand, *supra* note 37, at 17; Reply to Freeport-McMoRan's Response to Joint Motion to Dismiss, *supra* note 41, at 4-5.

<sup>43</sup> See, e.g., New Mexico Mining Association's Consolidated Memorandum in Response to Attorney General's Motion to Remand Proposed Copper Mine Rules and Various Organizations' Joint Motion to Dismiss Petition for Rulemaking, WQCC 12-01(R), 3 (filed January 11, 2013) available at <http://www.nmenv.state.nm.us/wqcc/documents/MiningAssoconsolmemo.pdf>; Freeport-McMoRan's Consolidated Response to the Joint Motion to

Dismiss Petition for Rulemaking and the Attorney General's Motion to Remand the Proposed Rule to NMED, WQCC 12-01(R), 3 (filed January 11, 2013), available at <http://www.nmenv.state.nm.us/wqcc/documents/FreeportMcmoranconsolresponse.pdf>; New Mexico Environment Department's Response to Motions to Remand or Dismiss, WQCC 12-01(R), 2 (filed January 11, 2013), available at <http://www.nmenv.state.nm.us/wqcc/documents/NMEDResponseBrief.pdf>.

<sup>44</sup> Such areas are defined in Section 20.6.7.7(B)(5) of the proposed rules as "for an open pit that intercepts the water table, the area where ground water drains to the open pit and is removed by evaporation and/or pumping, and is interior to the department approved monitoring well network installed around the perimeter of an open pit pursuant to [proposed 20.6.7.28(B)(4)]." See Notice of Amended Petition, *supra* note 35, at 1.

<sup>45</sup> See Freeport-McMoRan's Consolidated Response, *supra* note 43, at 10.

---

## 2013 Legislative Update

*continued from page 6*

able at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0136.pdf>.

<sup>32</sup> See Fiscal Impact Report for HB 163, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0163.pdf>; see also Fiscal Impact Report for SB 175, at 1-2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0175.pdf>.

<sup>33</sup> See Fiscal Impact Report for HB 181, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0181.pdf>; see also Fiscal Impact Report for SB 309, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0309.pdf>.

<sup>34</sup> See Fiscal Impact Report for HB 259, at 1-2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0259.pdf>.

<sup>35</sup> See Fiscal Impact Report for SB 266, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0266.pdf>.

<sup>36</sup> See Fiscal Impact Report for HB 335, at 1-2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0335.pdf>.

<sup>37</sup> See Fiscal Impact Report for HB 429, at 2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0429.pdf>.

<sup>38</sup> See Fiscal Impact Report for HB 458, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0458.pdf>.

<sup>39</sup> See Fiscal Impact Report for HB 576, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0576.pdf>.

<sup>40</sup> See Fiscal Impact Report for SB 204, at 2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0204.pdf>.

<sup>41</sup> See Fiscal Impact Report for SB 245, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0245.pdf>.

<sup>42</sup> See Fiscal Impact Report for SB 547, at 1-2, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0547.pdf>.

<sup>43</sup> See Fiscal Impact Report for SB 563, at 1, available at <http://www.nmlegis.gov/Sessions/13%20Regular/firs/SB0563.pdf>.

# Regulating Hydraulic Fracturing: New Mexico and National Trends

Laura Melton-Thornton\*

Hydraulic fracturing, or “fracking,” is the process of pumping fluids into natural gas or oil wells under high pressure to fracture shale formations and release previously unreachable energy stores.<sup>1</sup> Although the technology is nothing new—it was first introduced to the gas and oil industry in 1949 by Stanolind Oil<sup>2</sup>—its increasing popularity coupled with its exemption from the Safe Water Drinking Act and other federal laws in 2005<sup>3</sup> has left a growing industry largely unregulated.

While the technology has undoubtedly benefitted producers and consumers by decreasing the United States’ reliance on foreign oil and gas,<sup>4</sup> it has also raised concerns about intensive water use and the potential for environmental contamination.<sup>5</sup> In the absence of federal standards for the industry, some states have stepped into the regulatory void, including two unsuccessful attempts by the New Mexico Legislature in 2013.<sup>6</sup> This article provides an overview of the benefits and concerns of fracking, summarizes the different regulatory approaches taken by the states in the area of chemical disclosure, and addresses New Mexico’s past—and possible future—attempts at regulation.

Fracking has many benefits, both direct and indirect. Some of the direct benefits, such as the ability to release previously unreachable gas stores, are well known and are the primary reason fracking continues to be a popular method of natural gas extraction.<sup>7</sup> The technology is quickly turning the United States into a net exporter of natural gas.<sup>8</sup> The indirect benefits are more subtle but they are also primarily economic. With the increase in natural gas production, power companies are turning to natural gas as a source for power generation, which lowers energy costs for consumers and also lowers the carbon footprint because natural gas produces less carbon than coal-fired power plants.<sup>9</sup>



*Hydraulic fracturing at the Haynesville Shale in Louisiana*

© Photo by Daniel Foster available at <http://www.flickr.com/photos/daniefoster/640338162/> under a Creative Commons Attribution 2.0. Full terms at <http://creativecommons.org/licenses/by/2.0>.

However, benefits do not come without costs. From an environmental standpoint, fracking is a water-intensive technology. One estimate put water consumption at about 135 billion gallons of fresh water a year, which represents about 0.3 percent of the total groundwater and surface water withdrawals in the United States;<sup>10</sup> water that could be used for other industries or to supply our municipalities.<sup>11</sup> In the West, where fresh water is especially

scarce, fracking is a huge concern based solely on the issue of water consumption. Yet fracking presents a second concern. Fracking requires the injection of ethylene glycol, methanol, sodium polycarboxylate, and other chemicals deep into the ground, all of which have the potential to contaminate groundwater supplies, either by the injection process or in the handling of fracking waste.<sup>12</sup> Yet despite its growing use around the country and concerns raised by the general public, fracking has been definitively linked to groundwater contamination in only one state: Wyoming.<sup>13</sup> Stories exist of methane, a waste product of fracking, causing water wells, homes, or other structures to explode or catch on fire in several states.<sup>14</sup> Similarly, the increase in seismic activity in communities where fracking is prevalent is only now being linked to the industry.<sup>15</sup>

Currently, few national regulations exist with respect to fracking.<sup>16</sup> Specifically, there is no federal requirement that the fracking industry disclose the chemicals it uses, nor are there any federal requirements on the handling of fracking waste due to the technology’s exemption from the federal Safe Drinking Water Act, the Clean Water Act, and other key federal statutes in what is commonly known as the Halliburton Loophole.<sup>17</sup> While representatives in both the U.S. Senate and House of Representatives have introduced bills in recent years to repeal the exemptions, these bills have died in committee.<sup>18</sup> Bills to regulate fracking on

federal lands have also seen little support.<sup>19</sup> Proposals are currently being pushed by different federal agencies to try to produce some regulation of the oil and gas industry with respect to fracking at the national level in order to provide a minimum standard for the industry in all states.<sup>20</sup>

As a result, some states are adopting legislation to set fracking standards and requirements, but by no means are these efforts uniform.<sup>21</sup> In those states heavily dependent on the oil and gas industry for revenue, such as Florida and Alaska, little regulation exists. Whereas, in states with little economic reliance on gas and oil, such as Indiana and Vermont, complete bans on fracking have been enacted.<sup>22</sup>

Regulation has focused on a few key areas: disclosure of fracking solutions, protection of water quality, spill prevention, and waste and wastewater management.<sup>23</sup> For example, in the area of chemical disclosure, disparity in state regulation is evident.<sup>24</sup> Table 1 provides a summary of the myriad approaches, including those states where no disclosure is required and those states in which disclosure is unnecessary because the process has been banned. The lack of disclosure is because the chemical mixture is protected as a trade-secret; however, some states are requiring companies to justify the need for the exemption before such an exemption is granted.<sup>25</sup> When disclosure is required, the industry provides its chemical list via an online database independent of the federal government, available at [FracFocus.org](http://FracFocus.org).

**Table 1: Fracking Solution Disclosure Status by States as of February 1, 2013<sup>26 27 28</sup>**

States Requiring Some Disclosure	States Requiring No Disclosure	States in which Disclosure Is Proposed or Unknown	States Banning Fracking	States with No Current, Confirmed Fracking Activity
Alabama Arkansas Colorado Idaho Kansas Louisiana Michigan Mississippi Montana New Mexico <sup>29</sup> North Dakota Ohio Oklahoma Pennsylvania Texas Utah Virginia West Virginia	Alaska Florida Kentucky Missouri South Dakota Tennessee Virginia Washington	California Illinois Massachusetts Nebraska	Indiana Maryland New Jersey New York Vermont	Arizona Connecticut Delaware Georgia Hawai'i Iowa Maine Minnesota Nevada New Hampshire North Carolina Oregon Rhode Island South Carolina Wisconsin

The lack of federal regulation is problematic for the gas and oil industry. Because of inconsistent state requirements, the industry must tailor its operations to the specific place it plans to drill.<sup>30</sup> Thus, a national standard for disclosure and other issues would alleviate this uncertainty and inconsistency while providing better reporting requirements and environmental protections for states. Compliance with state or federal regulations could also provide revenue to states for monitoring wells, taxes on these wells, and fines when violations occur.<sup>31</sup>

New Mexico introduced two bills in 2013 with respect to hydraulic fracturing although neither passed into law. House Bill 136 would have required chemical disclosure because current chemical reporting is voluntary beyond the limited requirements imposed by New Mexico's Oil and Gas Association.<sup>32</sup> House Bill 335 would have required geologic and hydrologic studies before a new fracking well is drilled. House Bill 335 would have also provided legal fees, actual damages, and punitive damages when fracking damaged private property.<sup>33</sup> Some counties in New Mexico have acted independently to address fracking. For example, Mora County has made national news for recently banning fracking within its borders.<sup>34</sup> It is possible that, depending on the reaction to the ban in Mora County, New Mexico law makers will propose a similar state ban to fracking in the 2014 legislative session.<sup>35</sup>

While fracking reduces our dependency on foreign energy sources and provides a direct benefit to consumers by lowering the price of natural gas, there is certainly a concern over the environmental impacts of a largely unregulated industry with the potential to contaminate groundwater. However, if companies, environmental groups, and the federal government can come together and agree on standards, then safety concerns can be adequately addressed across the nation. Programs such as the Center for Sustainable Shale Development in the Northeast may be a step in the right direction.<sup>36</sup> Further steps to protect the environment and the public will assure the future of the fracking industry as a contributor to the United States economy and help remove moratoriums on the industry imposed at the state and local level.

---

#### Endnotes

\* Laura Melton-Thornton is a rising 2L student at the University of New Mexico School of Law.

<sup>1</sup> Shawna Bligh and Chris Wendelbo, *Hydraulic Fracturing: Drilling Into the Issue*, 27 Nat. Resources & Env't 3, 1 (2013).

<sup>2</sup> Save Colorado from Fracking, *History of Fracking*, <http://www.savecoloradofromfracking.org/basics/history.html> (last visited May 19, 2013).

<sup>3</sup> United States Environmental Protection Agency, *Regulation of Hydraulic Fracturing under the Safe Water Drinking Act*, [http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells\\_hydroreg.cfm](http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_hydroreg.cfm) (last visited May 24, 2013); see also Clean Water Action, *Fracking: Laws and Loopholes*, <http://cleanwater.org/page/fracking-laws-and-loopholes> (last visited June 7, 2013).

<sup>4</sup> Sean T. Dixon and Jonathon Panico, *Extraction for Exportation: Is There Such a Thing As "Net Energy Independence?"*, 27 Nat. Resources & Env't 3, 38-42 (2013).

<sup>5</sup> Meg Handley, *New Federal Fracking Rules Rile Environmentalists*, *Oil and Gas Industry*, (May 17, 2013), <http://www.usnews.com/news/articles/2013/05/17/new-federal-fracking-rules-rile-environmentalists-oil-and-gas-industry> (last visited May 19, 2013).

<sup>6</sup> See House Bill 136 and House Bill 335, available at [http://www.nmlegis.gov/lcs/bill\\_finder.aspx](http://www.nmlegis.gov/lcs/bill_finder.aspx) (select the appropriate chamber and enter the bill number, then press "search").

<sup>7</sup> Kevin Hassett and Aparna Mathur, *Benefits of Hydraulic Fracturing*, *Oxford Energy Forum*, Issue 91, 11-13 (2013); available at <http://www.aei.org/article/economics/benefits-of-hydraulic-fracking/>.

<sup>8</sup> See *id.*; see also Dixon and Panico, *supra* note 4.

<sup>9</sup> Hassett and Mathur, *supra* note 7.

<sup>10</sup> Jesse Jenkins, *Energy Facts: How Much Water Does Fracking for Shale Gas Consume?* (April 6, 2013), <http://theenergycollective.com/jessejenkins/205481/friday-energy-facts-how-much-water-does-fracking-shale-gas-consume> (last visited May 19, 2013).

<sup>11</sup> John Platt, *Fracking Water Use Draining Resources, Especially In Western U.S., New Studies Find* (May 9, 2013), [http://www.huffingtonpost.com/2013/05/09/fracking-water-use-draining-water\\_n\\_3239879.html](http://www.huffingtonpost.com/2013/05/09/fracking-water-use-draining-water_n_3239879.html) (last visited May 19, 2013).

<sup>12</sup> See *Frac Focus, What Chemicals Are Used*, <http://fracfocus.org/chemical-use/what-chemicals-are-used> (last visited June 7, 2013).

<sup>13</sup> Timothy Gardner, *US Delays Finalizing Report Linking Fracking to Water Pollution*, (Jan. 11, 2013), <http://www.reuters.com/article/2013/01/11/usa-epa-fracking->

idUSL1E9CB59J20130111 (last visited May 19, 2013).

<sup>14</sup> Bill Dedman & Karen Weintraub, NBC News (April 8, 2013), *Disputes over Environmental Impact of 'Fracking' Obscure its Future*, available at <http://www.cnbc.com/id/100623670>.

<sup>15</sup> See John C.K. Daly, *More Scientific Evidence Linking Fracking and Earthquakes* (April 4, 2013), [http://www.huffingtonpost.com/john-ck-daly/more-scientific-evidence-\\_b\\_3009927.html](http://www.huffingtonpost.com/john-ck-daly/more-scientific-evidence-_b_3009927.html) (last visited June 4, 2013).

<sup>16</sup> Jody Freeman and David Spence, *Should Fracking be Regulated by the Federal Government?* Wall Street Journal Online (April 12, 2013) <http://online.wsj.com/article/SB10001424127887323495104578314302738867078.html> (last visited May 24, 2013).

<sup>17</sup> Amy Tiemann, *What You Need to Know About Fracking: Halliburton Exception* <http://amytiemann.com/tag/halliburton-exception> (last visited May 24, 2013); see also Sourcewatch, [http://www.sourcewatch.org/index.php/Fracking\\_regulations#Fracking\\_wastewater\\_regulations](http://www.sourcewatch.org/index.php/Fracking_regulations#Fracking_wastewater_regulations) (last visited June 7, 2013).

<sup>18</sup> See Bligh and Wendelbo, *supra* note 1.

<sup>19</sup> *Id.*

<sup>20</sup> See Handley, *supra* note 5.

<sup>21</sup> Sorell E. Negro, *Fracking Wars: Federal, State and Local Conflicts over the Regulation of Natural Gas Activities*, 35 Zoning and Planning Law Report 2, 2 (2012), available at [www.rc.com/documents/negro\\_frackingwars\\_2012.pdf](http://www.rc.com/documents/negro_frackingwars_2012.pdf). [http://www.rc.com/documents/negro\\_frackingwars\\_2012.pdf](http://www.rc.com/documents/negro_frackingwars_2012.pdf) (last accessed May 19, 2013).

<sup>22</sup> See Bligh and Wendelbo, *supra* note 1.

<sup>23</sup> *Id.*

<sup>24</sup> Bigger Pie Forum, *Fracking: Frequently Asked Questions*, <http://www.biggerpieforum.org/How-does-fracking-work#Q3> (last visited May 29, 2013).

<sup>25</sup> Matthew McFeeley, *State Hydraulic Fracturing Disclosure Rules and Enforcement: A Comparison*, NRDC Issue Brief, at 6 (July 2012), <http://www.nrdc.org/energy/files/Fracking-Disclosure-IB.pdf> (last visited May 19, 2013); see also Georgetown Environmental Law Review blog, *The Problem With Fracking Trade Secrets* (April 25, 2013), <http://gielr.wordpress.com/2013/04/25/the-problem-with-fracking-trade-secrets/> (last visited May 19, 2013).

<sup>26</sup> See Bligh and Wendelbo, *supra* note 1, at 2-6.

<sup>27</sup> Matthew McFeeley, *supra* note 25.

<sup>28</sup> Thomas E. Kurth, Michael J. Mazzone, Mary S. Mendoza & Christopher S. Kulander, *American Law and Jurisprudence on Fracking*, 47 Rocky Mt. Min. L. Foundation Journal, vol. 2, 300-336, available at [http://www.haynesboone.com/files/Publication/3477accb-8147-4dfc-b0b4-380441178123/Presentation/PublicationAttachment/195a3398-5f02-4905-b76d-3858a6959343/American\\_Law\\_Jurisprudence\\_Fracing.pdf](http://www.haynesboone.com/files/Publication/3477accb-8147-4dfc-b0b4-380441178123/Presentation/PublicationAttachment/195a3398-5f02-4905-b76d-3858a6959343/American_Law_Jurisprudence_Fracing.pdf).

<sup>29</sup> The only disclosure required in New Mexico is that by the New Mexico Oil and Gas Association, which requires the disclosure of chemicals as required by the Material Safety Data Sheets in accordance to the guidelines of the Occupational Safety and Health Administration. See [http://www.sourcewatch.org/index.php/New\\_Mexico\\_and\\_fracking](http://www.sourcewatch.org/index.php/New_Mexico_and_fracking) (last visited May 29, 2013).

<sup>30</sup> Jacquelyn Pless, *Natural Gas Development and Hydraulic Fracturing: A Policymaker's Guide*, (revised June, 2012), available at [www.ncsl.org/issues-research/energyhome/natural-gas-development-and-hydraulic-fracturing.aspx](http://www.ncsl.org/issues-research/energyhome/natural-gas-development-and-hydraulic-fracturing.aspx).

<sup>31</sup> Pamela Prah, *Fracking for State Dollars*, <http://www.pewstates.org/projects/stateline/headlines/fracking-for-state-dollars-85899447047> (last visited May 29, 2013).

<sup>32</sup> H.B. 136, Reg. Sess. (N.M. 2013); see also Fiscal Impact Report, <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0136.PDF>.

<sup>33</sup> H.B. 335, Reg. Sess. (N.M. 2013); see also Fiscal Impact Report, <http://www.nmlegis.gov/Sessions/13%20Regular/firs/HB0335.PDF>.

<sup>34</sup> Meg Handley, *Fight Over Fracking Continues as Counties Begin to Ban Practice*, (May 2, 2013), <http://www.usnews.com/news/articles/2013/05/02/new-mexico-county-becomes-first-in-us-to-ban-fracking> (last visited May 19, 2013).

<sup>35</sup> See Julie Cart, *A New Mexico County's Fracking Ban Is All About the Water*, SANTA FE NEW MEXICAN (June 2, 2013), available at [http://www.santafenewmexican.com/news/local\\_news/article\\_33ed23fb-2b73-565d-82d9-003315686485.html](http://www.santafenewmexican.com/news/local_news/article_33ed23fb-2b73-565d-82d9-003315686485.html).

<sup>36</sup> See Kevin Begos, NBC, *Energy Firms, Environmental Groups Agree on Tough New Fracking Standards* (March 20, 2013), available at <http://nbcnews.com/business/energy-firms-environmental-groups-agree-tough-new-fracking-standards-1C8975363>.

# News and Updates

## Mark Your Calendar

### June 2013 State Bar of New Mexico Annual Meeting—Bench and Bar Convention: Basics of Environmental Justice

On Saturday, June 29, 2013, at 3:45 p.m., NREEL is co-sponsoring a CLE event as part of the Annual Meeting—Bench and Bar Conference in Santa Fe. The event features UNM School of Law Professor Eileen Gauna, who will present “Basics of Environmental Justice: Providing Access to Justice for Those Threatened by Environmental Harm.” For more information, visit the State Bar website at [www.nmbar.org](http://www.nmbar.org), or contact the State Bar at 505-797-6000. —*Ashleigh Morris*

### 2013 Annual Winter NREEL CLE: Air Quality

On Friday, December 20, 2013, NREEL will sponsor its annual winter CLE event, which will focus on the issue of air quality. The all-day event will take place at the State Bar Center; attendance by video will be available. Look for emails from the State Bar as the event draws closer. —*AM*

### UNM School of Law’s Environmental Law Moot Court Team

The UNM School of Law’s Environmental Law Moot Court team, under the tutelage of Samantha Ruscavage-Barz, competed this past February at Pace Law School in New York. This year’s assigned problem involved issues of Clean Water Act violations, statutory interpretation, and citizen group standing. Although the team did not advance to the quarter finals, the students learned immensely from the experience, with thanks to the many lawyers who volunteered to help prepare these students for the tournament. —*AM*



*From left: Taylor Lieuwen, Rachel Giron, and Jason Wallace of the UNM School of Law’s Environmental Moot Court Team. Photo courtesy Samantha Ruscavage-Barz*

### Environmental Law Society’s Student Pub Quiz Fundraiser

On April 21, 2013, the eve of Earth Day, UNM School of Law’s Environmental Law Society partnered with the Native American Law Student Association (NALSA) and O’Neill’s Pub in Albuquerque to hold a pub quiz and raise money for summer student stipends. Dubbed “Geeks Who Drink,” this special event raised \$300 to help support students working in public interest environmental law over the summer. —*Michelle Miano*



*Participants in the Geeks Who Drink pub quiz. Photo courtesy Environmental Law Society*

---

## UNM School of Law's Fall ELS Lawyer-Student Mixer

On October 24, 2012, UNM Law School's Environmental Law Society held a lawyer-student mixer on the Hart Wing back patio.—*AM*

### ELS Board for 2013-14

These UNM School of Law students will be serving on the Environmental Law Society's board for the coming school year: Dave Nezzie, president; David Ketai, vice president; Lila Semrau, secretary; and Collin Gannon, treasurer. All are enthusiastic students who are already planning for the new academic year. Congratulations to this stellar group.—*MM*



*Fall ELS Lawyer-Student Mixer at UNM.  
Photo courtesy Environmental Law Society*

### Natural Resource Speaker Series at UNM School of Law

In keeping with the annual tradition of bringing in a variety of guest speakers in the area of natural resources, energy, and environmental law, the NREEL Section again partnered with the UNM School of Law's Natural Resources Program, the Utton Center, and the Environmental Law Society to host two guest speakers at the law school this past academic year. On February 4, 2013, **Suedeem Kelly** presented "Reflections on My Time in the FERC; Projections on U.S. Energy in the Future." Kelly is a former UNM Law School faculty member and former FERC Commissioner who is now a partner in the Washington, D.C. office of Akin Gump. On November 14, 2012, **James Gustave Speth** presented "America the Possible: Manifesto for a New Economy." Among his many achievements, Speth was chairman of the U.S. Council on Environmental Quality during President Carter's administration, co-founder of the Natural Resources Defense Council, and founder and president of the World Resources Institute. He currently teaches at Vermont Law School. CLE credit was available for both lectures.—*AM*

---

## Editor's Note

*continued from the cover*

Laura Melton-Thornton examines attempts to regulate hydraulic fracturing and its potential impact on groundwater, including bills that were before the New Mexico Legislature during the 2013 session.

Although the goal of this issue was not to set any particular theme, the fact that each of these three articles touches on water regulation is simply a reflection of how important the resource is to all of us in New Mexico. I extend a hearty thank you to each of the authors for their efforts and willingness to contribute to this newsletter.

In editing *Vista*, my goal is to provide an avenue of discourse for law students as well as attorneys in the NREEL bar section by offering articles of interest to the practice area. For those of you mulling over topics you think might be worthy of publication, please consider seeing those ideas to print. Feel free to contact me directly at [ashleigh\\_morris@yahoo.com](mailto:ashleigh_morris@yahoo.com) to discuss a possible story idea. The deadline for submitting proposed topics for the winter issue is September 15, 2013.

In the meantime, enjoy the issue—and the summer!  
*Ashleigh Morris, Editor*



## Natural Resources, Energy & Environmental Law Section

### Board of Directors

Terry Copeland, Chair  
[theresa.copeland@sol.doi.gov](mailto:theresa.copeland@sol.doi.gov)

Josh Mann, Past Chair  
[jmann@usbr.gov](mailto:jmann@usbr.gov)

Kim Bannerman, Chair Elect  
[kim.bannerman@state.nm.us](mailto:kim.bannerman@state.nm.us)

Luke Pierpont, Budget Officer  
[lpierpont@gmail.com](mailto:lpierpont@gmail.com)

Sally Paez, Secretary  
[sally.paez@gmail.com](mailto:sally.paez@gmail.com)

Eileen Gauna, UNM School of Law Liaison  
[gauna@law.unm.edu](mailto:gauna@law.unm.edu)

Michelle Miano,  
UNM School of Law Student Representative  
[mianomi@law.unm.edu](mailto:mianomi@law.unm.edu)

Ashleigh Morris, YLD Liaison,  
*Vista* Newsletter Editor  
[ashleigh\\_morris@yahoo.com](mailto:ashleigh_morris@yahoo.com)

Steve Hernandez  
[slh@lclaw-nm.com](mailto:slh@lclaw-nm.com)

Adrian Oglesby  
[Adrian@lawoftheriver.com](mailto:Adrian@lawoftheriver.com)

Tom Paterson  
[tpaterson@susmangodrey.com](mailto:tpaterson@susmangodrey.com)

Lou Rose  
[lrose@montand.com](mailto:lrose@montand.com)

Samantha Ruscavage-Barz  
[sruscavagebarz@wildearthguardians.org](mailto:sruscavagebarz@wildearthguardians.org)