

**ATTACHMENT E**



**MEMORANDUM**

**To** Antero Resources Piceance Corporation

**FROM** Hogan Lovells US LLP

**TELEPHONE** 303-899-7300

**DATE** April 27, 2011

**SUBJECT** Memorandum regarding Existing Protections for Ambient Air Quality

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The Second Draft of the Battlement Mesa Health Impact Assessment ("Second Draft HIA") alleges that "there is not enough information to determine whether or not current federal, state, and COGCC regulations and rules are sufficient to protect public health from air pollution resulting from natural gas development and production in high population density areas such as the Battlement Mesa PUD." This statement ignores state and federal law. The Second Draft HIA makes recommendations it admits are "above and beyond" those required by federal and state law. Second Draft HIA, § 3.1 at 12.

Colorado state law expressly prohibits a local government from implementing many of the recommendations contained within the Second Draft HIA. Additionally, both federal and state air quality regimes belie the claim that current rules and regulations to protect public health from air emissions are insufficient and that the recommendations contained in the Second Draft HIA with respect to air quality, particularly hazardous air pollutants, are appropriate or legal. Colorado state law expressly preempts the recommendations in the Second Draft HIA as it relates to air quality regulations.

On the federal level, in 1990, Congress enacted the Clean Air Act ("CAA"), a comprehensive air quality program that includes provisions on National Emission Standards for Hazardous Air Pollutants ("NESHAP") and New Source Performance Standards ("NSPS"). At the state level, in 1992, the Colorado general assembly enacted the Colorado Air Pollution Prevention and Control Act ("CAPPCA"), implementing the federal CAA program and functioning as a gap-filling mechanism for the state to further regulate hazardous air emissions. As noted above, CAPPCA expressly preempts local authorities from imposing more stringent requirements with respect to hazardous air pollutants. Colo. Rev. Stat § 25-7-128(7)(c). Any recommendations made in the Second Draft HIA (or finalized HIA) that are more stringent than current Colorado law and regulations regarding hazardous air pollutants (which implement the requirements of the CAA) are prohibited. Those recommendations should be addressed in a legislative or regulatory proceeding before the Air Quality Control Commission ("Commission"), rather than a permit action before Garfield County.

## Federal Clean Air Act

In 1990, Congress enacted major amendments to the CAA to address concerns about human health and environmental effects caused by air pollution. P.L. 101-549 (Nov. 15, 1990). Some of the key changes address hazardous air pollutants, otherwise known as “HAPs” or “air toxics,” which are pollutants that have known adverse human health or environmental effects.

### *National Emission Standards for Hazardous Air Pollutants*

The Environmental Protection Agency (“EPA”) historically regulated HAPs through the NESHAPs. In the 1970s and the 1980s, the NESHAPs program was considered unsuccessful because it failed to significantly reduce air toxic pollution. See EPA Overview of the CAA Amendments of 1990. As a result, the CAA Amendments of 1990 overhauled the NESHAPs program in order to make it more effective to protect public health.

Under the 1990 amended NESHAPs program, an emission source is categorized as a “major source” or an “area source” depending on whether the yearly HAP emissions exceeds particular thresholds.<sup>1</sup> A “major source” must be controlled with “the maximum degree of reduction in emissions . . . taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determine[d to be] achievable for new or existing sources in the category or subcategory to which such emission standard applies.” 42 U.S.C. § 7412(d)(2). These standards are more commonly known as “MACT” standards – maximum achievable control technologies. An “area source” might be subject to generally available control technologies (“GACT”) or management practices to reduce emissions instead of MACT standards, at EPA’s discretion. 42 U.S.C. § 7412(d)(5). The source categories for oil & gas exploration and production are included in both the major and area source categories, and regulated by EPA and thus by the State of Colorado Air Pollution Control Division (“APCD”). Revised NESHAPs for the oil and gas industry will be proposed in May 2011 and finalized before the end of 2011.

The CAA required EPA to assess any risk to public health from toxic air pollution remaining after implementation of the amended NESHAPs program. 42 U.S.C. § 7412(f). If this “residual risk” threatened public health, EPA was obligated to promulgate supplementary health-based standards. *Id.* EPA currently conducts ongoing national-scale assessments (“NATA”) of air toxic emissions in order to identify and prioritize air toxics, emission source types, and locations that are of greatest potential concern.<sup>2</sup> See EPA, NATA website, available online at [www.epa.gov/nata](http://www.epa.gov/nata). These assessments characterize the potential public health risk from exposure and are designed to overestimate the risks. *Id.* EPA recommends NATA as a “starting point for local-scale assessments.” *Id.* This program identifies risk from air toxic pollution and underscores EPA’s commitment to combat whatever negative public health effects remain after implementation of the NESHAP program. Garfield County data is included in EPA’s 2005 Assessment Results (published 2011). The Garfield County modeling results, developed from emissions inventories as of 2005 (the height of the oil and

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<sup>1</sup> A “major source” is defined by the CAA as “any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.” 42 U.S.C. § 7412(a)(1). In contrast, an “area source” is defined as “any stationary source of hazardous air pollutants that is not a major source.” 42 U.S.C. § 7412(a)(2).

<sup>2</sup> The most recent NATA was published in March 2011.

gas boom), do not indicate any concerns regarding impacts to public health from hazardous air pollutants. In addition, the modeling results are validated by the correlation between modeling and monitoring data for the particular pollutants of concern in the Second Draft HIA. For that reason, in contrast with the statements made in the Second Draft HIA, there seems to be very little “unknown” risk to public health in Garfield County from hazardous air pollutants from oil and gas operations – the primary pollutants addressed in the Second Draft HIA.

#### *New Source Performance Standards*

EPA also regulates air toxics through NSPS, which focus on controlling air emissions from various types of industrial facilities. 42 U.S.C. § 7411(b). A performance standard is defined as a “standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.” 42 U.S.C. § 7411(a)(1). Under NSPS, if a category of stationary sources causes or significantly contributes to air pollution reasonably anticipated to endanger public health or welfare, EPA must promulgate regulations establishing standards of performance for that source category. 42 U.S.C. § 7411(b)(1). Accordingly, while public health considerations determine whether EPA promulgates regulations for a given source category, additional considerations impact EPA’s development of the actual standards applicable to it. Revised NSPS requirements for oil and gas operations will be proposed in May 2011 and promulgated before the end of 2011.

#### **Colorado Air Pollution Prevention and Control Act**

In response to the CAA Amendments of 1990, the Colorado general assembly amended CAPPCA. S.B. 92-105, 58<sup>th</sup> Gen. Assemb., Reg. Sess. (Colo. 1992). This enactment of CAPPCA authorizes the state to implement the CAA<sup>3</sup> and includes a gap filling mechanism for making the Colorado rules more stringent than the CAA. Thus, even if the Second Draft HIA had taken issue with specific aspects of the CAA with respect to oil and gas operations (which it did not), CAPPCA established a method to address any identified deficiencies in the CAA. To the extent that CAPPCA did not address a particular deficiency, state law and regulations contain the proper procedures to instigate such a change. A permit application is not the appropriate forum for implementing more stringent requirements.

#### *Purpose of CAPPCA*

CAPPCA requires the use of “*all available practical methods which are technologically feasible and economically reasonable*” to reduce, prevent and control air pollution in Colorado. Colo. Rev. Stat. § 25-7-102 (emphasis added). From this statement of purpose, public health is listed as one of many considerations to determine which air pollution measures are appropriate. But by focusing solely on public health, the Second Draft HIA ignored the additional considerations of practicality, technological feasibility, and economical reasonability required by law.

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<sup>3</sup> EPA may delegate implementation and enforcement authority to states, such as Colorado, that have developed satisfactory state implementation plans. 42 U.S.C. §§ 7411(c)(1), 7412(l)(1).

*Federal NSPS and MACT incorporated by reference*

Colorado regulates air pollutants by incorporating by reference the federal NSPS and MACT programs into its state implementation plan. See 5 C.C.R. 1001-8. Once a year, the Commission adopts any new or revised federal NSPS and MACT by reference. See Colorado Department of Public Health and Environment website.

*CHAPs*

The State of Colorado has fully and completely regulated hazardous air pollutants in the State of Colorado. Originally, CAPPCA listed 130 Colorado-only hazardous air pollutants (“CHAPs”) in addition to the 189 hazardous air pollutants identified in the CAA. Colo. Rev. Stat. § 25-7-109.3(5)(a). The Colorado Air Quality Control Commission<sup>4</sup> was given authority in CAPPCA to amend the CHAP list by regulation. Colo. Rev. Stat. § 25-7-109.3(5)(b). The updated list with over 500 additional CHAPs can be found in 5 C.C.R. 1001-5. The CAPPCA definition of a “major source” of these pollutants is comparable that in the CAA. 5 C.C.R. 1001-5.I.B.25. As in the CAA, major sources under CAPPCA must control CHAP emissions through Colorado MACT<sup>5</sup> and Colorado GACT<sup>6</sup> standards. Colo. Rev. Stat. § 109.3(3). In general, where a federal MACT standard applies, the Colorado MACT is inapplicable because CAPPCA incorporates by reference the federal MACT standards. Colo. Rev. Stat. §§ 25-7-109.3(3)(b)(I), (3)(e). But where no federal standard is provided, HAP and CHAP sources are subject to Colorado’s program. *Id.* at 109.3(3)(b)(II).

In CAPPCA, as in the CAA, emission limits are technology based. See Colo. Rev. Stat. § 25-7-103(6.7),(6.8). Originally, the CAA implemented health-based requirements, which limited emissions based on the perceived risk to public health regardless of feasibility. 58 Fed. Reg. 42762 (Aug. 11, 1993). That method, however, failed to successfully achieve its goal of establishing achievable emission limits. Consequently, the CAA Amendments of 1990 moved to a program limiting emissions based on the availability of technology. *Id.* Likewise, Colorado implemented technology-based definitions of emission limits. Colo. Rev. Stat. § 109.3(3)(a)(I). Based on these definitions, Colorado MACT requires a cost-benefit analysis to determine the level of emission control. Colo. Rev. Stat. § 25-7-103(6.7),(6.8).

*Preemption*

Colorado **explicitly prohibits** local governments, such as Garfield County, from implementing standards or requirements “more stringent than a corresponding state provision *with respect to hazardous air pollutants . . .*” Colo. Rev. Stat. § 25-7-128(7)(c)

<sup>4</sup> The Commission also promulgates regulations under the authority of CAPPCA. Colo. Rev. Stat. §§ 25-7-104, 105.

<sup>5</sup> *Colorado MACT* means “standards . . . utilizing principles of sound engineering judgment in applying the criteria set forth in section 112(d) of the federal act respecting the creation of standards or requirements which provide for the maximum degree of emissions reduction that has been demonstrated to be achievable for the control of hazardous air pollutants, considering a cost-benefit analysis, economics, the cost and availability of control technology, and the location, nature, and size of the source involved, and the actual or potential impacts on the public health, welfare, and the environment.” Colo. Rev. Stat. § 25-7-103(6.8).

<sup>6</sup> *Colorado GACT* means “standards imposed pursuant to section 25-7-109.3(3) utilizing principles of sound engineering judgment in applying the criteria set forth in section 112(d) of the federal act respecting the creation of standards or requirements utilizing generally available control technologies or management practices by area sources for the reduction of emissions of hazardous air pollutants considering a cost-benefit analysis, economics, the cost and availability of control technology, and the location, nature, and size of the source involved, and the actual or potential impacts on the public health, welfare, and the environment.” Colo. Rev. Stat. § 25-7-103(6.7).

(emphasis added). This is likely because CAPPCA recognized that “the prevention, abatement, and control of air pollution in each portion of the state are matters of *statewide* concern.” Colo. Rev. Stat. § 25-7-102. The only exception to this prohibition on local HAP standards allows “local zoning powers and ordinances enacted pursuant to other authorities under state law.” Colo. Rev. Stat. § 25-7-128(7)(c). In addition, when a local air pollution control authority does adopt requirements more stringent than the corresponding state provisions, unrelated to HAPs or under the limited exception, that authority is financially responsible for the state’s enforcement costs. Colo. Rev. Stat. § 25-7-114.7(2)(a)(I)(C). Garfield County’s implementation of any air quality recommendations related to hazardous air pollutants in the Second Draft HIA would be constrained by this provision.

*Colorado Department of Public Health & Environment (“CDPHE”) in cooperation with the Agency for Toxic Substances and Disease Registry (“ATSDR”) Health Consultation to Garfield County*

On August 26, 2010, the CDPHE and ATSDR issued a Health Consultation for Garfield County at the request of Garfield County.<sup>7</sup> This Health Consultation concluded that “[i]t cannot currently be determined if breathing ambient air in [those areas of] Garfield County [which were monitored] could harm people’s health.” And so it made four recommendations: (1) continue long-term air monitoring; (2) implement short-term air monitoring; (3) determine source apportionment including sources other than the oil and gas operations; and (4) continue management of the risk. One area of uncertainty identified in the report was the exclusion from consideration of sources other than oil and gas development that contribute to the overall pollutant levels. Significantly, this exclusion would result in an overestimation of the risk posed solely by oil and gas development. This report did not justify the imposition of more stringent requirements on oil and gas development, but rather it identified areas where the collection of additional information could assist future health assessments to determine need. Therefore, the Second Draft HIA conclusions regarding impact to public health from air emissions from oil and gas operations and the recommendations to limit emissions from oil and gas operations are not validated by the Health Consultation. Furthermore, if additional requirements are determined to be appropriate, additional requirements must be imposed through the proper state agency channels.

## **Conclusion**

The APCD has a federally-approved air permitting program from EPA, with full NESHAP and NSPS implementation authority. Beyond the federally-approved air program, Colorado has expanded its authority under CAPPCA to protect public health from air emissions (including hazardous air pollutants). The federal and state authorities tasked with protecting air quality have enacted comprehensive regimes for the purpose of maximizing the reduction of hazardous air pollutants for the benefit of human and environmental health. Even those comprehensive regimes, designed to ensure protection of human health, consider factors such as economic and technological feasibility during the development of regulatory requirements – factors which the recommendations in the Second Draft HIA ignore. Finally, Colorado state law expressly prohibits local authorities from implementing requirements addressing air emissions or hazardous air emissions. The recommendations made in the Second Draft HIA with respect to air quality are pre-empted by state law, and thus cannot be implemented by Garfield County.

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<sup>7</sup> This Health Consultation relays the same information as the CDPHE Garfield County Air Toxics Inhalation: Screening Level Human Health Risk Assessment (June 2010).