

STATE OF NORTH CAROLINA
COUNTY OF WATAUGA

IN THE OFFICE OF
ADMINISTRATIVE HEARINGS
08 EHR 0779 and 09 EHR 3175

APPALACHIAN VOICES,)
)
 Petitioner,)
)
 v.)
)
 NORTH CAROLINA DEPARTMENT OF)
 ENVIRONMENT AND NATURAL)
 RESOURCES, DIVISION OF AIR)
 QUALITY,)
 Respondent,)
)
 and)
)
 DUKE ENERGY CAROLINAS, LLC,)
)
 Respondent-Intervenor.)

APPALACHIAN VOICES'
BRIEF IN SUPPORT OF
EXCEPTIONS TO DECISION
(Before the Environmental
Management Commission)

INTRODUCTION

Now comes Petitioner, Appalachian Voices, pursuant to G.S. 150B-36, with a brief in support of its exceptions to the Decision of the Administrative Law Judge (ALJ) in the above-captioned matter as it comes before the State agency for a final agency decision. This matter involves the issuance of air pollution permits by Respondent, the North Carolina Department of Environment and Natural Resources, Division of Air Quality (DAQ), to Respondent-Intervenor, Duke Energy Carolinas, LLC (Duke Energy). The air pollution permits govern the construction, operation and maintenance of a new, massive 800-megawatt coal-fired power plant (Unit 6). Unit 6 is currently under construction at Duke Energy's Cliffside generating facility located approximately fifty miles west of Charlotte in Cleveland and Rutherford Counties, North Carolina.

LIST OF COMMONLY USED ACRONYMS AND SHORTHAND IDENTIFIERS

AOC	Approximate Original Contour
BACT	Best Available Control Technology
CAA	Federal Clean Air Act
DAQ	Division of Air Quality
Duke Energy	Duke Energy Carolinas, LLC
EAB	Environmental Appeals Board
EIA	United States Energy Information Administration
EPA	Environmental Protection Agency
FIP	Federal Implementation Plan
Modified Source	An existing major source of air pollution undergoing major modifications
NAAQS	National Ambient Air Quality Standards
NSRWM	EPA's Draft New Source Review Workshop Manual
PEIS	United States Env't'l Protection Agency, et al., Programmatic Environmental Impact Statement Regarding Mountaintop Mining/Valley Fills in Appalachia
PRB	Powder River Basin
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
T28 Permit	The first air pollution permit issued by DAQ to Duke Energy for the construction, operation and maintenance of Unit 6 issued on 29 January 2008
T29 Permit	The second permit issued by DAQ to Duke Energy for the construction, operation and maintenance of Unit 6 issued on or about 13 March 2009
Unit 6	Duke Energy's massive new 800-megwatt coal-fired power plant

ABOUT APPALACHIAN VOICES

Headquartered in Boone, North Carolina, Petitioner, Appalachian Voices, is a non-profit, member-based organization incorporated under the laws of North Carolina. Appalachian Voices brings people together to solve the environmental problems having the greatest impact on the central and southern Appalachian Mountains. Appalachian Voices has offices in Asheville, NC, Charlottesville, VA and Washington, D.C.

Appalachian Voices' members utilize the areas surrounding, and downwind of, Unit 6 permanently and regularly to fulfill a variety of legally protected interests including: raising children; residences; owning and operating businesses; swimming; fishing; boating; education; breathing; domestic and municipal water supplies; wildlife viewing, including endangered and threatened species; recreation; and aesthetic and spiritual fulfillment. Members of Appalachian Voices plan to use the area surrounding, and downwind of, Unit 6 permanently and regularly as they have customarily done well into the foreseeable future.

Appalachian Voices' members utilize the coalfields of the central Appalachian Mountains permanently and regularly to fulfill a variety of legally protected interests including: raising children; residences; owning and operating businesses; swimming; fishing; hunting; boating; education; breathing; domestic and municipal water supplies; wildlife viewing, including endangered and threatened species; recreation; and aesthetic and spiritual fulfillment. Members of Appalachian Voices plan to use the coalfield regions of the central Appalachian Mountains permanently and regularly as they have customarily done well into the foreseeable future.

Appalachian Voices' members have suffered, are suffering, and are threatened with, actual injury from Respondent's failure to comply with the Clean Air Act (CAA). Because the interests

of Appalachian Voices' members are directly and irreparably injured by Respondent's violation of the CAA, Appalachian Voices brings this action on behalf of itself and its members.

PROCEDURAL HISTORY

On or about 31 October 2007, Appalachian Voices timely filed comments regarding DAQ's draft permit for the construction, operation and maintenance of Unit 6. See Exhibit 3. On 29 January 2008, DAQ issued a final permit (T28 Permit) to Duke Energy for the construction, operation and maintenance of Cliffside. See Motion to Intervene on Behalf of Duke Energy, at 2, ¶ 5. On 18 March 2008, Appalachian Voices timely filed a petition for a contested case hearing with the OAH. See Appalachian Voices' Petition for a Contested Case Hearing in 08 EHR 0779. That petition challenged, on a number of grounds, the unlawfulness of DAQ's decision to issue the T28 air pollution permit to Duke Energy. See id. at 3–5 (briefly discussing claims 13.a–13.f). On 30 April, the ALJ granted DAQ's unopposed motion to consolidate all the Petitioner's T28 cases (i.e. 08 EHR 0771, 0779, 0835 & 0836) and granted Duke Energy's motion to intervene. See Order Consolidating Cases, Amending Schedule, Amending Caption and Granting Intervention at 2.

On 27 October 2008, Appalachian Voices filed a motion for partial summary judgment as to claims 13.a and 13.c of its contested case. See Appalachian Voices' Motion and Memorandum in Support of Summary Judgment in 08 EHR 0779. In that motion, Appalachian Voices argued that DAQ violated the CAA by refusing to consider the collateral impacts of surface coal mining when selecting the best available control technology (BACT). Id. Following a hearing on 17 November 2008 regarding a number of motions, the parties filed proposed orders with the ALJ on 22 December 2008. See Proposed Order Granting Appalachian Voices' Motion for Partial Summary Judgment in 08 EHR 2008. On the same day, Appalachian

Voices voluntarily dismissed claim 13.b. See Appalachian Voices' Unopposed Voluntary Dismissal of its Environmental Justice Claims in 08 EHR 0779.

On 12 May 2009, Appalachian Voices timely filed a petition for a contested case hearing challenging DAQ's decision – made on or about 13 March 2009 – to issue a new construction, operation and maintenance permit for unit 6 (T29 Permit). See Appalachian Voices' Petition for a Contested Case Hearing in 09 EHR 3175.¹ On 13 May 2009, the ALJ denied Appalachian Voices' Motion for Summary Judgment regarding claims 13.a and 13.c of its T28 Petition. See Order Denying Summ. Judg. for Petitioners and Granting Summ. Judg. for Respondent and Intervenor-Respondent at 4–7. On 27 May 2009, the ALJ granted Duke Energy's motion to intervene in the T29 permit proceedings. See Orders Granting Motion to Intervene in 09 EHR 3102, 3174, 3175 and 3176.

Based upon, inter alia, DAQ's Motion to Consolidate and Appalachian Voices' Motion to Decouple its T28 Petition from the other T28 Petitions, briefing in support thereof, and certain dismissals with prejudice made by Appalachian Voices, the ALJ, inter alia: (1) denied DAQ's Motion to Consolidate Appalachian Voices' T29 Petition (09 EHR 3175) with the other T29 Petitions (09 EHR 3102, 3174 and 3176); (2) granted Appalachian Voices' Motion to Decouple its T28 Petition (08 EHR 0779) from the other T28 Petitions (08 EHR 0771, 0835 and 0836); and (3) granted DAQ's Motion to Consolidate Appalachian Voices' T28 and T29 Petitions (08 EHR 0779 and 09 EHR 3175). See Order on Consolidation, Decoupling and Dismissal at 2, ¶¶ 1, 3, 5, respectively (August 11, 2009). The ALJ further ordered that its rulings on claims 13.a and 13.c in Appalachian Voices' T28 Permit Petition (08 EHR 0779) apply to the identical claims (i.e. 14.a and 14.c) in its T29 Permit Petition (09 EHR 3175). See id. at 2. With no additional claims

¹ The other T28 Petitioners also filed contested case hearings challenging the T29 permit. See Petitions for Contested Case Hearings in 09 EHR 3102, 3174 and 3176. These latest petitions are collectively known as the T29 Petitions. See Order on Consolidation, Decoupling and Dismissal at 2, ¶ 1 (11 August 2009).

before the ALJ (compare claims 13.a–13.f in 08 EHR 0779; with claims 14.a–14.f in 09 EHR 3175), Appalachian Voices filed a motion requesting that the ALJ return its decision to the EMC for a final decision on 08 September 2009. See generally, Appalachian Voices’ Mot. & Mem. in Supp. of, Returning the ALJ’s Dec. to the EMC for a Final Decision. On or about 07 October 2009, the Office of Administrative Hearings (OAH) returned its decision to the EMC. See e.g., Letter from NC Dep’t of Justice to Gollwitzer, et al. (October 7, 2009).

Appalachian Voices files exceptions to the findings of fact and conclusions of law contained in the ALJ’s Decision denying Appalachian Voices’ Motion for Summary Judgment because the ALJ erred in finding that the permit was granted properly.

**THE CLEAN AIR ACT: AMBIENT AIR QUALITY STANDARDS,
IMPLEMENTATION PLANS, NEW SOURCE REVIEW, PREVENTION OF
SIGNIFICANT DETERIORATION AND SELECTING THE BEST AVAILABLE
CONTROL TECHNOLOGY**

I. Establishing National Ambient Air Quality Standards and Designating Areas as Attainment, Non-attainment or Unclassifiable in Meeting Those Standards

Title I of the Clean Air Act, 42 U.S.C. §§ 7401–7671q (2008), requires, inter alia, the United States Environmental Protection Agency (EPA) to develop national ambient air quality standards (NAAQS) for those pollutants that “cause or contribute to air pollution.” 42 U.S.C. § 7408(a)(1)(A)–(B) (2008). In addition to protecting human health and the environment, NAAQS “serve as ceilings for acceptable maximum air quality concentrations.” Bernard F. Hawkins, Jr. & Mary Ellen Ternes, The Clean Air Act Handbook, 131 (Robert J. Martineau, Jr. & David P. Novello eds., 2d ed. 2004). Once a NAAQS has been established for a “criteria” pollutant,² EPA must divide the country into areas designated as “attainment,” “non-attainment” or

² To date, EPA has promulgated NAAQS for six criteria pollutants: sulfur dioxide (SO₂), particulate matter (PM), nitrogen oxide (NO_x), carbon monoxide (CO), ozone (O₃) and lead (Pb).

“unclassifiable” for each criteria pollutant depending on whether the area meets the NAAQS for that pollutant. Id. § 7407(d)(1) (2008).³

II. State and Federal Implementation Plans for Achieving NAAQS

States bear the primary responsibility for assuring air quality within their borders by developing state implementation plans (SIP) detailing the manner in which the NAAQS will be achieved and maintained. 42 U.S.C. § 7407(a) (2008). A SIP is not effective until approved by EPA. See, 42 U.S.C. § 7410 (2008). SIPs may be approved in whole or in part. 42 U.S.C. § 7410(k)(3) (2008). If a SIP, or portion thereof, is untimely or insufficient for achieving and maintaining NAAQS, EPA will develop a federal implementation plan (FIP) for the state to follow. 42 U.S.C. § 7410(c)(1) (2008). Where a FIP is in effect, EPA is the implementing authority unless EPA delegates its responsibilities to a state. 42 U.S.C. § 7410(c)(3) (2008). States that have received EPA approval for their SIPs are commonly known as “SIP-approved” states, while those implementing FIPs are known as “delegated” states.

III. New Source Review and the CAA’s Prevention of Significant Deterioration Program

To address air pollution emitted by major new sources and major modifications of existing sources (modified sources), the CAA requires new source review (NSR) before construction activities may commence. NSR is divided into two programs depending on the NAAQS attainment status of each criteria pollutant in the area to be affected by the new or modified source. In non-attainment areas, new and certain modified sources must, inter alia,

³ It is not uncommon for areas to be designated as “attainment” for some criteria pollutants and “nonattainment” for other criteria pollutants.

obtain preconstruction permits designed to offset emission increases and achieve the lowest achievable emission rate (LAER). 42 U.S.C. §§ 7501–7514a (2008).⁴

In attainment areas, new and certain modified sources must comply with the prevention of significant deterioration (PSD) program, 42 U.S.C. §§ 7470–7492 (2008), by obtaining preconstruction permits that prescribe emissions limits representing the “best available control technology” (“BACT”). 42 U.S.C. § 7475 (2008). As part of the permitting process, the applicant must demonstrate that the criteria pollutants it will emit – coupled with existing sources – neither exceed NAAQS nor PSD increments. PSD increments represent the maximum allowable increase in concentration of criteria pollutants that is permitted to occur above a specified baseline concentration. See United States Env’tl Protection Agency, Draft New Source Review Workshop Manual at C.3 (1990) (NSRWM). PSD increments are based upon the amount of growth or degree of protection desired for a particular area. Class I areas “have the smallest increment and thus allow only a small degree of air quality deterioration. Class II areas can accommodate normal well-managed industrial growth. Class III areas have the largest increments and thereby provide for a larger amount of development than either Class I or Class II areas.” NSRWM at C.3–C.5.⁵

IV. Selecting the Best Available Control Technology

A cornerstone of Congress’ PSD permitting program is “to assure that any decision to permit increased air pollution ... is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.” 42 U.S.C. § 7470(5) (2008) (emphasis added). Accordingly, DAQ

⁴ Offsets are not required if the proposed source “is located in an area where specified growth allowances are permitted.” Bernard F. Hawkins, Jr. & Mary Ellen Ternes, The Clean Air Act Handbook, 180 (Robert J. Martineau, Jr. & David P. Novello eds., 2d ed. 2004).

⁵ In order to protect areas of national and international significance, Congress established a number of mandatory Class I areas. See 42 U.S.C. § 7472 (2008).

must review permit applications by evaluating “the energy, environmental, economic, and other costs associated with each alternative technology, and the benefit of reduced emissions that the technology would bring.” NSRWM at B.1–2. EPA’s NSRWM details a five-step, top-down process that should be used in identifying BACT.⁶

First, the polluter identifies in its application “all control options with potential application to the source and pollutant under evaluation.” NSRWM at B.10. Then, the polluter eliminates any options that are clearly demonstrated to be technically infeasible based on physical, chemical or engineering principles. *Id.* During the third step, the polluter ranks the remaining control technologies based on their effectiveness. *Id.* The fourth step is the heart of the BACT analysis because it ferrets out the control technology having the least collateral environmental, economic and energy impacts. As explained by EPA:

If the applicant accepts the top alternative in the listing as BACT, the applicant proceeds to consider whether impacts of unregulated air pollutants or impacts in other media would justify selection of an alternative control option. If there are no outstanding issues regarding collateral environmental impacts, the analysis is ended and the results proposed as BACT. In the event that the top candidate is shown to be inappropriate, due to energy, environmental, or economic impacts, the rationale for this finding should be documented for the public record. Then the next most stringent alternative in the listing becomes the new control candidate and is similarly evaluated. This process continues until the technology under consideration cannot be eliminated by any source-specific environmental, energy, or economic impacts which demonstrate that alternative to be inappropriate as BACT.

Id. at B.8–9 (emphasis added). Finally, in step five, “[t]he most effective control option not eliminated in step 4 is proposed as BACT for the pollutant and emission unit under review.” *Id.*

⁶ “The Draft NSR Manual is not accorded the same weight as a binding Agency regulation and, as such, a strict application of the methodology described in the NSR Manual is not mandatory. Nevertheless, the [Environmental Appeals] Board requires an analysis that reflects a level of detail in the BACT analysis comparable to the methodology in the NSR Manual. See e.g. *Knauf I*, 8 E.A.D. 121, 134 n.25 (EAB 1999) (‘A strict application of the methodology described in the NSR Manual is not mandatory, but we expect an analysis that is as sufficiently detailed as the model in the NSR Manual.’); *id.* at 129 n.14 (‘We would not reject a BACT determination simply because the permitting authority deviated from the Draft NSR Manual, but we would scrutinize such a determination carefully to ensure that all regulatory criteria were considered and applied appropriately.’).” *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 54 (EAB 2001).

In sum, the polluter – and ultimately DAQ – must select the control option having the most benign collateral impacts.

After selecting BACT, DAQ specifies – as an enforceable permit condition – an emissions limit for each source representing the “maximum degree of reduction achievable for each pollutant ...” Id. at B.2. If, however, it is infeasible for DAQ to impose an enforceable emissions limit, the agency may require “the source to use design, alternative equipment, work practices or operational standards to reduce emissions of the pollutant to the maximum extent.” Id. “The final permit is not issued until a draft permit has gone through public comment and the permitting agency has had an opportunity to consider any new information that may have come to light during the comment period.” Id. at B.54. This process also allows DAQ to consider new information developed subsequent to the submission of a complete application. Id. at 55. “This emphasizes the importance of ensuring that prior to the selection of a proposed BACT, all potential sources of information have been reviewed by the source to ensure that the list of potentially applicable control alternatives is complete (most importantly as it relates to any more effective control options than the one chosen) and that all considerations relating to economic, energy and environmental impacts have been addressed.” Id. (emphasis added).

**CONTEXTUAL BACKGROUND: AN OVERVIEW OF THE COLLATERAL IMPACTS
IMPACTS OF PERMITTING THE CONSTRUCTION, OPERATION
AND MAINTENANCE OF COAL-FIRED POWER PLANTS⁷**

I. Introduction

Armed with behemoth earth-moving machines, bunker-busting explosives and other terrors of modern technology, surface mining operations exact a devastating – far too often deadly – toll on the people, communities and ecosystems wherever they occur. Rapaciously transforming forested mountains into flat, eerily lifeless moonscapes, mountaintop removal coal mining in the central Appalachian Mountains is by far the most egregious type of surface mining. In roughly thirty years, Americans have stoked the infernos of our power plants with so much mountaintop removal coal that we have permanently erased more than 500 peaks from the Appalachian skyline, buried or polluted nearly 2,000 miles of pristine headwater streams and swept away nearly one million square miles of America’s most diverse and valuable ecosystem – the mixed mesophytic forests of the central Appalachian Mountains. Surface mining, however, is just the beginning of coal’s devastating cradle-to-grave lifecycle. From preparing the site by clear-cutting forests, to building massive dams containing lakes of toxic processing sludge, to creating climate change that rapidly melts glaciers – leaving polar bears stranded and starving – the coal-based electricity industry leaves a wake of untold human misery and environmental destruction wherever coal is extracted, processed, transported, burned and disposed of as air pollution and other post-combustion wastes.

⁷ Appalachian Voices includes this discussion of the collateral impacts of coal mining simply to illustrate for the EMC the magnitude of DAQ’s arbitrary and capricious refusal to consider the dramatic differences between the environmental impacts of surface-mined Central Appalachian coal, its western cousin, Powder River Basin (PRB) coal. As such, the assertions in these statements are immaterial for determining whether the ALJ erroneously concluded – as a matter of law – that Appalachian Voices is not entitled to summary judgment. Similarly, Appalachian Voices’ cost calculations and opinion that using PRB or other sources of coal may be environmentally and economically superior to surface-mined central Appalachian coal, are included for illustrative purposes and are also immaterial for determining – as a matter of law – whether Appalachian Voices is entitled to summary judgment. See infra, Exception #1 (discussing the ALJ’s error in determining that Appalachian Voices was required to support its motion for summary judgment with affidavits or other verified pleadings).

With more than sixty percent of the state's electricity generated from coal – and nearly half of that from mountaintop removal – North Carolinians depend on the people, communities and environment of the Appalachian coalfields. As such, we have a reciprocal ethical duty to reduce or eliminate coal's catastrophic societal and environmental impacts wherever coal is mined, processed, burned and discarded. Congress codified this moral obligation, in part, in the CAA, which requires DAQ to assess the collateral environmental and economic impacts of its permitting decisions regarding BACT.

II. Mountaintop Removal and Surface Mining in the Appalachian Mountains

Mountaintop mining and mountaintop removal begin by blasting and bulldozing away “as much as 600 feet” off the mountaintop. See UNITED STATES ENV'T'L PROTECTION AGENCY, ET AL., MOUNTAINTOP MINING/VALLEY FILLS IN APPALACHIA (PEIS), at III.J-1 (available at www.epa.gov/reg3esd1/nepa/mountaintop/mountaintop.htm). The sheer magnitude of these explosives is staggering. **The equivalent of one Hiroshima-sized bomb is detonated each week in the Central Appalachian Mountains** – turning the world's oldest mountains upside down and inside out.⁸ When mountaintop removal coal mining is involved, the rubble of what were once majestic, forested mountain peaks and ridges is indiscriminately discarded into nearby

⁸ Calculations are based on the Explosives section of the United States Geologic Survey's 2006 Minerals Handbook at <http://minerals.usgs.gov/minerals/pubs/commodity/explosives/myb1-2006-explo.pdf>.

valleys and streams. See PEIS at III.I-20.⁹ While burying these tiny mountain streams may seem insignificant, these headwaters play an incredibly important role in protecting water quality and quantity for millions of Americans:

[e]ven where inaccessible to fish, these small streams provide high levels of water quality and quantity, sediment control, nutrients and wood debris for downstream reaches of the watershed. Intermittent and ephemeral headwater streams are, therefore, often largely responsible for maintaining the quality of downstream riverine processes and habitat for considerable distances.

PEIS at III.C-1. Mountaintop mining and mountaintop removal are currently employed in the unique mixed mesophytic forests of West Virginia, Kentucky, Virginia and Tennessee. See PEIS at III.F-1. “The rugged terrain of this region is generally characterized by steep mountain slopes, confined river valleys and narrow ridge tops.” Id. at III.A-2.

According to the EPA, this region contains incredibly important biological resources for the region, the nation and the world:

[t]hese ecoregions are unique in the world because they combine characteristically northern species with their southern counterparts, and thus boast enormous richness and diversity. That, in combination with relatively mild environmental conditions, has provided a perfect setting for the evolution of unique species of plants, invertebrates, salamanders, crayfishes, freshwater mussels, and fishes. These species include great numbers of organisms, including terrestrial, aquatic, and plant species, which are supported by the Appalachian ecoregions. The southern Appalachians have one of the richest salamander faunas in the world. The Appalachian ecoregion forests represent some of the last remaining stands of

⁹ While it may be important to distinguish mountaintop mining from mountaintop removal, the environmental impacts of each are nearly identical. Mountaintop removal is simply a subspecies of mountaintop mining that utilizes valley fills rather than returning the mined area to its approximate original contour (AOC). See, e.g., PEIS at III.I-16 (“although area mining may affect an entire mountaintop or ridge line, it is considered a separate entity from mountaintop removal in that an area [mountaintop] mine site must be reclaimed to AOC.”); see also, PEIS at III.I-20 (explaining that “[i]n practice, the term mountaintop removal is used more broadly and sometimes applies ... if still descriptive of the overburden removal method.”); Bragg v. West Virginia Coal Ass’n, 248 F.3d 275, 286 (4th Cir. 2001) (“[m]ountaintop-removal coal mining, while not new, only became widespread in West Virginia in the 1990s. Under this method, to reach horizontal seams of coal layered in mountains, the mountaintop rock above the seam is removed and placed in adjacent valleys; the coal is extracted; and the removed rock is then replaced in an effort to achieve the original contour of the mountain. But because rock taken from its natural state and broken up naturally ‘swells,’ perhaps by as much as 15 to 25%, the excess rock not returned to the mountain -- the ‘overburden’ -- remains in the valleys, creating ‘valley fills.’”). In sum, while both mining methods begin by obliterating mountain peaks and ridges by reducing them to rubble, mountaintop removal coal mining includes the additional collateral environmental and societal impacts associated with burying nearby valleys and streams.

a forest type that was once widespread in the northern hemisphere. These rich deciduous forests have been profoundly altered over the past few centuries and are becoming increasingly threatened.

PEIS at III.A-1 (citations omitted). Indeed, “[t]he mixed mesophytic forests of the Appalachian coal fields supports one of the richest floral, breeding bird, mammal, and amphibian communities of any upland eastern U.S. forest type – it has also been described as ‘the most biologically diverse ecosystem in the southeastern United States.’” PEIS at III.F-2 (citations omitted; emphasis added). Other forest types being destroyed by mountaintop mining in the Appalachian coalfields include: (1) Appalachian Oak Woods (i.e. Oak Dominant Forests); (2) Northern Hardwoods (i.e. Mountain Hardwood Forests); (3) Floodplain Forests; (4) Oak-Pine Forests (i.e. Hardwood/Conifer Forests and Mountain Hardwood/Conifer Forests); and (5) Pine Forests (i.e. Mountain Conifer Forests). See PEIS at III.F-4–6.

Furthermore, “as many as 14 vertebrate species may be found in the [Appalachian coalfields] that are not found anywhere else in the world.” PEIS at III.F-6 (emphasis added). Similarly, “[b]irds are amazingly diverse in the [Appalachian coalfields], due largely to the mosaic of microenvironments associated with the Appalachian Plateau Province.” PEIS at III.F-7. Portions of the region “contain critical breeding habitat for some species of Neotropical migratory songbirds.” Id. (emphasis added). In fact,

[s]ome of the highest concentrations of Neotropical migrant bird species like the scarlet tanager (*Piranga olivacea*), worm-eating warbler (*Helmitheros vermivorous*), Louisiana waterthrush (*Seiurus motacilla*), and wood thrush (*Hylocichla mustelina*) occur in West Virginia. The mixed mesophytic forests are reported to support the richest avifauna in Kentucky and one of the richest avifauna’s [*sic*] in the eastern United States.

PEIS at III.F-7 (citations omitted). Mountaintop mining threatens to destroy this critically important biological region because such operations

involve fundamental changes to the region's landscape and terrestrial wildlife habitats. Prior to 1998 (the start of this EIS) with the increasing size of these operations, a single permit involved changing thousands of acres of hardwood forests into herbaceous cover. This is true even for the short-term when forest is [the] post-mining land use. While the original forest habitat was crossed by flowing streams and was comprised of steep slopes with microhabitats determined by slope, aspect, and moisture regimes, the reclaimed mines are often limited in topographic relief, devoid of flowing water, and most commonly dominated by erosion-controlling, herbaceous communities. ...

PEIS at III.F-12 (citations omitted, emphasis added). The late, Honorable Charles H. Haden II, described his grim firsthand experience witnessing the permanent destruction that accompanies mountaintop mining and its more destructive cousin, mountaintop removal:

[t]he Court's helicopter flyover of all mountaintop removal sites in southern West Virginia revealed the extent and permanence of environmental degradation this type of mining produces. On February 26, the ground was covered with light snow, and mined sites were visible from miles away. The sites stood out among the natural wooded ridges as huge white plateaus, and the valley fills appeared as massive, artificially landscaped stair steps. Some mine sites were twenty years old, yet tree growth was stunted or non-existent. Compared to the thick hardwoods of surrounding undisturbed hills, the mine sites appeared stark and barren and enormously different from the original topography. ... Destruction of the unique topography of [the Appalachian Mountains], ... cannot be regarded as anything but permanent and irreversible. ...

Bragg v. Robertson, 54 F. Supp. 2d 635, 646 (S.D. WV 1999) (emphasis added).

III. Open Pit Mining in the Powder River Basin

The coalfields of the Powder River Basin (PRB) are primarily located in northeastern Wyoming and central Montana. "The Basin is primarily a gently rolling grassland with a few mesas and buttes (hinting of the nearly horizontal strata below) that are typical of arid western valleys. Trees are found only along the creeks and rivers." See generally, The University of Wyoming Science and Mathematics Teaching Center's "Guided Field Trip to a Coal Mine," <http://smtc.uwyo.edu/coal/MineFieldTrip/welcome.asp> (last visited 27 October 2008). Open pit mining is the typical method of extracting coal in the PRB. Id. An open pit mine involves

digging a hole, removing the coal and then filling the hole with the overburden. “Once the pit is filled it is reshaped back to the original contours and seeded with native grasses. Animal habitats are rebuilt. Reclamation is very successful as it is often difficult to tell the mined land from the unmined [sic].” <http://smtc.uwyo.edu/coal/MineFieldTrip/reclamation2.asp?auto=yes> (last visited 27 October 2008). Due to drastically different topography and lower population densities in the west, open pit mining in the PRB has far less devastating environmental and societal effects than surface mining in the Appalachian Mountains.

STATEMENT OF UNDISPUTED MATERIAL FACTS

Appalachian Voices timely submitted – and DAQ received – comments on the proposed permit prior to the 15 November 2007 deadline.¹⁰ See Hearing Officer’s Report and Recommendations, Appendix B at 6. In those comments, Appalachian Voices specifically requested that DAQ consider, inter alia, the “collateral impacts” of mountaintop removal and other surface coal mining on the people, communities and the environment of the Appalachian coalfields when identifying and selecting the best available control technology (BACT). See generally, AppVoices’ Mem. in Supp. of Summ. Judg., Exhibit 3 at 5–25. In response to that request DAQ stated that “[t]he issue of coal mining is outside the scope of a review under DAQ regulations, see Hearing Officer’s Report and Recommendations at 6, and that it “has no authority or regulation over coal mining procedures.” Id. at 21.¹¹

¹⁰ The deadline for submitting written comments regarding the draft construction and operation permit was extended from 31 October 2007 to 15 November 2007. See Hearing Officer’s Report and Recommendations at 1.

¹¹ Because DAQ and Duke have failed to controvert or challenge these three material facts, they are indisputably, undisputed.

**STANDARDS OF REVIEW WHEN CHALLENGING DAQ'S DECISIONS MADE
PURSUANT TO THE NORTH CAROLINA ADMINISTRATIVE PROCEDURE ACT**

In cases challenging agency decision making under North Carolina's Administrative Procedure Act (APA), N.C. Gen. Stat. §§ 150B-1–57, “[q]uestions of law receive de novo review,’ whereas fact-intensive issues ‘such as sufficiency of the evidence to support [an agency's] decision are reviewed under the whole-record test.’” In re: Denial of NC Idea's Refund of Sales and Use Tax, __ N.C. App. __ (2009), 675 S.E.2d 88, 94, 2009 N.C. App. LEXIS 423 (quoting In re Appeal of the Greens of Pine Glen Ltd. P'ship, 356 N.C. 642, 647, 576 S.E.2d 316, 319 (2003)). “Specifically, in cases where the gravamen of an assigned error is that the agency is subject to reversal under subsections 150B-51(b)(1), (2), (3) or (4) of the [APA], a court engages in de novo review.” Id. (citing Meads v. N.C. Dep't of Agric., 349 N.C. 656, 665, 670, 509 S.E.2d 165, 171 (1998)).

Because each of Appalachian Voices' exceptions involves pure questions of law (i.e. none involve questions of fact or mixed questions of fact and law), de novo review is the appropriate standard of review. Under de novo review, the matter is considered anew and the reviewing tribunal freely substitutes its own judgment for that of the agency that made the decision. See id. (quoting Mann Media, Inc. v. Randolph County Planning Bd., 356 N.C. 1, 13, 565 S.E.2d 9, 17 (2002)).

**EXCEPTION #1: THE ALJ ERRED IN CONCLUDING THAT – AS A MATTER OF
LAW – APPALACHIAN VOICES MUST SUPPORT A MOTION FOR SUMMARY
JUDGMENT WITH AFFIDAVITS OR OTHER VERIFIED PLEADINGS**

North Carolina's Rules of Civil Procedure expressly provide that a litigant need not submit affidavits or other verified pleadings in order to secure summary judgment in its favor. See N.C. Gen. Stat. § 1A-1, Rule 56(a) (allowing a claimant to move for summary judgment “with or without supporting affidavits ...”) (emphasis added); see also, N.C. Gen. Stat. 1A-1, Rule 56(c)

("[t]he judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, ...") (emphasis added). Yet, the ALJ denied Appalachian Voices' motion for summary judgment by holding that "Appalachian Voices did not meet its burden of proof of showing that there is no genuine issue as to any material fact ..." See Order Denying Summ. Judg. for Petitioners and Granting Summ. Judg. for Respondent and Intervenor-Respondent at 5, ¶ 16 (hereafter, ALJ's Order).¹² The ALJ's conclusion is erroneous and should be rejected by the EMC because the crux of Appalachian Voices' motion centers on the purely legal question of whether DAQ must consider the collateral impacts of various types of coal mining before permitting Duke Energy to pollute North Carolina's air.

It is by now axiomatic that judicial review of DAQ's permitting decisions is generally limited to the evidence considered by DAQ prior to approving or denying an air pollution permit. See e.g., Camp v. Pitts, 411 U.S. 138, 142, 93 S. Ct. 1241, 36 L. Ed. 2d 106 (1973) (per curiam) ("[t]he focal point for judicial review should be the administrative record already in existence, not some new record made initially in the [OAH]."); see also, Ohio Valley Env'tl. Coalition v. Aracoma Coal Co., 556 F.3d 177, 210 (4th Cir. 2008) (unless arising under the National Environmental Policy Act, "review of agency action is typically limited to the administrative record that was available to the agency at the time of its decision.") (citing Camp v. Pitts at 142) (emphasis added).

Accordingly, in this record review case, Appalachian Voices needs to establish just three undisputed material facts in order to proceed to the legal merits of its claim. Namely that prior to

¹² In opposing Appalachian Voices' motion for summary judgment DAQ and Duke made much ado about the fact that Appalachian Voices did not support that motion with any affidavits or other verified pleadings. See e.g., DAQ's Resp. in Opp. to AppVoices' Mot. for Summ. Judg. at 4–6); Duke's Opp. to AppVoices' Mot. for Summ. Judg. at 18–19.

issuing the air pollution permit: (1) Appalachian Voices timely submitted comments regarding the draft permit; (2) Appalachian Voices brought to DAQ’s attention the collateral impacts of surface-mined Central Appalachian coal in those comments; and (3) DAQ failed to consider the collateral impacts of surface-mined Central Appalachian Coal. Each of these material facts was established prior to DAQ’s issuance of the air pollution permit. See supra, Statement of Undisputed Material Facts at 16.

Accepting the ALJ’s conclusion that in record review cases – where no genuine issues of material fact exist – a petitioner must engage in the costly, time-consuming discovery process before proceeding to the legal merits, will forever abrogate a petitioner’s right to move for summary judgment “at any time after the expiration of 30 days from the commencement of the action.” N.C. Gen. Stat. 1A-1, Rule 56(a). Here, the ALJ – apparently beguiled by how DAQ and Duke Energy framed the question presented – set out to answer the wrong question.¹³ The EMC should reject the ALJ’s evisceration of a petitioner’s fundamental right to move for summary judgment at any time thirty days after commencing an action.

**EXCEPTION #2: THE ALJ ERRED IN CONCLUDING THAT – AS A MATTER OF
LAW – DAQ IS NOT REQUIRED TO CONSIDER THE COLLATERAL
IMPACTS OF SURFACE COAL MINING WHEN SELECTING BACT
FOR A COAL-FIRED POWER PLANT**

The ALJ denied Appalachian Voices’ motion for summary judgment by finding that “[t]he Clean Air Act does not regulate coal mining in permits issued for power plants, and neither DAQ nor Duke Energy has control over the means by which coal is obtained for sale in the market.” ALJ’s Order at 6, ¶ 27. The ALJ also found that “[i]n North Carolina, coal mining techniques are managed by the Division of Land Resources under the Mining Act of 1971 [and] [o]n the

¹³ Instead of deciding whether DAQ must – as a matter of law – consider the collateral impacts of coal mining when identifying and selecting BACT, the ALJ seemed to be determining whether certain types of coal mining have more unacceptable collateral impacts than others. In answering the latter question, there is little doubt that Appalachian Voices would have to support a motion for summary judgment with affidavits and other verified pleadings.

federal level, mining is governed by the Surface Mining Control and Reclamation Act. *Id.* at ¶¶ 25–26 (citations omitted). While the ALJ’s statements are – standing alone – correct, the ALJ erred in denying Appalachian Voices’ motion for summary judgment by answering the wrong question. The question presented is not whether DAQ or Duke Energy could control the methods of extracting coal. Rather, the question – as presented by Appalachian Voices – is whether DAQ must consider the collateral impacts of coal mining when selecting BACT? *See* AppVoices’ Mem. in Supp. of Summ. Judg. at 23. An in-depth review of the BACT selection process reveals that DAQ must consider such impacts provided that these concerns were timely brought to the agency’s attention during the process.

As noted above, when selecting BACT, DAQ must “identify all control options with potential application to the source and pollutant under evaluation.” NSRWM at B.10 (emphasis added). Next, DAQ must evaluate – in a comparative manner – “the energy, environmental, economic and other costs associated with each [potential] alternative technology.” *Id.* at B.1–2; *see also, In re Old Dominion Electric Cooperative*, 3 E.A.D. 779, 792 (Adm’r 1992) (explaining, “[w]hile collateral environmental impacts are relevant to the BACT determination, their relevance is generally couched in terms of discussing which available technology, among several, produces less adverse collateral effects, and, if it does, whether that justifies its utilization even if the technology is otherwise less stringent.”); *In re Metcalf Energy Ctr.*, PSD Appeal Nos. 01-07 & -08, at 14 (EAB Aug. 10, 2001), *aff’d*, No. 01-71611 (9th Cir. Nov. 21, 2002) (“the hallmark of any BACT analysis is the process of comparing one facility with another, in terms of pollution control technologies employed, costs of compliance, collateral environmental, energy, and economic impacts, and so on.”).

In addition, DAQ must “identify any significant or unusual environmental impacts associated with a control alternative that have the potential to affect the selection or elimination of a control alternative.” NSRWM at B.47 (emphasis added). Similarly, DAQ must consider “the extent to which the alternative emission control systems may involve a trade-off between short-term environmental gains at the expense of long-term environmental losses and the extent to which the alternative systems may result in irreversible or irretrievable commitment of resources ...” *Id.* at B.49. As an example of the types of impacts that should be considered during this phase of the BACT analysis EPA identifies the “use of scarce water resources.” *Id.*¹⁴ Once a top BACT candidate is identified, DAQ must determine “whether impacts of unregulated air pollutants or impacts in other media would justify selection of an alternative control option.” *Id.* at B.8 (emphasis added). Moreover, “if two or more control techniques result in control levels that are essentially identical ... the source may wish to point this out and make a case for evaluation of only the less costly of these options. The scope of the BACT analysis should be narrowed in this way only if there is a negligible difference in ... collateral environmental impacts between control alternatives.” *In re Prairie State Generating Co., LLC*, PSD Appeal No. 05-05, slip op. at 46 (EAB Aug. 24, 2006) (quoting NSRWM at B.20–21) (emphasis added).

Thus, the ALJ’s conclusion that because DAQ has no authority to regulate coal mining, DAQ need not consider its collateral impacts is – as a matter of law –clearly erroneous. It is notable that the Environmental Appeals Board (EAB) has rejected similar arguments.¹⁵ See e.g.,

¹⁴ Here, DAQ simply ignored overwhelming evidence in the record before it that surface-mined Appalachian coal will irreversibly and irretrievably impact the scarce resources of the Central Appalachian Mountains. See, Bragg v. Robertson, 54 F. Supp. 2d at 646 (“[d]estruction of the unique topography of [the Appalachian Mountains], ... cannot be regarded as anything but permanent and irreversible. ...”); see also, Exhibit 3, 4 (incorporating, inter alia, in its entirety, UNITED STATES ENV’T’L PROTECTION AGENCY, ET AL., MOUNTAINTOP MINING/VALLEY FILLS IN APPALACHIA).

¹⁵ The EAB is the final Agency decisionmaker on administrative appeals under all major environmental statutes that EPA administers. The EAB typically sits in panels of three judges and makes decisions by majority vote.

In re: Amerada Hess Corporation Port Reading Refinery, 12 E.A.D. 1, 10 n.19 (EAB 2005) (“[w]hile the PSD provisions do not authorize the regulation of [hazardous air pollutants (HAPs)] per se, HAP emissions may be considered in the PSD permitting process ... in the context of considering collateral environmental impacts in the selection of BACT.”) (citations omitted; emphasis added); see also, In re Knauf Fiber Glass, GmbH, 8 E.A.D. 121, 165 n.59 (EAB 1999) (“waste issues might be legitimate subjects of PSD review if such issues were raised in the context of the BACT determination as collateral environmental impacts.”) (emphasis added); Id. at 172 (“[i]ssues of safe chemical handling are generally outside the scope of the PSD program unless raised in the context of the BACT determination as collateral environmental impacts.”) (citation omitted; emphasis added).

In sum, if certain collateral impacts are identified and raised during the BACT selection process permitting authorities must consider them. Here, like the petitioners in Knauf, Appalachian Voices squarely and unequivocally raised the specter of surface-mined Appalachian coal in the context of the BACT determination as collateral environmental, economic and social justice impacts. See generally, Exhibit 3, 5–25. As such, the ALJ erred in holding that DAQ need not consider such effects in making its BACT determination.

In re: Prairie State Generating Company, LLC, PSD Appeal No. 05-05, slip op. at 60–63 (EAB Aug. 24, 2006), provides additional support for the proposition that the ALJ erred in finding that DAQ need not consider the collateral effects of coal mining during its BACT analysis. There, petitioners argued that because the facility would use approximately one million tons of limestone per year in operating the technology designated as BACT, the impacts of limestone mining on the threatened Eastern Narrow Mouth Toad should have been considered as collateral effects. While the EAB declined to reach the issue of whether the effects of limestone

mining constituted “‘secondary environmental impacts’ within the meaning of NSR guidance,” id. at 62, it is noteworthy that the Illinois EPA found it had authority to – and did – consider such collateral impacts as they were raised in the context of making its BACT determination. See id. at 60 (“[p]etitioners state that the administrative record contained a copy of an e-mail from IEPA to Prairie State stating that the issue was raised in a draft biological opinion prepared by the Illinois Department of Natural Resources.”).

Finally, the ALJ erred in failing to effectuate Congress’ intent that DAQ “assure that any decision to permit increased air pollution ... is made only after careful evaluation of all the consequences of such a decision ...” 42 U.S.C. § 7470(5) (2008) (emphasis added). While Appalachian Voices holds an expansive, though reasonably bound, view of the ordinary meaning of the word “all,” the ALJ’s implicit definition of all will – contrary to a fundamental principle of statutory construction – render the first clause of section 7470(5) meaningless. As explained by the Supreme Court of North Carolina:

[u]nder the canons of statutory construction, the cardinal principle is to ensure accomplishment of the legislative intent. To that end, we must consider “the language of the statute ..., the spirit of the act and what the act seeks to accomplish.” Moreover, undefined words are accorded their plain meaning so long as it is reasonable to do so. Further, the Court will evaluate the statute as a whole and will not construe an individual section in a manner that renders another provision of the same statute meaningless.

Polaroid Corp. v. Offerman, 349 N.C. 290, 297; 507 S.E.2d 284, 290 (1998) (citations omitted). Here, because Congress failed to define the non-technical word all in section 7470(5), the ALJ was required to apply its plain meaning. Polaroid Corp., at 297; see also, Smith v. United States, 508 U.S. 223, 228 (1993) (“In the search for statutory meaning, we give nontechnical words and phrases their ordinary meaning.”) (citation and internal quotation marks omitted). In applying this principle of statutory construction, courts have found dictionaries instructive. Id. at 228.

The word “all” is ordinarily construed as representing the total extent, amount, quantity or number. See THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE, Houghton Mifflin Company, at 47 (3rd ed. 1996). Because the effects of surface coal mining in Central Appalachia constitute one of the number of “all” the direct and reasonably foreseeable consequences of DAQ’s permitting decision, the ALJ’s conclusion should be rejected – unless, of course, the application of the ordinary meaning of the word “all” would be unreasonable. Polaroid Corp., at 297. In determining whether the application of the plain meaning of a particular word is reasonable, it must neither “thwart the purpose of the statutory scheme [nor] lead to an absurd result.” J. SUTHERLAND, STATUTES AND STATUTORY CONSTRUCTION, § 77:3 (N. SINGER ed. 7th ed. 2008). Here, neither of these consequences stem from applying the plain meaning of the word all.

Applying the plain meaning of the word all to section 7470(5) will not thwart any of the purposes of the PSD program. In fact, using the ordinary meaning of the word all enhances the effectiveness of that program by providing an additional lens through which DAQ “careful[ly] evaluat[es] all of the consequences” of its permitting decisions. 42 U.S.C. § 7470(5) (2008) (emphasis added). To better understand this conclusion it is necessary to review the five purposes for which Congress enacted the PSD program:

- (1) to protect public health and welfare from any actual or potential adverse effect which in the Administrator’s judgment may reasonably be anticipate[d] to occur from air pollution or from exposures to pollutants in other media, ... ;
- (2) to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;
- (3) to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources;

(4) to assure that emissions from any source in any State will not interfere with any portion of the applicable implementation plan to prevent significant deterioration of air quality for any other State; and

(5) to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.

42 U.S.C. §§ 7470(1)–(5) (2008). Remarkably, while the purposes embodied in sections 7470(1)–(4) are specifically designed to protect and improve air quality, section 7470(5) broadens the purpose of the PSD program to include the “careful evaluation of all the consequences” of DAQ’s permitting decisions. 42 U.S.C. § 7470(5) (emphasis added). To accept the ALJ’s conclusion that the PSD permitting program requires the DAQ to turn a blind eye to those collateral impacts which are not site-specific (i.e. at or in the immediate vicinity of a pollution source), violates a fundamental principle of statutory construction by rendering section 7470(5) meaningless. See e.g., Mintec Corp. v. Miton, 392 B.R. 180, 186 (Bankr. D. Md. 2008) (“[a]bsent a clear indication to the contrary, a statute, if reasonably possible, is to be read so that no word, clause, sentence or phrase is rendered surplusage, superfluous, meaningless, or nugatory.”) (citation omitted); see also, Polaroid Corp., 349 N.C. at 297 (A court “will not construe an individual section in a manner that renders another provision of the same statute meaningless.”) (citation omitted).

Here, DAQ argued that it “has historically interpreted the ‘environmental’ aspect of the collateral impacts clause to authorize only the consideration of environmental impacts that are due to emissions or discharges of other pollutants from the facility that result from the use of each control technology.” DAQ’s Resp. to Mot. for Summ. Judg. at 9. By tacitly accepting DAQ’s interpretation of the CAA, the ALJ rendered the first clause of section 7470(5) superfluous insofar as section 7470(1) already requires DAQ to assess the site-specific impacts

of its permitting decisions. Compare 42 U.S.C. § 7470(1) (“to protect public health and welfare from any actual or potential adverse effect which ... may reasonably be anticipate[d] to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air.”); with 42 U.S.C. § 7470(5) (“to assure that any decision to permit increased air pollution ... is made only after careful evaluation of all the consequences of such a decision.”). Thus, the ALJ has inadvertently thwarted Congress’ purpose in enacting section 7470(5) by collapsing its meaning to nothing more than a nullity.

Appalachian Voices’ interpretation, on the other hand, enhances the PSD program by breathing life into Congress’ desire that DAQ carefully evaluate “all of the consequences” of its permitting decisions. 42 U.S.C. § 7470(5) (emphasis added). Because courts “will not construe an individual section in a manner that renders another provision of the same statute meaningless,” Polaroid Corp., 349 N.C. at 297 (citation omitted), and because Appalachian Voices has proffered a reasonable interpretation that avoids this result, the ALJ’s implicit construction of section 7470 must be rejected by the EMC. See also, Mintec Corp., at 186 (“[a]bsent a clear indication to the contrary, a statute, if reasonably possible, is to be read so that no word, clause, sentence or phrase is rendered surplusage, superfluous, meaningless, or nugatory.”) (citation omitted). This conclusion is buttressed by the fact that applying the ordinary meaning of all will not lead to absurd results.

While reasonable limits must be placed upon the scope of section 7470(5) in order to effectuate – without crippling – Congress’ intent, the ALJ’s narrow construction of the PSD program renders the first clause of section 7470(5) meaningless, surplusage. Courts have consistently rejected such interpretations of statutory language. As noted above, the EPA and EAB have identified the outermost dividing line separating those non-site-specific collateral

impacts that generally fall inside the scope of the PSD program from those which do not. See supra at 22–23. An evaluation of the irreversible and irretrievable commitment of resources – provided they’ve been raised in the context of the BACT determination – is coextensive and consistent with Congress’ use of the word “all” in section 7470(5) of the CAA.

In sum, if an issue is not identified as a collateral impact during the BACT analysis – either by the polluter, DAQ or the public – courts have insulated permitting authorities from engaging in a fishing expedition to identify and evaluate such effects. On the other hand, if certain collateral impacts have been brought to DAQ’s attention, then DAQ must engage in a “careful evaluation” of those consequences. Here, the ALJ simply erred in concluding that DAQ – after being specifically requested to do so – need not: (1) evaluate the collateral impacts of various mining techniques; (2) assess a reasonable range of blends and their comparative impacts;¹⁶ and (3) identify potential permit conditions that minimize unacceptable collateral impacts. Requiring such an analysis is wholly consistent with the CAA and would not, contrary to Congressional intent, redefine the source.

Thus, contrary to DAQ’ assertions, see DAQ’s Resp. to Mot. for Summ. Judg. at 11–13, neither the CAA, nor Appalachian Voices’ proffered interpretation thereof, requires DAQ to evaluate a boundless, remote and attenuated chain of collateral impacts such as the manufacturing processes used in making pollution control equipment or Portland cement. Nor must DAQ evaluate the mining practices at each of the mines from which Duke Energy receives coal or a nearly limitless combination of potential fuel sources, plant types, and associated control options. However, DAQ must consider the collateral impacts of Unit 6’s primary source

¹⁶ As an example of a reasonable range (i.e. not limitless) for analyzing differing blends of coal, DAQ might consider (1) 10% surface-mined Central Appalachian coal (“SMCAC”) and 90% PRB coal; (2) 20% SMCAC and 80% PRB coal; (3) 30% SMCAC and 70% PRB coal; (4) 40% SMCAC and 60% PRB coal; and (5) 50% SMCAC and 50% PRB coal. If any of these combinations would require a redesign of the facility, other options should be explored.

of fuel because the nexus between its need for coal and the environmental impacts of coal mining could not be clearer. Indeed, “but for” issuing the permit, DAQ would not be responsible for increasing the demand for any coal mining – and its concomitant impacts – in Central Appalachia. Requiring DAQ to evaluate these collateral impacts and compare those with the collateral impacts of burning PRB coal and underground coal fulfills both the letter and spirit of the PSD program. See, respectively, 42 U.S.C. § 7479(3) (2008) (accounting for “energy, environmental, and economic impacts and other costs”); and 42 U.S.C. § 7470(5) (2008) (requiring permitting decisions to be made “only after careful evaluation of all the consequences of such a decision ...”) (emphasis added).

EXCEPTION #3: THE ALJ ERRED IN CONCLUDING THAT – AS A MATTER OF LAW – DAQ IS PROHIBITED FROM REQUIRING DUKE ENERGY TO BURN SPECIFIC TYPES OF COAL OR BLENDS THEREOF

While the ALJ correctly noted that “BACT is an emission limit, not a particular technology,” ALJ’s Order at 5, ¶ 18, the ALJ erred in finding that DAQ cannot require Duke Energy to burn specific types of coal – or blends thereof – in Unit 6. Id. In support of this erroneous conclusion, the ALJ reasoned that “[u]nder the terms of the Permit, Duke Energy may implement various pollutant control technologies, methods, or techniques to achieve the BACT limits, as long as those BACT limits are achieved, regardless of the sulfur content of the fuel that it burns.” Id. at ¶ 19 (citing In re: Hillman Power Co., L.L.C., PSD Permit Appeal Nos. 02-04, 02-05, 02-06, EPA App. Lexis 15 (EAB July 31, 2002)).

Again, the ALJ erred in denying Appalachian Voices’ motion for summary judgment by answering the wrong question. The question presented is not whether Duke Energy can achieve the BACT limits regardless of the sulfur content of the coal it burns. Instead, the question – as presented by Appalachian Voices – is whether DAQ can require Duke Energy to burn a specific

type of coal, or blends thereof, as an enforceable condition of the PSD permit? See AppVoices' Mem. in Supp. of Summ. Judg. at 23. The EPA has unequivocally answered this question in the affirmative: "there may be instances where, in the permit authority's judgment, the consideration of alternative production processes is warranted and appropriate for consideration in the BACT analysis." NSRWM at B.13. "A production process is defined in terms of its physical and chemical unit operations used to produce the desired product from a specified set of raw materials." Id. at 13–14. Here, DAQ has the discretion to consider specific types of coal, or blends thereof, as viable alternatives to producing the desired product (i.e. electricity) from a specified set of raw materials (i.e. coal). As such, ALJ erred in concluding that DAQ cannot require Duke Energy to burn specific types of coal, or blends thereof, because such a requirement is akin to an alternative production process and, "[i]n such cases, the permit agency may require the applicant to include the inherently lower-polluting [i.e. one that has less destructive collateral impacts] process in the list of BACT candidates." Id. at 13–14. Indeed, DAQ acknowledges that it has this type of discretion: "[o]nly in rare, clearly defined circumstances may DAQ forego imposing an emission limitation and instead prescribe a specific control technology." DAQ's Resp. at 7. If, as here, an emission limitation cannot be defined to avoid the unacceptable collateral impacts of coal mining, DAQ has the discretion to prescribe an alternative production process (i.e. a specific control technology) that avoids the irreversible and irretrievable destruction of the Appalachian Mountains. See NSRWM at B.13.

EPA's framework for providing permitting authorities broad discretion in assessing various BACT alternatives is consistent with one of the principal purposes of the PSD permitting program: "to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences ..." 42 U.S.C. §

7470(5) (2008) (emphasis added). Similarly, DAQ’s obligation to consider alternatives during BACT analyses is consistent with Congress’ view that the public be given an opportunity to present such alternatives for DAQ’s consideration during the public review and comment process. See 42 U.S.C. 7475(a)(2) (2008).

In sum, the ALJ erred because DAQ has ample discretion to “prescribe a specific control technology” (i.e. require a specific type of coal or blend thereof) as an alternative production process that avoids the unacceptable, irreversible and irretrievable impacts of surface mining in Central Appalachia. See e.g., Sierra Club v. United States EPA, 499 F.3d 653 (7th Cir. 2007) (hypothesizing that a permit requirement to switch from high-sulfur coal to low-sulfur coal “would be the adoption of a ‘control technology.’”) (emphasis added).¹⁷

EXCEPTION #4: THE ALJ ERRED IN CONCLUDING THAT – AS A MATTER OF LAW – DAQ IS NOT REQUIRED TO CONSIDER OTHER SOURCES OF COAL AS ALTERNATIVES TO BURNING SURFACE-MINED CENTRAL APPALACHIAN COAL

Even if the EMC accepts the ALJ’s finding that DAQ needn’t consider other sources of coal as part of its BACT analysis – a point that Appalachian Voices does not concede – the ALJ erred in concluding, as a matter of law, that DAQ need not consider other sources of coal as alternatives to surface-mined central Appalachian coal because the Clean Air Act prohibits construction unless “a public hearing has been held with opportunity for interested persons ... to appear and submit written or oral presentations on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations.” 42 U.S.C. § 7475(a)(2) (2008) (emphasis added). Here, Appalachian Voices timely presented overwhelming evidence that surface-mined Appalachian coal has unacceptable effects and

¹⁷ Sierra Club makes clear that should DAQ determine that burning different types of coal, or combinations thereof, has less damaging collateral impacts, then DAQ can require Duke Energy to use such coal as an alternative control technology, see 40 C.F.R. § 51.166(b)(12), or production process. See NSRWM at B.13.

requested DAQ to consider, inter alia, PRB coal as an alternative fuel source. See e.g., Exhibit 3, 5–25. Yet, the ALJ erroneously held that DAQ was not required to consider sources other than surface-mined Appalachian coal. ALJ’s Order at 6, ¶ 22.

While the ALJ attempts to bolster his conclusion by finding that “DAQ considered PRB fuel ... and the record upon which the Permit was issued identified several reasons (reliability of delivery, emissions and costs) why exclusive use of PRB coal would not be appropriate,” id. at 5–6, ¶ 20, these considerations do not excuse DAQ’s failure to comparatively consider the collateral impacts of alternative mining techniques pursuant to section 7475(a)(2). Without such an analysis, neither DAQ nor Duke Energy can affirmatively conclude that the permit represents the best available control technology – after considering energy, environmental, economic and other costs. See 42 U.S.C. § 7479(3) (2008).

CONCLUSION & PRAYER FOR RELIEF

In sum, the ALJ erred by answering the wrong questions. The question is not simply whether DAQ has the authority to regulate coal mining? The appropriate questions to be answered are whether DAQ: (1) must compare the collateral environmental, economic and societal impacts of various sources of coal with those of surface-mined Appalachian coal when these effects are raised in the context of selecting BACT; (2) has the discretion and authority to require Duke Energy, through enforceable permit conditions, to burn other sources of coal or blends thereof; and (3) must consider other sources of coal as alternatives to burning surface mined Appalachian coal. As demonstrated in the foregoing analysis, the answer to each question is a resounding yes. Because Appalachian Voices timely and squarely raised the effects of surface mining in Central Appalachia “in the context of the BACT determination as collateral environmental impacts,” the ALJ erred in finding that DAQ need not evaluate those effects. See

Knauf at 165 n. 59 & 172. By excusing DAQ’s shortcomings, the ALJ has failed “to assure that any decision to permit increased air pollution ... is made only after careful evaluation of all the consequences of such a decision.” 42 U.S.C. § 7470(5) (2008).

WHEREFORE, the EMC should determine that the permit sub judice was issued improperly. For Exceptions 1–4, alternative findings of fact and conclusions of law are found in Appalachian Voices’ Proposed Decision, filed 16 November 2009, and should be adopted as the final agency decision.

Respectfully submitted, this 13th day of October 2009.

/s/

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CERTIFICATE OF SERVICE

I hereby certify that copies of APPALACHIAN VOICES' BRIEF IN SUPPORT OF EXCEPTIONS TO THE DECISION (Before the Environmental Management Commission) has been served on the following counsel by hand delivery or by first-class USPS mail, postage pre-paid and by electronic mail on the following:

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Dated at Asheville, North Carolina this 13th day of November 2009.

/s/

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