COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
FILE NO. TRH-41137-039
PERMIT NO. 898-0806

SIERRA CLUB
and
KENTUCKIANS FOR THE COMMONWEALTH

PETITIONERS

VS. **ORDER GRANTING TEMPORARY RELIEF**

ENERGY AND ENVIRONMENT CABINET
and
CAMBRIAN COAL CORPORATION

RESPONDENTS

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I. INTRODUCTION: BACKGROUND and SUMMARY OF RULING

A. Background

In this action, Petitioners, Sierra Club and Kentuckians for the Commonwealth, seek temporary relief from the Energy and Environment Cabinet's (Cabinet's) April 15, 2010 determination to issue Cambrian Coal Company's application for surface coal mining and reclamation operations permit 898-0806. This determination was made by the Cabinet's Division of Mine Permits (DMP) under the authority of KRS Chapter 350 and the regulations promulgated pursuant thereto, including principally the permitting regulations codified at 405 KAR Chapter 8. Petitioners seek temporary relief from the permit determination while they contest the ultimate validity of the permit in a separate but related formal hearing proceeding designated by File No. PDH-41137-048 (PDH action). The PDH action was filed on May 14, 2010, pursuant to the authority of 405 KAR 7:092 Section 8 and seeks revocation of this

approximately 792 acre permit near Elkhorn City, Pike County, Kentucky, which authorizes coal removal by the contour, auger, and area (mountaintop removal) methods of coal mining. While initially no petition for a temporary relief hearing (TRH) was filed by the Petitioners, this TRH petition followed on August 23, 2010, after Petitioners were notified that Cambrian would shortly commence operations on the permit (or a portion thereof).[1]

The authorization and standards for temporary relief, including from the issuance of a determination to issue a permit, are established by 405 KAR 7:092 Section 12 and are set out fully in the Conclusions of Law, below. In brief, Petitioner musts establish the following to be entitled to a grant of temporary relief: i) a substantial likelihood of success on the merits in its related PDH proceeding; and ii) that temporary relief, if granted, will not result in an adverse effect on the public health or safety or cause significant, imminent environmental harm to air, land, or water resources.

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[1] The portion being operated on currently is limited to the "footprint" of a prior issued Cambrian Coal Company permit, permit 898-0615, which was a permit transferred to Cambrian from another entity. The prior permit has been overlapped by this new Cambrian permit, but the new permit changes the approved method of operation for the overlapped area, in part, and specifically authorizes additional area mining for the overlapped area to a lower elevated coal seam, which lower seam was previously to be mined only by the contour and auger methods. Petitioners particularly oppose the proposed area mining under the new permit because they believe said operations, and the accompanying large hollowfills at the head areas of streams will adversely impact or cause material damage to the hydrologic balance off the permit area, which is the critical basis for its PDH and TRH challenges. It should also be noted that the new permit also adds a substantial amount of additional acreage than was covered under the prior permit. However, operations on those new areas are not currently allowed because Cambrian is pursuing and has yet to be granted its required individualized Kentucky Pollution Discharge Elimination System (KPDES) discharge permit required under the federal Clean Water Act (CWA), which discharge permit program is administrated by the Cabinet's Division of Water (DOW). (Counsel report the draft KPDES permit has been issued, but that no final action has been taken on it because the federal Environmental Protection Agency (EPA) exercised its right to review said permit. That review period, which can be extended, is currently ongoing).

Currently, operations are only authorized under the footprint area of the prior permit because Cambrian is relying on its prior general KPDES permit that had been issued for the overlapped permit area and its involved sedimentation control ponds. However, Petitioners still seek temporary relief because apparently both the Cabinet's Division of Mine Reclamation and Enforcement (DMRE), which is the Cabinet agency responsible for KRS Chapter 350 enforcement; and the Cabinet's DOW (responsible for Kentucky's CWA and KPDES programs) have advised Cambrian that they may conduct operations within that footprint area and use the changed method of operation allowing for additional area mining.

B. Summary of Ruling

In this TRH action, Petitioners seek temporary relief from the Cabinet's determination to issue the permit to Cambrian and, thus, require Cambrian to cease active operations on the permit during the pendency of the underlying formal PDH action resolving the ultimate legal validity of the permit. Petitioners seek temporary relief on two legal bases, which in this report the undersigned has referred to as the "temporal" and "standard" arguments. The parties agreed that there are no disputed material facts relevant to resolving these two issues. Thus, these two issues have been submitted to the undersigned for a ruling after the parties' respective counsel filed legal memorandums and were heard in oral argument.

Petitioners' temporal argument is that DMP failed to assess in its required cumulative hydrologic impact assessment (CHIA) the pollutant contributions caused by the active mining period of Cambrian's operations. Petitioners' standard argument is that DMP's use of certain threshold qualifiers in its definition of "material damage" was in violation of the Clean Water Act (CWA) because the definition did not include all violations of the water quality standards and effluent limitations as "material damage."

As to the temporal issue, the undersigned concludes that Petitioners are likely to prevail on the merits in the underlying action and are, thus, entitled to temporary relief. In summary, the bases of this ruling are that the controlling definitions require pollutant contributions from the active mining period to be included in the hydrologic impact assessment and it is illegal to only assess the impact of the operation's post-reclamation pollutant contributions, as DMP did in this CHIA. Given that large amounts of dirt are being moved during the active mining period, that is when the operation is likely to be contributing the greatest amount of pollutants to the watersheds

and having the greatest impact on the hydrologic balance. By the time the operation reaches the post-reclamation phase, the receiving waters may have already suffered "material damage" from the cumulative impact of all mining in the watersheds. However, that impact is ignored if contributions from the active mining time period are not included in the assessment.

In its hydrologic impact assessment, DMP simply assumed that once the site reached post-reclamation equilibrium discharges or pollutant contributions from the site would be into the same quality of waters that existed pre-mining, as established by the background water monitoring data Cambrian submitted as part of the permit application process. This failed assessment process is extremely environmentally troubling because the watersheds receiving the discharges here are already impaired waters and pollutants from surface coal mining operations in the impact area are the cause of that impairment. This ruling is an independent and sufficient basis for a grant of temporary relief even though the undersigned is rejecting Petitioners' other basis for relief.

The undersigned rejects Petitioners' standard argument because the qualifiers DMP used in its CHIA analysis were for a separate and independent purpose, as opposed to the purpose of the CWA requirements. The CHIA's purpose is to set a threshold for the level of cumulative impacts that constitutes "material damage" for the purpose of determining whether a KRS Chapter 350 permit can or cannot be issued. In addition, Cambrian will be independently required (under both regulatory programs) to meet all applicable water quality standards and effluent limitations under the CWA. Thus, there is no inconsistency between this imposed requirement of the mining laws and the CWA.

Notwithstanding this rejection of the standard argument, two qualifications of this ruling should be noted. First, it is important to note this ruling is limited to consideration of the definition of "material damage" on its face, which current law supports is likely acceptable. This ruling does not address how the definition was applied, as that issue is not under review in this matter. Secondly, the undersigned has ruled herein that DMP must consider the impacts of the active mining period as part of its assessment, and, thus, DMP cannot use any of the challenged qualifiers to exclude consideration of those impacts. That would be an illegal application of the definition. In the present case, DMP did not apply the "material damage" definition to exclude consideration of those impacts, but excluded consideration of the impacts from active mining only because, as stated by DMP in the CHIA itself that: "Increases in TDS and conductivity [identified pollutants of concern from this mining operation] are expected to occur during and immediately after mining. Increases during mining vary widely from site to site and are not addressed here."

II. SUMMARY OF THE PROCEEDINGS

After this TRH petition was filed by Petitioners on August 23, 2010, this matter was assigned to the undersigned and, at the undersigned's request, the Office of Administrative Hearings (OAH) arranged a scheduling conference with the parties' counsel in the PDH action for the purpose of scheduling and determining how to proceed in this separate TRH action.

This initial telephonic scheduling conference was held on August 27, 2010. The Hon. Mary V. Cromer appeared for Petitioners, Sierra Club (Sierra) and Kentuckians for the Commonwealth (KFTC). The Hon. Timothy Hagerty appeared for Respondent, Cambrian Coal

Corporation (Cambrian). The Hon. Tamara Patrick appeared for the Cabinet, with several client representatives from the Cabinet's DMP.

During this initial scheduling conference, Petitioners reported they are seeking temporary relief, as a matter of law, based on the same arguments they have made in a separate motion for summary judgment/recommendation filed in the related PDH action on two of their four assignments of errors or "counts." Thus, Petitioners did not seek an evidentiary hearing in their petition for temporary relief. Counsel for the Respondents reported that pursuant to a Scheduling Order entered in the PDH action, which anticipated Petitioners' motion for summary recommendation to be made on the specified two counts, Respondents were to file their replies to said motion on September 3, 2010. However, by agreement, due to September 3, 2010, being a state employee forced-furlough day during which non-critical state employees were not allowed to work, and Labor Day holiday being on September 6, 2010, the parties had agreed to allow the Respondent Cabinet to file its response to Petitioners' motion on September 7, 2010. Counsel for both Respondents also reported they believed the two counts could be resolved, as a matter of law and without an evidentiary hearing, in both the TRH and PDH proceedings, and that they, therefore, anticipated their responses to Petitioners' motion would also include their own counter-motions for summary recommendation, as to the same two counts. (As to count 4, concerning an alleged failure by Cambrian to conduct its mining operations to minimize the amount of spoil disposal or to comply with a new Reclamation Advisory Memorandum (RAM), the parties apparently all agree that particular count must be resolved through an evidentiary hearing due to disputed facts, but that count is not relevant to this TRH proceeding since Petitioners are not seeking temporary relief on that count. As to the other count in the PDH

petition, count 2, Petitioners have subsequently withdrawn that count with prejudice in the PDH action and have never relied on that count as a separate basis for temporary relief).

Thus, given the above, it was agreed that this temporary relief petition would be heard, as a matter of law during an oral argument, relying on the same filings made in the PDH action on the cross-motions for summary recommendation-with the exception that the TRH record would not be held open for Petitioners' reply to be made in the PDH action. The undersigned ordered that the cross-motions/responses were to be filed by the Respondents respectively on September 3, 2010 (Cambrian) and September 7, 2010 (Cabinet), as was the schedule in place for the PDH action. The oral argument on the TRH petition was scheduled to be held on September 8, 2010. On August 30, 2010, OAH filed and served its official Notice formally advising the parties of this TRH petition, this briefing schedule, and the date and time for the oral argument during which this TRH would be heard.

However, it should be noted that while Petitioners did not object to this procedure, Petitioners did object to the schedule since they desired an earlier oral argument and earlier submittal of their TRH petition for ruling given that Cambrian counsel reported the operations had already begun on the permit-at least as to that portion covered by the footprint of the earlier permit. Petitioners' request for an earlier schedule and submittal were rejected by the undersigned after counsel for the Cabinet reported she would be unable realistically to comply with any earlier schedule. As noted further below, the undersigned did sustain Petitioners' objection to Cambrian counsel's request to place into the record an affidavit of "equitable" type factors balancing against a grant of temporary relief, as those are not legally relevant to the

criteria specified for consideration of Petitioners' TRH petition. (An affidavit filing was authorized but for avowal purposes only).

The parties made their filings and oral argument on the TRH petition was held on September 8, 2010. In addition to the above counsel who appeared for the prior scheduling conference, the Hon. Stephen A. Sanders also appeared for Petitioners, as their co-counsel, but Ms. Cromer made Petitioners' arguments in support of their temporary relief petition. No client representatives attended the oral argument. Finally, the Hon. Matthew L. Mooney, the Hearing Officer assigned the PDH action, also attended the oral argument and participated in questioning of counsel, since the exact same issues would be submitted to him in the near future.[2] This oral argument lasted several hours and a digital record of the oral argument was made.

During this oral argument, counsel reported the information on current operations summarized in note 1, above and the additional fact that DMRE was going to issue a noncompliance to Cambrian for its operations which exceeded the "footprint" of the prior overlapped permit.

Finally, at the conclusion of the oral argument on September 8, 2010, the undersigned requested the parties (by agreement) work out and file a copy of all the referenced Federal Register notices relied on in their written filings. Mr. Haggerty agreed to attempt this compilation. Counsel for the Cabinet also reported that there was a single page missing from the

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[2] Currently, the cross-motions for summary recommendation in the PDH action are scheduled to be heard during a separate oral argument before Mr. Mooney on October 13, 2010, after the filing of Petitioners' reply. However, because of Cambrian's current operations on a portion of the permit area, Petitioners needed this TRH petition heard, submitted, and ruled on "expeditiously," as required by the controlling temporary relief regulation. Because of language in KRS 350.0301(5), the Office of Administrative Hearings (OAH) assigns a different Hearing Officer to hear and consider related petitions for temporary relief and the underlying formal hearing proceedings.

official CHIA record which had been given to her and the Petitioners. She reported she would attempt to locate and file this single missing page.

On September 10, 2010, Mr. Hagerty sent an e-mail to the OAH, with attachments. The attachments included copies of the requested pages from the Federal Register (FR), with an additional single page reference sheet as to the copies provided; and in addition, a copy of the docket sheet for the federal court litigation concerning OSM's formal approval of the West Virginia CHIA standard (which was noticed in one of the copied FR notices). This litigation was also discussed during the oral argument and the undersigned had specifically inquired about the status of that litigation, which this docket sheet provides. A copy of this e-mail with its attachments was provided to counsel of record and the e-mail specifically notes that this compilation of attachments had been agreed to between counsel as being both "accurate and complete." Finally, in an attachment in a separate September 10, 2010 e-mail to OAH (on which she copied all counsel), Ms. Patrick provided the missing page from the CHIA exhibit, which she reports had previously not printed out due to a "computer glitch."

In addition, on September 9, 2010, Mr. Hagerty also sent to OAH (with copies to counsel of record), an update as to the status of the mining operations on the permit. In this update he reports that the noncompliance, as expected, had been issued but Cambrian had also been ordered to cease all operations on the permit area, including on the "footprint" area of the prior permit until Cambrian obtained a minor revision addressing the involved ponds' correct location and their labeling (which is different under the two permits). However, that revision was expected to be obtained shortly or by "the end of next week."

As a result of the above report on current operations, and the obvious desire of the undersigned to not address the issues herein unless actually required to do so, on September 13, 2010, the undersigned checked the Cabinet's "Doc-Tree" database to review the actual wording on the September 7, 2010 issued noncompliance, which is noncompliance 53-0767. The noncompliance was based on a September 1, 2010 inspection. However, while the noncompliance was as expected and consistent with Mr. Hagerty's e-mail report, that database review also established that on September 8, 2010, the assigned DMRE inspector issued a modification of the noncompliance which stated in part: "Permittee is to cease all mining activities immediately on any areas permitted under permit #898-0806." The stated basis for the modification was stated as follows: "It was determined the company had no valid KPDES permit for permit #898-0806. Therefore no mining activities shall take place on any permitted area of 898-0806."

As a result of the above, the undersigned contacted counsel of record on September 13, 2010 and briefly advised them of the modification, and scheduled a follow-up teleconference with them on September 14, 2010 to discuss its consequences, especially as to the need for consideration of this TRH petition. This conference was held as scheduled. The Hon. Mary Cromer appeared for Petitioners. The Hon. Timothy Hagerty appeared for Respondent Cambrian. The Hon. Tamara Patrick appeared for the Cabinet. A tape record of this conference is maintained in the file.

During this follow-up conference on September 14, 2010, Ms. Patrick reported that she had checked on the status of allowed operations (from the DMRE perspective) and that the modification was incorrectly worded and further reported the modification would itself be

modified to reflect that DMRE will allow operations to continue under the new 898-0806 permit but limited to the overlapped footprint area of the prior 898-0615 permit and only after the minor revision is issued correctly locating and labeling the old 898-0615 sedimentation control ponds in the new 898-0806 permit. It is those ponds whose discharges were (and presumably are) authorized under the existing general KPDES permit. Those ponds and their coverage under a general KPDES permit are the bases for DMRE (and DOW by report of Cambrian's counsel) to allow Cambrian's operations to continue on the new permit (limited to the overlapped 898-0615 footprint area). This limitation will remain in place until Cambrian obtains final issuance of its individualized KPDES permit that will then cover all discharges from the new permit. Cambrian does not dispute that limitation.

In fact, Mr. Hagerty reported during the earlier oral argument that Cambrian would not object to a limited grant of temporary relief which would restrict any operations outside the footprint of the overlapped prior permit until at least issuance of its individualized KPDES permit. (As evidenced by the noncompliance, DMRE will enforce this limitation and any grant of temporary relief limited to that basis would be redundant unless there is a change of DMRE position). However, that offer was not sufficient for Petitioners because the approved method of operation for the overlapped area also changes under the new permit. The undersigned did not fully understand those differences during the oral argument, but questioned counsel for further information on this issue at the follow-up conference held on September 14, 2010.

As to the overlapped area, the prior permit allowed area mining of a higher elevated coal seam and only counter mining and auger mining of a lower level coal seam (but apparently with the entire area covered under the prior permit). The new permit authorizes area mining of the

lower elevated coal seam in the overlapped area. Thus, there will certainly be greater disturbance and spoil production, which impacts Petitioners' concerns. In response to questioning by the undersigned, Cabinet counsel reported that Cambrian will be allowed to conduct area mining operations on this overlapped area consistent with the approved method of operation under the new permit once the revision is issued. In response to questioning by the undersigned about whether the ponds had been modeled to properly handle the amount of disturbance caused by the new approved method of operation for this overlapped area or whether said ponds need to be modified, Mr. Hagerty reported that Cambrian had discussed this matter with the Cabinet (presumably DMRE and/or DMP or both, but not necessarily DOW) and the ponds were determined to be large enough to meet regulatory requirements so that operations could continue. (There was no discussion as to whether the expected revision addresses these issues or whether they were already addressed in the underlying permit determination). Petitioners in this TRH action have not separately sought relief on any of the unique issues that are possibly presented by the operations on the overlapped area, including reliance on the general KPDES permit for operations on the overlapped area and reliance on the old ponds under the new method of operation.

In this action, Petitioners have limited their bases for seeking temporary relief to counts 1 and 3 of their PDH petition and have not raised any additional issues to support their petition for temporary relief. Thus, these other potential issues are not before the undersigned, but were discussed only to determine whether there is a practical reason to rule on the TRH petition. Given that operations will recommence on the overlapped area once the revision is issued and there is no indication the revision will be inordinately delayed, the undersigned concludes that he needs

to take this matter immediately under submission and to issue his ruling as expeditiously as possible. The issues Petitioners have raised in their TRH petition will be summarized in the next section of this Order.

III. BACKGROUND LAW AND LEGAL REQUIREMENTS FOR PERMIT ISSUANCE AND PETITIONERS' TWO BASES FOR SEEKING TEMPORARY RELIEF

A. Introduction

As reflected in the petition for temporary relief, Petitioners believe they are entitled to temporary relief, as a matter of law, based on their assignment of errors labeled as counts 1 and 3 of their underlying PDH petition and the undisputed facts relevant to those counts, as established facially by the permit determination record. Petitioners attached the relevant portions of the permit record as part of their attached exhibits to their PDH petition and summary recommendation memorandum. Respondent Cabinet has also provided some additional exhibits attached to its memorandum relevant to its arguments on these same issues. All of the exhibits are listed and identified further below. (No additional exhibits were tendered by Cambrian).

As explained further below, Petitioners' two bases for seeking temporary relief are facial challenges to the standards the DMP used in making its required "no material damage to the hydrologic balance outside the proposed permit area" determination. This determination is an absolute legally required finding the Cabinet must make prior to issuance of any KRS Chapter 350 permit. That legal requirement and the other relevant background legal requirements will be explained next.

B. Background legal requirements for permit issuance

The fundamental legal prerequisite for issuance of a permit, which Petitioners' challenge as not having been satisfied for this permit determination, is that DMP must affirmatively determine that the operations proposed under the permit "have been designed to prevent material damage to the hydrologic balance outside the proposed permit area." This determination (or the no material damage determination) is made following DMP conducting a required "cumulative hydrologic impact analysis" or CHIA for the "cumulative impact area." The material/no material damage determination is the ultimate end point or conclusion of the required CHIA. See 405 KAR 8:010 Section 14(3) for the requirement of a Cabinet-performed CHIA and for the required no material damage determination that must be made by DMP as an absolute prerequisite prior to the issuance of any permit, including the one at issue herein.

The parties are in agreement that the critical legal term "material damage to the hydrologic balance outside the proposed permit area" or "material damage" in the hydrologic context is not defined under either Kentucky law or in the federal law (SMCRA) upon which the Kentucky law is based.[3] In addition, while the regulatory agency's requirement to conduct a

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[3] The Kentucky regulatory program to control the adverse environmental effects of coal mining in Kentucky, which is codified at KRS Chapter 350 and the regulations promulgated pursuant thereto at 405 KAR Chapters 7 through 24, is intended to be consistent with, but "no more stringent than" what is required to implement (or gain primacy) under the federal Surface Mining Control and Reclamation Act (SMCRA) of 1977. See e.g. KRS 350.025; KRS 350.028(5); KRS 350.089; and KRS 350.465. SMCRA is codified at 30 USC Sections 1201 et. seq. Kentucky's coal regulatory program was granted primacy by the federal Secretary of the Interior effective May 18, 1982, upon recommendation of the Director of the Office of Surface Mining Reclamation and Enforcement (OSM), the federal regulatory agency responsible for implementing SMCRA. See 47 FR 21404-21435. See Section 503 of SMCRA, codified at 30 USC Section 1253, for the requirements of a state regulatory program to obtain primacy, which, in summary, requires the state program to be "in accordance with the requirements [of SMCRA]." As to the broader purposes of KRS Chapter 350 and the coal regulatory program beyond obtaining and maintaining primacy, the General Assembly sets those purposes out at KRS 350.020. After first emphasizing the importance of coal production in meeting the nation's energy needs and then finding that unregulated coal mining operations cause serious damage to life, property, and environmental resources, the General Assembly stated as follows: "the purpose of this chapter [is] to provide such regulation and control of such surface coal mining operations as to minimize or prevent injurious effects on the people and resources of the Commonwealth. To that end, the cabinet is directed to

"cumulative hydrologic impact analysis" or "CHIA" is set out in the law, the actual term "CHIA" is also not defined. As to the controlling definitions of the other relevant terms which are defined, those are set out further below.

As part of its permit application, Cambrian itself must submit background geologic data and full seasonal water monitoring data and a separate "probable hydrologic consequences" (PHC) analyses and determination for both the permit and off-permit area. The PHC must address surface and ground water quality and quantity issues. The PHC must also specifically include "dissolved and suspended solids under seasonal flow conditions." As to the background monitoring requirements, see 405 KAR 8:030 Sections 12-16. As to the PHC requirements, see KRS 350.060(7). This same statutory section also requires the "collection of sufficient data in the

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rigidly enforce this chapter and to adopt whatever administrative regulations are found necessary to accomplish the purposes of this chapter." In 1986, the Kentucky Court of Appeals in the case of *Smith v. NREPC*, 712 S.W. 2nd 951, 953 relied on KRS 350.020 and stated that the Cabinet should not adopt a "'hands off' policy of non-involvement" in performing its duties under this Chapter. It is also obvious from the totality of these provisions that the Kentucky coal regulatory program, like SMCRA itself, is a balancing of environmental and economic interests. SMCRA states this expressly at its Section 102(f), 30 USC Section 1201(f).

As to federal law, the undersigned agrees with Respondents that once the Kentucky regulatory program has been granted primacy (and it is retained-as it has been to date) that Kentucky law establishes the controlling regulatory law. See *Bragg v. West Virginia Coal Association*, 248 F. 3d 275 (4th Cir. 2001), cert denied 534 US 1113 (2002). (This is unless the Secretary of the Interior makes a formal inconsistency determination that a given Kentucky provision is inconsistent with SMCRA and KRS 350.025 would then deem the Kentucky provision as unenforceable. No such determination has been made under this section on any issue relevant to this case). However, while Kentucky law controls, given the need for Kentucky law to be in accordance with SMCRA and its regulations to be "no less effective" than the corresponding federal regulations to get and maintain primacy, the law and interpretative authority under that law and regulations provide very important guidance for consideration in the appropriate interpretation of Kentucky law, at least where there is no direct unambiguous conflict in the two bodies of law. However, as to the issues relevant to this case, there is no conflict between Kentucky law and SMCRA. Petitioners in their arguments stress certain specified sections of SMCRA, particularly its requirement that nothing therein be construed as "superseding, amending, modifying or repealing" a specified list of federal laws, including the federal Water Pollution Control Act, as amended, (which is more commonly referred to as the Clean Water Act, 33 USC Section 1251 et.seq. or CWA); state laws enacted pursuant thereto; or "other federal laws relating to the preservation of water quality." See SMCRA Section 702(a)(3), 30 USC 1292 (a)(3). However, while Petitioners stress that SMCRA provision, this same requirement, for the surface coal mining operation particularly to meet all applicable water quality standards and effluent limitations required under the CWA and Kentucky's regulatory program enacted pursuant thereto, are also clearly established under the Kentucky program law. See discussion and citations further below.

PHC for the mine site and surrounding areas so that an assessment can be made by the cabinet of the probable cumulative impacts of all anticipated mining in the area upon the hydrology of the area and particularly upon water availability." (This is the required CHIA discussed above). This same statutory section also provides that, "[t]he permit shall not be approved until the information is available and is incorporated into the application."

Finally, as to the permit applicant's responsibility, 405 KAR 8:030 Section 32 requires the applicant to submit with the application as a part of its required mining and reclamation plan (MRP), a plan, "to minimize disturbances to the hydrologic balances within the permit area and adjacent area and to prevent material damage to the hydrologic balance outside the permit area." This regulatory section also sets out in more detail the PHC requirements, requires the hydrologic protection measures proposed for the operation be identified in the application,[4] and requires setting out the proposed ongoing water monitoring plan to allow monitoring the effects of the operation on the hydrologic balance. Finally, this regulation also requires that sufficient information be provided in the application to allow DMP to make its required CHIA determination and that sufficient protective measures be included to prevent material damage to the hydrologic balance outside the permit area, including establishing the operations' ability to "meet applicable water quality statutes, administrative regulations, standards, and effluent limitations, as required by 405 KAR 16:060, Section 1(3)." See subsection (1)(b)1 of the regulation for this latter specific requirement.[5] See also KRS 350.420 for the statutory duties

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[4] The parties have referred to these protective measures as being the hydrologic reclamation plan (HRP), which includes the requirement that all surface drainage from the disturbed areas pass through an approved sedimentation control pond prior to the waters being discharged to an off-permit area.

[5] As to the referenced 405 KAR 16:060 Section 1(3), that regulatory subsection simply requires that: "In no case shall federal and state water quality statutes, standards, or effluent limitations be violated." This regulation

regarding the duty of the permittee/operator to minimize disturbances to the hydrologic balance "both during and after surface coal mining operations and during reclamation by: ...

> (2) Conducting surface coal mining operations so as to prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow, or runoff outside the permit area, but in no event shall contributions be in excess of requirements set by applicable state or federal

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overall establishes the general hydrologic protection performance standards applicable for all surface mining permits, including the prevention of material damage to the hydrologic balance outside the permit area. See also KRS 350.420. Finally, on these issues see also 405 KAR 16:070, which requires that all surface drainage pass through approved sedimentation control and also sets out the requirement of the permittee to follow the applicable water quality standards and effluent limitation standards. This latter requirement is set out at Section 1(g) of the regulation as follows:

> Discharges of water from areas disturbed by surface mining activities shall at all times be in compliance with all applicable federal and state water quality standards and either: 1. If the operation does not have a KPDES permit, the effluent limitations for coal mining operations by the U.S. EPA in 40 CFR 434; or, 2. The effluent limitation established by the KPDES permit for the operation.

As to 40 CFR 434, that section of the federal regulations establishes the applicable technology based effluent limitations for coal mining operations under the CWA. The five covered parameters under these regulations are: total iron (Fe of 7/ 3.5 mg/L); total manganese (Mn of 4.0/2.0 mg/L); total suspended solids (TSS of 70/35 mg/L); settleable solids (SS of .5 mg/L) and pH in the range of 6-9 standard pH units. As to the two sets of numbers for the first three parameters, the highest is a maximum allowable at any time and the lower number is the maximum daily average for 30 consecutive days. The regulations also establish some alternative ELs for given levels of precipitation events. (Application of the SS EL as opposed to the TSS EL during specified precipitation events). As to the other parameters discussed in this case, which are the parameters of total dissolved solids (TDS); sulfates; and specific conductivity, there are currently no established per se technology-based effluent limitations (ELs), but there are applicable in-stream water quality based standards established by 401 KAR Chapter 10. The technology-based standards (ELs) are required minimums, applicable to all sources within the particular source category. The CWA regulatory authority (RA) can (and is under a duty to, at least once total maximum daily loads (TMDLs or pollutant loads) are established for the receiving water segment) impose additional or more strict ELs in order for the source's receiving waters to come into compliance with the in-stream water quality standards for those specified pollutants, as needed for the particular water body to fully support its designated use. The receiving streams involved in this case are designated for use as a "warm water aquatic habitat." There are no applicable in-stream per se numeric standards for the use of these particular parameters of concern. There are numeric standards for TSS of 750 mg/L; and sulfates of 250 mg/L, but those standards are applicable only to waters which are to be used as a domestic water supply source, at the point of intake which is not applicable here. See 401 KAR 10:031, Section 6, Table 1. (The Table is given in micrograms per liter (L), as opposed to milligrams (mg)/L. 1 mg = 1,000 micrograms). As to these pollutants/parameters, the regulation merely provides that for waters designated for warm water aquatic habitat the TDS or specific conductance "shall not be changed to the extent that the indigenous aquatic community is adversely affected." See 401 KAR 10:031 Section 4(f). The same non-numeric in-stream standard is given for TSS and SS. Id at (g) and (h). Thus, the 40 CFR Part 434 ELs for these parameters are not used as in-stream standards. However, as to pH, the numeric EL standard (range of 6-9 standard units) given by 40 CFR Part 434, is also used as the applicable in-stream requirement for this use. (Neither the PHC analysis by Cambrian or the CHIA of the Cabinet predicted any problems with acid mine drainage (AMD) from this permit and that aspect of the Cabinet's determination is not challenged by Petitioners in this action).

law. ... [Overall, the statute sets out seven requirements in seven distinct subsections, but the quoted subsection (2) is the most relevant to this case].

However, while the PHC, CHIA, and the above-discussed hydrologic impact requirements address issues of both surface and ground water quality and quantity, in the present case, Petitioners are only challenging the portion of the CHIA determination that the proposed operations will not result in material damage to the quality of the surface water of off-permit waters. Thus, no issues of water quantity impact or impact on groundwater are presented. As to impact on the water quality of off-permit surface waters, it is also not disputed that the receiving streams are already listed as being impaired waters under the CWA (unable to support their designated uses under the in-stream water quality standards of 405 KAR Chapter 10). Moreover, they are impaired by pollutants of concern from surface mining operations, including total dissolved solids, sulfates, and pollutants contributing to the waters' overall conductivity. As to the receiving streams, see Finding 5, below.

Again, for the Kentucky statutory and regulatory provisions set out above, the undersigned concludes there is nothing in the Kentucky coal regulatory program that authorizes a coal mining permittee or the Cabinet agencies responsible for implementing said program (DMRE and DMP) to "supersede, amend, modify or repeal" any aspect of the CWA or of the Kentucky water quality program enacted pursuant to KRS Chapter 224. In fact, the undersigned concludes the Kentucky program establishes a duty on those agencies, especially the DMP (the agency responsible for reviewing the proposed plans for the operation prior to issuance of any permit) to make an affirmative finding that no material damage to the hydrologic balance will occur in off-permit areas, and that duty includes a finding that the operations, as designed and

proposed, will be able to meet all applicable water quality standards and effluent limitations, as those standards and limitations are determined by DOW.[6]

C. The two specific issues

The Petitioners' two stated bases for seeking temporary relief are summarized as follows: i) the standard DMP used for making its required no "material damage" finding, as that standard is defined in the CHIA is unlawful because it adds certain qualifiers not authorized by law and which illegally modify the water quality standards required by the CWA that cannot be modified by a KRS or SMCRA authorized permit; and ii) DMP's CHIA failed to consider the acknowledged increases in TDS, sulfates, and specific conductance for the period of time during and immediately after Cambrian's mining. These two distinct but (possibly) interrelated arguments will be referred to herein respectively as the Petitioners' "standard" and "temporal" arguments.

1. Petitioners' standard argument

As to the standard argument, the CHIA establishes (and Respondents agree) that DMP used the following definition of "material damage to the hydrologic balance" when making the required no material damage determination on the surface water quality issue:

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[6] The undersigned does question how DMP can review the sufficiency of an operation's proposed design to meet applicable water quality standards, if those standards are not communicated between DOW and DMP. The facial permit record does not establish any interagency communication and, during oral argument, counsel for the Cabinet reported that no such communication was known to have occurred here, but argues that none is actually required by law. From the discussion during oral argument, it appears DOW just recently issued the individualized draft KPDES permit and this occurred some significant amount of time following DMP's permit determination challenged here. (DOW, as part of the planning process, frequently estimates predicted ELs and may have been able to do so here for DMP's use). Given the proposed operations must be designed to meet standards, the lack of interagency communication on such an important issue is troubling, especially since the receiving waters are already impaired for certain parameters of concern from surface mining and it is at least possible DOW has imposed some ELs beyond those technology-based minimums established by 40 CFR Part 434. The undersigned has not been provided a copy of the draft KPDES permit, but during oral argument Mr. Haggerty reported that said permit does not contain any effluent limitation for TDS or conductivity.

> Material damage also manifests itself as a quantifiable adverse change to the hydrologic balance outside the permit area and/or the quantifiable reduction of the capacity to support lotic aquatic species and designated use and/or a resource loss the current or potential water users. Given these circumstances, it is reasonable to assume that material damage occurring as a **long-term or permanent effect**, cannot be corrected by surface coal mining regulations or mitigation strategies.
>
> Threshold limits for surface water quantity and for groundwater quantity and quality shall be based on applicable water quality standards found in 401 KAR Chapter 10. Material damage to the surface water will occur when the surface water fails to comply with the surface water quality standards on a **chronic** basis and the designated use (401 KAR Chapter 10) for the surface water is **significantly** impacted by mining. ...
>
> KPDES effluent limits are used to define material damage for the surface water quality parameters controlled by KPDES effluent limits. The Division of Water sets effluent limits based on the water quality and use support. Individual KPDES permits address effluent limitations for proposed mining operations in impaired streams and exceptional waters. CHIA at 18 [Emphasis added to emphasize the qualifiers Petitioners argue are unlawful and in conflict with the CWA and the SMCRA provision relied upon by Petitioners and cited above].

In response to Petitioners' standard argument, Respondents argue, in part, as follows: i) the term "material damage" is not defined under KRS Chapter 350 and SMCRA in this context (which the Petitioners admit); ii) the term "material" is itself a qualifier that indicates some threshold level of quantifiable damage is required before making an adverse finding of impact, as KRS Chapter 350 and SMCRA uses in other contexts like in assessing the need for remediation requirements for subsidence damage; iii) DOW (and not DMP or DMRE) is the Cabinet agency responsible for determining the actual water quality standards and effluent limitations applicable to this operation and nothing in the KRS Chapter 350 SMCRA authorized permit modifies that separate legal obligation imposed on Cambrian, with which it must still comply; iv) while the duty to make the required no material damage finding is mandatory, both the procedure and standard used in making that determination is within the sound discretion of DMP, the

responsible regulatory authority, and DMP' interpretations are owed deference; and v) OSM has specifically approved - in two formal FR notices - other states' standards (formally adopted by state law in those cases unlike here) used in making the material damage determination that use the same qualifiers complained of by Petitioners in this case. (Except for DMP's use of the qualifier "chronic.")

The Petitioners make the following replies: i) they agree material damage is not a defined term in this context; ii) argue OSM chose not to adopt a threshold for material damage in this context, unlike other contexts like subsidence where OSM established a threshold, because OSM intended "material damage" in this context to be construed in strict compliance with all applicable water quality standards and limitations and that any deviation from those standards should per se be considered to be "material damage;' iii) argue that while DOW sets the applicable water quality standards and effluent limitations, DMP must still review and approve the proposed design for the Cambrian operation as being sufficient to meet those standards, which is beyond the capability or authority of DOW to review or approve in the KPDES determination; iv) argue that deference is not owed when the standard adopted is unlawful; and v) argue that, at least as to OSM's approval of the other states' definitions of "material damage," the last approval is being contested as being unlawful in pending litigation in a federal US District Court and, thus, may be overturned.

It is obvious from the above discussion there is also a "temporal" component to the standard argument since the standard could be used to not address a temporary impact during and immediately after active mining, as long as said impact was not chronic, long-term or permanent, or significant. However, this is distinct from the temporal component in Petitioners' "temporal"

argument which is that the pollutants discharged during the period of active mining were not considered in the DMP assessment of damage. (Those pollutants, while being discharged during the limited time period of active mining, could result in chronic, long-term or permanent damage, particularly if DMP's methodology in these assessments allow exclusion of all pollutant discharges occurring during active mining time periods, as that is the time period those pollutant discharges are likely to be at their greatest peaks).

2. Petitioners' temporal argument

As to the temporal argument, Petitioners specifically argue that DMP failed to consider acknowledged increases in TDS, sulfates, and specific conductance for the period of time during and immediately after Cambrian's active mining. Respondents dispute the factual accuracy that DMP failed to consider these issues,[7] but do not contest that the CHIA makes the following statement relied upon by the Petitioners in support of their temporal argument:

> Increases in TDS and conductivity are expected to occur during and immediately after mining. **Increases during mining vary widely from site to site and are not addressed here**. CHIA at page 20 (Emphasis added).

Petitioners argue this failure to address increases in TDS (and the related conductivity which correlates with it) for the period of active mining makes the CHIA in violation of law requiring vacating of both the underlying no material damage determination and the permit determination itself. In support of their argument, Petitioners rely upon specified definitions including of the term "cumulative impact area," (which term is defined in the next section and does support their temporal argument) and KRS 350.060(7), which Petitioners argue specifically

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[7] Since Petitioners chose to waive any evidentiary hearing, any issue of disputed fact established by the record must be resolved against their TRH petition. However, the undersigned concludes that there is no genuine issue of disputed fact, as he also concludes the statement emphasized in bold below is insufficient, as a matter of law,

requires the CHIA to consider the impacts of the proposed mining on TDS levels, including for the periods of all "anticipated mining."

As to KRS 350.060(7), which has been discussed previously in both the context of the applicant's PHC and the Cabinet's CHIA, which section provides in its entirety as follows:

> Each application shall include a determination of the probable hydrologic consequences of the mining and reclamation operations, both on and off the mine site, with respect to the hydrologic regime, quantity and quality of water in surface and groundwater systems, including the dissolved and suspended solids under seasonal flow conditions, and the collection of sufficient data for the mine site and surrounding areas so that an assessment can be made by the cabinet of the probable cumulative impacts of all anticipated mining in the area upon the hydrology of the area and particularly upon water availability. This determination shall not be required until the time hydrologic information on the general area prior to mining is made available from an appropriate federal or state agency. The permit shall not be approved until the information is available and is incorporated into the application.

Respondents disagree with Petitioners' interpretations on these issues. As to the requirement that TDS and its impacts be specifically predicted for the period of active mining, Respondents argue this requirement is imposed only on the applicant in the PHC and is not a mandatory requirement imposed on the Cabinet in the CHIA itself. In the next section, the relevant defined terms, including those relevant to this issue, will be set out.

D. Relevant defined terms

As discussed above, the critical term at issue "material damage" is not defined under Kentucky or federal law (SMCRA) upon which the Kentucky program is intended to be "consistent with but no more stringent than." On this latter issue see discussion in note 3, above.

However, while the dispositive "material damage" term is not defined in the relevant context, there are definitions provided for some of the other terms relevant to the analysis of this

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to establish actual consideration or satisfactory completion by DMP of its mandatory non-discretionary duties under KRS Chapter 350.

dispositive term. Those definitions, as defined in 405 KAR 8:001 Section 1, are set out immediately below.

> (4) "Adjacent area" means land located outside the affected area or permit area, depending on the context in which "adjacent area" is used, where air, surface or groundwater, fish, wildlife, vegetation or other resources protected by KRS Chapter 350 may be adversely impacted by surface coal mining and reclamation operations.
>
> (28) "Cumulative impact area" means the area, including the permit area, within which impacts resulting from the proposed operation may interact with the impacts of all anticipated mining on surface and groundwater systems. Anticipated mining shall include, at a minimum, the entire projected lives through bond release of:
> (a) The proposed operation;
> (b) All existing operations;
> (c) Any operation for which a permit application has been submitted to the cabinet; and
> (d) All operations required to meet diligent development requirements for leased federal coal for which there is actual mine development information available.
>
> (47) "Hydrologic balance" means the relationship between the quality and quantity of water inflow to, water outflow from, and water storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake, or reservoir. It encompasses the dynamic relationship between precipitation, runoff, evaporation, and changes in ground and surface water storage.
>
> (48) "Hydrologic regime" means the entire state of water movement in a given area. It is a function of the climate and includes the phenomena by which water first occurs as atmospheric water vapor, passes into a liquid or solid form, falls as precipitation, moves along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration.
>
> (89) "Probable cumulative impacts" means the expected total qualitative, and quantitative, direct and indirect effects of surface coal mining and reclamation operations on the hydrologic regime.
>
> (90) "Probable hydrologic consequences" means the projected results of proposed surface coal mining and reclamation operations which may reasonably be expected to change the quantity or quality of the surface and groundwater; the surface or groundwater flow, timing, and pattern; and the stream channel conditions on the permit area and adjacent areas.
>
> (126) "Suspended solids" or nonfilterable residue, expressed as milligrams per liter, means organic or inorganic materials carried or held in suspension in water which are retained by a standard glass fiber filter in the procedure outlined by the U.S. EPA's regulations for waste water and analyses (40 C.F.R. 136). [These are those retained by a specified sized filter under specified test conditions. While not defined here, TDS would be the filterable residue].

The above completes the summary of the background law and legal requirements for permit issuance, Petitioners' two bases for seeking temporary relief, and Respondents' responses thereto. The record for consideration of Petitioners' legal motion for temporary relief will be summarized next.

IV. RECORD ON MOTION FOR TEMPORAY RELIEF

A. The motion record

The record for Petitioners' motion for temporary relief consists of the following:

i). The pleadings in the underlying PDH file, which consists of Petitioners' petition therein at docket entry # 1 filed on May 17, 2010 (with attached exhibits labeled A-F); the Cabinet's response to the petition at docket entry # 4 filed on June 17, 2010; and Cambrian's response to the petition at docket entry # 5 filed on June 21, 2010.

ii). Petitioners' filing of the "declarations" or affidavits of its three respective members on June 30, 2010, which the Petitioner organizations rely on for organizational standing to bring both the PDH and TRH actions (which, at least as to one declarant who is a member of both organizations, Respondents' agree is sufficient as a matter of law to give both Petitioners' groups standing).

iii). Petitioners' motion and memorandum in support of its motion for summary disposition as to the first and third assignments of errors or "counts" in its PDH petition filed on July 30, 2010, at docket entry # 8 (with 4 attachments, 3 of which are the same previously filed member declarations).

iv). Cambrian's response to Petitioners' motion and its own counter-motion as to the same 2 counts with memorandum in support filed on September 3, 2010, at docket entry # 10.

v). The Cabinet's response to Petitioners' motion and its own counter-motion as to the same 2 counts with memorandum in support filed on September 7, 2010, at docket entry # 11 (with 12 exhibits).

vi). Petitioners' petition for TRH filed on August 23, 2010, at docket entry # 1 in the TRH file. (There are no responsive written pleadings to a TRH petition. This petition does establish that Petitioners seek temporary relief as a matter of law and without the request for an evidentiary hearing, based only on counts 1 and 3 of its underlying PDH petition and based on its already filed motion for summary disposition in the PDH action).

vii). Tape record of the August 27, 2010 scheduling conference in the TRH file.

viii). August 30, 2010 Notice of TRH and scheduling of oral argument on Petitioners' petition for TRH, at docket entry # 2 of the TRH file.

ix). Digital record of the September 8, 2010 oral argument where Petitioners' TRH petition was heard.

x). The September 10, 2010 filed FR compilations (with a cover sheet) and the docket sheet for the West Virginia case discussed during oral argument. These filings were provided by counsel for Cambrian after review and agreement with counsel of record to satisfy the undersigned's request made at the oral argument. The relevance of each of these filings is summarized briefly below.

xi). The September 10, 2010 filing by Cabinet counsel to provide the missing page from the CHIA. The CHIA had previously been by filed by Petitioners as one of its supporting exhibits, but this page had been missing from the record due to a Cabinet computer glitch.

xii). Tape record of the September 14, 2010 follow-up conference scheduled at the undersigned's request to discuss the need for consideration of TRH petition.

B. The exhibits

The Petitioners have relied on the following exhibits (A-F and 1-4), attached respectively to their PDH petition and motion, as referenced above:

Petitioners' A. A copy of the November 9, 2009 comments (5 pages) submitted by Ms. Cromer on Petitioners' behalf to DMP concerning Cambrian's then pending application for Permit 898-0806, as the application existed on October 13, 2009 during Ms. Cromer's reported review of it on that date. (This is prior to DMP conducting its CHIA analysis). In these comments, Petitioners raise essentially 2 arguments and objections to the permit as follows: i) that the PHC is insufficient for the Cabinet to fulfill its CHIA requirements, which issue has not been directly raised in the petitions; and ii) argue that the proposed operation and its hydrologic protection and reclamation plan (HRP) does not (and cannot) protect the hydrologic balance from material damage, especially given most of the discharge will be into Elkhorn Creek, which is already an impaired water from excess sedimentation/siltation and TDS as established from the most recent CWA 303(d) listing. This exhibit also notes that on July 9, 2009, DOW rejected Cambrian's application for coverage of its proposed operations under a general KPDES permit and advised Cambrian that coverage under an individualized KPDES permit would be required.[8]

Petitioners' B. A copy of DMP's April 15, 2010 dated notice (2 pages) of decision sent to Ms. Cromer, responding to her above comments and giving her and Petitioners' notice of

[8] A copy of the referenced DOW letter has not been provided in this record. Ms. Cromer does not state whether the letter addresses the ability of Cambrian to operate under the prior general permit for the footprint area and under what conditions. As noted above, the method of operation for this area has changed under the new permit even for this prior permit area and this change will cause additional disturbance.

DMP's determination to issue Cambrian's permit 898-0806. The substantive portion (except for the portion advising Petitioners of their hearing rights to contest the determination) is set out in the Findings, below.

Petitioners' C. This is the critical document/determination at issue: DMP's "cumulative hydrologic impact analysis" or as referred to herein the "CHIA," which consists of 33 pages total, including two Appendices: A (mining history for the CIA) and B (water quality data).[9] The principal portions of the CHIA relied upon by the parties in their respective arguments are set out in the Findings, below.

Petitioners' D. This is the relevant portions (with cover sheets and certification by DOW's Director) of the Cabinet's DOW required CWA Section 303(d) 2008 Integrated Report to Congress on the Condition of Water Resources in Kentucky (2008 IR). This is more commonly referred to as the listing of impaired waters. See Finding 5, below.

Petitioners' E. This exhibit is selected portions of Cambrian's application (MPA-03) for permit 898-0806, which was prepared on its behalf by Summit Engineering, Inc. The initial preparation date on the front document lists an August 4, 2008, submittal and the final re-submittal prior to DMP approval to be date stamped by DMP on March 23, 2010. The portions provided establish as follows, as to the mine plan: i) the mining phases with work to begin in the watersheds of 4 specified existing ponds (3 reported as being on the overlapped 898-0615

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[9] However, on this exhibit one page is missing but this deletion is not obvious from the numbering itself on the exhibit, which is computer numbered pages 1-32 when this copy was generated and provided to Petitioners (and also to Cabinet counsel when she was provided her initial copy of the exhibit as well., as she reported during oral argument. The missing page (labeled page 25 on its printing), which was subsequently provided by Cabinet counsel as reported above, is the 1st of 4 pages detailing the mining history of the Marrowbone Creek watershed, which appears to be appropriately inserted into this exhibit's CHIA copy between its pages 26 and 27. See discussion of this issue in Section III of this Order.

permit); ii) the overlapping of two hollowfills (HF) from the 898-0615 permit; iii) that the mining sequence will be to mine the Elkhorn # 2 and #3 seams by contour mining using adjacent HFs; then area mine all three authorized seams and completing capacity of the HFs; and then to reclaim. A large portion of this exhibit provides detailed spoil generation and storage calculations; the narrative descriptions of HF designs; and addresses RAM #135 compliance, which is not the RAM relevant to Petitioners' count 4. (These are not relevant to this TRH Petition, except to establish as background that this operation does propose to generate and store a large volume of spoil).

Finally, this exhibit does contain 7 pages (4 attachments) relevant to the issues presented here, as they were relied upon by DMP in its CHIA: These are as follows: i) Attachment 17.2.A (description of watershed receiving discharges from permit area);[10] ii) Attachment18.1.A (Cambrian's PHC determination); iii) Attachment 18.1.B post-mining stream reclamation); and iv) Attachment 18.2.A (description of hydrologic protection measures).

Petitioners' F. A copy of Reclamation Advisory Memorandum (RAM) # 145, which is relevant only to Petitioners' count 4 of its underlying PDH petition. It is not subject to the parties' cross motions or this TRH petition.

Petitioners' #s 1-3. These are "declarations" or affidavits from the three individuals upon which the Petitioner organizations are relying upon for their standing. Respondents do not contest the sufficiency of Mr. James R. Stapleton, Jr.'s injury in fact allegations for establishing standing made in exhibit 1 and, thus, Petitioners' standing is established without the need for further discussion or a critical review of the other two affidavits. See Conclusion 5, below.

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[10] This also noted that Cambrian permit 898-0615 has been reclaimed and has received a Phase I bond release.

Petitioners' # 4. A copy of OSM's December 1985 Draft: "Guidelines for Preparation of a Cumulative Hydrologic Assessment" (1985 Draft). In Petitioners' arguments, she makes some limited references to this document, as persuasive support for her legal argument. This document is also referenced by DMP in the CHIA itself, as to its definition of "impact." On that issue see Finding 13, below.

The Cabinet has relied on the following exhibits (1-12), attached to its cross-motion, as referenced above:

Cabinet 1. This is a three page document from Cambrian's application. The first page (relevant portion of it) is Item 18 (Determination of Probable Hydrologic Consequences) of Cambrian's application form, which page provides no substantive information and refers to three pages by reference. Two of those are provided with this exhibit. All three of the referenced pages were previously provided in Petitioners' Exhibit E. Ms. Patrick submitted this exhibit to establish "Cambrian's PHC does not indicate a potential problem with hydrologic impacts from sulfates or TDS." See Cabinet's memorandum at 9. See also Finding 23a(b), below.

The remaining Cabinet exhibits, 2-12 below, were introduced to establish the status of the mining in the respective watersheds at issue.

Cabinet 2. The first two pages are the permit face sheet for Cambrian's permit 898-0613. This is not the permit directly at issue, but Cambrian does propose to use an existing structure(s) (at least one of the ponds) for operations under the permit at issue, 898-0806. This is also not the "overlapped" permit 898-0615, whose footprint DMRE has authorized Cambrian to mine under permit 898-0806 prior to receiving its individualized KPDES permit. This permit, originally issued on March 31, 2001, to Coal-Mac (under # 898-0451), was transferred to

Cambrian on February 3, 1996, per this face sheet, which also notes the permit has actually expired.

The last 4 pages are the permit face sheet for Cambrian's permit 898-0615, which is the overlapped permit. This permit, originally issued on September 11, 1984, to Coal-Mac (under # 898-0461), was transferred to Cambrian on July 10, 2001, per this face sheet, which also notes the permit has actually expired.

Cabinet's 3-12. See discussion and reference to these exhibits relating to the mining status in the watersheds in Finding 15 below.

As noted above, Cambrian did not submit any additional exhibits for consideration on the record, but Mr. Hagerty did compile all of the Federal Register (FR) notices that had been cited in the parties' respective written arguments. These were cited as persuasive authority on their respective legal interpretations. Those notices will be discussed below in the section of the Findings setting out the actions taking in those notices and the relevancy to the legal issues presented herein.

V. FINDINGS OF FACT

After carefully considering the record in its entirety, the undersigned hereby makes the following Findings of Fact which are not disputed:

A. Background facts: the parties and permit

1. The Cabinet, through its Division of Mine Permits (DMP), is the administrative agency of the Commonwealth of Kentucky responsible for reviewing applications for surface coal mining and reclamation operations permits to assure that the requirements for a permit are met and that the mining and reclamation operations, as proposed, can meet all of the applicable

performance standards in the Commonwealth's laws and regulations governing the environmental impacts of coal mining. These laws are codified in KRS Chapter 350 and 405 KAR Chapters 7 through 24. As to permitting requirements, those are set out in the regulations at 405 KAR Chapter 8 and specifically require that DMP conduct a cumulative hydrologic impact analysis (CHIA) for the "cumulative impact area" (CIA) and make an affirmative finding that the operations, as proposed, "have been designed to prevent material damage to the hydrologic balance outside the permit area," prior to issuance of the permit. See 405 KAR 8: 010 Section 14(3) for this required determination, which is the challenged determination (including the standards used in making said determination), at issue in this proceeding. See also KRS 350.060(7). For a summary of the relevant background legal requirements for permit issuance and the issues presented, see Section II of this Order, above.

2. Cambrian Coal Corporation (Cambrian) is a corporation and holder of surface coal mining and reclamation operations permit # 898-0806, which is the permit being challenged in this TRH action and in the underlying PDH action initiated by Petitioners. DMP issued this permit determination on April 15, 2010. This permit authorizes disturbances on 792 acres overall (with 787.9 acres of that being authorized surface disturbance) near Elkhorn City, Pike County, Kentucky, by the contour, auger, and area (mountaintop removal) methods of mining. According to the CHIA, "primary sediment control will be accompanied by on-bench dugout ponds and embankment ponds. No surface run-off from any disturbed area will be allowed to leave the mining area without first passing through a pond." The CHIA also notes that previously existing hollowfills and 6 existing ponds will be used. (The CHIA does not discuss the additional fills or ponds proposed in the operation). See CHIA at page 9. Three coal seams

are to be mined under this permit at the following approximate elevations in MSL: i) Amburgey at 1960 feet; ii) Upper Elkhorn # 3 at 1690 feet, and iii) the Upper Elkhorn # 2 at 1560 feet. See CHIA at page 10. See also discussion about the mine plan information in the summary of Petitioners' Exhibit D, above. Thus, under this permit, approximately 400 feet in elevation of the mountain will be removed by area mining during active operations, since all three seams are to be mined by the area mining method.

3. Petitioner Sierra Club (Sierra) is a national non-profit membership organization with over 1.3 million members nationally and approximately 5,000 members in its Kentucky Cumberland's Chapter, which Chapter helps its members explore, enjoy and protect the state's environmental legacy. Petitioner Kentuckians for the Commonwealth (KFTC) is a statewide social, economic and environmental justice organization with 6,500 members, which, among other goals, seeks to help its members protect the state's natural resources. See Petitioners' Exhibit # 1, declaration of Mr. James R. Stapleton, Jr., who is a member of both Petitioners organizations; owns property along Elkhorn Creek; recreates (hikes along; kayaks, canoes, fishes in, etc., using Elkhorn Creek) and, as an aquatic biologist, also has a professional interest in macroinvertebrates, which he believes are already impacted by mining in the area.

B. Background facts: the receiving waters

4. The permit area lies in the following 3 distinct surface watersheds: Lower Elkhorn Creek; Marrowbone Creek; and Pond Creek, which watersheds all drain into Russell Fork of the Levisa Fork of the Big Sandy River. As to Lower Elkhorn Creek watershed, the streams receiving discharges from this proposed permit include discharges into Jackson Branch; Little Branch; and Adams Branch. See CHIA at page 4 (Petitioners' Exhibit C version as used and

referenced throughout in this Order)[11]. As to the Marrowbone Creek watershed, the streams receiving discharges from this proposed permit include discharges into Brushy Branch and Dry Fork. Id. at 5. As to the Pond Creek watershed, the permit discharges directly into that watershed. The entire surface water cumulative impact area (CIA) consists of 61.5 square miles and is shown on Figure 1 of the CHIA.

5. The entire length of the Lower Elkhorn Creek (from its start to mile 10.6 or confluence with Russell Fork) and Marrowbone Creek (from its mile point 1.4 to mile point 11.3), both of which receive discharges from this permit, are listed as impaired waters as only partially supporting their designated use as warm water aquatic habitat (WAH) by the Cabinet's DOW on its required CWA Section 303(d) 2008 Integrated Report to Congress on the Condition of Water Resources in Kentucky (2008 IR).[12] As to the Elkhorn Creek impairment, this impairment is based on sedimentation/siltation and TDS caused by surface mining. As to the Marrowbone Creek impairment, this impairment is based on sedimentation/siltation caused by "channelization, surface mining, post-development erosion and sedimentation, loss of riparian habitat, highway/road/bridge runoff (not construction related) and TDS caused by surface mining. See CHIA at page 10 and Petitioners' Exhibit D (including only the relevant portions of the 2008 IR applying to these water segments). In addition, on the impairment issue the CHIA

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[11] Again, the official CHIA is apparently kept digitally and numbering may be subject to some variation in different printers' respective generated copies. Any reference to the missing page provided by Ms. Patrick following the oral argument will be referenced as a supplement to this exhibit, but it is a part of the official CHIA.

[12] This segment of Lower Elkhorn Creek is also listed as not supporting its designated use as a "primary contact recreation" water due to the presence of excessive fecal coliform caused by "on-site treatment systems" described as septic and similar systems in the 2008 IR, which is not a mining-caused impairment. A given water segment's designated uses are established at 401 KAR 10:026 Section 5 (2) assuming the segments are not covered in the Attached Tables (as these water segments are not). Thus, these waters are designated for all legitimate uses except for cold water aquatic habitat and outstanding resource waters, which designations are never obtained by a default listing under the regulation.

reports in narrative and data table form the results of DOW macroinvertebrate studies in these watersheds that already indicate some "impacts" on water quality. See short biology discussion at page 10 of the CHIA with the data summarized on page 11 in Table 2. See discussion in note 5, above where the in-stream water quality standards for WAH designated waters are discussed for parameters of concern for surface mining (TDS/conductivity; TSS and SS) as being where "the indigenous aquatic community is **adversely affected,**" by those parameters. See 401 KAR 10:031 Section 4(f)-(h) (Emphasis added to indicate this is a defined term under the regulations. See 401 KAR 10:001 Section 1(5) for that definition).[13] These macroinvertebrates sampled in the DOW studies are within the controlling definition of "indigenous aquatic community," as defined at Id. at Section 1(40). For the CHIA's definition of "impact," see Finding 13 below. Finally on this impaired water issue the 2008 IR establishes that DOW is (or at least was at the time the report was filed and prepared) working to establish appropriate total maximum daily loads (TMDL) for the pollutants in these water segments causing the impairments. A TMDL "means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources." See 401 KAR 5:001 Section 1 (162). The status of TMDL development (or its possible impact on the current draft individualized KPDES permit) is not known on this record. (However, this is not to imply TMDLs requirements should be imposed through a KRS Chapter 350 permit. They should not. TMDL issues should be addressed through the CWA permitting process. In fact,

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13 This regulation defines this term as follows:

"Adversely affect" or "adversely change" means to alter or change the community structure or function, to reduce the number or proportion of sensitive species, or to increase the number or proportion of pollution tolerant aquatic species so that aquatic life use support or aquatic habitat is impaired

Petitioners will have the right to challenge the final KPDES permit for this operation once the final KPDES permit is issued. See *Ohio River Valley Environmental Coalition, Inc. v. Callaghan,* 433 F. Supp 2d. 442, 446 (So. Dt. W Va. 2001), where the Court refused to consider the TMDL issues when a citizen's group sought a preliminary injunction challenging a West Virginia mining permit alleging the regulatory authority had failed to properly perform its CHIA responsibilities under the mining laws and, as a result, material damage to the hydrologic balance would occur off-permit unless the permit was enjoined).

C. Background facts: the procedural history

6. On, November 9, 2009, Petitioners, through counsel, filed objections to Cambrian's then pending application for permit 898-0806 raising essentially two arguments and objections to the permit as follows: i) the PHC is insufficient for the Cabinet to fulfill its CHIA requirements, which issue has not been directly raised in the PDH and TRH petitions; and ii) that the proposed operation and its hydrologic protection and reclamation plan (HRP) does not (and cannot) protect the hydrologic balance from material damage, especially given most of the discharges will be into Elkhorn Creek, which is already an impaired water from excess sedimentation/siltation and TDS as established from the most recent CWA 303(d) listing.

7. On March 23, 2010, Cambrian made its last submittal of the application to DMP. (The initial application had been filed approximately in August 2008. The review process, which normally requires a series of technical reviews by DMP and re-submittals by the applicant in response to those reviews, is not in this record).

8. On March 28, 2010, DMP completed its CHIA. See detailed Findings, below.

9. On April 15, 2010, DMP sent Petitioners' counsel a formal response to her comments giving her and Petitioners' notice of DMP's final determination to issue Cambrian's permit 898-0806 and the standards used in making that determination. The substantive portion of the notice and response (except for the portion advising Petitioners of their hearing rights to contest the determination) is as follows (with the portions setting out the standard used in added bold emphasis):

> This particular application has been reviewed and subsequently [substantively ?] designed to comply with applicable regulatory requirements including the prevention of material damage to the hydrological regime outside the permit area. **Material damage is a quantifiable adverse change [outside the permit area] to the hydrologic balance based on applicable federal state water quality standards. Consequences of material damage may include reduction of the capacity to support existing aquatic communities, change in designated use, or resource loss to current and potential water users, Material damage to the hydrologic balance also results in a long-term or permanent effect that cannot be corrected by surface coal mining regulations or mitigation strategies.**
>
> The coal applicant has addressed probable hydrologic consequences, e.g., flooding; surface water quality, ground water impacts and biological impacts and has resolved them through a hydrologic reclamation plan. A mining history (past, present and anticipated mining) in the cumulative impact area has been constructed and applicable data examined. As a result of this evaluation, a cumulative hydrologic impact assessment based on the permit application and cumulative impact area information was produced with the finding of no material damage. [The language added in the brackets by the undersigned is added to match exactly the definition of "material damage" used in the CHIA as a defined term. See Finding 11 (a), below]

10. On May 17, 2010, Petitioners filed their PDH petition timely challenging the Cabinet's DMP's determination to issue permit 898-0806 pursuant to the authority of 405 KAR 7:092 Section 8. Respondents filed timely responses opposing Petitioners' PDH petition. On August 23, 2010, after receiving notice that Cambrian was going to commence operations on a

portion of the permit, Petitioners filed a separate TRH petition pursuant to the authority of 405 KAR 7:092 Section 12 seeking temporary relief from the permit determination. This filing initiated the present TRH action, which was assigned to the undersigned for the reasons previously noted. A scheduling conference attended by counsel of record was held on August 27, 2010, to determine how to proceed on the TRH petition. On August 30, 2010, as a result of that scheduling conference, OAH sent out a formal notice of the TRH petition and Order scheduling an oral argument on September 8, 2010, for the TRH petition to be heard, as had been agreed to during the August 27, 2010 conference. All parties have waived their rights to an evidentiary hearing on Petitioners' TRH petition and the bases for relief is limited to the legal issues the parties have briefed on their respective cross-motions for summary disposition, which issues are limited to the 1st and 3rd assignment of errors (counts) raised in the PDH petition. For a more complete summary of proceedings, see Section III of this Order. For the record before the undersigned for consideration of Petitioners' TRH petition, see Section IV of this Order.

D. DMP's CHIA

11. As noted above, the critical document under review is the Cabinet's CHIA and the critical determination at issue therein is DMP's determination that the proposed operations will not cause "material damage to the hydrologic balance outside the permit area," as it and the determination relate to surface water quality issues only. Petitioners have not raised any issues as to the proposed operation's impacts on groundwater (quantity or quality issues) or impact on surface water quantity. In this section of the Findings, the undersigned will set out the relevant portions of the CHIA, including those portions particularly emphasized by the parties in their respective arguments. The most important of those portions are those that establish the "material

damage" definition used by DMP in making the determination and whether DMP facially considered the cumulative impacts during the active mining stage. Thus, it must be cautioned that when reading the Findings below, the actual substance or merits of the determination are not at issue, or even how DMP applied its definition of "material damage" in reaching its determination. Nothing below should be construed to be actual Findings on those issues that are not actually presented and were not used as a basis for this Order, but the undersigned did want to carefully review and report the record before him. Finally, the undersigned has used the qualifier "appear" in the findings below when discussing information in the record that is not established as undisputed fact.

12. The standard used by DMP in making its required "no material damage" determination is as follows:

a). The term "material damage" is a defined term in the CHIA at its page 5, and is exactly as set out above in bold in Finding 9, except the DMP director had deleted the "outside the permit area," in that notice letter, which the undersigned inserted above in brackets.

b). The term material damage is further explained in the CHIA at page 18 as follows:

> Material damage also manifests itself as a quantifiable adverse change to the hydrologic balance outside the permit area and/or the quantifiable reduction of the capacity to support lotic aquatic species and designated use and/or a resource loss to the current or potential water users. Given these circumstances, it is reasonable to assume that material damage occurring as a **long-term or permanent effect** cannot be corrected by surface coal mining regulations or mitigation strategies.
>
> Threshold limits for surface water quantity and for groundwater quantity and quality shall be based on applicable water quality standards found in 401 KAR Chapter 10. Material damage to the surface water will occur when the surface water fails to comply with the surface water quality standards on a **chronic** basis and the designated use (401 KAR Chapter 10) for the surface water is **significantly** impacted by mining. ...

> KPDES effluent limits are used to define material damage for the surface water quality parameters controlled by KPDES effluent limits. *The Division of Water sets effluent limits based on the water quality and use support. Individual KPDES permits address effluent limitations for proposed mining operations in impaired streams and exceptional waters.* [Emphasis added in bold to emphasize the qualifiers Petitioners argue are unlawful and in conflict with the CWA and the SMCRA provision relied upon by Petitioners and cited above in Section III of this Order. The emphasis in italics is added for purpose of the finding 13, below].

c). The application of this definition by DMP in making its required "no material damage" determination must be in read in conjunction with the CHIA's definition of "impact," which is discussed in the next finding.

13a. In determining whether an "impact" has occurred, the CHIA referred to and used the definition of "impact" used in the "1985 OSM Draft Guidance for the Production of a Cumulative Hydrologic Impact Assessment (CHIA)," that being "any measurable damage." See CHIA at page 4. A copy of the 1985 Draft Guidance was provided for the record, as Petitioners' exhibit # 4 and this definition of "impact" is on its page III-1. See below for further discussion about the 1985 Draft. However, the CHIA then states that: "It [the 1985 Draft] does not address the degree of change (severity of impact), and does not imply that the change will be damaging to the hydrologic balance." Id. The undersigned certainly agrees with these statements of DMP on this issue-that not every measurable impact constitutes "material damage" per se, and this guidance document does not itself define a particular threshold to be applied. However, the document certainly does state a threshold must be established by the RA on a case-by-case basis depending on the site specific conditions (using the RA's best professional judgment on the issue) and then use this specified threshold to actually measure whether an "impact" constitutes "material damage." In fact, in the example draft of a CHIA in its Appendix B, the document

does actually establish a "severity of impact" standard. See Finding 39 below, discussing the 1985 Draft Guidance. Thus, the undersigned concludes it is the responsibility of DMP as the responsible Regulatory Authority to determine and establish within the CHIA itself (since the RAs have been given flexibility to address site specific needs on a case-by-case basis) the criteria to be used to measure whether a measurable impact constitutes "material damage." However, the undersigned also concludes that this may be qualitative criteria as opposed to numeric criteria even though numeric criteria may be a better approach or more objective measurement, as stated in the 1985 Draft Guidance. Facially, the definition of "material damage" set out above has both qualitative and quantitative portions and, again, how it was actually applied in this case is not before the undersigned.

13b. As to the quantitative portion, DMP, by stressing the 1985 Draft Guidance definition of "impact" without establishing what amount of change will be damaging, effectively modified the terms "quantifiable adverse change," and "quantifiable reduction" as those terms are used in the CHIA's definition of "material damage," since it establishes that some further qualifier or threshold, **which is not otherwise defined within the CHIA itself**, is also being applied in making the critical "material damage" determination. However, as concluded above, DMP is allowed to use a qualitative standard in making its "material damage" determination and this lack of a quantitative standard being used in that process is insufficient for Petitioners to prevail.

13c. Like the unknown qualifier above, it is also not clear in the CHIA (or this record) whether DMP, in the CHIA process including its use of the "material damage" definition at issue, addressed (or at least sufficiently addressed) the permit's probable cumulative impacts on the

receiving waters' ability to support their designated use as warm water aquatic habitat (WAH). Another related uncertainty to that issue is whether the CHIA's referencing the standards for domestic drinking water usage for certain parameters of concern (TDS/sulfates) is a sufficient threshold for measuring "material damage" from those same parameters for the waters' use as WAH. These are environmentally important issues for mining in these watersheds because these receiving waters are impaired and the indigenous aquatic community is already impacted. See Finding 5, above. The CHIA also acknowledges, after first indicating that sulfates are not generally regulated and that they are likely to increase from mining causing corresponding increases in receiving waters' conductivity, that the conductivity increases "... may potentially affect aquatic life in different ways ... ." See CHIA at page 18. (The CHIA then states that it is not known what levels of conductivity are significant). However, even though the CHIA provides data to indicate the aquatic community in the watersheds are already adversely impacted, that pollutants of concern from the mining may further impact that community, that the receiving waters are already impaired for this use by surface mining impacts, DMP then appears to establish no usable criteria to assess what level of additional impacts that aquatic community may be able to further tolerate from the probable cumulative impacts from all anticipated mining. However, with one exception, the adequacy issues of DMP's assessment on the WAH issues just discussed are not presented in this case and go more toward addressing the substantive merits of the determination or the application of the "material damage" definition to these issues. The exception is that DMP clearly did not address any of the impacts caused by or during active mining operations on the waters' ability to support this use (or on any other use) because DMP's

methodology in conducting its analysis completely excluded these impacts from its assessment. See further discussion on DMP's methodology, below.

14. Notwithstanding DMP being on notice that DOW was going to require an individualized KPDES for the discharges associated with this permit and was denying coverage under a general permit[14] (see Petitioners' Exhibit A), and that the receiving waters to these discharges were impaired (see Id. and CHIA at 10 referencing the 2008 IR), and the above acknowledgement in the CHIA that DOW would be setting the particular effluent limits (ELs) for this particular permit, the CHIA has absolutely no discussion of the projected/anticipated individualized ELs that would apply to the discharges from this permit. However, it does expressly mention the 40 CFR Part 434 .5 ml/L SS technology-based standard which would apply in large rain events. Consequently, the undersigned infers that the technology-based standards were applied by default. (If the EL standards are not known, DMP could not review the permit designs as being sufficient to meet those standards, as is required by its own definition of material damage). See also Table 8 at page 19 of the CHIA where the in-stream standards for surface water used as a drinking source are set out. (As noted above, these are in-stream standards at the point source of intake for the water supply. See 401 KAR 10:031 Section 5).

15. At pages 6-8 of the CHIA and in its Appendix A, DMP sets out the mining history of the cumulative impact area (CIA), including Pond Creek as a sub-watershed of the Marrowbone Creek watershed. The cumulative impact area has been extensively mined, including portions of the area included under this particular permit, which the CHIA notes was mined under Cambrian permits 898-0613 and 898-0615. (The 898-0615 footprint area overlapped in this permit is the

[14] A general KPDES permit would use the minimum technology based ELs established by 40 CFR Part 434, discussed above.

only area DMRE is currently allowing operations on until issuance of Cambrian's individualized KPDES permit). The histories include past permitted operations, active operations (which may or may not have completed coal removal), and proposed operations to the extent known with a status designation. The history is summarized in the narrative and detailed by operation in the two Tables included in Appendix A for the two sub-watersheds within the CIA. The CHIA also noted that, as to operations listed as being active in the watershed (mining coal or yet to receive a bond release) a total of six water-related noncompliances have been cited. See also Cabinet exhibits 2-12, which were introduced to establish mining history/operations in the CIA. The additional facts on this history are found as follows:

a). **Lower Elkhorn watershed.** As summarized by Cabinet counsel in her memorandum at page 9, Appendix A establishes only five active operations and one pending application (for an amendment to an existing permit which is not adding any additional acres for disturbance) for the Lower Elkhorn Creek watershed. Two of the "active" permits are the expired Cambrian permits 898-0613 and 898-0615. See Cabinet Exhibit 2.

b). Another active permit in the watershed is AEP Kentucky Coal LLC's permit 898-0647 for which coal removal is complete (A2- reclamation only status effective on 11/2/06) and almost all increments are in some form of bond release. See Cabinet Exhibit 3 for the documentation supporting this finding. See three subsequent mine inspection reports (MIR) for this permit dated 9/24/07, 11/14/07 and 7/14/10, introduced as Cabinet's Exhibits 4-5, with the last MIR inspecting the water quality performance standards based on the submitted 1st quarter water monitoring reports establishing no exceedences for that quarter.

c). CAM Mining LLC's Permit 898-4291. See Cabinet Exhibit 6, MIRs for 3/25/10 and 7/8/10, establishing the assigned inspector's review of the 4th quarter 2009 and 1st quarter 2010 water monitoring reports with no exceedences of standards reported. This is an underground mining permit with only 8 of the 32 bonded acres disturbed.

d). CAM Mining LLC's Permit 898-0780. See Cabinet Exhibit 7 (the permit's PHC and hydrologic reclamation plan or HRP), which establish the ponds were designed to handle a 10- year, 24-hour precipitation event and meet the .5 ml/L effluent limits for settleable solids. This exhibit states that: "Sulfates and conductivity are expected to remain within expected limits," but provides no explanation for that expectation. Cabinet Exhibit 8 consists of 15 MIRs on this permit from 7/17/06 through 8/12/09, which establish this was a large active surface mine during this reporting period with 783 acres permitted and 150 acres disturbed at the beginning of the period and 675 acres at the end of the period. (Approximations are made on MIRs). No water quality problems are noted in these MIRs for this period. Exhibit 9, which are MIRs for 3/24/10 and 7/7/10, establish that the water monitoring reports for the 4th quarter of 2009 and 1st quarter of 2010 show no exceedences of water quality standards.

e). **Marrowbone Creek watershed.** Cabinet counsel reports only two pending applications for this watershed from CHIA's Appendix A. See Cabinet's memorandum at page 10. These are Landfall Mining's application 898-7085 and Wright Way's application 898-4348. In her memorandum, Cabinet counsel was unable to address the active permits in this watershed (like she had done for the Lower Elkhorn Creek watershed above) because of the "missing" page from Petitioners' Exhibit C (Petitioners' copy of the CHIA), which she reported was also missing in her CHIA copy as well. This missing page, which had the printout of the active permits, has

now been found and provided by Cabinet counsel for the file with copies to all counsel, and will be summarized below. The pending applications for this watershed will first be addressed.

g). As to Landfall's application 898-7085, this is for a proposed 17.7 acre permit primarily for haul roads with a self-described "small" refuse disposal area. (Roads are not generally covered by sedimentation control ponds). See Cabinet's Exhibit 10 and Appendix A, at page 30. In Cabinet's Exhibit 11, the PHC and HRP for this application is provided and is relied upon by Cabinet counsel in her brief to establish that TDS is not expected to be a problem. The statement in the PHC on this issue reads as follows: "The readings for sulfates and total dissolved solids were within the acceptable ranges and are not expected to increase." Again, no further explanation is given which is common to Cambrian's PHC involved in this case and the CAM Mining application referenced above.

h). As to Wright Way's application 898-4348, which per Appendix A was to be a 147.67 acre underground mine, that application appears to have been abandoned. On August 17, 2010, DMP sent the applicant a letter stating that the application had been returned to the applicant as of January 6, 2010, with a request to correct specified administrative deficiencies, but corrections, to date, had not been submitted. This August 17, 2010 letter advised the applicant that if the application was not re-submitted within 30 days of the letter, that it would be considered to be permanently withdrawn. These facts are established by Cabinet's Exhibit # 12.

i). As to the five active permits for the Marrowbone Creek watershed, the missing page establishes the following for the five permits: i) LCC Kentucky, LLC permit 898-4249, an underground mine with 273.83 acres permitted and none disturbed with a Phase I release status; ii) LCC Kentucky, LLC permit 898-4293, an underground mine with 4267.3 acres permitted and

65 acres disturbed in active (or potentially active) mining status; iii) Clintwood Elkhorn Mining permit 898-4325, an underground mine with 1562.4 acres permitted and 9 acres disturbed with a actively producing coal status; iv) Landfall Mining permit 898-9144, a refuse recovery mine with 17.9 acres permitted and 14 acres disturbed in active (or potentially active) mining status; and, v) Landfall Mining permit 898-9146, a refuse recovery mine with 42.1 acres permitted and 8 acres disturbed in actively producing mining status.

j). **Mining history discussion in the CHIA.** The narrative discussion is on pages 6-8 of the record copy of the CHIA. Page 7 is actually a boundary map of the CIA (surface and groundwater), proposed permit boundary; and a generated map of the issued coal mine permits in the county and CIAs. For the Lower Elkhorn watershed, it reports that 15,614 acres are or have been permitted in the watershed and approximately 3,484 of those acres have been reclaimed. (However, as established by Cabinet counsel in her argument and exhibits, a significant portion of the "active" acreage may well be post-disturbance and in some reclamation status prior to full bond release). This proposed permit (70% of which is in this watershed) is approximately 3.2% of the surface watershed acreage. For the Marrowbone Creek watershed, the CHIA reports that 16,466 acres are or have been permitted in the watershed and approximately 706 of those acres have been reclaimed. This proposed permit is approximately 1.4 % of the surface watershed acreage. The CHIA's Appendix A report of mining history (including the missing page) was generated from a March 24, 2010 computer database run, as the date of the report is shown at the top of each of its first pages.

k). DMP's post-reclamation analysis of TDS and conductivity (which are parameters of concern not covered by ELs), at page 20 of the CHIA, does not appear to use the mining history

data to establish any actual cumulative analyses, as opposed to analyzing the impact of Cambrian's discharges in isolation. Certainly the cumulative mining history was not used for making any predictions for the parameters of concern, as it applies to impacts occurring prior to the "post-reclamation" period, as no analysis (even for this operation considered in isolation) was conducted for that temporal period. Petitioners raised this issue specifically in their PDH petition, as it applied to the temporal period prior to this permit achieving post-reclamation status. As to Petitioners' challenge to the substantive merits of DMP's "post-reclamation" analysis (count II of the PDH petition), Petitioners have moved to withdraw that challenge with prejudice from their PDH petition, and that count was never relied on in their TRH petition.

16. Cambrian's background surface water quality data is reported in the CHIA at page 12, with the sampling data recorded in Table 3 on page 13. Only two sampling locations are reported: one in Pond Creek (SW 500), the Marrowbone watershed, and one in Jackson Branch (SW 700), the Lower Elkhorn Creek watershed. Six water samples were collected at each location, one in each of the quarters beginning with the 4th quarter of 2006 and concluding in the 1st quarter of 2008. The following parameters were analyzed: flow, pH, acidity, alkalinity, TSS, TDS, Sulfates (SO4), Fe, and Mn. An additional set of water quality data is attached as Appendix B to the CHIA (the CHIA's last page). Two sample locations are provided in the Lower Elkhorn Creek watershed. One reports analyses from 3 water samples collected from 2/20/80 to 10/20/82. The other reports analyses from 10 water samples collected from 3/22/90 to 8/3/01. This Appendix B data is not discussed in the CHIA narrative and does not appear to have been used.

17. On its page 18, the CHIA identifies hydrologic concerns within the CIA. This discussion in its entirety is as follows, with the most relevant portions emphasized in bold:

> The proposed mining operation is located in the Lower Elkhorn Creek and Marrowbone Creek watersheds, which do not include special-use waters. However, both streams are listed as partially supporting their designated uses of warm-water aquatic habitats.
>
> Possible effects of mining on the geological and ground-water resources of the CIA area include possible changes to the chemistry of ground and surface water, and, potentially, temporary increases in the sediment load of surface streams.
>
> **Impacts to surface- or ground-water quality may include an increase in dissolved minerals**; changes in water pH, acidity and alkalinity; **and an increase in settleable and suspended solids.** Based on the acid base analysis included in the permit application, acid mine drainage (AMD), which occurs when suffide minerals in rock are exposed to oxidizing conditions, is not a particular concern in this watershed.
>
> **Even in the absence of AMD, some sulfate and iron are usually liberated during the mining process, and other water quality parameters such as pH, TDS, TSS and alkalinity may also be affected. KPDES discharge permit requirements regulate most of these parameters, but sulfate is not regulated, and is one parameter likely to increase as a result of mining. Unlike positively-charged ions like iron, sulfate is a negative ion and is not easily removed from water by conventional methods: once liberated, sulfate will persist in water for a significant period of time.**
>
> **Increases in specific conductance values of ground and surface water in mined areas are often linked to increased sulfate. While recent studies suggest that increased specific conductance values may potentially affect aquatic life in different ways, it is unclear at what levels effects are significant.**
>
> **Another effect of mining can be increased sediment in runoff.** An increase in sediment, woody debris and other organic material can be caused by the disturbance associated with mining, increased runoff due to the removal of soil cover; or from a combination of both mechanisms. Road construction and access roads are another significant source of sediment from surface mine permits.

18. On its page 19, the CHIA identifies DMP's responsibility in making this determination as follows:

> It is the responsibility of the Division of Mine Permits to affirmatively find, in writing, that a proposed mining operation has been designed to prevent material damage to the hydrologic balance outside the permit area. Several components that contribute to these findings are found in the surface mining permit application (MPA-03): the probable hydrologic consequences (PHC) analysis and the hydrologic reclamation plan. These plans address water quantity, including the potential for water supply diminution or de-watering of aquifers in the ground water regime, peak flow discharge rates and low flow discharge rates, and flooding potential of the surface waters, and water quality, including treatment facilities designed to meet effluent limitations and water quality stream standards, the potential of acid mine drainage, and methods design to prevent acid mine drainage from underground mine openings and spoil handling.

19. On its page 20 in a single page, the CHIA sets out DMP's analysis of probable hydrologic consequences from this permit and Cambrian's hydrologic reclamation plan (HRP) as follows:

> PROBABLE HYDROLOGIC CONSEQUENCES (PHC) AND HYDROLOGIC RECLAMATION PLAN (HRP)
>
> Water Quality
>
> AMD
> For this mine, the acid-base account shows no potential for acid production. Therefore, the mobilization of metals and other adverse parameters will be minimized. However, if water-quality monitoring indicates problems developing, water treatment would be required in order to ensure that low-pH water is not introduced into the stream system. [AMD is not at issue in this proceeding].
>
> TDS/conductivity
> **Increases in TDS and conductivity are expected to occur during and immediately after mining. Increases during mining may vary widely from site to site and are not addressed here.** Typical conductivity values for post-reclamation areas range up to about 500 µS/cm. Using a factor of 0.5 to 0.9 to convert conductivity values to TDS values (Hem, 1992) yields an estimated TDS of 250 - 450 mg/L. For this report, we used the worst-case estimate of 450 mg/L TDS.
>
> Baseline sampling indicates that current TDS levels in Pond Creek (the receiving stream in the Marrowbone Creek watershed) range from about 300 to about 400 mg/L. Assuming the entire discharge of Pond Creek comes from the proposed hollow fill, this would correlate to a worst-case increase of 150 mg/L TDS in Pond Creek.
>
> Discharge data for streams in the area are sparse or missing. For this report, mean annual flows were estimated using online software (http://kygeonet.ky.gov/kyhydro/main.htm). Using the mean annual flow estimate of 6 cubic feet per second (cfs) for Pond Creek and about 9.10 cfs for Russell Fork, TDS in Russell Fork could increase by about 1 mg/L TDS in Russell Fork (the nearest stream with an in-stream TDS standard).
>
> TDS values in Jackson Branch are currently about 425 mg/L to about 520 mg/L. Using a post reclamation TDS of 450 mg/L for Jackson Branch, and estimated mean annual flows of 2 cfs for Jackson Branch and 76 cfs for Lower Elkhorn Creek, increases in TDS in Lower Elkhom Creek due to mine activity could range from no impact to an increase of less than 1 mg/LTDS, assuming that the entire flow in Jackson Branch comes from the hollow fills included in this proposed project.
>
> Sediment
> Sediment control ponds will be designed to control settleable solids concentration. Effluent from permit outfalls could have settleable solids of up to 0.5 mg/L during large storm events.
>
> ...[The CHIA then addressed flooding and supply issues which are not relevant to this proceeding].

20. Petitioners have not challenged the methodologies used and the conclusions made by DMP in the CHIA, which are set out in the Finding above, except for the portion emphasized in bold that establishes DMP did not attempt to determine the amount of increases in the pollutants of concern for the period during and immediately after mining from this proposed permit in isolation and, thus, consequently DMP did not determine the "probable cumulative impacts" on the "cumulative impact area" during that period as well.

21. In count 2 of their underlying petition Petitioners did originally challenge the merits of DMP's post-reclamation analysis of TDS and conductivity, but Petitioners' have subsequently moved to withdraw that substantive challenge with prejudice. See PDH file, at docket entry # 9 filed on August 30, 2010.[15] The post-reclamation analysis does not appear (but is not actually established as an undisputed fact on this record as there are too many unknowns in the analysis)[16] to have used the mining history data discussed in Finding 15 above, to perform any actual cumulative analyses, as opposed to analyzing the impact of Cambrian's discharges in isolation for the post-reclamation period. Thus, it appears DMP made a "PHC" determination

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[15] Petitioners' original count 2 challenge was based largely on the lack of TMDLs for the receiving streams and an argument they needed to be developed prior to authorizing a permitted discharge to any impaired water under the CWA. (The caselaw does not support that argument, but the issue is not presented here). As to TMDLs, see Finding 5 and its accompanying note, above. Certainly, TMDLs are DOW's responsibility to develop and not the responsibility of DMP, and KRS Chapter 350 permits cannot be held in abeyance for their development-if not even NPDES/KPDES permits are held in abeyance for needed TMDL development. Any intrusion into the TMDL area by DMP would violate the primary SMCRA prohibition (Section 702(a)(3) of SMCRA) and case (*In Re Surface Mining Litigation*, 627 F. 2d.1346, 1366-1370 (D. C .Cir. 1980)) relied upon by Petitioners as part of their "standard" argument. (Petitioners rely on the case notwithstanding the Court struck down mining regulations as being more stringent than the CWA). However, this does not mean that DMP should not communicate with DOW during its CHIA review process and use the anticipated ELs to assure the applicant's proposed design and HRP is sufficient to meet the anticipated water quality standards and ELs, since meeting those standards is the critical element of determining the "material damage" issue from anyone's analysis.

[16] It is possible that in its analysis DMP assumed all drainage from all active permitted acreages in the watersheds would have the same "post-reclamation" values for the parameters of concern assumed for Cambrian under the analysis. However, never factoring into the analysis impacts and values from active operations pre-reclamation status could result in dead streams prior to obtaining a "post-reclamation" watershed.

of Cambrian's permit without conducting any "probable cumulative impacts" of all "anticipated mining" within the watersheds. ("Anticipated mining" is defined within the CIA definition, which is set out above). In fact, this section of the CHIA is titled "Probable Hydrologic Consequences (PHC) and Hydrologic Reclamation Plan (HRP)," which supports that this was an analysis of Cambrian's permit in isolation. There was absolutely no reference in this section of any impacts being considered from any of the other mining operations. However, even while they were pursuing their count 2 challenging the substantive merits of the analysis, they did not raise the lack of cumulative analysis aspect as to their separate "temporal" argument-where the lack of any cumulative analysis was specifically raised.

22. On its page 21, the CHIA sets out DMP's required Findings as follows:

> STATEMENTOF FINDINGS
> The Kentucky Division of Mine Permits has evaluated the cumulative hydrologic impact potentially attributed to the proposed operation 898-0806. Potential aquifers are below the elevation of proposed mining ,and mining is unlikely to diminish the ground water supply. No acid strata were found in the permit area. The sediment structures are designed to comply with water quality standards and peak discharge levels will be lower than pre-mining conditions. The cumulative impact area will not be significantly affected by this new operation.
>
> Therefore, the Kentucky Division of Mine Permits finds that the proposed operation 898-0806 has been designed to prevent material damage to the hydrologic balance outside the permit area, based on information obtained from the hydrologic reclamation plan and existing data in the Big Sandy River basin.

E. Cambrian PHC / Use of the PHC in the CHIA / CHIA fail to consider impacts caused by or from Cambrian's operation during the active mining time period

23a. As to the components of the Cambrian application which were relied upon (or cited) by DMP in making its CHIA and its no material damage determination, the application establishes as follows:

(a). The permit's ponds were designed to meet the **0.**5 ml/L settleable solids (SS) EL standard during 10-year, 24-hour precipitation events. See Petitioners' E, at Attachment 18.1.A. While acknowledging the mine will "obviously create a temporary increase in suspended and settleable solids in the runoff from the mine during the active phase of the operation," Cambrian relied on these ponds to capture and treat the water prior to being discharged off-permit. See Id.

(b). As to predicting TDS and sulfates, the permit application states in its entirety as follows: " The readings for sulfates and total dissolved solids were within the acceptable range and are not expected to be a problem." See Id. This statement is not further explained and the "readings" relied upon were not cited. (Presumably, it is the background baseline water monitoring data reported in Table 3 of the CHIA. That data establishes as follows: in the Pond Creek watershed TDS values in the range of 300-390 mg/L and SO4 values in the ranges of 41-82 mg/L; and in the Lower Elkhorn Creek watershed TDS values in the range of 426-516 mg/L and SO4 values in the range of 46-89 mg/L). Again, these receiving streams are already partially impaired from fully supporting their WAH designated use because of pollutants from coal mining, including specifically TDS. See Finding 5, above.

(c). As to the protection of the surface water regime, the application states as follows:

> The drainage and sediment control plan for this permit should adequately protect the surface hydrologic regime. **The sediment control structures are designed to meet the applicable effluent concentrations**. The discharge points will be monitored regularly under the KPDES compliance program. If any discharge point is found to be in excess of applicable standards, immediate steps will be taken to correct the specific problem(s). [Emphasis added] See Petitioners' Exhibit E, at Attachment 18.2.A

(d). Other than the reference to the SS standard of **0.**5 ml/L which is a technology based minimum EL established by 40 CFR Part 434, the application does not actually set out the

anticipated ELs applicable to discharges from the mine. As discussed above, Cambrian first sought coverage under a general KPDES permit, but was later required by DOW to obtain an individualized KPDES permit.

(e). The PHC does not actually predict TDS and SO4 levels to be caused by its mining operations, other than generically stating the unknown levels are not "expected" to be a problem. At most, the PHC provided the pre-mining data from the monitoring to establish background conditions only. No analysis or data is provided and no numeric values are predicted from Cambrian's own operations. There is also no technology-based TDS, conductivity, and SO4 ELs to assume maximum discharges of those parameters. (Thus, no exceedences to actually cite from the ongoing monitoring reports even if there is a problem).

23b. Even assuming Cambrian's contribution **in isolation** would not be sufficient to cause a problem, this lack of contribution prediction from Cambrian's operations in its PHC makes it impossible for DMP to make a "probable **cumulative** impacts" assessment or CHIA of all "anticipated mining" in the "cumulative impact area," at least based on consideration of the PHCs alone. (As noted previously it is theoretically possible DMP could have combined flows from all "anticipated mining" acreages within the CIA and attributed the same post-reclamation values for those flows and then conducted a combined analysis. However, it does not appear that this was the method used in this case and DMP certainly does not state this was done in the CHIA. It is also possible DMP conducted a post-reclamation PHC for Cambrian in isolation using the assumed value based on the worse case (highest of the reported ranges used) for typical post-reclamation values from generic surface mining and due to the predicted value did not

believe it needed to proceed further downgradient in the hydrologic system for a cumulative analysis).

23c. However, the disputed issues discussed in the paragraph immediately above need not be resolved and are legally irrelevant to the limited issues presented in this TRH petition. Again, the substance of the post-reclamation analysis is not at issue. The two legal issues presented here are: i) whether the facial definition of "material damage," is illegal under SMCRA and the CWA because of the qualifiers used in the definition; and, ii) whether pollutant loads from active mining can be legally excluded from the assessment process and the final material damage determination. On the latter issue, there is no factual dispute as to how the analysis was done, as DMP concedes in the CHIA that its only analysis (cumulative or not) was limited to pollutant contribution predictions based on post-reclamation contribution values only.

23d. The CHIA does not have any prediction of how the active operations will impact the water quality established by the pre-mining monitoring data. In its analysis, DMP assumed the post-mining Cambrian contribution of pollutants would be into waters of the exact same quality in existence before Cambrian's active operations. Both of these facts are established in this record without dispute. Both are relevant to Petitioners' temporal argument, but not their "standard" argument. (However, these facts could be relevant to an attack on the "material damage," definition, as applied, if the definition was being used to exclude consideration of impacts caused by active mining).

23e. The PHCs for the other two active mines discussed in the mining history Finding above also suffer from the same exact lack of information as the Cambrian PHC. They also would not be usable alone for a combinational approach in conducting a cumulative analysis.

(These should be compared with the 1985 Draft Guidance's Appendix B's example CHIA, which relies on PHCs that actually predict numeric changes in background from the operations and notes specifically use of the "combinational" approach as opposed to an "independent analysis" approach otherwise discussed in the 1985 Draft Guidance). As to the PHCs for the active mines in the Marrowbone watershed, the content of those PHCs are unknown on this record because of the missing page issue. However, except for Cabinet counsel in her memorandum, it does not appear any of the PHCs were actually used as a part of DMP's actual **assessment determination,** as opposed to being discussed in the narrative portion. Again, DMP's assessment appears to be a PHC determination of Cambrian's **post-reclamation contribution, in isolation,** and assuming a "worse case" post reclamation discharge value for conductivity (using a formula to then translate that parameter into TDS) and then adding that value to the receiving waters, and assuming their quality was the same, as it was **prior** to being impacted by the active mining. Thus, **all** of the impacts occurring during and from active mining, when the pollutant discharges are obviously at their greatest peak, were ignored in the methodology used by DMP here. By the time post-reclamation equilibrium is reached the receiving watersheds, which are already impaired, may have already suffered "material damage," even as the term is defined by DMP.

23f. Thus, based on the above findings, the PHCs of record for these watersheds cannot cure (be a sufficient response to validate permit issuance under the standards of law set out elsewhere in this Order) the facial failure established in the CHIA itself that impacts from the active phases of mining and immediately thereafter were not considered by DMP in making its required "no material damage" determination.

23g. Finally, while individual mining operations in a watershed may each alone not cause impacts reaching the levels required for "material damage," (after all they are all "expected" and "designed" to meet ELs)[17] the same determination certainly cannot be automatically assumed for the cumulative impacts of those operations, which is the purpose of the CHIA mandate. In addition, this reasoning of reliance on effluent limitations (ELs) does not address the parameters of concern like TDS, SO4s, and conductivity that are not covered by technology-based ELs, but which are still causing impairment in the watersheds. Presumably, it is the cumulative impacts of the mining operations causing the existing impairments of Lower Elkhorn Creek and Marrowbone Creek. Analysis of the operations in isolation and analysis of only the operations' post-reclamation contributions after the sites have been reclaimed and have reached equilibrium can only result in the impairments continuing and possibly worsening.

G. Federal Register notices cited by the parties / Rejection of Petitioners' "standard" argument persuasively established

24a. All parties cited particular Federal Register (FR) notices in their respective memorandums, as persuasive authority or guidance supporting their respective legal arguments. These notices and their actions are addressed in chronological order in the following Findings while discussing their relevance to the parties' respective arguments addressing Petitioners' count 3 argument, which is that the DMP definition of "material damage" used in the CHIA is facially flawed and must be rejected as a matter of law. The undersigned has referred to that argument as being Petitioners' "standard" argument and has also repeatedly noted that the issue of how DMP actually applied that definition is not before him. After careful consideration of

[17] This assumes the actual ELs are known. There really should be coordination between DMP and DOW, particularly where there is a known need for individualized KPDES permits and the discharges to be permitted are

these FR Notices, the undersigned Finds/Concludes that the Notices relied upon by Petitioners do not support their standard argument and that the Notices relied upon by Respondents are highly persuasive for their rejection of that argument. The bases of this conclusion is established by the Findings immediately below and will be further summarized when the undersigned formally rejects, as a matter of law, Petitioners' claim for temporary relief on their count 3 standard argument. The 1985 Draft Guidance is also discussed in these Findings but also does not support Petitioners' standard argument that the definition is facially flawed.

24b. As to Petitioners' count 1 "temporal" argument, which is that the CHIA is facially flawed and must be rejected as a matter of law because DMP failed to determine the cumulative impacts of all anticipated during active mining, these FR Notices do not directly address that issue and are of very limited guidance on reaching an appropriate conclusion on that Count. As to the 1985 Draft Guidance, even noting its limitations, it is persuasive (but certainly not controlling) in support of Petitioners' temporal argument because it reinforces the definition of "anticipated mining" and is consistent with common sense that pollutant contributions during active mining cannot be ignored during the assessment process.

25. **May 18, 1982, 47 FR 21404-21435. Kentucky granted primacy under SMCRA effective this date.** This was the formal notice that the Secretary of the Interior, based on the recommendation of the OSM Director, granted (conditioned on correction of specified deficiencies) Kentucky "primacy" under SMCRA for its permanent regulatory program. This grant of primacy has never been revoked and remains in effect to date. As discussed above, this establishes Kentucky law as being the controlling body of law, as opposed to SMCRA and its

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into waters already impaired. However, this lack of coordination is not a basis for the ruling herein.

regulations, which still remain very important as interpretative guidance for Kentucky law on the issues. See discussion in note 3, above. The parties did not cite this notice for any further purpose.[18]

26, **June 25, 1982, 47 FR 27712-27734. Formal notice by OSM of proposed major regulatory changes to the permanent program regulations addressing hydrology and geology permitting and performance standards.** This is the notice that began the rulemaking process for promulgation of the current federal regulations on these subject areas. As to this notice, the Respondents relied on the following statement at 47 FR 27717 to establish the discretion OSM was proposing to give the Regulatory Authorities (RAs) in conducting their CHIA responsibilities:

> The OSM has not proposed to establish a detailed list of analysis or methodologies to be used in conducting a cumulative impact assessment. Each cumulative impact assessment must, by necessity, be tailored to the local conditions and the probable hydrologic impacts from individual mines. As a result, OSM expects to provide latitude to the individual State regulatory authorities in selecting methodologies to be used in performing the required cumulative impact assessment.

27. **September 26, 1983, 48 FR 43956-43994. This is the formal notice by OSM promulgating the revisions to the permanent program regulations addressing hydrology and geology permitting and performance standards.** (Hereinafter the "Preamble"). This notice establishes the current federal regulations on these issues. In her arguments, counsel for

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[18] This notice at 47 FR 21409 does specifically approve Kentucky's definition of "probable hydrologic consequences" notwithstanding its lack of including "aquatic habitat" as a specific consideration. Thus, an applicant is not required to specifically address aquatic habitat issues in its required PHC, just the broader water quality issues. As to DMP, in its CHIA, while using the applicant's PHC as one source of information, its responsibility is to make its determination of the "probable cumulative impacts," as that term is defined at 405 KAR 8:001 Section 1(89). This definition is set out above.

Petitioners repeatedly cited portions of the Preamble explaining the bases and interpretations of the final rules, as being supportive of Petitioners' "standard" argument. (In addition she also used it as a source of background information on the expected sequential process leading up to the CHIA, which sequence is not disputed between the parties). See general sequence discussion at Id. at 439654-5.

28. In response to its substantive use by Petitioners, Respondents argue that this Preamble is not controlling, as preambles are only interpretative guides and are not actual law. More importantly, Respondents argue Kentucky law "exclusively" controls once primacy has been granted. The undersigned agrees with both of these arguments of Respondents. However, the undersigned also notes that under the facts of primacy (and the need for Kentucky law to be "in accordance" with SMCRA and its regulations) to be "no less effective than the federal regulations as a prerequisite for OSM approval of Kentucky's request for primacy, and the obvious intent (statutorily expressed) of the Kentucky General Assembly for Kentucky to both obtain and maintain primacy, such preambles explaining the bases for a final rule promulgation under SMCRA is a highly persuasive interpretative tool of the corresponding Kentucky regulation-unless there is an unambiguous conflict between the corresponding regulations that can not be reconciled. In the present case, there is no such conflict and the parties have not cited any differences (significant or otherwise) between the corresponding regulations or statutes.

29. However, notwithstanding the Finding/Conclusion above, Respondents argue and the undersigned agrees that the Preamble does not actually support Petitioners' "standard" argument that the DMP material damage definition it used in the challenged CHIA is facially illegal. (The issue of how it was applied in this case or the merits of the determination are not before the

undersigned for a ruling in this TRH petition and the Preamble would give some guidance on those issues). This is based on the following reasons:

a). No actual definition of "material damage" is promulgated under this rulemaking. While the Preamble references necessary compliance with water quality standards and effluent limitations, so does both the Kentucky regulations and the definition of "material damage' used by DMP in the challenged CHIA. The primary statement from the Preamble relied upon by Petitioners states in its entirety as follows:

> One commenter wanted proposed paragraph (h) to allow the regulatory authority to establish criteria to measure "material damage." Others urged OSM to define the term or establish guidelines to evaluate whether material damage would occur from the proposed operation.
>
> Evaluating the probable consequences of the proposed operation upon the hydrologic balance outside the permit area is a very important step in the review of a permit application by the regulatory authority; OSM agrees that the regulatory authorities should establish criteria to measure material damage for purposes of the CHIAs.
>
> However, because the gauges for measuring material damage may vary from area to area and from operation to operation, **OSM has not established fixed criteria, except for those established under §§816.42 and 817.42 related to compliance with water-quality standards and effluent limitations.** See Preamble at 48 FR 43973 [Emphasis added. It should also be noted that OSM in the Notice approving West Virginia's new "material damage" definition expressly rejected Petitioners' proffered interpretation of this language...See Finding 34(f)(iv) below where that Notice is discussed].

b) OSM's final approval of two states' formalized definitions of "material damage" which are completely inconsistent with Petitioners' proffered interpretation of this language. One of those formal approvals was just over two years following this promulgation (1985) and the other was as recent as late 2009. Those formal notices are set out below.

c). There is nothing in the Preamble or in the final regulations that indicates OSM changed its intent, as stated and quoted above in the notice for this proposed rulemaking (Finding 26), to provide the RAs flexibility to use their best professional judgment on these issues. See Preamble at 48 FR 43065, which is quoted in the next Finding.

d). The notice of intent set out below where OSM proposes to establish an actual definition for the term, which notice acknowledges that it has not done so to date.

30. Additional statements made in the Preamble, which were cited by the parties in their written arguments are as follows:

a); Both Petitioners (emphasized in bold) and Respondent Cabinet (emphasized in italics) cited statements at 48 FR 43965.

> The baseline hydrologic and geologic information will be sufficient to provide the regulatory authority with the information from which to determine operator compliance with required performance standards. **Moreover, the rules allow for the regulatory authority to require additional information should that prove necessary.** While it may be difficult at the permit review stage to predict all possible environmental problems that could develop, *the regulatory authority will be applying its best professional judgment that the operation has been designed to prevent material damage to the hydrologic balance outside the permit area.* The ongoing monitoring will provide the regulatory authority with operation data so that adjustments to the hydrologic protection plan or other permit conditions may occur.

The above emphasized statements are obviously both correct. In fact, as to the first statement, DMP is under a mandatory obligation to not issue the permit until, and if, it has sufficient information to make the required no material damage finding. See KRS 350.060(7) and 405 KAR 8:030 Section 14(3). However, the sufficiency/insufficiency of the information relied on and the substantive merits of the post-reclamation determination actually made are not presented in this TRH petition.

b). Petitioners rely on the following statements at 48 FR 43971 to establish that the TDS parameter must be specifically addressed in the PHC:

> [The final regulation] includes a requirement that the PHC include a determination of the probable impacts of the mining operation on total dissolved solids. Salinity (total dissolved solids) predictions can be extremely useful as an indicator of potential problems for which remedial measures can be prescribed. Also, along with total suspended solids, it is one of the parameters specifically required by section 507(b)(11) of the Act. [See also KRS 350.060(7), which requires a TDS analysis in the PHC. Respondent Cabinet argues this requirement does not apply to the CHIA, and cited another Notice in support, which is addressed further below].

c). In its statement of summary, on the Preamble's first page it states as follows:

> Greater flexibility is provided to both the operator and the regulatory authority to design and implement surface mining and reclamation operations which address site-specific hydrologic and geologic conditions.

See also Id. at 43973 on this flexibility issue as it relates to development of CHIAs in particular.

31. **October 6, 1983, 48 FR 45597-8. KPDES.** This is the formal notice by the federal Environmental Protection Agency that Kentucky has been approved to administer the CWA's NPDES (National Pollutant Discharge Elimination System) permit program through the Kentucky Pollutant Discharge Elimination System (KPDES) program.

32. **December 3, 1985, 50 FR 49544-50. Wyoming's formal "material damage" definition approved, as part of Wyoming's primacy package.** This notice is important for the following reasons:

a). This is the formal notice by OSM approving (effective immediately) Wyoming's regulatory definition of "material damage." The OSM's Director's Finding approving this regulation finds as follows:

> Wyoming has revised this definition at Chapter 1, section 2(yy) by qualifying that it refers to significant long-term or permanent adverse changes to the hydrologic regime. The Federal rules do not define this phrase, but based on the legislative history of SMCRA and the accepted definitions of "material" and "significant" in common usage, the Director finds that these adjectives are synonymous in this context and that this change is no less stringent than SMCRA and no less effective than the Federal definition.

b). One commenter specifically objected to the proposed use of "significant" as a qualifier for determining material damage, as it would "allow random application of this definition," but the Director said he rejected this comment based on the reasoning in his Finding of approval. See Id. at 50 FR 49548.

c). This definition is very similar to DMP's non-promulgated definition of "material damage," used in making its CHIA determination at issue in this case and is, thus, highly persuasive against Petitioners' facial standard argument. (The standard may be misused in application, but again that issue is not raised in the TRH petition).

33. **August 28, 1987, 52 FR 32764-67. Formal notice by OSM of proposed regulatory changes to the permanent program regulations to define the content and scope of PHC determinations for permit applications.** This notice was actually to un-suspend some of the regulations, previously enacted in the rulemaking in Finding 26, above, that were suspended and further reviewed after litigation for both procedural and substantive challenges. The issues discussed were the appropriate aeral (spatial scope) and temporal scope of the PHC. As to the aeral scope, this notice proposed keeping the "permit and adjacent areas" language of the 1983 regulations. As to the aeral scope, the 1983 language was also proposed to be kept (silent on issue) as opposed to adopting a "life of mine" standard beyond the life of the permit, as an

advocacy group argued for in the litigation. These issues, as it relates to a CHIA were not discussed in this Notice. The following should be noted from this notice:

a). This Notice was cited by the Cabinet because of the following statement made in the Notice, which emphasizes flexibility for the RA in developing the content of the CHIA, even as to the parameters considered (like TDS/conductivity):

> In contrast to hydrologic parameters specified in the PHC, the Act is general in its guidance to RAs regarding parameters to be evaluated in the CHIA. This is a strong indication that Congress envisioned the two hydrologic evaluations to be fundamentally different. As a result, the regulatory authority has the prerogative of defining the content of the CHIA according to the hydrologic concerns within its jurisdiction. Id. at 32766.

b). The following additional statement from the Notice emphasizing the responsibility of the RA should also be noted:

> The language of this section clearly distinguishes the responsibilities of the applicant, which are to assess the PHC on the permit and adjacent areas and provide data on the mine site and surrounding areas, **from the responsibility of the RA, which is to utilize these and other hydrologic data to assess cumulative impacts of all anticipated mining in the area.** Emphasis added. Id.

c), As to the relevancy (for persuasive authority purposes) of the above statements in reviewing the facial sufficiency of the challenged CHIA, it must be considered that the statutory PHC and CHIA requirements are established under SMCRA at 30 USC 1257(b)(11), and that this section of SMCRA is identical to the KRS 350.060(7) statute establishing the same PHC and CHIA requirements in Kentucky. However, as to persuasiveness of these statements it must also be remembered that the content of CHIAs was not directly at issue in the rule-making. This fact

was later made by OSM itself in the Notice of final rule, which was the follow-up action to this Notice of proposed rule-making. See 53 FR 36398.

34. **September 19, 1988, 53 FR 36394-36401. Final Rule promulgating PHC requirements.** This is the final action resulting from the Notice disused in Finding 32 and its Preamble was cited by Cabinet counsel to emphasize its description that CHIAs, unlike PHCs, are intended to address "regional concerns." Id. at 36395. There were no changes from the regulation language proposed in the prior Notice. The Preamble also makes the following statement, which is relevant if the CHIA at issue in this proceeding is facially inadequate in its consideration of impacts during active mining because the parameters of concern "vary widely from site to site" during active mining and were not (further0 considered for that reason:

> [The Act requires] that there be sufficient data for the mine site and surrounding areas so that a CHIA can be made by the regulatory authority. Thus, if insufficient hydrologic information exists for preparing a CHIA, then the regulatory authority must delay issuance of a permit until either the necessary information is available from an appropriate federal or State agency or is collected and incorporated into the permit application by the applicant. Id. at 36398.

35. **December 24, 2008, 73 FR 78970-81. West Virginia's formal "material damage" definition approved, as part of West Virginia's primacy package.** In the same action, OSM also approved deletion of a state definition of "cumulative impact" from the program. It must be noted that these changes to the West Virginia program were first initiated in 2001 and have a complicated procedural and litigation history thereafter. The history is summarized in the Notice itself and briefly below at the end of this particular Finding for background purposes. It must

also be noted that this approval is itself in pending litigation.[19] This Notice, which resulted from a March 22, 2007 re-submittal of the same two changes, is important for the following reason:

a). This is the formal notice by OSM approving (effective immediately) West Virginia's amendment of a regulation establishing CHIA requirements by adding a regulatory definition of "material damage." The approved definition of material damage is as follows:

> Material damage to the hydrologic balance outside the permit area[s] means any long term or permanent change in the hydrologic balance caused by surface mining operation(s) which has a significant adverse impact on the capability of the affected water resources to support existing conditions and uses. Id, at 78971.

b). This approval, as to its effect and appropriateness under SMCRA requirements, was presumably carefully reviewed by OSM because of the procedural history and, thus, is more persuasive to the undersigned since he is certain that the issues got a "hard look" by OSM prior to making its approval determination. In making this determination OSM, as a result of the Fourth Circuit ruling described below in the history of this Notice, described its responsibility by quoting from that ruling as follows:

> "SMCRA requires OSM to find not only that the amended program contains counterparts to all Federal regulations, but also that it is no less stringent than SMCRA and no less effective than the Federal regulations in meeting SMCRA requirements."
>
> In addressing OSM's approval of the proposed addition of a sentence to the State's CHIA requirements that defined "material damage to the hydrologic balance outside the permit area," the court stated that: "the added definition made West Virginia's proposed program different that the nationwide program. OSM's

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[19] See *Ohio River Valley Environmental Coalition, Inc. v. Salazar,* Southern District of West Virginia, Case No. 3:09-CV-00149 pending before the Hon. Robert C. Chambers. Since the undersigned requested an update as to the status of this case during the oral argument on September 8, 2010, a copy of the docket sheet for this action was provided by counsel on September 10, 2010. On September 7, 2010 , the Defendants in the action filed their cross-motions for summary judgment. Plaintiffs had filed their own summary judgment motion on July 6, 2010. It is not clear from the docket sheet alone when it is expected that the parties' cross-motions for summary judgment will be submitted to Judge Chambers.

> obligation is to analyze that different feature and explain whether and why the added provision renders the amended state program more, less, or equally effective compared to federal requirements. At a minimum, it must address the potential affect of the amendment on the State program and provide a reasoned analysis of its decision to approve it."
>
> It is with the guidance provided by the court in mind that OSM has conducted this review of these two proposed amendments. Id. at 78971.

c). In its Findings, OSM noted for background that, as to the federal program that: "Material damage thresholds or standards for those parameters are not supplied," but then also noted that the federal program requires compliance with all federal and state water quality laws, standards and ELs. Id. at 78973-4.

d). In making its determination to approve the West Virginia definition of "material damage," OSM made several observations in support of its approval determination. In these statements, OSM accepted all three of the qualifiers used in the West Virginia definition of "material damage" which are i) "significant," ii) "long term or permanent change," and the capability of the affected water resources to "support existing conditions and uses" The basis of OSM's approval of these qualifiers are as follows:

i) **Significant.** "Since material damage certainly implies something more than minor damage and its is a word that OSM has used in Federal regulations for material damage in other contexts, the use of "significant" by West Virginia in this definition is not unreasonable." Id. at 78975. (Respondents both strongly argued this point as well in their respective briefs-that obviously the term "material" is itself a term of qualification indicating some threshold as opposed to "any" damage).

ii). **Long term or permanent change.** West Virginia assured OSM that under this definition that that all proposed operations will be designed to "consistently" meet applicable water quality standards and limitations in order to avoid any long term or permanent change. West Virginia also argued that that isolated or random exceedences should not be considered material damage. In response, OSM stated: "The idea that material damage to the hydrologic balance is limited to long-term trends rather than an isolated spike in relation to threshold levels or ranges is consistent with the requirement that monitoring data need only be submitted every three months and gives reasonable meaning to "material" damage." This statement was then qualified by OSM expressly to note that some isolated events certainly could result in material damage, but that numerous performance standards and remediation requirements would then come into play, including under the West Virginia state program, and that on a case-by-case basis such issues could be addressed during the review period. Id.

iii). As to **"support existing conditions and uses,"** West Virginia assured OSM that this phrase effectively requires consideration of the water quality laws and standards that it has promulgated under the CWA.[20]

e). As a result of the above, OSM made the following Finding:

> OSM Finds that it does provide reasonable guidance on what would constitute material damage to the hydrologic balance outside the permit area without imposing limitations on the reach of the phrase that would make the West Virginia program less effective than the federal regulations in achieving the purposes of SMCRA.
>
> West Virginia has stated that it intends to implement its proposed definition in a manner that provides objective criteria for determining whether a proposed operation is designed to prevent material damage to the hydrologic balance outside the permit area, Further, it has stated that it will do so in a

[20] As to water uses, OSM stated: "These uses must be taken into consideration by the State when approving a proposed mining operation. Id. at 78975.

> manner that will give reasonable meaning to the phrase "material" while providing consistent application understandable to all parties. Therefore OSM finds that the proposed new definition of material damage at CSR Section 18-2-3.22.e is no less stringent than SMCRA as discussed in this notice. Should we later find that this definition is not being implemented in a manner consistent with the above discussion, OSM may revisit this finding. Id. at 78975.

f). The remainder of the Notice is OSM's response to comments, including one of the prior and current Plaintiff's groups (Ohio River Valley Environmental Coalition, Inc. or "OVEC") in the litigation concerning this Notice. The more relevant responses and comments are as follows:

i). In response to OVEC's comment that the new standard is less objective than the deleted "cumulative impact" definition, OSM response was that the new material damage definition was actually more objective in that the deleted definition referred to "threshold limits and ranges" that were completely undefined and that the lack of a mathematical precise formula (which is acknowledged by both West Virginia and OSM) does not equate with a lack of objectivity. Id. at 7897.

ii) OSM expressly rejected what it described as being the "apparent" basis for OVEC's argument, which was that any exceedence or violation of CWA standards would constitute material damage, and noted that OVEC cited no law or authority for that position. Id. The undersigned notes that this is the basis for Petitioners' facial "standard" argument in this case even though Petitioners' counsel during oral argument was obviously reluctant to equate material damage with being any isolated violation of CWA standards, at least under all circumstances. This argument is rejected by the undersigned in the Conclusions, below.

iii) OSM specifically rejected OVEC's argument that there needs to be specific criteria established for determining whether "material damage," would occur like the thresholds and ranges referred to (but not defined) in the deleted regulation for "cumulative impact." OSM's response was that there was no such federal mandate for such criteria and that **no** state or program has such criteria. Id.

iv) OSM also expressly rejected OVEC's argument (and Petitioners herein) that the reference to compliance with all water quality standards in the 1983 regulations (and accompanying Preamble statement relied upon by the Petitioners in this action-see Finding 28(a) above) establish that violations of those standards as being automatically "material damage." Id. at 38977-8. OSM did note, however, that those violations would still be violations of the SMCRA performance standards and cited thereunder. The undersigned notes that the accuracy of this point is another reason why Petitioners' SMCRA Section 702(a)(3) argument is not persuasive.

v). OSM rejected OVEC's argument that SMCRA should be independently used to enforce TMDL requirements under the CWA, but also noted that it was "certainly appropriate" for the RA to consider discharges into 303(d) listed impaired streams during the CHIA process-especially as Abandoned Mine Lands (AML) program money under SMCRA was being used for stream restoration in many instances and it would obviously be counter-productive if new discharges were competing with the restoration efforts. Id. at 48978.

(g). The US EPA, while raising some concerns about the proposed changes and noting that some possible interpretations of the new definition could be inconsistent with CWA, gave its regulatory required concurrence to these changes. Id. at 78979-80.

(h) **Procedural history for the W.Va. material damage approval.** The changes were initiated in 2001; OSM approval the changes (and others) in 2003; and in 2005 the approvals were vacated by the US District Court for the Southern District of West Virginia and were remanded to OSM for further proceedings with directions. The Court then amended its decision to require the Director to instruct West Virginia that it must enforce the approved portion of the state program. Both decisions were appealed by the Interior Secretary to the US Court of Appeals for the Fourth Circuit and were affirmed on federal APA grounds. The Court held that this type of approval determination needs to follow rule-making procedures and was arbitrary and capricious because the approval did not reflect consideration of the approval's effect on the West Virginia's program overall effectiveness. (Thus, the Fourth Circuit did not actually address the merits of the approvals. The Court reported the approvals were on the basis that there was no corresponding federal definition of "cumulative impact" which was being deleted and "material damage" which was being added). See *Ohio River Valley Environmental Coalition, Inc. v. Kempthorne*, 473 F. 3d 94 (4th Cir 2006).

36. **November 30, 2009, 74 FR 62664-62668. OSM announces its intent to consider promulgation of a "material damage" definition and to change its "cumulative impact area" (CIA) definition.**[21] More broadly, this is a formal notice by OSM of proposed rulemaking and notice of intent to prepare a supplemental environmental impact statement (SEIS) concerning its intent to review and revise its steam buffer zone (SBZ) regulations for protection of streams

[21] As to the appropriate definition of CIA, the Notice discusses the possibility of using elements which the US Army Corps of Engineers use in making their cumulative impact assessment under their CWA Section 404 permit determinations, as part of the regulations. The "anticipated mining" sub-part of the CIA definition is important in Petitioners' temporal argument but this Notice does not have any relevant discussion on that issue.

that it had revised earlier on December 14, 2008 (73 FR 75814-75885).[22] OSM determined a revision in the SBZ regulations was necessary to implement an interagency action plan "to significantly reduce the harmful environmental consequences of surface coal mining in Appalachia." Id. This referenced plan also required OSM to review its other relevant regulations that potentially impact that plan, and as part of that review process is seeking comment as to whether it needs to adopt for the first time an actual regulatory definition of the term "material damage." The following is found about this Notice:

37. This Notice (and the next described notice in the next Finding) was relied upon by the Respondents to support their argument that the current regulations do not define the term "material damage" and that the DMP definition of the term used in the CHIA at issue is within the range of announced possibilities for a definition and, thus, the definition used by DMP is certainly an allowable definition for the term under SMCRA. The undersigned agrees with the Respondents that these Notices support those conclusions. For example, this Notice states as follows:

> When we adopted our hydrologic information regulations at 30 CFR 780.21 and 784.14, which implement section 510(b)(3) in part, we did not include a definition of "material damage to the hydrologic balance" or establish fixed criteria for that term 'because the gauges for measuring damages may vary from area to area and from operation to operation.' We seek comment on whether understanding of the relevant hydrology and the associated technology have advanced since 1983 to the degree that there is now support for a definition that would include specific criteria and consistent measures for material damage to the hydrologic balance, and, if so, what that definition might be. Id. at 62668. [At this point OSM cited as

[22] The Notice reports that the regulations were immediately challenged in two separate actions in the US District Court for DC that remained pending as of the date of this particular Notice. The next Notice provided updates on the status of the litigation. By agreement, the actions have been placed in abeyance and OSM has agreed to use "best efforts" to sign a proposed rule by February 28, 2011, and a final rule by June 29, 2012. OSM also noted in the next Notice that due to the changes in Administration on January 20, 2009, OSM had already independently decided to change the 2008 SBZ rule. As to the referenced interagency plan, (memorandum of understanding or MOU) that was entered into between Interior; Army; and EPA on June 11, 2009.

support the Preamble to the 1983 regulations relied upon by Petitioners, as a large portion of their argument. See Finding 26, above.].

OSM is also proposing (but not necessarily in the context of a material damage definition at this time since the following was a distinct proposal in the Notice):

> a quantitative or qualitative threshold beyond which further damage to water quality or aquatic life in a particular watershed would be prohibited. We encourage commenters to identify potential thresholds and explain why those thresholds should be established. We also encourage commenters to discuss how thresholds could be harmonized with Clean Water Act requirements and the Clean water Act permitting requirements. Id. at 62667.

38. **June 18, 2010, 75 FR 34666-34669. SBZ and "material damage" rulemaking process continues.** In this Notice, OSM announces the rulemaking for SBZ and "material damage" announced above continues and also notices "scoping" opportunity changes to the related environmental impact statement (EIS) being prepared in the process. (OSM announced its intent to prepare an EIS in an earlier related Notice. See 75 FR 22723 (April 30, 2010)). This Notice outlines possible alternatives for the determinations under review, including for the definition of "material damage." As to those alternatives, this Notice states as follows:

> Alternatives for defining the term "hydrologic balance," include (1) Any impairment of a physical, chemical, or biological function of the hydrologic balance, (2) Any quantifiable adverse impact on the quality or quantity of surface or groundwater or the biological condition of a stream that would preclude or diminish use of the water or stream; (3) Any ongoing violation of water quality standards; and, (4) Differentiating between short term vs. long-term impairment. Id. at 34168.

39. OSM's December 1985 Draft Guidelines for Preparation of a Cumulative Hydrologic Impact Assessment (CHIA). **(1985 Draft).** A copy of this document was placed into the record

by Petitioners, as their Exhibit 4 and was relied upon by Petitioners to both provide background, as to the CHIA requirements, and as some support of their arguments. The following is found in regard to this document:

a). This is a 25-year-old draft document that was never adopted in final form and was intended primarily to give the RAs technical guidance in the preparation of their required CHIAs, as opposed to making formal statements of OSM's legal positions on certain issues. As such, its use by a commenter (OVEC) objecting to OSM's formal approval of West Virginia's definition of "material damage," which OSM approval is discussed above in Finding 35, was expressly rejected by OSM in that determination for such a use. On the 1985 Draft, OSM stated as follows:

> There are also a few other aspects of OVEC's comments that warrant a response. The background Section seriously mischaracterizes Federal CHIA and material damage requirements. The draft CHIA guidelines that OSM released in 1985 quoted from in the comments are just that –draft. They have never been finalized and certainly do not represent an agency position enforceable by regulation, including the State program amendment process. Further, the introduction to the draft guidelines states clearly that they were only intended as technical guidance and should not be construed as enforceable standards. See 73 FR 78978 (November 30, 2009).

This statement is certainly supported by the Preface and Instruction sections of the 1985 Draft itself. See 1985 Draft at pages iii and 1, where it states (for example) its contents are to be "suggestions" only, "should be considered guidelines and not standards," and that the "regulatory authority is not required to use this material." (It goes on-thus, it is very emphatic on these qualifications of its intended purpose).

b). The 1985 Draft while again emphasizing the definitions given in the document "are not to be construed in any way as official OSM definitions," but were being given only to facilitate understanding of the guidance document, did actually establish a definition of "material damage," that itself used the qualifier "significant." That definition at page 3 is as follows:

> Material damage to the hydrologic balance means, with respect to CHIA, the changes to the hydrologic balance caused by surface mining and reclamation operations to the extent that these changes would **significantly** affect present and potential uses as designated by the regulatory authority. [Emphasis added].

c). For the 1985 Draft's discussion of material damage, see pages III-5,-7; and IV-22-27. The following statement should also be considered:

> The material damage criteria, of course, cannot require less than the existing laws, standards or regulations. **Therefore, the first step in developing these criteria is to assemble all existing standards and determine which apply to the cumulative impact area and to the identified hydrologic concerns.** Most established standards relate to water quality and to its effect on specific uses. Id. at IV-22. [Emphasis added].

d). In their memorandum, Petitioners cited pages III-7, IV-22; and IV-31-2 to establish that it is the responsibility of the RA to establish (and specify) allowable limits and amounts of change in the CHIA process for the purpose of making its material damage determination. The undersigned agrees that determining what impact is to be considered damaging is the obvious responsibility of the RA under this regulatory program, but also concludes that this document states that that these limits or amounts need not be quantitative assessments, but can be qualitative and that the RA is given wide latitude in making these determinations (and others), but must use his best professional judgment in doing so. See e.g. II at 2. [As pointed out by DMP in its CHIA, this document does not establish any thresholds itself for when an "impact" is

to be considered significant. See Finding 13 above and the 1985 Draft Guidance's definition of "impact "at page III-1. However, it is clear this is because no set one size fits all national standard was to be imposed and each RA was expected to address site specific issues to set an appropriate threshold levels for the site given its particular hydrologic concerns. Thus, while there is no given standard in the document itself, its example of an appropriate assessment in the Appendix does set a standard] .

e). In their memorandum, Petitioners cite page IV-31 to establish that that it is the responsibility of the RA to make its required material damage determination and that this guidance thereafter states that the RA is to then:

> write a statement of these findings, giving all supporting evidence and stating the rationale used. This determination is the main objective of the whole CIA process. The supporting evidence and rationale validate the determination.

In evaluating DMP's CHIA at issue in this case with the guidance given in the above comment, the DMP CHIA is certainly not self-validating as it facially lacks any explanation as to what method it used (if any) to make its critical " probable **cumulative** impacts" assessment even for its "post-reclamation" analysis. There is not even a mention of the other active mines (or their PHCs)[23] in the watersheds on this single analysis page of the CHIA, which is actually labeled to be a PHC for the Cambrian mine, which is also what it appears in fact to be. As a result, DMP's CHIA does not persuade that it warrants the deference Respondents seek for it in their arguments.

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[23] Counsel for the Cabinet did attempt to cure this in her memorandum by attaching copies of the PHC's available to her at the time, but she lacked data for one of the watersheds completely (Marrowbone Creek with 5 active mines in addition to the one at issue) because of the missing page from the CHIA that had that data. The CHIA itself does not facially reflect any consideration of the mining data for the other active mines (or of their respective PHCs) in the actual analysis portion of the document. As noted before, she subsequently located this page and provided it for the file and opposing counsel. As to the Lower Elkhorn Creek watershed, there are 3 other active mines in addition to the 3 Cambrian permits mentioned in this report and Cabinet counsel submitted the PHC for two of the three and status information on the other. This history was discussed in Finding 15, above.

(However, the merits of this post-reclamation analysis are not before the undersigned in this TRH because it is unrelated to Petitioners' facial challenge to DMP's use of the challenged "material damage" definition). The issue of how that definition was applied is not before the undersigned.

40. As to Petitioners' "temporal," argument, the 1985 Draft Guidance has the following relevant statements/information:

a). The 1985 Draft Guidance at page IV-1 notes that the phrase "anticipated mining," (which is within the controlling Kentucky definition of cumulative impact area) and is the same as this definition includes a temporal element and states as follows on that issue:

> All Anticipated Mining Operations
>
> The discussion of cumulative impact area concepts (Chapter III) centers on the geographical area alone. The other part of the CIA delineation process, discussed below, involves identification of the specific operations whose impacts must be included. The definition of CIA specifies the types of operations, which, at a minimum, must be included as "anticipated mining." **In addition, "anticipated mining" also includes a time factor; that being, "at a minimum, the entire projected lives through bond release of:" the above-listed types of operations (30 CFR 701.5, Cumulative Impact Area). This means that the total areas projected to be disturbed by mining and reclamation activities over the entire lives of these operations (not just the 5-year permit areas in effect at the time the CHIA is prepared) must be included in the CIA.** [Emphasis added].

Certainly this means that the CIA is to include the cumulative impacts during the active life of the mining operation plus its impact post-permit life. (In fact, the only temporal controversy discussed in the FR history found above is whether the post-permit period needs to be included in the applicant's PHC analysis, in addition to being included in the RA's CHIA. Thus, inclusion of all impacts from the active mining time period in the assessment has always been a given by common sense. In the present case, DMP, other than its single statement: "that increases during mining [TDS and conductivity] may vary widely from site to site and are not addressed here" did

not consider the actual impacts during/or from the active miming period. See CHIA at page 20. Instead, DMP analyzed only the impact of Cambrian's post-reclamation contributions once reclamation had been achieved (and presumably equilibrium reached) and assumed the post-mining receiving waters would then still be the same exact quality (with absolutely no impact from the active mining period at all) as they were in the pre-mining monitoring data supplied by Cambrian.

b). See the 1985 Draft Guidance's Figure III-2 on page III-4 for illustrative purposes. While this figure is intended to demonstrate the hypothetical cumulative impacts of three different mining operations at a point location downgradient from the last mine, the impact obviously "peaks" during and immediately active mining and then reach equilibrium at some temporal point after active mining. This figure also illustrates the undersigned's comments made in the paragraph immediately above. DMP's PHC/CHIA was done at a temporal point in time on the far right hand portion of the curve and after a period of time after equilibrium was already reached at that location point in the hydrologic system. (As shown in this figure, the post-mining reclamation is only somewhat higher that pre-mining baselines for the pollutant parameters measured. However, it is certainly possible that the earlier peak of the pollutants during and immediately after mining may have already impaired the receiving water's use at the location depending on the impacts of the peaks). The discussion accompanying this figure also points out that the cumulative impacts will then continue to move further down gradient in the hydrologic system. Of course, the ultimate receiving waters in the watersheds receiving these Cambrian discharges are already impaired from TDS due to mining and are on the state's 303(d) impaired waters lists. See Finding 5, above.

c). See 1985 Draft Guidance's Appendix A, the document's recommended example a CHIA report, which includes the recommended content for the CHIA assessment process at pages A-2 through A-3. This includes prediction of parameters of concern for both short-term and long-term periods, and including explanations for the different methods used (both as to why selected and how calibrated) in making the two sets of predictions. A sample CHIA report is included as Appendix B.

IV. CONCLUSIONS OF LAW

Based on the foregoing Findings of Fact and after full consideration of the parties' respective arguments, the undersigned makes the following Conclusions of Law:

A. Background conclusions

1. This action was initiated by Petitioners, pursuant to the authority of 405 KAR 7:092 Section 12, seeking temporary relief from the issuance of permit 898-0806 This regulation provides in pertinent part, as follows:

> Section 12. Temporary Relief.
>
> (1) (a) Pending the completion of the investigation and hearings provided for in this administrative regulation, a hearing officer may, subject to review by the secretary, grant temporary relief from a notice or order issued pursuant to KRS Chapter 350 or administrative regulations, or a permit or bond release decision of the cabinet.
>
> (b) A petition for relief shall be in writing, and filed with the office. The petition shall contain:
> 1. A detailed statement setting forth reasons why such relief should be granted;
> 2. A showing that there is a substantial likelihood that the person requesting the relief will prevail on the merits of the final determination of the proceeding;
> 3. A statement that the relief sought will not adversely affect the health or safety of the public or cause significant, imminent environmental harm to land, air, or water resources;
> 4. If the petition relates to an order for cessation and immediate compliance issued pursuant to KRS 350.130(1) or (4) or a decision to release a bond, a

statement of whether the requirement for a decision on the petition within five (5) working days is waived; and

5. A statement of the specific relief requested.

(c) A hearing officer may grant temporary relief after making a written finding that relief is warranted, and shall state the reasons for the finding. A hearing officer shall grant or deny relief expeditiously; except if the person requests temporary relief from an order for cessation and immediate compliance issued pursuant to KRS 350.130(1) or (4), or from a bond release decision, a hearing officer shall grant or deny temporary relief within five (5) working days of receipt by the office of a request.

(2) [This subsection is deleted as being inapplicable here as it addresses the requirements to obtain temporary relief from DMRE enforcement actions, such as issuance of noncompliances and cessation orders]

(3) If a person requests temporary relief from a permit or coal exploration determination, the hearing officer under conditions as may be prescribed pending final determination of the proceeding may grant temporary relief if:

(a) The parties to the proceeding have been notified and given an opportunity to be heard on a request for temporary relief;

(b) The person requesting the relief shows that there is a substantial likelihood that he will prevail on the merits of the final determination of the proceeding; and

(c) The relief will not affect adversely the public health or safety, or cause significant, imminent environmental harm to land, air, or water resources; and

(d) The relief sought is not the issuance of a permit where a permit has been denied, in whole or in part, by the cabinet, nor release of a bond when a bond release request has been denied.

(4) ... [This subsection is deleted as being inapplicable here as it addresses the special procedural and timing requirements if relief is being sought from a cessation order or determination to release a bond]

2. As to two of the above specified requirements to obtain temporary relief from a permit determination, there has obviously been both notice and an opportunity to be heard on this petition and Petitioners are not seeking issuance of a permit after its denial. Therefore, Petitioners only have the burden to establish both i) that they have a substantial likelihood of prevailing on the merits in their related PDH action challenging the validity of the permit; and, ii)

that, if temporary relief is granted, that it "will not adversely affect the health or safety of the public or cause significant imminent environmental harm to land, air or water resources."[24]

3. Since, if granted, temporary relief would serve only to preserve the status quo pending resolution of the formal action challenging the permit and would require cessation of all further active operations, (outside of ongoing interim reclamation and monitoring obligations which would not be suspended) including cessation of any further coal removal or any additional disturbances under the permit, Petitioners have established that the second requirement of obtaining temporary relief is satisfied and Petitioners must only further establish a substantial likelihood of success on the merits.[25]

4. This is a de novo proceeding as to all issues of both fact and law. See 405 KAR 7:092 Section 3 (1)(a).

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[24] "Significant, imminent environmental harm" is defined at 405 KAR 7:001 Section 1(74) as follows::

> an adverse impact on land, air, or water resources which resources include, but are not limited to, plant and animal life as further defined in this subsection.
> (a) An environmental harm is imminent, if a condition, practice, or violation exists which:
> 1. Is causing environmental harm; or
> 2. May reasonably be expected to cause environmental harm at any time before the end of the reasonable abatement time that would be set by the cabinet's authorized agents pursuant to the provisions of KRS Chapter 350.
> (b) An environmental harm is significant if that harm is appreciable and not immediately reparable.
>
> The other term "adverse effect on the public health or safety" is not otherwise defined in the regulations except in the context of an "imminent danger" to the public heath or safety, which is defined at 405 KAR 7:001 Section 1(32).

[25] While counsel for Cambrian during the August 27, 2010 conference sought an opportunity to present evidence of equitable factors to oppose Petitioners' grant of temporary relief, such as loss of payroll, employees' jobs, or economic hardship, etc., that would occur during any period of temporary relief, said offer was objected to by Petitioners' as being legally irrelevant under the legal standard controlling for temporary relief. The undersigned agrees with said objection. Thus, this objection was sustained. However, the undersigned did allow Cambrian to file an affidavit into the record on these equitable factors-but for avowal purposes only.

5. Petitioners have standing to bring this action. This conclusion is based on Petitioners' allegations made in their PDH and TRH petitions (to the extent uncontested); the affidavit or declaration of Mr. James Stapleton, Jr., who is a member of both Petitioner organizations, see Finding 3 above; and, finally, Respondents' statements/recognitions made in their respective filings acknowledging that Mr. Stapleton's affidavit is sufficient, as a matter of law, to satisfy Petitioners' standing requirements to bring both the TRH and its underlying PDH action. Since the sufficiency/insufficiency of the other two individuals' stated injuries in fact, as established in their respective affidavits, need not be addressed for Petitioners' standing, and the individuals are not seeking standing on their own behalf, the undersigned does not address the sufficiency of those members' alleged injuries in fact in this Order.

B. Summary disposition standard

6. Since Petitioners have chosen to proceed on their TRH petition based on their arguments that they are entitled to relief as a matter of law and without any evidentiary hearing, Petitioners need to establish that they meet the standard for summary disposition and are substantially likely to prevail under that standard. Petitioners fail if there are any issues of disputed fact, which are necessary to support their TRH petition. The controlling standard for summary disposition will now be set out.

7. The Hearing Officer is authorized by 405 KAR 7:091 Section 3(4) to make a recommendation for summary disposition if the motion record establishes as follows:

i). There is no disputed issue as to any material fact; and

ii). The moving party is entitled to a summary disposition as a matter of law.

7. This is the same standard used by the Commonwealth of Kentucky's judiciary for summary judgment motions as established by the Kentucky Rules of Civil Procedure (CR), at CR 56.03. Since the Cabinet promulgated a regulatory standard identical to the standard used in the civil rules by the judiciary, and given that Final Orders of this Cabinet are subject to review by the judiciary, the undersigned will apply caselaw interpreting this standard to this case.

8. The leading interpretative case for the proper application of this standard is *Steelvest, Inc., v. Scansteel Service Center Inc.,* 807 S.W. 2d 476 (Ky. 1991). In *Steelvest*, the Court adopted a strict standard for summary judgment, as opposed to a more liberal standard being used by federal courts. The *Steelvest* Court stated that the summary judgment rule is to be "cautiously applied" so as to not cut off litigants from their right of trial. See *Id.* at 480. The record must be viewed in the light most favorable to the party opposing the motion and all doubts must be resolved in the opposing party's favor. A summary judgment should only be granted "to terminate litigation when, as a matter of law, it appears that it would be impossible for the respondent to produce evidence at trial warranting a judgment in his favor and against the movant. See *Id.* at 483 citing *Paintsville Hospital Company, v. Rose,* 683 S.W. 2d 255, 266 (Ky. 1985).

9. Notwithstanding the above strict standard for summary judgment, the *Steelvest* Court also placed some burden upon the party opposing a "properly supported summary judgment motion" by stating as follows:

> Finally, under both the Kentucky and the federal approach, a party opposing a properly supported summary judgment motion cannot defeat it without presenting at least some affirmative evidence showing that there is a genuine issue of material fact for trial. See *Id.,* at 482.

10. The Court subsequent to *Steelvest*, has clarified and softened the term "impossible" to establish that although a strict standard for summary judgment practice must still be applied in the Commonwealth, that summary judgment practice has not been eliminated and that the term "impossible" should be interpreted to be used "in a practical sense and not in an absolute sense." See *Perkins v, Hausladen* 828 S.W. 2d 652, 654 (Ky. 1992). See also *Welch v. American Publishing Company,* 3 S.W. 3d 724, 729 (Ky. 2001) ("*Steelvest* did not repeal CR 56.03"); and *Lewis v. B & R Corp.*, 56 S.W. 3d 432, 436 (Ky. App. 2001).

C. Dispositive conclusions

11. For the controlling law and definitions and a summary of the parties' respective arguments see Section III of this Order, above.

12. Petitioners have established that they are entitled to temporary relief from DMP's determination to issue Cambrian's application for a surface coal mining and reclamation 898-0806 as to their "temporal" argument, but have failed to meet their burden to establish that they are entitled to temporary relief as to their "standard" argument. See the above Findings and Conclusions for the bases of these conclusions.

Temporal argument

13. In summary, as to Petitioners' "temporal argument" that DMP failed to facially consider the impacts of acknowledged increases in total dissolved solids (TDS), sulfates (SO4)[26],

[26] Counsel for the Cabinet argues the CHIA does not itself acknowledge SO4 will increase during mining because that parameter is not mentioned on the analysis page (20) of the CHIA. This conclusion would not change even if the SO4 parameter is excluded. However, SO4 is specifically mentioned on page 18 of the CHIA and states that some SO4 is "usually liberated during the mining process" and that increases in conductivity (which the CHIA also acknowledges may be a problem for the aquatic community) are often linked to that increase. TDS and conductivity are also linked, as facially established by DMP's use of a correlation to equate the two parameters in its post-reclamation analysis. The two parameters are also linked in the DOW water quality standards. See 401 KAR 10:031 Section 4(1)(f). Thus, these three parameters are clearly identified as parameters of concern.

and conductivity for the period during and immediately after mining, the primary bases for the conclusion that Petitioners have net their burden on this issue are as follows:

a). The controlling definition of "anticipated mining" set out within the controlling definition of "cumulative impact area" contains this temporal element (requiring consideration of pollutant contributions during and immediately after mining). This element was clearly ignored in DMP's analysis, which was limited to conducting an analysis of Cambrian's pollutant contributions **only** during or from the post-reclamation time period discharges and without any analysis or consideration of the impact that will occur during and from the active mining time period discharges. The post-reclamation discharges from the permit will be into waters impacted by active mining discharges and not into waters of the quality that existed in the background monitoring data, as assumed by DMP in its post-reclamation analysis-the only analysis conducted to support issuance of this permit. The receiving streams may be "materially damaged' under the definition used by DMP by the time the post-reclamation time period is reached, but that possibility is ignored in DMP's analysis. (If that definition, whose facial validity is the other

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As to Cabinet counsel's argument that KRS 350.060(7)'s express mandate for consideration of the TDS parameter applies only to the permit applicant for inclusion in the applicant's PHC determination and is not a mandated part of the required Cabinet assessment, the undersigned concludes that the statute is ambiguous on this issue and that the Cabinet's interpretation has one supporting reference from OSM (interpreting SMCRA with the same language of the state statute) in its FR notices reviewed as part of this record. See 52 FR 32766 discussed in Finding 33 above. However, this issue is not resolved here because, even assuming the Cabinet's proffered interpretation is correct, Petitioners are still entitled to temporary relief on this record because: i) in this case TDS was expressly identified by DMP as being a parameter of concern; and, ii) there must still be an assessment of impacts caused by and during the active mining period. Thus, DMP did not use its judgment to deny an assessment of TDS for this period because it was determined not to be a parameter of concern during this period, it did not perform the analysis simply because it illegally excluded the temporal period impacts from its assessment because "**increases during mining may vary widely from site to site and [therefore] are not addressed here.**" Thus, given the lack of any actual predictive or useful TDS information in Cambrian's PHC (see Findings above) for DMP to use, DMP lacked sufficient information to perform this required analysis and unlike with the "post-reclamation" values where DMP felt professionally comfortable in using an assumed "typical" value for contributions during the post-reclamation time period, it did not have "typical" values available to asses during mining impacts. Again, under KRS 350.060(7) the permit cannot be issued if there is an insufficiency of information to conduct the required "probable cumulative impact assessment for all anticipated mining."

legal issue presented in this matter and concluded next, is applied in a manner to avoid consideration of this required temporal element, then the undersigned concludes that definition would be in violation of law for the same reasons set out in this conclusion. However, the undersigned is not certain said definition is facially in conflict with this temporal consideration requirement).

b). DMP's only statement/consideration of the active mining period impacts is insufficient, as a matter of law, to meet its mandates under KRS 350.060(7) and 405 KAR 8:010 Section 14(3) required for issuance of the permit. This consideration, in its entirety, is at page 20 of the CHIA and provides as follows: "Increases in TDS and conductivity are expected to occur during and immediately after mining. **Increases during mining may vary widely from site to site and are not addressed here.**" CHIA at page 20 (Emphasis added). This is a "hands-off" approach to meeting its regulatory duties and is in contravention of the purposes of the regulatory program, as stated by the Kentucky General Assembly at KRS 350.020. See also *Smith v. NREPC,* 712 S.W.2nd 951, 953 (Ky. App. 1986), where the Court stated (in the context of the Cabinet's duties to review the sufficiency of a required waiver allowing operations within 300' of an occupied dwelling) that such a ""hands-off' policy of non-involvement" toward the performance of its required regulatory duties is "seriously flawed." While it may be a difficult issue to address, DMP is obligated to exercise its best professional judgment as to what increases are expected from all aspects of "anticipated mining," including for the temporal period of actual mining. This is obviously the point in time when the impacts are likely to be at their peak, as opposed to when the site obtains post-reclamation equilibrium and massive amounts of spoil are no longer being handled on site on a daily basis. Finally, if there is insufficient information to

make the required determination the permit cannot be issued, as a matter of law, (see KRS 350.060(7) and 405 KAR 18:010 Section 14 (3)); and DMP may always require further information from the applicant to assist in that required review and determination.

c). The parameters of concern are not covered by technology-based effluent limitations (ELs) and, thus, ongoing required water monitoring for this permit will not be sufficient to avoid possible environmental harms caused by problems from increases in these parameters of concern during mining. The required monitoring reports are reviewed by DMRE (the enforcement agency for this permit within the Cabinet) for the purpose of determining compliance with the performance standards (the ELs) and will not result in any violations since there is no specified exceedence levels to cite under 40 CFR Part 434. These federal regulations establish the technology-based ELs applicable to coal operations under the CWA. In addition, the monitoring reports of the discharges themselves will not measure the environmental harm caused by the cumulative impacts from all of the "anticipated mining" in the watersheds. The "probable cumulative impacts" of all "anticipated mining" are to be assessed pre-permit issuance by DMP.

d) These discharges are into waters of the Commonwealth which are already CWA 303d listed impaired waters that are not fully reaching their designated use as warm water aquatic habitat (WAH), and that impairment has been caused by mining related discharges of TDS. This fact, established in Finding 5 above, coupled by the above noted limitation of ongoing monitoring to establish environmental harm once the permit is issued establishes the environmental importance of a fully supported permit determination prior to its issuance. Thus, temporary relief, if granted, will not cause any environmental harm, and if granted, may actually prevent environmental harm from occurring.

e). See particularly Findings 23a-23g and 40 above for the primary bases (and further explanation) for this ruling, which Findings are, in part, Conclusions of Law.

Standard argument

14. Petitioners "standard" argument is that the DMP definition of "material damage" is facially invalid, as a matter of law, because it contains certain qualifiers that Petitioners' argue cause it to be less protective and in violation of the CWA, 33 USC Section 12501 et.seq. The actual definition used by DMP is set out in Finding 12 above. As to the challenged qualifiers used in the CHIA definition of "material damage" to establish the threshold of impact considered to be "material" these are: i) requiring the damage to be "long term or permanent;" ii) requiring any failure to meet water quality standards to be on a "chronic" basis; and, iii) requiring the designated water use to be "significantly" impacted. In essence, Petitioners argue the term should be defined to equate with any violations of applicable water quality standards and effluent limitations (ELs) and that DMP's use of these qualifiers in the definition violates SMCRA's prohibition against amending, violating or superseding provisions of the CWA. The undersigned rejects this argument and concludes that Petitioners are not likely to succeed on the merits of this issue in their underlying PDH action and, therefore, Petitioners must be denied temporary relief based on this argument. The primary bases for this conclusion are as follows:

a). There is no actual state or federal statutory or regulatory definition of "material damage." Again, Kentucky law applies exclusively to this matter because of the grant of primacy to Kentucky, but federal law in the context of this KRS Chapter 350 primacy program is a highly persuasive interpretative tool, particularly when the corresponding federal and state statutes and

regulations at issue are substantively identical, as they are in this case. See note 3, above for further discussion of the controlling law issue.

b). As to OSM's determination to not promulgate a regulatory definition of the term "material damage," the undersigned is convinced that this was done intentionally by OSM as the implementing authority under SMCRA to give the state Regulatory Authorities (RAs) flexibility to define the term on a case-by-case basis to address site specific hydrologic concerns identified in the assessment process. See Findings 24-38 above that, in detail, set out the applicable Federal Register (FR) notices that support this conclusion. See also the discussion on this issue in the 1985 Draft Guidance document, which discussion also reinforces this Conclusion. See Finding 39 above for the 1985 Draft Guidance's discussion of this issue.

c). OSM has formally approved in FR notices changes in Wyoming's and West Virginia's state laws, included as part of those states' respective primacy programs under SMCRA, definitions of the "material damage" term that included qualifiers similar to those used by DMP in the CHIA at issue in this case. (These are the only two states with laws or regulations formally defining the term). These formal approvals occurred in 1985 (Wyoming), which was just over two years from OSM's 1983 enactment of the currently controlling regulations for protection of the hydrologic balance (where OSM itself chose not to define the term), and as recently in 2008 (West Virginia). As to these two formal FR notices, see respectively Findings 32; and 35. The qualifiers approved for Wyoming and West Virginia are as follows:

Wyoming: "significant long-term or permanent adverse changes in the hydrologic regime"

West Virginia: "long-term or permanent change in the hydrologic balance ... which has a significant adverse impact on the capability of the affected water resources to support existing conditions and uses."

d). The above approvals demonstrate that OSM's position contemporaneous to enactment of the controlling regulations and thereafter has been that the term "material," is a qualifier of the term "damage" and is not intended to equate any degree of damage no matter how insignificant or temporary as being a sufficient level of damage to trigger denial of permits under SMCRA and their approved primacy programs.[27]

e). In common usage the term, "material" is itself a qualifier indicating some level of threshold needs to be reached. This is also specifically how the term is used in other contexts within the coal regulatory program itself.[28] Consequently, the undersigned concludes it is unlikely that OSM in the current rulemaking to possibly define "material damage" for the first time will choose to define the term using the first (any impairment) alternative discussed in the note above.

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[27] But see June 18, 2010 FR notice, Finding 38 above, where OSM notices its intent to define the term for the first time and the range of alternatives proposed are in that Notice as follows: i) "any impairment;" ii) "quantifiable adverse impact;" iii) "any ongoing violation" of water quality standards; and, iv) "differentiating between short term vs. long-term impairment." Obviously, the first and second proposals are close to Petitioners' position in this case and the other alternatives proposed have qualifiers closer to the term as defined by DMP in this case. At this point, however, this is just an alternatives proposal and OSM has yet to notice and propose an actual definition of the term for a formal rulemaking. Thus, this is not particularly persuasive for any of the parties' respective arguments at this point except to establish that it is likely or possible a federal definition of "material damage" will be promulgated for the first time and, thus, is not defined in the current regulations.

[28] See e.g., the definition of "material damage" which uses the "significant" qualifier for the purpose of determining the level of damage from subsidence that rises to the level requiring remediation at 405 KAR 19:001 Section 1(61). As to why it was not defined in the context at issue, the undersigned is convinced it was intended to allow RAs flexibility to determine an appropriate definition within the assessment process itself and to give flexibility to address site specific hydrologic needs.

f). As to the above two OSM approvals, two limiting points must be considered in fairness to Petitioners. The first is that neither of the approvals concerned the use of the qualifier "chronic," which is the qualifier most objected to by them. The second is that OSM's West Virginia's approval is currently being challenged in pending litigation and, thus, may be overturned and new law/authority may ultimately be established on this issue. The undersigned has carefully reviewed these points but has rejected them for the following reasons: i) the term "chronic" is close to the term "long-term or permanent" that was included in the approved definitions; ii) if DMP were to apply the chronic qualifier so as to not fulfill its responsibilities (concluded above) to assess the "probable cumulative impacts" of all "anticipated mining," including the impacts caused from and during active mining, that would be illegal; iii) DMP did not use the definition as a basis to exclude in its assessment the impacts occurring during active mining, as the exclusion was based only on "wide variances" in the increases of the parameters of concern during the active mining period; and, iv) the fact of pending litigation, itself, without a favorable ruling having been first obtained is not very persuasive, especially as the undersigned independently concludes, as set out above, that some qualifier is intended to be legally appropriate by use of the term "material" and it was not given an established single definition in order to give the Regulatory Authorities (RAs) flexibility in the CHIA process to address site specific hydrologic concerns and additional flexibility to establish what level of cumulative impacts would rise to the level of constituting "material damage" under those site specific conditions.

g). The undersigned also rejects Petitioners' argument that use of the qualifiers per se violates the CWA and, thus, SMCRA"s prohibition against construing any of its provisions as

"superseding, amending, modifying, or repealing" the CWA, as SMRA prohibits at its Section 702(a)(3), codified at 30 USC Section 1292(a)(3). The primary bases of this rejection are as follows:

i). The mining operations must be designed to meet all applicable water quality standards, and DMP is obligated to review those designs and affirmatively find, prior to permit issuance, that the operations (and discharging ponds) are designed to meet those standards. See 405 KAR 8:030 Section 32(1)(b)1 and 405 KAR 8:010 Section 14(2) and (3). Thus, within the context of these requirements, and not withstanding Petitioners' concerns over the qualifiers, which are used for another purpose, the operations are deigned to and the permittee is still obligated to meet those standards on an ongoing and continual basis.

ii). The permittee Cambrian is fully obligated to comply with all requirements of the CWA in its mining operations, including compliance with all applicable water quality standards and effluent limitations (ELs) and will be cited under the KRS Chapter 350 regulatory program for any violation of those standards. See 405 KAR 16:070 Section 1(1)(g). Thus, any "exceedences" of those standards will be cited as a violation consistent with the CWA.

iii). DOW remains the authorized KPDES permitting agency delegated authority to issue required pollutant discharge permits required under the CWA NPDES program, and that agency retains its enforcement rights and responsibilities for all discharges, including the ones at issue in this case.

iv). The above are regulatory requirements independent of DMP's CHIA determination and will not be altered in any way by the CHIA determination or the material damage definition (and qualifiers) used therein. The CHIA is to determine the "probable cumulative impacts of all

anticipated coal mining in the cumulative impact area" for defining whether, given those level of cumulative impacts (measured against the material damage threshold as defined in the CHIA), the mining permit can be issued under KRS Chapter 350 standards.

v). Thus, given the above, the Petitioners are incorrect that this definition used for this purpose serves to supersede, amend, modify, or repeal any requirement of the CWA and its single case cited in support is factually inapplicable. See *In Re: Surface Mining Regulation Litigation*, 627 F.2d 1346, 1366-70 (D.C. Cir. 1980). In that case the Court struck down, pursuant to a challenge by the coal industry, a SMCRA interim regulation that established an EL as being in violation of Section 702(a)(3) of SMCRA because the substance of the regulation was covered in the CWA (and was less stringent). The Court held that the SMCRA provisions overlapped the CWA coverage, was inconsistent with the CWA provision in the area overlapped, and was, thus, in conflict with the SMCRA prohibition against altering the CWA. However, the Court opined that if a SMCRA provision falls within a "regulatory gap area" between the two programs that is authorized to be covered by SMCRA, then SMCRA can be used to cover that regulatory gap. In the context of that decision, the SMCRA/KRS Chapter 350 CHIA process prior to permitting is in such a "regulatory gap" area that is not covered by the CWA and, thus, cannot be said to inconsistent with the CWA, especially as the permittee remains otherwise fully obligated to comply with all water quality standards of the CWA.

V. ORDER

Based on the foregoing Findings of Fact and Conclusions of Law, the undersigned hereby enters the following Order in this action:

1. The Petitioners are hereby **GRANTED** temporary relief from DMP's determination to issue Cambrian Coal Company, Inc., its application for surface coal mining and reclamation operations permit 898-0806.

2. Cambrian Coal Company, Inc., is hereby Ordered to **CEASE** all further active surface coal mining and reclamation operations on the permit, including the creation of any new disturbances, while this grant of temporary relief remains in effect. However, Cambrian **SHALL** continue to perform any needed ongoing reclamation and monitoring operations and **SHALL** otherwise comply with all performance standards of the program during the period this grant of temporary relief remains in effect.

3. This grant of temporary relief will expire upon the earlier of the entry of a Final Order resolving the underlying formal action PDH-41137-048, or upon entry of an Order of the Secretary vacating this grant of temporary relief.

SO ORDERED this 29th day of September, 2010.

STEVE BLANTON, HEARING OFFICER
ENERGY AND ENVIRONMENT CABINET
OFFICE OF ADMINISTRATIVE HEARINGS
35-36 FOUNTAIN PLACE
FRANKFORT, KY 40601
(502) 564-7312

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing ORDER was, on this 29th day of September, 2010, mailed by first-class mail, postage prepaid, to:

HON MARY VARSON CROMER
HON STEPHEN A SANDERS
APPALACHIAN CITIZENS LAW CENTER
317 MAIN STREET
WHITESBURG KY 41858

SIERRA CLUB
85 SECOND STREET 2ND FLOOR
SAN FRANCISCO CA 94105

KENTUCKIANS FOR THE COMMONWEALTH
PO BOX 1450
LONDON KY 40743

HON TIMOTHY J HAGERTY
HON REBECCA GOHMANN
HON EMILY C MCKINNEY
FROST BROWN TODD LLC
400 W MARKET STREET 32 FL
LOUISVILLE KY 40202

CAMBRAIN COAL COPORATION
PO BOX 100
BELCHER KY 41513

and hand-delivered to:

Hon. TAMARA J. PATRICK
Energy and Environment Cabinet
Office of General Counsel
#2 Hudson Hollow
Frankfort, KY 40601

Teresa B. McDonald
DOCKET COORDINATOR
Distribution:
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