STATE OF MICHIGAN

Honorable Paula J.M. Manderfield
Circuit Judge

THIRTIETH JUDICIAL CIRCUIT
Veterans Memorial Courthouse

November 21, 2011

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Re: National Wildlife Federation, et al. v MI Dept. of Natural Resources & Environment, et al.
Ingham County Case No.: 11-123-AA

Dear Counsel:

Enclosed please find an Order Affirming Grant of Part 632 Permit.

Sincerely,

Jean M Smydra

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Judicial Assistant to Judge Manderfield

Enclosure

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STATE OF MICHIGAN

IN THE 30TH CIRCUIT COURT FOR THE COUNTY OF INGHAM

GENERAL TRIAL DIVISION

NATIONAL WILDLIFE FEDERATION, a District of Columbia nonprofit corporation, YELLOW DOG WATERSHED, INC., a Michigan nonprofit corporation, KEWEENAW BAY INDIAN COMMUNITY, a federally recognized Indian Tribe, and HURON MOUNTAIN CLUB, a Michigan nonprofit corporation,

Appellants-Petitioners,

v.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, and KENNECOTT EAGLE MINERALS COMPANY, a Michigan corporation,

Appellees-Respondents.
_____/

OPINION AFFIRMING GRANT OF PART 632 PERMIT

Case No.: 11-123-AA

Hon. Paula J.M. Manderfield

Petitioners challenge Respondent Michigan Department of Environmental Quality's ("the MDEQ's") decision to grant Respondent Kennecott Eagle Minerals Company ("Kennecott") a mining permit to engage in sulfide ore mining in Marquette County, Michigan.[1] Petitioners seek to have the Final Determination and Order ("the FDO") granting the permit reversed and the permit vacated

For the reasons set forth below, the Court **AFFIRMS** the agency decision.

[1] The permit was sought under Part 632 of the Natural Resources and Environmental Protection Act ("NREPA"), MCL 324.63201, *et seq*,

PARTIES

The National Wildlife Federation ("NWF") is a District of Columbia not-for-profit corporation established as a natural conservation education organization with members nationwide. NWF maintains its Great Lakes District Office in Ann Arbor, Michigan, and one of NWF's members owns ten acres of property approximately one mile northwest of the mine site.

The Keweenaw Bay Indian Community ("the KBIC") is a federally recognized Indian tribe whose members reside in Baraga County, which adjoins Marquette County. The KBIC's members have the right to hunt, fish, trap, and gather in, on, and over lands which include the proposed mine site and surrounding areas. The KBIC also owns riparian property along the Salmon Trout River, downstream from the mine site. Eagle Rock, the proposed location for the mine portal, is an alleged sacred place of worship and gathering for the KBIC.

The Yellow Dog Watershed Preserve is an organization established to protect the Yellow Dog River, the Salmon Trout River, and the Yellow Dog Plains, which contain the headwaters of both rivers.

The Huron Mountain Club ("HMC") is a Michigan not-for-profit corporation established as a family retreat and wildlife preserve. HMC owns property within four miles of the mine site, including eleven miles of the Salmon Trout River downstream from the mine. HMC's property is the subject of more than 200 scientific studies, and the flora and fauna inventoried on the property include more than 5,000 different species, many of them endangered, threatened, rare, or species of special concern.

Kennecott, who seeks to mine nickel and copper at the proposed mine site, is owned by Rio Tinto, one of the largest mining companies in the world. The MDEQ is the state agency charged with issuing environmentally related permits under state law.

FACTS

This case arises from Kennecott's proposal to develop an underground mining operation in Michigan's Upper Peninsula, to mine a sulfide ore body located directly beneath the headwaters of the Salmon Trout River in the Yellow Dog Plains, with the mine portal to be located at the base of Eagle Rock, an alleged sacred site of the KBIC. The legally required permits necessitated by Kennecott's proposed development are as follows:

1. A nonferrous metallic mineral mining permit under Part 632 of the Natural Resources and Environmental Protection Act ("NREPA");[2]

2. A groundwater discharge permit under Part 31 of NREPA;[3] and

3. An air use permit under Part 55 of the NREPA,[4] to regulate air emissions from the mine.

In February 2006, Kennecott took the first steps toward its proposed development by submitting permit applications to the MDEQ for the above-listed permits. Concurrently, Kennecott submitted to the DNR a mining and reclamation plan and an application for a surface use lease for the separate 120-acre parcel of State-owned land that was included in the area needed for the mine. The present case concerns only the Part 632 mining permit.

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[2] MCL 324.63201, *et seq.*
[3] MCL 324.3101, *et seq.*
[4] MCL 324.5501, *et seq.*

In January 2007, the MDEQ announced that it proposed to approve Kennecott's Part 632 permit application. The MDEQ ordered the Part 632 permit consolidated with the other permits for which Kennecott had applied, as well as with the lease of State-owned land sought by Kennecott, for purposes of holding public hearings on the proposed approval of the permits and grant of the lease. In February 2007, however, Petitioners advised the MDEQ that it believed that certain reports prepared by the agency's retained expert, which reports were highly critical of the proposed mining operation, had not been disclosed to the public. Upon investigation, the MDEQ determined that in fact two reports by the agency's retained expert had not been disclosed to the public. Accordingly, the MDEQ cancelled the public meetings and rescinded its tentative approval of the Part 632 permit.

Following an independent investigation that found no wrongdoing in connection with the failure to disclose the reports, the public meetings were rescheduled. Those hearings took place in September 2007, and on December 15, 2007, the MDEQ issued the requested Part 632 mining permit to Kennecott.

Within a week of this decision, Petitioners filed a request for a contested case hearing as to both the MDEQ's issuance of the Part 632 permit and its issuance of a Part 31 Groundwater Discharge permit. Over Petitioners' objections the ALJ consolidated the contested case hearings regarding the two permits. The ALJ subsequently denied Petitioners' motion for authorization to conduct discovery. The contested case hearing took place during the spring and summer of 2008, and included 40 days of testimony and a site visit.

On August 18, 2009, the ALJ issued a Proposal for Decision in this matter. In this Proposal, the ALJ found against Petitioners on all issues except one, that one issue being that the ALJ found that Eagle Rock constituted a sacred place of worship requiring a specific assessment in Kennecott's permit application. The ALJ recommended that the Part 632 permit be issued with the exception that provision be made to avoid direct impact to Eagle Rock that might interfere with religious practices at that site. All parties filed exceptions to the Proposal.

In November 2009, the final decision-maker remanded the Proposal to the ALJ on the issue of whether Eagle Rock was a "place of worship" within the meaning of Part 632 of NREPA. The ALJ accordingly prepared a supplemental Proposal for Decision, as required by the Order of Remand.

On January 14, 2010, the MDEQ issued its Final Decision and Order ("FDO"). In the Order the agency vacated its earlier Order of Remand, reversed the ALJ's finding that Eagle Rock constitutes a "place of worship," and ordered the Part 632 permit to be issued.

Petitioners then filed the present appeal in Washtenaw County. Several months later venue was transferred to Ingham County. The Court has reviewed the briefs and over 8,000 pages of hearing transcript, and has heard over seven hours of oral argument.

ANALYSIS

Standard of Review

The scope of this court's review is governed by the APA, MCL 24,306(1), and Const. 1963, art 6, § 28. MCL 24.306(1) provides:

1) Except when a statute or the constitution provides for a different scope of review, the court shall hold unlawful and set aside a decision or order of an agency if substantial rights of the petitioner have been prejudiced because the decision or order is any of the following:

(a) In violation of the constitution or a statute.

(b) In excess of the statutory authority or jurisdiction of the agency.

(c) Made upon unlawful procedure resulting in material prejudice to a party.

(d) Not supported by competent, material and substantial evidence on the whole record.

(e) Arbitrary, capricious or clearly an abuse or unwarranted exercise of discretion.

(f) Affected by other substantial and material error of law.

Under Const 1963, art 6, § 28, the FDO must be "authorized by law" and "supported by competent, material and substantial evidence on the whole record."[5]

A. Legal Errors are Reviewed De Novo.

In determining whether the FDO is based on a "substantial and material error of law," this Court reviews an agency's legal interpretations *de novo*.[6] The Michigan Supreme Court clarified in *In re Complaint of Rovas Against SBC Michigan*[7] that an agency's interpretation is entitled to "respectful consideration," but *not* deference, and cannot be upheld if it conflicts with the terms of the provision at issue:

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[5] The standard under Const 1963, art 6, § 28 is essentially identical to those under MCL 24.306(1); however the statute goes farther by allowing a decision to be set aside if it is "[a]ffected by other substantial and material error of law." *Northwestern Nat'l Gas Co v Comm'r of Ins*, 231 Mich App 483, 488, 490; 586 NW2d 563 (1998).

[6] *Great Wolf Lodge v Pub Serv Comm*, 285 Mich App 26, 34; 775 NW2d 597 (2009), citing *In re Complaint of Rovas Against SBC Michigan*, 482 Mich 90, 108; 754 NW2d 259 (2008).

[7] *In re Complaint of Rovas, supra.*

> [an] agency's interpretation is entitled to respectful consideration and, if persuasive, should not be overruled without cogent reasons. Furthermore, the agency's interpretation can be particularly helpful for "doubtful or obscure" provisions. But, in the end, the agency's interpretation cannot conflict with the plain meaning of the statute. "Respectful consideration" is not equivalent to any normative understanding of "deference" as the latter term is commonly used in appellate decisions.[8]

The *de novo* standard of review applies equally to agency interpretations of administrative rules.[9]

B. Competent, Material and Substantial Evidence on the Whole Record.

This Court's review of an agency's factual findings is not *de novo*. Nonetheless, the Court is obligated to engage in a qualitative and quantitative analysis of the entire record – and not only those portions relied on in the FDO – to determine whether those findings are supported by competent, material and substantial evidence on the whole record:

> What the drafters of the Constitution intended was a thorough judicial review of [an] administrative decision, a review which considers the whole record – that is both sides of the record – not just those portions of the record supporting the findings of the administrative agency. Although such a review does not attain the status of *de novo* review, it necessarily entails a degree of qualitative and quantitative evaluation of evidence considered by an agency.[10]

"Substantial evidence" is evidence which a reasoning mind would accept as sufficient to support a conclusion.[11] While it consists of more than a mere scintilla of evidence it may be substantially less than a preponderance of the evidence.[12] Stated differently, it does not matter whether a different position is supported by more evidence – that is, which

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[8] *Id.*
[9] *Great Wolf Lodge, supra*, 285 Mich App at 34.
[10] *Michigan Employment Relations Comm'n v Detroit Symphony Orchestra, Inc*, 393 Mich 116, 124; 223 NW2d 283 (1974).
[11] *Russo v Michigan Dep't of Licensing and Regulation*, 119 Mich App 624, 631; 326 NW2d 583 (1982).
[12] *Id.*

way the evidence preponderates – but rather only whether the position taken by the agency was supported by substantial evidence – that is, whether the inferences made were legitimate and supportable.[13] "A court will not set aside findings merely because alternative findings also could have been supported by substantial evidence on the record."[14] An agency's findings are not supported by "competent, material and substantial evidence" if they contradict the record,[15] ignore uncontradicted evidence or plainly overlook critical facts,[16] or rely on a factual finding that lacks evidentiary support.[17]

C. Arbitrary and Capricious.

An agency's decision is arbitrary if it lacks an "adequate determining principle" and was "arrived at through an exercise of will or caprice, without consideration or adjustment with reference to principles, circumstances, or significance," or is "decisive but unreasoned."[18] "Capricious" has been defined as "apt to change suddenly, freakish, whimsical, humorsome."[19]

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[13] *In re Payne v Muskegon*, 444 Mich 679, 690 n 8; 514 NW2d 121 (1994).
[14] *Id.*
[15] *Great Lakes Sales, Inc v State Tax Comm*, 194 Mich App 271; 486 NW2d 367 (1992).
[16] *Lopez v Michigan Dept' of Soc Services*, 76 Mich App 505; 257 NW2d 143 (1977); *City of Detroit Downtown Devlpmt Auth v US Outdoor Adver, Inc*, unpublished opinion per curiam of the Court of Appeals, Docket No. 2623111, decided May 28 2008.
[17] *Whispering Pines Golf Club, LLC v Twp of Hamburg*, unpublished opinion per curiam of the Court of Appeals, Docket No. 254672, decided September 22, 2005.
[18] *VanZandt v State Employees Ret Sys*, 266 Mich App 579, 584; 701 NW2d 214 (2005).
[19] *City of St Louis v Mich Underground Storage Tank fin Assurance Policy Bd*, 215 Mich App 69, 75; 544 NW2d 705 (1996).

D. Unlawful Procedure Resulting in Material Prejudice to a Party.

Actions taken in violation of procedural requirements such as the contested case provisions of the APA are "unlawful procedure resulting in material prejudice to a party.[20]

Discussion

Appellants' arguments for the most part fall into three broad categories: (1) challenges to the sufficiency of the evidence; (2) challenges to the procedures followed during the contested case proceedings; and (3) challenges to the completeness of the permit application. Appellants also raise a few miscellaneous arguments that will be addressed at the end of this opinion.

A. Challenges to the Sufficiency of the Evidence

Petitioners assert that the FDO is unlawful and must be set aside because the MDEQ's finding that the mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources was not supported by competent, material, and substantial evidence on the whole record. Petitioner's challenge is four-pronged:

1. Petitioners challenge the FDO's finding that the mine is not likely to subside or collapse;

2. Petitioners challenge the FDO's finding that the mining operation will not have any severe adverse impact on the flora and fauna in the region;

3. Petitioner's challenge the FDO's finding that the mining operation will not have any severe adverse impact on the wetlands in the region; and

4. Petitioner's challenge the FDO's finding that there will be no severe adverse impact on the surface or ground waters in the region from Acid Rock Drainage.

[20] *Beeler v Michigan Racing Comm'r*, 191 Mich App 498, 500-502; 478 NW2d 700 (1991).

1. Challenge to the FDO's Finding that the Mine Is Not Likely to Subside or Collapse

Petitioners first assert that the MDEQ's finding that the proposed mine's crown pillar (roof) will not collapse or subside was not supported by competent, material, and substantial evidence on the whole record. This Court disagrees.

Petitioners presented the testimony of three expert witnesses on the issue of crown pillar stability at the contested case hearing, Drs. Marcia Bjornerud and Stanley Vitton, and rock mechanics specialist Jack Parker. Each of these witnesses pointed out numerous serious, and potentially fatal, flaws in Kennecott's analysis of the proposed mine's crown pillar stability. Specifically, Petitioners' experts testified that Kennecott had over-estimated rock-strength in their analysis because: it had apparently (1) excluded certain portions of data that would have lowered the ultimate determination of overall rock strength[21], (2) failed to calculate certain required variables in the standard industry formula for determining rock strength,[22] (3) used too high of a value for one of the required variables (the variable relating to the dryness of the rock),[23] (4) generally overestimated the quality of the rock,[24] (5) failed to consider the orientation of the bore holes from which the rock samples were taken,[25] (6) failed to consider or test local horizontal and lateral rock stresses in the region and consider case studies of other mines

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[21] Testimony of Jack Parker, located at Tabs 671 and 706, Bates Nos. 050399, 050401, 050403, and 050404; Testimony of Dr. Marcia Bjornerud, located at Tabs 671 and 672, Bates Nos. 050536-37, 050538, 050544, 050550, 050558-59; Testimony of Dr. Stanley Vitton, located at Tabs 672, 673 and 706, Bates Nos. 050667, 050675.

[22] Testimony of Bjornerud, Bates Nos. 050497-98, 050520-21; Testimony of Vitton, Bates Nos. 040639, 050655.

[23] Testimony of Bjornerud, Bates Nos. 050497, 050519, 050548, 050569; Testimony of Vitton, Bates Nos. 050651-52.

[24] Testimony of Parker, Bates Nos. 050362-64, 050377, 050383, 050471; Testimony of Bjornerud, Bates No. 050520; Testimony of Vitton, Bates Nos. 050637, 050639.

[25] Testimony of Parker, Bates Nos. 050373-74; 050384-85.

in the region,[26] (7) failed to take into account all of the distinct features (meaning cracks, areas of broken rock, dikes, faults, discontinuities in rock, etc.) in the crown pillar,[27] and (8) failed to consider the long-term time stability of the crown pillar and the potential for subsidence/lack of stability of the backfill.[28] Based on these flaws and concerns, each of Petitioners' expert witnesses stated that they believed the crown pillar would be unstable and would likely fail.[29]

Respondents presented the testimony of five expert witnesses on this issue, Drs. David Sainsbury and William Blake for the MDEQ, and Drs. Trevor Carter and David Stone, and professional engineer Kevin Beauchamp, who prepared the rock strength and crown pillar stability analysis found in Kennecott's permit application, for Kennecott. These witnesses responded to each of Petitioners'' experts' perceived flaws and presented testimony nullifying each of these concerns.

As to Petitioners'' witness' first concern, Beauchamp explained that all of the relevant available data was used by Kennecott in its analysis of rock strength, and further explained which portions of rock quality data was not used, and explained that this method is accepted industry practice.[30] As to Petitioners' witnesses' second concern, Beauchamp testified that five of the six required variables in the standard industry

[26] Testimony of Parker, Bates Nos. 050424-25, 050426, 050428; Testimony of Bjornerud, Bates Nos. 050507-08, 050509, 050510-11; Testimony of Vitton, Bates Nos. 050629, 050642.
[27] Testimony of Bjornerud, Bates Nos. 050544-45; Testimony of Vitton, Bates Nos. 050676; 050728.
[28] Testimony of Vitton, Bates Nos. 050688, 050690-92, 050696-97, 050700, 050766-67, 0507770-71.
[29] Testimony of Parker, Bates Nos. 050421, 050489; Testimony of Bjornerud, Bastes No. 050576; Testimony of Vitton, Bates Nos. 050654, 050685-87, 050704, 050714, 050715, 050729.
[30] Testimony of Kevin Beauchamp, Tab 684, Bates Nos. 053349, 053362-64.

formula for determining rock strength, and explained that it was premature, and not standard industry practice to include the sixth variable, relating to horizontal and vertical stresses, in any rock strength analysis conducted before beginning mining operations.[31]

As to Petitioners' witnesses' third concern, Beauchamp testified that in doing its rock strength analysis Kennecott had not assumed completely dry conditions, but rather that the statement in Kennecott's application that appeared to indicate such an assumption, based on the numerical value assigned to the variable relating to the dryness of the rock, was simply a typographical error.[32] As to Petitioners' witnesses' fourth concern, Beauchamp testified that before accepting as accurate the numbers provided to him regarding rock strength he went to the mine site and looked at the cores, made sure the core loggers were using industry standard procedures, and did on-site physical testing, in keeping with industry standards, in order to determine that the data he was being provided was accurate.[33] Beauchamp also pointed out that he had access to the information for the entire range of 109 bore holes, while Petitioners had access only to photographs of the eight bore holes with the worst quality rock found at the site.[34]

As to Petitioners' witnesses' fifth concern, Beauchamp testified that he did, in fact take the orientation of the bore holes into consideration in conducting his analysis of rock strength and crown pillar stability.[35] As to Petitioners' witnesses' sixth concern, Beauchamp testified and Sainsbury both testified that Kennecott had considered regional horizontal and lateral rock stresses in its analysis,. Both Beauchamp and Blake both testified that it was not common or industry standard to conduct in situ stress tests and

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[31] *Id.*, at Bates Nos. 053290, 053365.
[32] *Id.*, at Bates No. 053339.
[33] *Id.*, at Bates Nos. 053279, 053280, 053282.
[34] *Id.*, at Bates Nos. 053322, 053358-60.
[35] *Id.*, at Bates No. 053292.

consider such data in making rock strength and crown pillar stability analysis before beginning the actual mining procedures.[36] Beauchamp also testified that Kennecott had considered case studies of other local Upper Peninsula mines in its analysis, while Blake and Carter each testified that that review of other regional mines, and in particular the Athens Mine, was not relevant to an analysis of the rock strength and crown pillar stability of the proposed mine, because the proposed mine involves a different type of rock and a different method of mining than the Athens mine.[37]

As to Petitioners' witnesses' seventh concern, Beauchamp testified that Kennecott had considered all relevant distinct features in its analysis and that, although initial analysis appeared to show a major sub-vertical fault located in the crown pillar, further substantial boring of that area turned up no evidence of any substantial broken zones or alignment of such zones, in short no evidence to support the existence of a major fault in the mining area.[38] As to Petitioners' witnesses' eighth concern, Beauchamp testified that Kennecott did consider long-term stability in its analysis, and that in order for surface subsidence to occur, a gap of 20 meters would have to be left between the backfill and the crown pillar, while the proposed plan calls for tight backfill.[39] Stone testified that there were no short- or long-term settlement risks with regard to the backfill proposed to be used, that blasting of the secondary stopes would not affect the stability of the backfill,

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[36] Testimony of Beauchamp, Bates Nos. 053345, 053367-68; Deposition testimony of Dr. Sainsbury, Tab 359, Bates No. 026457; Testimony of Dr. William Blake, Tab 673, Bates Nos. 050851-52, 050854-56.
[37] Testimony of Dr. Trevor Carter, Tab 685, Bates Nos. 053516-17, 053601, 053603-604, 053608, 053616, 053619-20; Testimony of Blake, Bates Nos. 050846-47.
[38] Testimony of Beauchamp, Bates Nos. 053313, 053325, 053326, 053346, 053470.
[39] *Id.*, at Bates Nos. 053336, 053469.

that there would be no strength-loss in the backfill over time, that there was no compression risk and that, in general, Petitioners' witnesses' concerns regarding post-mining subsidence were without merit.[40]

In addition, four of Respondents' five experts (all but Dr. Stone, whose testimony was limited to issues regarding backfill stability) testified that they believed that a crown pillar of 87.5 meters' thickness, with on-going data collection, would be stable. Beauchamp testified that Kennecott's analysis conservatively assumed a completely open void beneath the crown pillar, whereas no such void is proposed in the present case.[41] He stated that, based on a probabilistic assessment, a crown pillar of 87.5 meters' thickness, with a completely open void, would have a standard of safety greater than two – the industry standard – and would have a 90% probability of no failure.[42] He explained that where the void was reduced to that proposed in the present case, a crown pillar of 87.5 meters' thickness would have a standard of safety of 5.5 and virtually a 100% probability of no failure.[43] Accordingly, Beauchamp- stated that plug failure was not likely to occur.[44]

Carter testified that under the proposed plan, with a thickness of 87.5 meters, the crown pillar will be stable.[45] He stated that he was 99.5% certain that there would be no crown pillar failure.[46]

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[40], Testimony of Dr. David Stone, Tabs 683 and 690, Bates Nos. 053245, 053248-50, 053257-58, 054570, 054590-91, 050607-08.
[41] Testimony of Beauchamp, Bates No. 053329.
[42] *Id.*, at Bates Nos. 053351, 053353.
[43] *Id.*, at Bates No. 053351.
[44] *Id.*, at Bates No. 053310.
[45] Testimony of Carter, Bates No. 053540.
[46] *Id.*, Bates Nos. 053540, 053661-62.

Blake testified that he initially believed that Kennecott had been overly optimistic in its predictions of stability, and that its documentation and analysis did not support such predictions.[47] Blake stated, however, that he now believes that the proposed mining plan is technically sound, in light of Kennecott's subsequent July 2006 report, which responded to many of his initial concerns, increased the thickness of the proposed crown pillar to 87.5 meters, and provided for on-going data collection and analysis.[48] Blake also noted that the proposed crown pillar is located in the best quality rock in the mining area.[49] Accordingly, he testified that he believed an 87.5 meters' thick crown pillar would be stable and that the likelihood of plug failure was remote.[50]

Sainsbury likewise testified that he initially believed that Kennecott had not used industry best practices in its analysis, making Kennecott's conclusions suspect.[51] Like Blake, however, Sainsbury too revised his opinion entirely in light of Kennecott's July 2006 report.[52] Sainsbury testified that he believed that an 87.5 meters' thick crown pillar is sufficient to prevent any significant surface subsidence at the proposed mine.[53] Sainsbury further testified that he believed Kennecott had collected enough data to determine the stability of an 87.5 meters' thick crown pillar, and that a crown pillar of such thickness was "definitely going to be stable."[54]

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[47] Testimony of Blake, Bates Nos. 050819, 050821.
[48] *Id.*, at Bates No. 050820.
[49] *Id.*, at Bates Nos. 050847, 050849.
[50] *Id.*, at Bates Nos. 050839-40, 050857, 050859,050868, 050981, 050983, 050989.
[51] Deposition Testimony of Sainsbury, Bates Nos. 026396-97.
[52] *Id.*, at Bates No. 026428.
[53] *Id.*, at Bates No. 026453.
[54] *Id.*, at Bates Nos. 026461, 026488.

In light of the above, the Court finds that there is evidence that a reasoning mind would accept as sufficient, and certainly more than a scintilla of evidence, to support the MDEQ's finding that the crown pillar will not subside or collapse. Accordingly, this finding was supported by competent, material, and substantial evidence on the whole record and must be affirmed.

2. Challenge to the FDO's Finding that the Mining Operation Will Not Have Any Severe Adverse Impact on the Flora and Fauna in the Region

Petitioners next assert that the MDEQ's finding that the mining operation will not have any severe adverse impact on the flora and fauna in the region was not supported by competent, material, and substantial evidence on the whole record. Again this Court disagrees.

Petitioners presented the testimony of eight expert witnesses at the contested case hearing on the issue of the impact of the mine on the flora and fauna in the region. These witnesses testified regarding the rich diversity of plant and animal life in the area of the mine.[55] These witnesses further testified regarding a number of potential or anticipated effects of the mining operation, which they believe will have an adverse impact on the plant and animal life in the area. Specifically these witnesses identified the following areas of concern: (1) the introduction of heavy metals into the soil and streams in the area through particulate deposition;[56] (2) the fragmentation or interruption in continuity of

[55] Testimony of Dr. Kerry Woods, located at Tab 670, Bates Nos. 050245, 050246, 050254-55, 050256-59; Testimony of Dr. Paul Adamus, located at Tab 674, Bates Nos. 051038, 051103; Testimony of Dr. David Flaspohler, located at Tabs 675 and 710, Bates Nos. 051339, 051342, 051343; Dr. Alec Lindsay, located at Tab 679, Bates Nos. 052325-26; Testimony of Dr. Roger Strand, located at Tab 678, Bates Nos. 052114-15.

[56] Testimony of Woods, Bates Nos. 050267-68; testimony of Adamus, Bates Nos. 051085-86; testimony of Flaspohler, Bates Nos. 051368-71, 051380, 051381, 051400-01; testimony of Mr. Sub Vel, located at Tabs 674-75, Bases Nos. 051188, 051213, 051215-16, 051228, 051230; testimony of Lindsay, Bates Nos. 052335-36; testimony of Strand, Bates No. 052096; testimony of Dr. John Ejnik, located at Tab No.680, Bates Nos. 052439-41, 052445.

occupiable habitat;[57] (3) the loss of diversity of flora and fauna through displacement or through the attraction or introduction of non-native species to the area;[58] (4) noise pollution;[59] (5) light pollution;[60] (6) vehicular traffic and dust;[61] and (7) seismic or blast effects.[62] Based on these concerns, many of Petitioners' witnesses testified that they believed that the flora and fauna of the region would be adversely affected by the mining operation.[63]

Respondents presented the testimony of eleven expert witnesses on this subject: ten for Kennecott, and one for the MDEQ. Just as with the issue of crown pillar stability, Respondents' witnesses addressed each of Petitioners' experts' concerns and presented testimony nullifying those concerns.

Respondents' witnesses agreed with Petitioners that the area in which the mine is to be located is rich in plant and animal life. They disagreed, however, as to uniqueness of the flora and fauna in the area. Several of Petitioners' witnesses testified that the area is a refuge for rare and unusual animals and plants, and that a number of threatened or endangered species and species of special concern call the area home.[64] Even these witnesses, however, admitted on cross-examination that the only examples of rare,

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[57] Testimony of Woods, Bates Nos. 050260-61; testimony of Flaspohler, Bates Nos. 051345, 051347, 058494.
[58] Testimony of Flaspohler, Bates Nos. 051357-58; testimony of Lindsay, Bates No. 052333.
[59] Testimony of Lindsay, Bates No. 052336; testimony of Flaspohler, Bates No. 051358.
[60] *Id.*
[61] Testimony of Flaspohler, Bates No. 051358; testimony of Lindsay, Bates Nos. 052334, 052336.
[62] Testimony of Parker, Bates No. 050449.
[63] Testimony of Flaspohler, Bates No. 051417; testimony of Lindsay, Bates No. 052339; testimony of Strand, Bates No. 052117; Testimony of Adamus, Bates No. 051033.
[64] Testimony of Woods, Bates Nos. 050238, 050245, 050254-55, 050256-59; testimony of Adamus, Bates No. 051103; testimony of Flaspohler, Bates Nos. 051339, 051342; testimony of Lindsay, Bates Nos. 052325-26; testimony of Strand, Bates Nos. 052114-15.

threatened, or endangered species, or species of special concern (with the exception of one plant, the narrow-leafed gentian) that have actually been seen in the area are solitary sightings of a handful of birds, none of whom appear to be nesting in the area..[65]

Respondents' witnesses expanded on this clarification. Peter Kailing, a wildlife biologist, testified that he conducted wildlife surveys on approximately 1,360 acres in and around the mine area for Kennecott in three consecutive years and found only common and typical wildlife to be present in the area.[66] Kailing explained that the only threatened, endangered, or special concern species that he noted in the area were a bald eagle, an osprey, and a marlin, of which all but the marlin are in the process of being declassified as protected species, and each of which bird's presence in the area was transient.[67] Kailing specifically noted that Kennecott had conducted a special survey looking solely for the Kirkland's warbler, and that none were found anywhere in the area.[68] Kailing further testified that the mine area does not contain any critical habitat for bald eagles, osprey, marlin, or Kirkland's warblers, and that the various habitats in the mine area are all very common and do not provide critical habitat for any other endangered or threatened species known to occur in Marquette County.[69]

Dr. Robert Workman, an aquatic biologist, likewise testified that all of the aquatic species that were identified in the surveys of the mine area, including the so-called coaster brook trout, which he does not consider to be a separate and distinct species, are common and abundant in Michigan.[70] More specifically, Workman testified that none of

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[65] Testimony of Woods, Bates No. 050280; testimony of Adamus, Bates Nos. 051058-59, 051103, 051117; Testimony of Flaspohler, Bates Nos. 051342, 051421, 051449.
[66] Testimony of Peter Kailing, located at Tab 694, Bates Nos. 055346, 055406, 055350-51.
[67] *Id.*, Bates Nos. 055346, 055372-74, 055376, 055406.
[68] *Id.*, Bates Nos. 055377, 055380.
[69] *Id.*, Bates Nos. 055346, 055349, 055391, 055406, 055407.
[70] Testimony of Dr, Robert Workman, located at Tab 696, Bates Nos. 055640, 055685, 055703.

the fish species found in the streams in the mine area are threatened or endangered, and none are rare or unique.[71] Likewise, he testified that the habitat and macroinvertebrates found in the area are typical for the region, and that the vegetative canopy over the Salmon Trout River is neither rare nor unique in its plant life.[72]

Dr. William Taylor, an expert in the areas of fisheries ecology and population dynamics, echoed Dr. Workman's testimony regarding coaster brook trout, testifying that coaster brook trout are not genetically unique from any other brook trout, that they do not form a distinct population segment, and that in his opinion they are replaceable should there be any impact on them from the mining operation.[73] Mr. Michael Koss, an MDEQ employee and wildlife biology expert, similarly affirmed Workman's testimony, stating that the vegetation in the mine area does not provide any unique or rare wildlife habitats.[74] With regard to plant life in the mine area, Dr. Donald Tilton, the wetlands specialist who conducted the baseline wetland environmental survey for Kennecott, testified that the narrow-leaved gentian is the only threatened or endangered plant species in the area, and that although it is rare in the Untied States as a whole, it is very common in the Upper Peninsula.[75]

As to Petitioners' witnesses' concerns regarding particulate deposition, the Court notes that all of Petitioners' witnesses except Dr. John Ejnik spoke in terms of potential for harm rather than certainty of harm. Thus, Dr. Kerry Woods stated that the introduction of heavy metals into the environment *could* have a large effect on the ecosystem and forest ecology, but admitted that he had no evidence that heavy metals

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[71] *Id.*, Bates No. 055669.
[72] *Id.*, Bates Nos. 055669, 055676.
[73] Testimony of Dr. William Taylor, located at Tab 704, Bates Nos. 057319, 057349.
[74] Testimony of Michael Koss, located at Tab 702, Bates Nos. 056920-23.
[75] Testimony of Dr. Donald Tilton, located at Tab 695, Bates Nos. 055535, 055538-39.

will be introduced into the environment by the mining operations.[76] Likewise, Dr. Paul Adamus testified that particulate deposition *theoretically* could affect plant and animal life.[77] Similarly, Dr. David Flaspohler testified that heavy metals *can* be at least moderately toxic to plants and animals.[78] Dr. Alec Lindsay testified that deposition of heavy metals into the soil or water, *if it occurs*, will affect some bird species adversely.[79]

Respondents' witnesses, on the other hand, presented detailed, specific, and concrete evidence demonstrating that while some particulate deposition of heavy metals will occur over a wide area, even at its most concentrated point this deposition will not be sufficient to cause harm to the environment.

Andrea Martin, the environmental engineer who prepared Kennecott's air permit application, testified that the mining operation planned by Kennecott will not be a major source of hazardous air pollutants.[80] Martin testified that she intentionally overestimated in the air permit application the amount of hazardous air pollutants estimated to be produced by the mine by calculating these amounts as if the mine were to be operating twenty-four hours per day and seven days per week, by assuming all particulate matter would be a relatively small size and therefore able to slip through the filtering system, by ignoring settling that will decrease amount of emissions, and by using the highest estimated amount of ore-handling.[81] Martin further testified that she assumed only 85% efficiency in Kennecott's efforts to control air emissions, when in fact most filters achieve 95% or higher efficiency.[82] Even under these conditions, Martin testified that the

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[76] Testimony of Woods, Bates Nos. 050268, 050287-88.
[77] Testimony of Adamus, Bates No. 051085.
[78] Testimony of Flaspohler, Bates Nos. 051368-71, 051380-81.
[79] Testimony of Lindsay, Bates Nos. 052335-36; testimony of Strand, Bates No. 052096.
[80] Testimony of Andrea Martin, located at Tab 686, Bates No. 053806.
[81] *Id.*, Bates Nos. 053823, 053824, 053827, 053826, 053833-36, 053839-40.
[82] *Id.*, Bates No. 053886.

mine's emissions will be well below state limits on emissions.[83] Martin also testified that Petitioners' particulate deposition expert overestimated the amounts of emissions because he assumed a higher emission rate than is allowed under the conditions of the permit granted to Kennecott, and because he made incorrect assumptions regarding the composition of in-mine road dust and backfill.[84] Likewise, Steve Kish, an air quality specialist with the MDEQ, testified that the proposed mine meets all Michigan air quality requirements and that Petitioners' expert overestimated the mine's emissions because he did not factor into his calculations plume depletion that will occur.[85]

Michael Depa, also an air quality specialist with the MDEQ, testified that the amount and concentration of every air pollutant or toxin that will be produced by the mine will be below the permitted maximum, and that even after ten years of accumulation the levels will be low enough that area streams and soil will meet Michigan's drinking water and direct contact criteria.[86] Depa further testified that particulate deposition will occur over a wide area, but that it will be of no consequence, because of the extremely low levels of concentrations being deposited even at the points of highest concentration.[87] Depa stated that the amount of copper and nickel that will be deposited as a result of mine emissions will be an order of magnitude less than the amounts of those substances already in the soil in the mine area, and therefore that any impact, even at the point of highest concentration, will be de minimus if any at all.[88]

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[83] *Id.*, Bates Nos. 053922-24.
[84] *Id.*, Bates Nos. 053852-54, 053914.
[85] Testimony of Steve Kish, located at Tab 687, Bates Nos. 054014-15, 054033.
[86] Testimony of Michael Depa, located at Tab 687, Bates Nos. 054079, 054085.
[87] *Id.*, Bates Nos. 054092-93.
[88] *Id.*, Bates No. 054089.

Depa further advised that there likewise would be no impact on area waters from particulate deposition, even during times of heavy snowmelt, because even taking the total deposition amount for a twelve month period (rather than a four month winter period) and assuming 100% of the deposition ended up in the water, the water would still meet state water quality standards.[89]

Dr. Lawrence Kapustka, a toxicologist, confirmed Martin's and Depa's testimony, advising the Court that the magnitude and quality of emissions that will be produced by the mine are trivial in terms of the amount that will be deposited.[90] He explained that the maximum amount of emissions and concentrations, even projected over the ten year life of the mine, do not rise to the threshold of concentrations that would be necessary to bring about adverse effects in plants, invertebrates, birds, or mammals.[91] Kapustka stated that the projected concentrations of heavy metals are sufficiently low, even in the zones of maximum concentration, that even without accounting for such things as leaching, which will decrease the actual amount of the metals in the soil and water, the concentrations of metals emitted by the mine will be below the capacity for analytical chemistry to detect the emissions.[92] Kapustka further explained that the annual maximum deposition of copper and nickel – the two heavy metals of greatest concern in connection with this mine -- from the mine will constitute a fraction of the amount of those metals already found in the area's soil.[93] Kapustka testified that, taking the background concentrations of those metals and the mine emissions of those metals

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[89] *Id.*, Bates Nos. 054091-92, 054109.
[90] Testimony of Dr. Lawrence Kapustka, located at Tabs 696-697, Bates Nos. 055773, 055822.
[91] *Id.*, Bates Nos. 055773, 055822.
[92] *Id.*, Bates Nos. 055474, 055822, 055834.
[93] *Id.*, Bates Nos. 055806-07.

together (16.2 micrograms per kilogram of copper and 20.1 micrograms per kilogram of nickel) and comparing it to the Environmental Protection Agency's ("the EPA's") standards (28 – 80 micrograms per kilogram for copper and 38 – 280 micrograms per kilogram for nickel), there is no reason to expect any adverse effects on plants, invertebrates, birds or mammals from the mine's operation.[94]

Dr. William Adams, an aquatic toxicologist employed by Kennecott's parent company Rio Tinto, confirmed Kapustka's and Depa's testimony. Adams explained that the Michigan standards (maximum amounts permitted) for surface water concentrations of metals constitute the lowest concentration that can be statistically determined to affect a given organism (the standards differ based on which type of organism is being considered).[95] Accordingly, Adams explained, even where the concentrations exceed the Michigan standards, this does not automatically translate to catastrophic results.[96] Adams stated that he believed Petitioners' witness, Dr. Ejnik, substantially overestimated the concentrations and amounts of nickel and copper that will end up in the area's streams as a result of the mine for two reasons: because Ejnik did not factor in dissolved organic carbons, which absorb large amounts of metals and make then no longer bioavailable (available to be absorbed by other organisms), and because Ejnik did not account for speciation (the different forms that a metal may take) in his calculations, yet not all forms of metal are equally bioavailable or equally toxic.[97] Making adjustments for those factors, Adams testified that copper, nickel, and other pollutants in area streams as a result of mine operations will be in concentrations below the Michigan standards, even at

[94] *Id.*, Bates Nos. 055810-12, 055817-18.
[95] Testimony of Dr. William Adams, located at Tab 697, Bates No. 055919.
[96] *Id.*
[97] *Id.*, Bates Nos. 055905, 055924, 055930-31, 055980-81.

the point of highest concentration, and therefore will not affect any aquatic species.[98] Moreover, Adams stated that this is true even in times of pulses in metal concentrations due to snowmelt.[99]

Adams further testified that he strongly disagreed with Ejnik's assertion that copper and nickel deposition will become 100% bioavailable within 120 days, because the dissolved organic carbons will have absorbed as much as they are capable of absorbing. He testified regarding numerous tests that he personally had been involved with or was aware of on just this question, and stated that the results of those tests showed that soil and water do not reach such a "steady state" for decades or even centuries.[100]

Finally, Adams testified that because the concentrations and amounts of heavy metals entering the area streams will be so small, it is unlikely that there will be any toxic plume in Lake Superior, or that there will be any real effect on the mouth of the Salmon Trout River.

As to Petitioners' witnesses' concerns regarding the fragmentation or interruption in continuity of occupiable habitat, several of Petitioners' own witnesses admitted that habitat fragmentation has already occurred to a great extent in the area, due to historic and ongoing logging and other activities.[101] Moreover, Petitioners' witness Flaspohler further admitted that there is no evidence that wildlife use the Yellow Dog Plains as a corridor between habitats.[102]

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[98] *Id.*, Bates Nos. 055932, 055936, 055937, 055950, 055982, 055991.
[99] *Id.*, Bates No. 055987.
[100] *Id.*, Bates Nos. 055970, 055975, 055977.
[101] Testimony of Flaspohler, Bates Nos. 051435-37, 051439, 051487, 051444; testimony of Lindsay, Bates Nos. 052361-63.
[102] Testimony of Flaspohler, Bates No. 051468.

Respondents' witnesses then reaffirmed this testimony, agreeing that the area is already highly fragmented, and noting that there is no evidence that any wildlife use the Yellow Dog Plains as a corridor.[103] Kennecott's witness Koss explained that although several packs of gray wolves use the Yellow Dog Plains during snow-free months, the mine will not disrupt or impact their activities, because the wolves will just go around the mine area.[104] Koss further testified that the mining activities also would not fragment existing wildlife habitats so as to adversely affect wildlife in the area because the mine footprint is fairly small and the mining operation fairly short-term, thereby preventing any lasting or significant effect on wildlife in the area.[105]

With regard to Petitioners' witnesses' concerns regarding the loss of diversity of flora and fauna through displacement or through the attraction or introduction of non-native species to the area, one of Petitioners' witnesses admitted on cross-examination that some non-native species of plants and animals may already be drawn to or are being introduced to the area due to the logging and other activities that result in a heavy human presence in the area and due to traffic into the area from outside areas that provides a potential means for transportation of non-native seeds or spores and non-native invertebrates into the area.[106] Likewise, several of Petitioners' witnesses admitted that there are other areas within the vicinity of the mine that provide the same habitats as those found in the mine footprint and to which wildlife displaced by the mine can relocate.[107]

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[103] Testimony of Kailing, Bates Nos. 055387-88; 055397-98.
[104] Testimony of Koss, Bases Nos. 056925, 056927.
[105] *Id.*, Bates Nos. 056927-28.
[106] Testimony of Flaspohler, Bates Nos. 051440-41.
[107] *Id.*, Bates No. 051445; Testimony of Lindsay, Bates Nos. 052373-74.

Respondents' witnesses echoed these statements. Kailing testified that any wildlife that currently uses the mine footprint will simply temporarily relocate to adjacent, similar habitats, of which there are many, and that any impact to such wildlife will be temporary because the mine footprint will be returned to its native state once the mining operations are completed.[108] Likewise, Koss testified that there are a number of jack pine stands in the area similar to those found in the mine footprint, so that habitat is not unique to the area, while Workman testified that the displacement of wildlife from the mine footprint will not have any effect on the streams in the region and their aquatic species because displacement already occurs in the area on a regular basis due to extensive logging activities.[109]

With regard to Petitioners' witnesses' concerns regarding noise and light pollution, both Lindsay and Flaspohler testified that they believed noise and light pollution would have adverse effects on wildlife in the area.[110] Flaspohler admitted on cross examination that he was unaware that Kennecott would be shielding lights at the mine site, building berms around the outside of the surface facilities for noise dampening, and placing silencers on the exhaust stacks.[111]

In addition to the above testimony, Kennecott's blasting expert, Tracey Arlaud, discussed at length the noise pollution that would result from blasting at the mine. She explained that the first and loudest portal blast will be 98 decibels at the surface directly at the portal itself, which is two decibels below the level of a chainsaw or circular saw, while at the property line the first portal blast will be 67 decibels, which is lower than the

[108] Testimony of Kailing, Bates Nos. 055349, 055390-93, 055405, 055407.
[109] Testimony of Koss, Bates Nos. 056921-22; Testimony of Workman, Bates Nos. 055750-51.
[110] Testimony of Lindsay, Bates No. 052336; Testimony of Flaspohler, Bates Nos. 051357-58.
[111] Testimony of Flaspohler, Bates Nos. 051469-70.

level of spoken conversation.[112] She further explained that following the first portal blast, blasts will occur for eight seconds duration three times every 48 hours, each time becoming lower in decibel, until after approximately a week the noise from the blasts will be at the level of spoken conversation at the mine portal itself, and inaudible at the fence line.[113]

Kennecott's witness Kailing also weighed in on the subject of noise pollution, testifying that he does not believe that noise pollution from the mine will have any substantial impact on wildlife in the area because of the various measures that Kennecott will be taking to prevent or lessen noise pollution and because of the existence of natural sound buffers such as trees and shrubbery.[114]

As to Petitioners' witnesses' concerns regarding road traffic and dust, while expressing concern over the impacts of these effects of the mining operation on the flora and fauna of the area, Petitioners' witnesses admitted on cross-examination that Kennecott will not be building any new roads in connection with the mine, but rather will be using the existing roads in the area, that no measures are currently taken to control road dust, and that studies relied upon by them in their opinions regarding the potential adverse effects of road traffic and dust involved studies of roads that were paved and much more heavily traveled than the roads in the area of the mine.[115] Respondents' witnesses then added to that testimony, explaining that Kennecott will be controlling road dust by watering at regular intervals, following strict limits set forth in the mining permit,

[112] Testimony of Arlaud, Bates Nos. 058427, 058438.
[113] *Id.*, Bates No. 058428.
[114] Testimony of Kailing, Bates Nos. 055395-96.
[115] Testimony of Flaspohler, Bates Nos. 051470-71; Testimony of Lindsay, Bates Nos. 052359-60.

and by following a fugitive dust plan, and further explaining that road use associated with the mine will not have a substantial impact on wildlife in the area because the road is already graded weekly and well-used.[116]

Finally, with regard to Petitioners' witnesses' concerns regarding seismic or blast effects, Kennecott's blasting expert testified that various techniques exist to lower the energy and vibrations of blasts in order to protect sensitive areas or structures, and that Kennecott planned to use such techniques in its mine operations.[117] Using those techniques, Arlaud testified that the particle velocity from the blasting done at the mine site will be well below the levels that would damage buildings.[118] With regard to concerns regarding the effects of blasting on the fish in the Salmon Trout River, Arlaud explained that Parker's testimony predicting harm to the fish was erroneous because in determining the effects of the blasting Parker used the formula for surface blasting rather than the formula for underground blasting, and energy waves act differently on the surface than they do underground.[119] Arlaud explained that Parker's testimony also was erroneous because Parker failed to take into account the dissipation of energy that will occur as the energy spreads outward from the blast.[120] Finally, Arlaud stated categorically that the blasting energy generated at the mine will be well below the level that would be harmful to the fish in the Salmon Trout River.[121]

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[116] Testimony of Martin, Bates Nos. 053909, 053925, 053928; Testimony of Kailing, Bates Nos. 055394-95, 055404-05.
[117] Testimony of Arlaud, Bates Nos. 053714, 053730, 053737-38.
[118] *Id.*, Bates Nos. 058444-45, 058447-48.
[119] *Id.*, Bates Nos. 053730-31.
[120] *Id.*, Bates Nos. 053733-34.
[121] *Id.*, Bates Nos. 058425-26.

In light of the above, the Court finds that there is substantial evidence that a reasoning mind would accept as sufficient to support the MDEQ's finding that the mining operation will not have any severe adverse impact on the flora and fauna in the region. Therefore, this finding was supported by competent, material, and substantial evidence on the whole record and must be affirmed.

3. Challenge to the FDO's Finding that the Mining Operation Will Not Have Any Severe Adverse Impact on the Wetlands in the Region

Petitioners next assert that the MDEQ's finding that the mining operation will not have any severe adverse impact on the wetlands in the region was not supported by competent, material, and substantial evidence on the whole record. This Court disagrees.

Petitioners presented the testimony of five expert witnesses regarding the impact on area wetlands of a drawdown in the groundwater level as a result of the mining operation. This testimony focused first on the groundwater modeling done by Kennecott and the drawdown predictions established through that modeling, and then on the impacts on the wetlands as a result of the drawdown.

Dr. Robert Prucha and Dr. Kenzi Karasaki testified for Petitioners regarding Kennecott's hydraulic testing and groundwater modeling. They were extremely critical of the bedrock and overburden[122] hydraulic models done by Kennecott's consultants, and identified a number of potential flaws in those models. They testified that they believed Kennecott's models were inaccurate because Kennecott: (1) did not utilize enough wells in their hydraulic testing or space those wells far enough apart or deep enough to accurately characterize or conceptualize the hydraulic properties of the mine site;[123]

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[122] The overburden refers to the unconsolidated material located above the bedrock.

[123] Testimony of Dr. Robert Prucha, located at Tabs 676, 677, and 708, Bates Nos.: 051576-77, 051619, 051626, 051588, 051640, 051641, 051655-56.

(2) did not choose proper locations for their hydraulic testing;[124] (3) did not take all of the dikes and faults in the area into consideration;[125] (4) improperly assumed that the one major fault they tested was very short and unconnected to other faults;[126] (5) improperly determined the dividing line between the upper bedrock zone, which has a much higher hydraulic conductivity, and the lower bedrock zone;[127] (6) improperly assumed that the one major fault Kennecott located was entirely located in the lower bedrock zone;[128] (7) did not take into consideration groundwater flow direction, velocity, or hydraulic gradients;[129] (8) did not conduct sufficient hydraulic testing and failed to conduct such testing properly;[130] (9) did not model for worst-case scenario;[131] (10) did not properly conduct calibration and sensitivity testing on the models;[132] (11) modeled the bedrock and overburden separately, rather than modeling them as a continuous whole;[133] and (12) did not take into consideration the experiences of nearby mines in regard to inflow.[134]

On these bases, Prucha and Karasaki testified that they believed Kennecott's hydrologic studies and modeling, and therefore Kennecott's predictions of drawdown based on those studies and modeling, were inadequate and inaccurate.[135] Accordingly, Prucha asserted that he expected the mine to encounter dramatically greater drawdown than predicted by Kennecott, up from the 60 to 210 gallons per minute inflow predicted

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[124] *Id.*, Bates Nos. 151588, 051605, 051609, 051589-90.
[125] *Id.*, Bates Nos. 051578, 051607, 051626.
[126] *Id.*, Bates Nos. 051608, 058288; Testimony of Dr. Kenzi Karasaki, located at Tab 707; Bates Nos. 058092-93.
[127] Testimony of Prucha, Bates Nos. 051611-14, 058304.
[128] *Id.*, Bates Nos. 051616-17, 058288.
[129] *Id.*, Bates Nos. 051614-15.
[130] *Id.*, Bates Nos. 051631-32; Testimony of Karasaki, Bates Nos. 058054, 058071-73, 058077, 058094, 058080.
[131] Testimony of Prucha, Bates No. 051652.
[132] *Id.*, Bates Nos. 058294-96, 058300-01; Testimony of Karaski, Bates Nos. 058083-87, 058089.
[133] Testimony of Prucha, Bates Nos. 058295, 058300, 058306.
[134] *Id.*, Bates Nos. 051598, 058293.
[135] *Id.*, Bates Nos. 051678, 051685-86, 051804, 058375-76, 058299-300; Testimony of Karasaki, Bates No. 058080.

by Kennecott to 280 – 3,000 gallons per minute.[136] Karasaki likewise testified that he believed that Kennecott had under-predicted permeability, and therefore that he believed it is very likely that mine inflow will be much higher than Kennecott's predictions.[137]

Respondents presented the testimony of thirteen expert witnesses on the impact of the mining operation on the area wetlands twelve for Kennecott, and one for the MDEQ. Nine of these witnesses testified regarding Kennecott's hydraulic testing and groundwater modeling, while four testified regarding the impact of the drawdown predicted by that modeling on the wetlands of the area. Just as with the issues discussed above, Respondents' witnesses addressed each of Petitioners' experts' concerns and presented testimony nullifying those concerns.

With regard to Petitioners' witnesses' concerns regarding the number, spacing, and depth of the wells Kennecott utilized in conducting their hydraulic testing, John Wozniewicz, who was the consultant responsible for the design and collection of data for characterization of the hydraulic properties of the bedrock at the mine site for Kennecott, testified that in doing the data collection he followed industry standards for data collection.[138]

As to Petitioners' witnesses' concerns regarding the selection of locations for hydraulic testing, Wozniewicz explained that Kennecott located boreholes near the major mine openings, because that is where hydraulic properties have the most significant impact on predicting mine inflow.[139] He further explained that through the various tests conducted Kennecott investigated all of the suspected or known features, such as dikes or

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[136] Testimony of Prucha, Bates Nos. 051666, 051669, 051680, 051808.
[137] Testimony of Karasaki, Bates Nos. 058090, 058114.
[138] Testimony of John Wozniewicz, located at Tab 692, Bates No. 054828.
[139] *Id.*, Bates Nos. 054836, 054841.

faults or areas of brecciated (broken) rock, and found only one area of moderate hydraulic conductivity, with all the remaining areas classified as areas of low hydraulic conductivity.[140] Wozniewicz explained that Kennecott then concentrated its major testing and located its wells for short- and long-term pump testing in the area of moderate hydraulic conductivity.[141]

With regard to Petitioners' witnesses' concern that Kennecott did not take all of the major features, such as dikes, faults, and brecciated zones into consideration in doing its hydraulic characterization and modeling, Wozniewicz testified that Kennecott investigated all of the suspected or indicated features in the area, including brecciated zones, and that Kennecott drilled most of the boreholes on an incline to increase the likelihood of intersecting any existing features[142] Kennecott's site operation and exploration manager for the proposed mine, Andrew Ware, echoed this testimony, stating that contrary to Prucha's assertion, Kennecott did take into consideration the so-called "Klasner fault zone" and investigated that area, drilling thirteen boreholes at various angles, and that this investigation failed to reveal any evidence of a significant fault or even of discrete features in that area.[143] Wozniewicz explained that the results of this testing located no high hydraulic conductivity zones and only one moderate hydraulic conductivity zone.[144] Finally, Willy Zawadzki, who created one of Kennecott's groundwater models, testified that he modeled conservatively by assuming the existence of numerous suspected faults or dikes, even where Kennecott's hydrological testing had

[140] *Id.*, Bates Nos. 054832-33, 054836, 054844.
[141] *Id.*, Bates Nos. 054844-45, 054863.
[142] *Id.*, Bates Nos. 054836, 054901.
[143] Testimony of Andrew Ware, located at Tabs 682-683, Bates Nos. 053001-03, 053123.
[144] Testimony of Wozniewicz, Bates Nos. 054832-38, 054844.

not shown those features to actually exist.[145] Zawadzki further informed the ALJ that, contrary to Petitioners' witnesses' belief, Kennecott had taken into account in its modeling that the bedrock extends directly to the surface at one point under the Salmon Trout River, without any intervening unconsolidated matter or clay.[146]

As to Petitioners' witnesses' concern that Kennecott had improperly assumed that the one identified feature in the area was short and unconnected to other features present in the mine area, Wozniewicz advised that according to the literature published on the subject, it is very rare to find a system of pervasive, hydraulically connected faults.[147] He further testified that the pump test Kennecott conducted in the area of moderate hydraulic conductivity indicated that the feature located in that zone is of limited length and is not connected to any other features. This testimony was confirmed by Zawadzki, who further testified that he modeled conservatively by assuming all features to be interconnected and of significant length.[148]

In connection with Petitioners' witnesses concern that Kennecott improperly identified the dividing line between the upper, more hydraulically conductive bedrock zone and the lower bedrock zone, Wozniewicz testified that Kennecott's determination that the dividing line falls roughly at 90 meters below ground was based on the results of the numerous tests that Kennecott conducted and was therefore supported by the data.[149] Similarly, with regard to Petitioners' witnesses concern that Kennecott improperly found the one hydraulically conductive feature in the mine area to be located entirely within the

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[145] Testimony of Willy Zawadzki, located at Tab 692, Bates Nos. 054965-66.
[146] *Id.*, Bates Nos. 055013-14.
[147] Testimony of Wozniewicz, Bates No. 054851.
[148] *Id.*, Bates Nos. 054864-65, 054871-72; Testimony of Zawadzki, Bates Nos. 054965-66, 054974, 054996-98.
[149] Testimony of Wozniewicz, Bates No. 054846.

less hydraulically conductive lower bedrock zone, Wozniewicz stated that Kennecott's testing had shown that the one identified feature with moderate hydraulic conductivity is located in the ore body itself, which is located entirely in the lower bedrock zone.[150]

As to Petitioners' witnesses' concern that Kennecott had failed to take into consideration in their modeling such things as groundwater flow direction and velocity and hydraulic gradients, Dan Wiitala, who was in charge of gathering background hydrological data for the proposed mine, testified at length regarding the testing Kennecott undertook with regard to stream flow and stream quality data, aquifer testing, measurement of groundwater levels, extensive groundwater and surface water modeling.[151] Wiitala further specifically testified that testing had shown that groundwater flow in the mine area runs north to northeast.[152] Wozniewicz testified that Kennecott did consider and test to determine the hydraulic gradients in the area and found the vertical gradient for the mine site to be negligible.[153]

With regard to Petitioners' witnesses' concerns that Kennecott's hydrologic testing was inadequate and improperly done, Wozniewicz testified that Kennecott did a variety of tests for their groundwater models, including water quality (chemical composition) sampling, packer tests, slug tests, short- and long-term pump tests, flow logging, and geological analysis.[154] He further testified that testing was conducted over the entire range of the mine, top to bottom, and that industry standards were followed.[155]

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[150] *Id.*, at Bates Nos. 054845, 054847.
[151] Testimony of Dan Wiitala, located at Tab 693, Bates Nos. 055051-52, 055054.
[152] *Id.*, at Bates Nos. 055099-100.
[153] Testimony of Wozniewicz, Bates Nos. 054858-59.
[154] *Id.*, Bates No. 054825.
[155] *Id.*, Bates Nos. 054828, 054841.

Finally, Charles Thomas, who reviewed the hydrogeology portions of Kennecott's application for the MDEQ's mine review team, testified that the hydrologic testing done by Kennecott was sufficient.[156]

As to Petitioners' witnesses' concerns regarding Kennecott's failure to model for a worst-case scenario, Gregory Council, who did some of the groundwater modeling for Kennecott, testified that Kennecott's models were modeled for a reasonable scenario, and that any inflow that might occur that exceeds the predicted or acceptable limits can be mitigated by various methods.[157] This testimony was echoed by Thomas, who advised that the monitoring conditions included in the mining permit provide the ability to observe and react very quickly to anything that might arise unexpectedly.[158] Zawadzki testified, as discussed above, that he was very conservative in his modeling so as to create a model that would give the highest reasonable estimate of groundwater inflow.[159]

In connection with Petitioners' witnesses' concern that Kennecott did not properly conduct calibration and sensitivity testing on their groundwater models, both Zawadzki and Council testified that they followed industry standards in doing their calibration and sensitivity testing.[160] Moreover, as previously noted, Thomas testified that Kennecott's testing, presumably including their calibration and sensitivity testing, was sufficient.[161]

With regard to Petitioners' witnesses' concern over the fact that Kennecott modeled the bedrock and overburden separately, rather than modeling them as a continuous whole, both Wozniewicz and Council testified that water quality testing

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[156] Testimony of Charles Thomas, located at Tab 701, Bates Nos. 056832-36.
[157] Testimony of Gregory Council, located at Tabs 693-694, Bates No. 055323.
[158] Testimony of Thomas, Bates No. 056785.
[159] Testimony of Zawadzki, Bates Nos. 054965-66, 054968-69, 054986-87, 054996-98.
[160] *Id.*, Bates No. 055019; Testimony of Council, Bates Nos. 055273-74.
[161] Testimony of Thomas, Bates Nos. 056832-36.

demonstrated that there is limited communication (i.e. connection) between the groundwater in the overburden and the water in the lower bedrock.[162] Accordingly, there would seem to be no real need to do a joint model for both the bedrock and the overburden.

Finally, as to Petitioners' witnesses' concerns regarding Kennecott's failure to consider the experience of the Marquette County iron mines in doing their modeling, both Wozniewicz and Thomas testified that there are significant differences between the geologic setting of those mines and that of the proposed mine. Accordingly, both testified that it was not reasonable for Kennecott to consider the iron mines in doing their modeling.[163]

Based on this testimony, Respondents' witnesses testified that they believed that Kennecott's predictions of 60 gallons per minute to 210 gallons per minute of groundwater inflow into the mine at peak times are reasonable, and that there is no evidence to support Dr. Prucha's greatly higher predictions.[164]

Turning to the question of the impact that any drawdown will have on the wetlands, Petitioners' witness Dr. Paul Adamus testified that the wetlands on and around the mine site are exceptionally important, because they produce organic matter, support large numbers of birds and invertebrates, and are important in mineral cycling.[165] He further testified that in his opinion the wetlands are exceptionally sensitive, such that even a change of only a few centimeters in the groundwater table level could radically

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[162] Testimony of Wozniewicz, Bates Nos. 054861-62, 054870-71; Testimony of Wiitala, Bates No. 055136.
[163] Testimony of Wozniewicz, Bates Nos. 054849-50, 054854; Testimony of Thomas, 056807.
[164] Testimony of Council, Bates Nos. 055294-95; Testimony of Thomas, Bates Nos. 056805-06; Testimony of Zawadzki, Bates Nos. 054980-81.
[165] Testimony of Adamus, Bates Nos. 051033, 051038.

affect the wetlands.[166] He noted that all of the experts agree that some drawdown will occur, and that Petitioners' experts have predicted this drawdown could be as much as 3 – 12 feet.[167] On this basis, Adamus stated that he was 80% sure that some wetland loss would occur as a result of the mining operation, and 100% sure that wetland degradation would occur.[168]

On cross examination, however, Adamus admitted that there are a number of factors present in the wetland areas closest to the mine which suggest that they are not quite as sensitive as he had asserted.[169] He further admitted that the wetlands in the mine area go through frequent periods of draught or dryness, with as much as a three foot drop in the groundwater table within a single season at times, that there is an average of 35 inches of rain and 176 inches of snow runoff each year in the area, and that the wetlands in the area are part of a bigger network of connected wetlands in the Upper Peninsula.[170]

Respondents' witnesses further expanded on this testimony. Dr. Donald Tilton, who conducted the baseline wetlands study for Kennecott, testified that the wetlands over and in the vicinity of the ore body are of a type tolerant of water level fluctuations.[171] Tilton stated that most of the wetlands over or near the ore body, hydrologically speaking, are supported by precipitation rather than by ground or surface water, and those wetlands, accordingly, will suffer no adverse affect from a groundwater table drawdown.[172] He advised that the wetlands bordering the Salmon Trout River also are not groundwater dependant, and therefore those wetlands also would not suffer any

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[166] *Id.*, Bates Nos. 051033, 051042-43.
[167] *Id.*, Bates Nos. 051063, 051072.
[168] *Id.*, Bates No. 051038.
[169] *Id.*, Bates Nos. 051093, 051125-29.
[170] *Id.*, Bates Nos. 051099-100, 051120-21, 051140.
[171] Testimony of Tilton, Bates Nos. 055489-90, 053545-46.
[172] *Id.*, Bates Nos. 055490-91, 055546.

adverse affect from a groundwater drawdown.[173] Tilton further stated that those wetlands in the area that are dependant on groundwater receive so much additional water through precipitation and surplus runoff that they, too, will not be affected by a groundwater drawdown.[174] Wiitala testified that the areas of greatest predicted groundwater table drawdown all are located in precipitation dominated wetlands.[175]

Council testified that the predicted drawdown, based on Kennecott's modeling and its prediction of between 60 gallons per minute and 210 gallons per minute of inflow into the mine, will range from less than six inches up to three feet.[176] He explained, however, that this drawdown would to be to the aquifers, and that it would be spread over the entire hydrological system.[177] Accordingly it will not translate necessarily to an equivalent drawdown in the groundwater table.[178]

With regard to the rivers of the area, Respondents witnesses testified that the drawdown would result in a predicted flow change to the Salmon Trout River of just .0006 of a foot (2-4%) decrease, with this effect lessened the further downstream you go, and would actually result in a .0001 of a foot *increase*, in the flow of the East Branch of the Salmon Trout River due to the influx of water from the Wastewater Treatment Plant.[179]

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[173] *Id.*
[174] *Id.*, Bates Nos. 055491, 055546.
[175] Testimony of Wiitala, Bates Nos. 055122-23.
[176] Testimony of Council, Bates Nos. 055268-69, 055319.
[177] *Id.*, Bates Nos. 055230-31, 055254, 055270, 055268-69, 055319.
[178] *Id.*
[179] *Id.*, Bates Nos. 05525759, 055270, 055271; Testimony of Wiitala, Bates Nos. 055140-41.

On this basis Tilton stated that he does not believe the functions or value of the wetland system will be affected by the predicted groundwater drawdown and that he believes the drawdown will have no effect on any of the wetlands in the area, much less be destroyed.[180]

In light of the above, the Court finds that there is clear evidence that a reasoning mind would accept as sufficient to support the MDEQ's finding that the mining operation will not have any severe adverse impact on the wetlands in the region. Therefore, this finding was supported by competent, material, and substantial evidence on the whole record and must be affirmed.

4. Challenge to the FDO's finding that there will be no severe adverse impact on the surface or ground water in the region from Acid Rock Drainage.

Petitioners next assert that the MDEQ's finding that there will be no severe adverse impact on the surface or ground water in the region from Acid Rock Drainage was not supported by competent, material, and substantial evidence on the whole record. This Court disagrees.

The term "Acid Rock Drainage" ("ARD") refers to the process whereby sulfide ore, when exposed to oxygen and water, reacts chemically to create sulfuric acid. ARD is universally recognized as one of the primary hazards of sulfide mining, and as a process that can cause immense damage to the surrounding environment if it is not recognized and prevented or controlled.

[180] Testimony of Tilton, Bates Nos. 055493-95, 055530, 055546-47, 055614.

There are three potential sources of ARD at the proposed mine: (1) through runoff from the development rock[181] that will be stored in the Temporary Development Rock Storage Area ("the TDRSA"); (2) through water pumped from the mine during mining operations; and (3) through water escaping from the mine once it is re-flooded at the end of mining. Kennecott retained consultants to conduct tests and modeling in order to determine the potential for ARD at the proposed mine and to assess the need for mitigation measures. These consultants conducted a series of geochemical tests and created models to evaluate each of these scenarios. Ultimately Kennecott's consultants concluded that active management will be required in connection with all rock types on-site in order to prevent or control ARD.

Petitioners presented the testimony of two witnesses regarding the potential for ARD generation: Dr. Ann Maest and Dr. John Coleman. Respondents presented the testimony of five witnesses on this issue: Mark Logsdon, Dr. Stuart Miller, John Starke, Margie Ring, and Dr. Edmond Eary.

1. Concerns Regarding Testing:

Petitioners' witnesses raised several concerns regarding the testing conducted by Kennecott's consultants, asserting that: (1) Kennecott's long-term kinetic testing, which testing determined the acid-generating potential of the various types of rock that make up the ore and development rock at the mine site, was unrepresentative and therefore unreliable, because it included too few tests of samples of high sulfide ore;[182] and (2)

[181] Development rock is rock removed from the mine in order to reach the ore, and which subsequently will be returned to the mine as part of the backfill.
[182] Testimony of Dr. Ann Maest, located at Tabs 677-678 and 707, Bates Nos. 051900, 951925-26, 051929-31, 051933, 051934.

Kennecott's kinetic testing was incomplete because Kennecott's consultants failed to revise their testing results post-application-submission to include more recent results of the then still on-going kinetic testing.[183]

Respondents' witnesses, however, presented testimony countering each of those arguments. Logsdon, who conducted the geochemical testing and modeling for Kennecott, admitted that of the fifteen long-term kinetic tests that he conducted only one was on a sample from the massive ore body, which is the rock highest in sulfide in the mine area, and only two were on samples from the semi-massive ore body, which is the rock second highest in sulfide content.[184] The remaining twelve tests were conducted on samples of development rock [185] He explained, however, that he focused primarily on the development rock rather than on the ore, because it is the development rock that will remain on site; the ore will be rapidly removed from the site once mined.[186] Accordingly, he stated that the acid-generating potential of the ore was of only limited relevance in assessing the risk for ARD.[187] Logsdon stated for this reason, and because he included samples that were representative both spatially and by type, that his testing was adequately representative for purposes of predicting the potential for ARD generation.[188]

Logsdon's conclusion was echoed both by Miller, who assisted in the geochemical work for Kennecott, and by Eary, who was retained by the MDEQ to review Kennecott's geochemical testing and modeling. Miller stated that Logsdon's focus on development rock for his kinetic testing complied with acceptable practice in the

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[183] Testimony of Maest, Bates Nos. 051916, 051944.
[184] Testimony of Mark Logsdon, located at Tab 688, Bates No. 054188.
[185] *Id.*
[186] *Id.*, Bates Nos. 054170, 054187-88, 054268.
[187] *Id.* Bates No. 054143.
[188] *Id.*, Bates Nos. 054183-84, 054189.

industry.[189] Eary likewise testified that Logsdon's tests provided a thorough characterization of the rock types to be mined and their potential reactivities, and that the number of samples per mass of each type of rock was adequate.[190] Eary explicitly testified that Logsdon's focus on the development rock was proper under relevant industry standards and that all of Kennecott's studies were conducted in accordance with industry practice.[191] Finally, Eary stated that he believed that Petitioners' witnesses had selected only those development rocks highest in sulfide content for their modeling and had ignored the vast majority of the development rock that had much lower sulfide content, and that accordingly he believed Petitioners' witnesses' models and predictions were biased and overestimated the potential for ARD generation.[192]

As to Petitioners' witnesses' criticism regarding Kennecott's failure to revise its modeling to include test results obtained after the time the permit application was submitted, Logsdon agreed that he used data that was not as current as that available to Petitioners' witnesses, because his modeling and reports were prepared more than a year earlier than Petitioners' witnesses' were.[193] He explained, however, that the purpose of his testing was not to predict the exact amounts of ARD that would be produced, but rather to determine the potential for ARD generation in order to advise Kennecott as to the mitigation measures required in order to protect the environment.[194] Based on the test data at the time he wrote his reports, he already knew that active management and mitigation measures were required for all rock types to be removed from the mine.[195]

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[189] Testimony of Dr. Stuart Miller, located at Tabs 688-689, Bates Nos. 054316, 054368-69.
[190] Testimony of Dr. Edmond Eary, located at Tab 702, Bates Nos. 057006-07, 056999, 057007.
[191] *Id.*, Bates Nos. 057006-07, 057005-06.
[192] *Id.*, Bates Nos. 057050-51.
[193] Testimony of Logsdon, Bates No. 054199.
[194] *Id.*, Bates No. 054148.
[195] *Id.*, Bates Nos. 054199-200.

Accordingly, there was no need for more recent test data, or for revision of his reports, because it would not change his opinion or his recommendations to Kennecott regarding mitigation measures.[196]

2. Concerns Regarding Modeling:

Petitioners' witnesses also raised a number of concerns regarding the geochemical modeling done by Kennecott's consultants.

a. *TDRSA*:

As to Kennecott's predictions regarding the development rock stored in the TDRSA, Maest and Coleman asserted that Kennecott: (1) overestimated its ability to separate ore from non-ore;[197] (2) made inaccurate assumptions regarding the particle size of the development rock to be stored in the TDRSA,[198] and underestimated the total amount of development rock to be stored in the TDRSA.[199]

Once again, however, Respondents' witnesses countered these concerns. As to Pettioners' witnesses' concerns regarding Kennecott's ability to separate ore from non-ore, Logsdon, Miller, and Eary each testified that under modern quality control practices, and in light of the economic incentive that Kennecott has to ensure all ore is mined, it is unlikely that much, if any, ore will end up in the TDRSA.[200] Logsdon went so far as to state that even a 1% error rate in identifying and mining ore is considered unacceptable in modern mining, and that the amount of ore that will not be mined and that will have the potential to end up in the TDRSA should be closer to the goal rate of one hundredth of

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[196] *Id.*
[197] Testimony of Maest, Bates Nos. 051897, 051939.
[198] *Id.*, Bates Nos. 051940-41; Testimony of Dr. John Coleman, located at Tabs 681-682, Bates Nos. 052787-88, 052793.
[199] Testimony of Maest, Bates Nos. 051941-42.
[200] Testimony of Logsdon, Bates Nos. 054204-05; Testimony of Miller, Bates Nos. 054336, 054338-39; Testimony of Eary, Bates Nos. 057047, 057081.

one percent, while Eary stated that the ore looks visibly different from the development rock and that test data showed that the boundaries between the ore body and the development rock were generally very distinct.[201]

With regard to Petitioners' witnesses' concerns regarding inaccurate assumptions for the particle size of the development rock to be stored in the TDRSA, Logsdon testified that his decision to consider all rocks in the TDRSA to be the same size and his election of 10 cm as the particle size was not based on an assumption that all of the rock would actually be that size, but rather was intended to constitute an average that could be easily scaled up to reach a reliable representation of the ARD production that will actually occur in the TDRSA.[202] Moreover, Logsdon further testified that even assuming a much smaller particle size, as Maest and Coleman did, it would not have changed his opinion and recommendations to Kennecott because even based on the larger particle size that he chose he was recommending the need for active management of all rock on-site.[203]

With regard to Petitioners' witnesses' concerns regarding an underestimation of the amount of rock to be stored in the TDRSA, Logsdon admitted that he used the wrong tonnage in his modeling based on a miscommunication between himself and Kennecott.[204] He explained, however, that this error was immaterial, because it would not have changed his predictions and recommendations, since he was already going to advise Kennecott that active management was necessary.[205]

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[201] Testimony of Logsdon, Bates Nos. 054204-05; Testimony of Eary, Bates Nos. 057046-47.
[202] Testimony of Logsdon, Bates Nos. 054148, 054219-20.
[203] *Id.*, Bates No. 054220.
[204] *Id.*, Bates No. 054235.
[205] *Id.*, Bates Nos. 054235-37.

Furthermore, Logsdon and Eary pointed out that Maest and Coleman failed to take into consideration the mitigation measures to be employed by Kennecott and the natural neutralizing factors present in the development rock. Logsdon explained that Kennecott will be mixing limestone into each load of development rock placed in the TDRSA in order to retard or prevent ARD generation, and that the amount of limestone used will be 30% more than believed necessary.[206] He further noted that in his modeling he assumed a 20% water infiltration rate for the TDRSA based on many years of experience, but in fact the TDRSA will have a cover over it, therefore greatly reducing the amount of water infiltration.[207] Eary noted that the development rock contains the minerals olivine, lizardite, and calcite or calcium carbonate, all of which are minerals which neutralize acid, and that it is necessary to take this fact into consideration as well when modeling for ARD, but that neither Maest nor Coleman did so.[208]

b. ARD Generation in Mine During Mining Operations:

With regard to Kennecott's predictions regarding the potential for ARD generation in the mine during mining operations, Maest and Coleman asserted that Kennecott: (1) failed to take into consideration water percolating through the crown pillar;[209] (2) overestimated the amount of water inflow;[210] and (3) underestimated the tonnage of development rock that is to be returned to the mine during the backfilling process.[211]

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[206] *Id.* Bates Nos. 054155, 054221, 054223, 054288-89.
[207] *Id.*, Bates Nos. 054216-17.
[208] Testimony of Eary, Bates Nos. 057017-18.
[209] Testimony of Maest, Bates Nos. 051937, 051943-44.
[210] *Id.*, Bates Nos. 051944-45; Testimony of Coleman, Bates Nos. 052791-92.
[211] Testimony of Maest, Bates No. 051943; Testimony of Coleman, Bates Nos. 052787-88.

Again, Respondents' witnesses rebutted this testimony. With regard to water percolating through the crown pillar, which water would cause generation of ARD on the exposed face of the crown pillar within the mine and could result in generation of ARD on the walls of the mine, Logsdon testified that he believes the possibility of the crown pillar yielding ARD is quite small.[212] He explained that the reason for this opinion is that in order for water to seep all the way down through the 87.5 meters thick crown pillar and escape into the mine the crown pillar would have to be under a nearly fully saturated state. In such circumstances, by the time the water reached the mine there would be negligible dissolved oxygen available to cause the necessary chemical reaction to form ARD.[213] The Court notes that this argument fails to take into account the fact that there will be plenty of oxygen available beneath the crown pillar, at least until an area is fully backfilled, to combine with any water coming through the ore in the crown pillar and to create ARD. Logsdon explained, however, that in calculating ARD generation potential within the mine he used a calculation of exposed surface area greater than the actual surface area of the proposed mine, and that therefore any ARD generated through water percolation through the crown pillar was accordingly accounted for.[214] Moreover, once again Logsdon pointed out that any increase in the amount of ARD would not have changed his recommendation because he was already recommending active management of the water pumped from the mine.[215]

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[212] Testimony of Logsdon, Bates No. 054234.
[213] *Id.*, Bates Nos. 054234-35, 054265.
[214] *Id.*, Bates No. 054279.
[215] *Id.*, Bates Nos. 054234, 054237.

With regard to Petitioners' witnesses' concerns regarding Kennecott's overestimation of water inflow into the mine, which would result in Kennecott underestimating because of dilution the amount of ARD in the pumped water, Logsdon explained that he used the inflow estimation available to him at the time he did his modeling and reports.[216] He agreed that this number subsequently was substantially lowered, and that he did not revise his modeling and reports, but stated the lower number of gallons per minute of inflow was irrelevant, because it would not have changed his recommendation that there was a need for active management of the pumped water.[217]

In connection with Petitioners' witnesses' concerns regarding Kennecott's underestimation of the tonnage of development rock to be returned to the mine during backfilling, Logsdon again admitted that he had erred due to miscommunication with Kennecott.[218] Once again, however, he stated that this error was irrelevant, because it would not have changed his recommendation regarding the need for active management.[219] Moreover, both Logsdon and Eary noted that Petitioners' witnesses in doing their modeling had failed to take into consideration the neutralizing factors that will be present: limestone and cement (which also contains lime) mixed with the development rock as it is returned to the mine as backfill.[220] Further, all water pumped from the mine during mining operations will be processed through the waste water treatment plant to remove any ARD present in it before it is reintroduced to the aquifers.[221]

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[216] *Id.*, Bates No. 054229.
[217] *Id.*, Bates No. 054230.
[218] *Id.*, Bates No. 054235.
[219] *Id.*, Bates Nos. 054235-37.
[220] *Id.*, Bates Nos. 054155-56, 054160; Testimony of Eary, Bates Nos. 057025, 057027.
[221] Testimony of Eary, Bates No, 057024.

c. ARD Generation in Mine After Re-Flooding:

With regard to Kennecott's predictions regarding the potential for ARD generation in the mine after the mine is reflooded at the end of the mining operation, Maest and Coleman asserted that Kennecott failed to account for ore remaining in the mine at the time of re-flooding. Respondents' witnesses again, however, counter this argument with their testimony. Both Logsdon and Miller testified that, based on improvements in quality control measures in the last few years and the economic incentive Kennecott has to mine all available ore, very little ore will remain in the mine at the end of mining operations.[222] Eary, on the other hand admitted that undoubtedly some amount of ore will remain in the mine post-closure.[223] Any ore left in the mine would have the potential to leach ARD into the water once exposed to it, though this leaching will cease once the mine is fully reflooded, due to lack of oxygen to continue the chemical reaction.[224] Both Eary and Logsdon, however, stressed the neutralizing potential of the limestone and cement in the backfill, as well as the natural neutralizing minerals contained in the development rock returned to the mine, and noted that Petitioners ignored this factor in doing their modeling.[225] Moreover, the Court notes that provisions are in place requiring Kennecott to monitor the water quality within the reflooded mine, and to redress any ARD issues that might arise post-closure.[226]

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[222] Testimony of Logsdon, Bates No. 054155; Testimony of Miller, Bates Nos. 054367-68, 054400.
[223] Testimony of Eary, Bates No. 057083.
[224] *Id.*, Bates Nos. 057027, 057030; Testimony of Logsdon, Bates Nos. 054155-56.
[225] Testimony of Logsdon, Bates No. 054160; Testimony of Eary, Bates Nos. 057017-18, 057025.
[226] Testimony of Dr. Stephen Donohue, located at Tabs 680-681, Bates Nos. 052642-43.

In light of the above, the Court finds that there is evidence that a reasoning mind would accept as sufficient to support the MDEQ's finding that there will be no severe adverse impact on the surface or ground water in the region from Acid Rock Drainage. Therefore, this finding was supported by competent, material, and substantial evidence on the whole record and must be affirmed.

B. Procedural Challenges:

Petitioners assert that the FDO is unlawful and must be set aside because it was made upon unlawful procedure resulting in material prejudice to Petitioners. Petitioners raise eight specific procedural challenges:

1. Petitioners assert that the ALJ reversed the burden of proof, in violation of MCL 324.63205(3) and Petitioners' Due Process rights, and the FDO adopted this improper standard;

2. Petitioners assert that the ALJ's denial of discovery, and his subsequent evidentiary and procedural rulings deprived Appellants of any meaningful opportunity to present their case or respond to Appellee's evidence;[227]

3. Petitioners assert that the FDO was made in violation of Petitioners' Due Process rights because the ALJ applied, and the FDO adopted, an incorrect de novo standard of review, and relied upon evidence outside the scope of that considered by the MDEQ in granting the Part 632 permit;[228]

4. Petitioners assert that that the outcome of the contested case was predetermined in violation of their Due Process right to a fair and unbiased decision-maker;

5. Petitioners assert that the FDO failed to review the record before issuing his decision, in violation of Petitioners' Due Process rights;

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[227] This issue was not raised in the parties' briefs in connection with this case. This issue *was* raised by the parties, however, in their briefs in connection with Petitioners' Part 31 permit challenge, as well as in the parties' oral arguments on both the Part 632 and Part 31 permit challenges. The Court further notes that, although each permit is challenged in a separate case in this Court, the contested case hearings on the two permits were consolidated. As a result, most of the procedural defects asserted by Petitioners are equally applicable to both permit challenges. Accordingly, the Court believes this issue is appropriate to be considered here despite its absence from the parties' Part 632 briefs.

[228] *Id.*

6. Petitioners assert that the ALJ improperly excluded evidence, resulting in prejudice to Petitioners;

7. Petitioners assert that the FDO's findings of fact were unlawfully conclusory and incomplete, in violation of the APA and Petitioners' Due Process rights.[229]

8. Petitioners assert that all of the above actions violated Petitioners rights under the Fair and Just Treatment Clause of the Michigan Constitution.[230]

As a preliminary matter, the Court notes that Respondents have argued that Petitioners' due process claims as a whole must fail because those claims are based on the proposed private conduct of Kennecott (i.e. the mining operations), rather than on actions of the State. For essentially the same reasons, Respondents have argued that Petitioners' due process claims must fail because no protected property interest of Petitioners has been violated by the actions of the State. The Court disagrees.

With regard to the "state action" requirement, the procedural rules governing contested case proceedings specifically grant due process rights to all parties to a contested case proceeding:

> [The contested case rules] shall be construed to secure a fair, efficient, and impartial determination of the issues presented in contested cases consistent with due process and safeguarding the rights of the parties.[231]

Moreover, even if this were not the case, the actions of state courts and judicial officers acting in their official capacities constitute "state action," for purposes of the Due Process Clause.[232] Further, this principle also extends to quasi-judicial tribunals.[233] As a result, the FDO was also a state action. In addition, the actions Petitioners here are challenging

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[229] *Id.*
[230] *Id.*
[231] Administrative rule R 324.2.
[232] *Shelley v Kraemer*, 334 US 1, 14; 68 S Ct 836; 92 L Ed 1161 (1941).
[233] *American Mfrs Mut Ins Co v Sullivan*, 526 US 40, 54; 119 S Ct 977; 143 L Ed 2d 130 (1999).

are not Kennecott's future mining operation, with its associated consequences, but rather the MDEQ's granting of the Part 632 permit. For each of these reasons, Petitioners have satisfied the "state action" requirement.

With regard to the "deprivation" requirement, the Michigan Supreme Court has held that the granting of a license or permit by a State agency is itself a "deprivation" of a protected property interest, so long as the plaintiff alleges sufficient facts concerning a diminution in the value of, or interference with the use and enjoyment of, his or her property caused by the grant of the license or the permit.[234] Petitioners have alleged sufficient facts to meet this requirement, because they have asserted not only a diminution in value or interference with the use and enjoyment of their property as a result of the grant of the Part 632 permit, but further injury to their riparian rights and impairment of their treaty rights. Each of these is a recognized protected property interest.[235] Accordingly, Petitioners have also satisfied the "deprivation" requirement.

Accordingly, Petitioners' procedural arguments are properly before the Court.

1. Burden of Proof

Petitioners first assert that the ALJ improperly imposed on Petitioners the burden of proof, particularly in regard to adverse environmental impacts, and that the FDO then adopted and compounded that error. The Court disagrees.

There are two legal authorities that have bearing on this question: MCL 324.63205 and Administrative rule R 324.64. MCL 324.63205 governs the Part 632 mining permit application procedures. Subsection (3) of that statute provides that:

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[234] *City of Livonia v Dep't of Soc Svcs*, 423 Mich 466, 508; 378 NW2d 402 (1985).
[235] *Id.*; *Dohany v City of Birmingham*, 301 Mich 30, 41; 2 NW 907 (1942); *People v Mackle*, 241 Mich App 583, 591; 617 NW2d 339 (2000).

> The applicant has the burden of establishing that the terms and conditions set forth in the permit application; mining, reclamation, and environmental protection plan; and environmental impact assessment will result in a mining operation that reasonably minimizes actual or potential adverse impacts on air, water, and other natural resources and meets the requirement of [Part 632].[236]

Subsections (11) and (12) of that statute then tie the MDEQ's grant or denial of a Part 632 permit to that burden of proof, providing that the MDEQ shall grant a Part 632 mining permit if the application meets the requirements of Part 632 and the proposed mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources, but shall deny a Part 632 mining permit if those conditions are not met.

Administrative Rule R 324.64 governs the burden of proof in contested case hearings involving the MDEQ. Subsection (1) of that rule states in relevant part as follows:

> The party filing [a] . . . petition for a contested case hearing . . . has the burden of proof and of moving forward unless otherwise required by law.[237]

Petitioners concede that Administrative Rule R 324.64 would generally apply to contested cases involving the MDEQ. Petitioners, however, point to subsection (3) of MCL 324.63205 and assert that this is a case where a different burden of proof is "otherwise required by law." Such an argument, however, ignores the scope of MCL 324.63205. That statute applies only to the application process. Once a Part 632 permit has been granted or denied, the applicability of that statute ends. The procedure in any subsequent contested case proceeding is then governed by Administrative Rule R 324.64.

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[236] MCL 324.63295(3).
[237] Administrative Rule R 324.64(1).

Administrative Rule R 324.64 requires that the burden of proof must be placed on the party filing the petition for the contested case hearing, i.e. the petitioner. Accordingly, the ALJ's and the FDO's allocation of the burden of proof on Petitioners did not constitute unlawful procedure resulting in material prejudice to Petitioners.

2. Denial of Discovery and of a Meaningful Opportunity to Present Case and Respond to Respondents' Evidence

Petitioners next assert that the ALJ violated their due process rights when he denied their request for discovery, because taken in conjunction with the ALJ's subsequent evidentiary rulings, this denial had the effect of denying Petitioners a meaningful opportunity to present their case and to respond to Respondents' evidence. Again the Court disagrees.

In general, parties to administrative proceedings have no constitutional right to discovery.[238] Nevertheless, the APA grants agencies that adjudicate contested cases the authority to adopt rules providing for discovery and the taking of depositions "to the extent and in the manner appropriate to [the particular agency's] proceedings."[239] Under this grant of authority, the MDEQ adopted Administrative Rule R 324.59(1). That rule provides that the taking and use of depositions and other discovery may be allowed in administrative proceedings before the MDEQ, but only upon stipulation of the parties or by leave of the Administrative Law Judge.[240] In other words, where the parties are unable to agree upon the use of discovery, the grant or denial of discovery is within the discretion of the ALJ. In general, the denial of discovery constitutes an abuse of discretion only where it denies a party a meaningful opportunity to present their case and

[238] *In re Del Rio*, 400 Mich 665,687 n7; 256 NW2d 727 (1977).
[239] MCL 24.274(1).
[240] Administrative Rule R 324.59(1).

thereby makes the proceedings fundamentally unfair.[241] A request for discovery, in the context of administrative proceedings as elsewhere, must also be balanced against the need for expeditious disposition of litigation.[242]

The administrative hearings in the present case differ from the circumstances in a typical civil trial in that before Petitioners ever requested a contested case hearing hundreds of pages of information regarding Kennecott's and the MDEQ's views on the relevant issues were already available for public review, and indeed Petitioners participated fully in the public review process for the Part 632 and Part 31 permits. Moreover, once Petitioners initiated the contested case proceedings, the parties exchanged extensive exhibit and witness lists. In fact, Petitioners own statements in their brief suggest that the problem they were facing, if anything, was an excess of information to process, rather than a lack of information.

Petitioners had the opportunity to engage in extensive pre-hearing motion practice.[243] Additionally, Petitioners presented 26 witnesses of their own[244], were permitted to engage in extensive cross-examination of Respondents' witnesses, often by more than one attorney,[245] and then had the opportunity to present rebuttal witnesses.[246] Petitioners further were granted additional time both pre- and post-hearing to review the

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[241] *Stokes v Chrysler, LLC*, 481 Mich 266, 294; 750 NW2d 129 (2008).
[242] *Masters v City of Highland Park*, 97 Mich App 56, 59; 294 NW2d 246 (1980).
[243] Tabs 016, 022, 024-026, 028-029, 037-038, 043, 046, 048, 053-054, 058, 061, 067, 073, 074.
[244] Tabs 669-680.
[245] Tab 681, Bates Nos. 052660-052757; Tab 682, Bates Nos. 053007-053009; Tab 683, Bates Nos. 053040-053140; Tab 684, Bates Nos. 053370-053457; Tab 685, Bates Nos. 053622-053677; Tab 686, Bates Nos. 053743-053779, 053859-053919; Tab 687, Bates Nos. 053967-053976, 054041-054060, 054102-054115; Tab 688, Bates Nos. 054241-054288; Tab 689, Bates Nos. 054356-054432; Tab 690, Bates Nos. 054554-054606; Tab 691, bates Nos. 054651-054663, 054698-054724, 054781-054807; Tab 692, Bates Nos. 054877-054954, 055000-055037; Tab 693, Bates Nos. 055160-055211; Tab 694, Bates Nos. 055288-055331, 055414-055468; Tab 695, Bates Nos. 055551-055610; Tab 696, Bates Nos. 055698-055746; Tab 697, Bates Nos. 055834-055868, 056003-056032; Tab 704, Bates Nos. 057359-057419; Tab 709, Bates Nos. 058414-058421, 058433-058450.
[246] Tabs 706-708, Bates Nos. 057821-058397.

available evidence and prepare their case and pleadings.[247] Petitioners also submitted many hundreds of pages of briefing , closing arguments, proposed findings of fact and conclusions of law , and exceptions to the PFD.[248] The contested case hearing included forty days of testimony spread out over several months, and the whole contested case process from beginning to end took more than two years' time.

To be sure all of the parties would have preferred to have had more time to process the other party's evidence and to prepare a response to that evidence. In light of the extensive procedures provided to Petitioners over the course of the contested case proceedings, however, this Court simply is not convinced that the ALJ's denial of Petitioners' discovery request, even coupled with his subsequent evidentiary rulings, prevented Petitioners from having a meaningful opportunity to present their case and to respond to Respondents' evidence. Accordingly, the ALJ did not abuse his discretion or violate Petitioners' due process rights by taking those actions.

3. Application of Incorrect Standard of Review and Reliance on Evidence Outside the Scope of that Considered by the MDEQ in Granting Permit

Petitioners next assert that the ALJ and the final decision-maker employed an incorrect "clean slate" de novo standard of review and that, based on that error, the ALJ wrongly admitted into evidence, and the final decision-maker wrongly relied upon, evidence outside the scope of that considered by the MDEQ in granting the Part 632 permit. Once again, however, the Court disagrees.

In the APA the Legislature has provided a mechanism and procedure for review of agency decisions. The Legislature, however, has not set forth a specific standard of review to be used in those proceedings. As a result, Michigan Courts, as well as state

[247] Tabs 018, 027, 054, 076, 085, 098, 101.
[248] Tabs 088-089, 103-104, 112, 115.

agencies and those challenging the rulings of those agencies, have struggled to define the proper standard of review, and there does not appear to be any binding case law that is exactly on all fours with the present case.

The MDEQ's Final Decision and Order in *Petition of Joseph Milauckas*,[249] however, is instructive. In that FDO, the final decision-maker had cause to conduct an extensive review of the proper standard of review in contested case proceedings engaged in by the MDEQ, and stated as follows:

> As a preface, it is well established that contested cases consist of a de novo review for the purpose of rendering the final agency decision of the [MDEQ]. In other words, an applicant has the right to offer a modified proposal during the pendency of a contested case provided it is within the scope of the public notice and it will not result in prejudice to the other party. The justification for this right is grounded in both law and policy. As to the former, the purpose of a contested case is set forth in the APA:
>
> 1. To render a final agency decision.
>
> 2. To allow for the exhaustion of administrative remedies, and create a record sufficient for judicial review of the final agency decision.
>
> Section 75 of the APA requires decisions in contested cases be based only on an evidentiary record established consistent with the Michigan Rules of Evidence. To that end, the APA refers to sworn witnesses, rebuttal evidence, judicial notice of facts, factual stipulations and re-hearings. Further, there is no express or implied prohibition on the use of evidence generated prior to the interim agency action or considering modified proposals.
>
> As noted evidence generated leading up to a contested case hearing is admissible. Taking this one step further, the Michigan Court of Appeals upheld the use of evidence under certain circumstances, generated <u>after</u> the hearing. Similarly, a line of contested cases where the record included evidence generated up to the day of the hearing have been reviewed by the circuit courts and Court of appeals. Significantly, none of the reviewing courts ever commented on, let alone criticized, the de novo review utilized in contested cases.

[249] *Petition of Joseph Milauckas*, 2003 WL 22767293.

The absence of any reviewing court's criticism of [the MDEQ] conducting a de novo review of an application stems from the expectation of compliance with the requirement of the APA concerning the creation of a complete evidentiary record during the contested case hearing. A predicate to the judiciary involving itself in a controversy arising out of a matter covered by the APA is a final agency decision based on a complete evidentiary record. This is appropriate because "administrative law dictates that courts move very cautiously when called upon to interfere with the assumption of jurisdiction by an administrative agency." This limitation is intended "to permit the fullest utilization of the technical fact-finding expertise of the administrative agency and permits the fullest expression of the policy of the statute while minimizing the burden on court resources." In this case a complete evidentiary record exists. As a result, [the final decision maker] may utilize the technical expertise of the agency under the policy enunciated in Part 325 and issue a final agency decision on the Petitioner's last proposal, provided of course that there is no prejudice and the proposal is within the scope of the public notice.

In addition to the legal basis, a practical consideration supports a de novo review in a contested case hearing. Assuming a contested case hearing consisted exclusively of a review of the [agency's] permit application decision, the final agency decision maker of the Director would necessarily be limited to approving that decision, reversing that decision or remanding the file to the agency for further consideration. Such a procedure is neither efficient nor economical because it would preclude finality. Further, to ignore a subsequent modification and only consider the project set forth in the application would render this case as a [sic] examination of a proposal a Petitioner no longer wishes to pursue. This case exemplifies the potential of such a result. Specifically, if the review is limited to the initial application and the decision was to deny that application, the Petitioner would be force to re-apply for the modified proposal. The process would begin again, culminating in the review of the final amended proposal or precisely what will be undertaken now.

As the foregoing analysis confirms the de novo review of a permit application by [the final decision maker], involving consideration of all the facts available, renders a genuine final agency decision allowing the applicant to proceed accordingly. Such a decision also allows the department to move on to other matters, rather than continuing to litigate an issue ad infinitum.

To summarize, de novo review of an application in the contested case process is required by law, is necessary to facilitate the role of the courts in reviewing agency actions as required by the APA, and ensures contested cases are decided efficiently and economically.[250]

[250] *Id.* (Citations omitted; emphasis in original).

Obviously, an agency FDO is not binding on this Court. This is not, however, simply a case of "the law is this because we (the MDEQ) say it is so," as Petitioners have suggested. The analysis quoted in its entirety above is thorough and well-reasoned, and cites throughout to the applicable provisions of the APA and to such relevant case law as exists. In the absence of any other legal authority directly on point, the Court adopts the reasoning of *Petition of Joseph Milauckas* and finds that the ALJ and the final decision-maker properly employed a de novo standard of review, that the ALJ properly admitted additional evidence and new proposals into evidence, and that the final decision-maker properly relied upon the new evidence and proposals in reaching his decision.

The Court notes that Petitioners have directed the Court to *In re 1987-88 Medical Doctor Provider Class Plan*[251] in support of their argument. The Michigan Court of Appeals in that case, however, explicitly noted that the particular appellate process at issue there was an "unusual appellate process" created by the Legislature specifically for use in conjunction with appeals under Part 5 of the Nonprofit Health Care Corporation Reform Act.[252] That case, therefore, is not relevant or helpful in determining the proper standard of review here.[253] Kennecott, likewise, has referred the Court to *Longo v McIlmurray.*[254] Once again, however, that case involved an appeal taken under rules that

[251] *In re 1987-88 Medical Doctor Provider Class Plan*, 203 Mich App 707; 514 NW2d 471 (1994).
[252] *Id.*, at 724.
[253] Petitioners also have cited to the case of *Sierra Club v MDEQ*, 277 Mich App 531; 747 NW2d 321 (2008) in support of their argument. The Court however
[254] *Longo v McIlmurray*, 115 Mich App 479; 321 NW2d 701 (1982).

were specifically promulgated to govern appeals from the Michigan Racing Commissioner's orders.[255] Thus, that case also is not relevant or helpful to the Court here.

The Court further notes that Petitioners have argued as a part of their challenge to the use of the de novo standard of review that the adoption of such a standard violates the requirement that the public have a voice in any permit process, and cites the case of *Sierra Club Mackinac Chapter v MDEQ*[256] in support of that proposition. In that case, however, the Court specifically found that ongoing public participation was required under an applicable federal statute. Petitioners here do not assert that this same federal statute is applicable to the present case. Furthermore, the Court in that case found the process lacking because no meaningful public review was provided for. In the present case, however, not only is an extensive public participation process provided for in Part 632 itself, but Petitioners took full advantage of that opportunity. Petitioners have not presented any authority that requires additional public participation beyond that provided for already in this case. Accordingly, this sub-argument is also unpersuasive.

4. Predetermined Outcome

Petitioners next assert that their due process rights were violated because the outcome of the contested case proceeding was predetermined, as evidenced by the events that occurred after the conclusion of the contested case hearing. The Court again disagrees.

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[255] *Id.*, at 483-484.
[256] *Sierra Club Mackinac chapter v MDEQ*, 277 Mich app 531; 747 NW2d 321 (2008).

The right to an unbiased and impartial decision-maker is a fundamental due process right.[257] This right is violated when the outcome of a case is prejudged.[258] Accordingly, where there is an intolerable risk of bias, that is to say a situation "where the probability of actual bias is too high to be constitutionally tolerable," an agency's decision must be reversed.[259]

Petitioners point to the fact that in October 2009, less than two weeks after the parties' exceptions to the PFD were filed, an MDEQ staff member apparently involved in the preparation of the FDO requested and received from MDEQ an email copy of the MDEQ's exceptions, that this individual did not request computerized copies of the other parties exceptions, and that the FDO ultimately adopted the proposed findings from the MDEQ's exceptions verbatim. Petitioners also point to the fact that the FDO was issued before the ALJ could issue a revised PFD on remand. Finally, Petitioners point to the timing of the FDO's issuance, only three days before a new Director was to be appointed to head the MDEQ. Petitioners assert that the confluence of these events leads to the "inescapable conclusion" that the outcome of the contested case proceeding was predetermined, or at the very least that there was an intolerable risk of bias based on these facts.

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[257] *By Lo Oil Co, supra*, at 29.
[258] *Spratt v DSS*, 169 Mich App 693, 699-700; 426 NW2d 780 (1988).
[259] *Id.*; See also *Utica Packing Co v Block*, 781 F2d 71, 78 (CA 6, 1986).

To resolve this argument, it is necessary to put these isolated facts into context. Pursuant to MCL 324.99903, the Governor had the authority to appoint a Director of the MDEQ.[260] Also pursuant to that statute, however, an acting MDEQ Director is barred from issuing an FDO in circumstances where his or her prior involvement in the application process poses a conflict of interest.[261]

The individual who was the acting Director during the period of the contested case hearings resigned his position effective January 4, 2010. Governor Jennifer Granholm appointed MDEQ employee Jim Sygo to serve as Interim Director until the agency was merged with the DNR under Executive Order 2009-45. Mr. Sygo, however, was the individual who had issued the Part 31 and Part 632 permits to Kennecott. Accordingly, Mr. Sygo delegated final decision-making authority to another MDEQ employee. That employee, nine days after his appointment as decision-maker in this matter and three days before the MDEQ and the DNR were to merge and a new Director was to be appointed, revoked the Order of Remand and issued the FDO. At the time the Order of Remand was revoked, the parties had already fully briefed the issue for consideration of which the matter had been remanded. Under these circumstances, without more, there is no basis for finding either that the outcome of the contested case proceeding was predetermined or that an intolerable risk of bias exists.

It is true that two weeks after the parties' exceptions were filed a request was made for a computerized copy of the MDEQ's exceptions, and that the proposed findings included in those exceptions were then subsequently adopted in the FDO. These facts standing alone, however, simply are not enough to indicate that the outcome of the

[260] MCL 324.99903(2).
[261] MCL 324.99903(7).

proceedings was preordained. Ultimately it was the appointed decision-maker who authored and issued the FDO, someone entirely different from the individual who requested the computerized copy of the exceptions, and there is absolutely no evidence on the record to indicate that the decision-maker was coerced in any manner to reach a specific result or to adopt the MDEQ's proposed findings.

It is also true that the final decision-maker vacated the agency's earlier Order of Remand and decided the question himself in the FDO. The issue for which the case had been remanded, however, was a legal issue rather than a factual issue, and no further fact-finding was done in connection with the remand. By the time the final decision-maker had been appointed, the parties had already submitted their briefs on the remanded issue, and the FDO had those documents available to him. In light of the fact that the final decision-maker's review of the PFD, the record, and any supplemental briefs or exceptions was *de novo*, and the fact that the final decision-maker had all of the necessary information available to him, he was equally as capable of reaching a final decision on that issue as was the ALJ. Moreover, Petitioners have not directed the Court to any evidence on the record that there was any ulterior motive for vacating the Order of Remand beyond the purely logical and judicially economical reason of avoiding unnecessary duplication of review. Accordingly, there is no basis for finding procedural error based on the vacation of the Order of Remand.

It is further true that the final decision-maker issued the FDO three days before a new Director was slated to take over the agency. Once again, however, there simply is nothing on the record that would suggest that his decision was coerced in any way or that he was acting in conformity with a preordained result. The Michigan Court of Appeals has held that:

> [A] proceeding before an administrative decision maker has a quality resembling that of a judicial proceeding. Therefore, just as a judge cannot be subjected to such scrutiny [regarding his deliberations] . . . so the integrity of the administrative process must be equally respected.[262]

While absolute proof of the existence of bias is not necessary to prevail on this issue, a party asserting the denial of its right to a fair and impartial decision-maker at the very least must show that the probability of actual bias is too high to be constitutionally tolerable.[263] Petitioners simply have not met that burden.

5. Failure to Review Record

Petitioners also assert that their due process rights were violated because the final decision-maker failed to review the entire record before issuing the FDO. Again, the Court disagrees.

MCL 24.285 provides in relevant part as follows:

> A decision or order shall not be made except upon consideration of the record as a whole or a portion of the record as may be cited by any party to the proceeding and as supported by and in accordance with the competent, material, and substantial evidence.[264]

Reflective of this Court Rule, the Michigan Court of Appeals has likewise held:

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[262] *Hicks v Dep't of Commerce*, 220 Mich App 501, 511; 560 NW2d 54 (1996) (Internal quotation marks and citation omitted).
[263] *Spratt, supra*; *Utica Packing Co, supra.*
[264] MCL 24.285.

> Whether an agency decision maker chooses to adjudicate a particular case by using the proposal for decision procedure or any other mechanism that involves the delegation of the taking of evidence, the agency's ultimate decision cannot be made without consideration of *all* the evidence, including evidence introduced before the fact finder. (Emphasis in original.[265]

Petitioners assert that the final decision-maker cannot possibly have reviewed the entire record before reaching his decision, given the voluminous record in this case, because the FDO was issued a mere nine days after Mr. Sygo delegated final decision-making authority to him. Thus, their sole evidence of wrong-doing is the temporal relationship between the delegation of authority and the issuance of the FDO.

In the FDO, however, the final decision-maker indicates that his decision *was* based on a review of the entire record. In the introduction he states that "[t]he decision in this case is based solely on the PFD, evidentiary record, and argument of the parties.[266] In the conclusion he reaffirms this assertion, stating:

> The final decision in this matter is based solely on the PFD, exhibits, transcripts, pleadings, and arguments. In consideration of the entire record in this matter, and based upon the Findings of Fact and Conclusions of Law, Kennecott is entitled to the permits issued by the [MDEQ] . . . . [267]

Once again the Court is mindful of the Michigan Court of Appeals' statement that:

> [A] proceeding before an administrative decision maker has a quality resembling that of a judicial proceeding. Therefore, just as a judge cannot be subjected to such scrutiny [regarding his deliberations] . . . so the integrity of the administrative process must be equally respected.[268]

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[265] *Hicks, supra*, at 508-509.
[266] Final Decision and Order, located at Tab 118, Bates No. 007399.
[267] *Id.*, at Bates No. 007419.
[268] *Hicks, supra*, at 511.

The Court is further mindful of the United States Supreme Court's admonishment that state administrators "are assumed to be men of conscience and intellectual discipline capable of judging a particular controversy fairly on the basis of its own circumstances."[269] Under the circumstances there is no basis for finding that the FDO was based on review of less than the full record.

6. **Exclusion of Evidence**

Petitioners next assert that the ALJ committed procedural error when he excluded Exhibit 11 of the de bene esse deposition of MDEQ's expert witness Dr. David Sainsbury. The Court disagrees.

"Absent an abuse of discretion, the decision of a hearing officer to refuse to admit evidence will not be disturbed on appeal."[270] "An abuse of discretion occurs when the decision results in an outcome falling outside the principled range of outcomes."[271]

Exhibit 11 was a file of documents produced by Dr. Sainsbury at his deposition, which documents constituted his complete file of documents in connection with Kennecott's Part 632 application and the MDEQ's request for Dr. Sainsbury to review that application.[272] Included among the documents was an e-mail that Dr. Sainsbury sent to a contact within Rio Tinto, Kennecott's parent company, which expressed concern regarding the stability of the crown pillar at the proposed mine and described Kennecott's

[269] *Withrow v Larkin*, 421 US 35, 55; 95 S Ct 1456; 43 L Ed 2d 712 (1975).
[270] *Tomczik v State Tenure Comm'n*, 175 Mich App 495, 502; 438 NW2d 642 (1989).
[271] *Woodward v Custer*, 476 Mich 545, 557; 719 NW2d 842 (2006).
[272] Tab 359, Bates Nos. 026510-12.

work as indefensible.[273] This email was sent contemporaneously with Dr. Sainsbury's final report to the MDEQ, which stated that he believed an 87.5 meter thick crown pillar would be stable.[274]

This document, obviously, has tremendous relevance to the credibility of Dr. Sainsbury's opinions on the stability of the proposed mine's crown pillar. Accordingly, at the contested case hearing, at the time Dr. Sainsbury's deposition was entered into the record, Petitioners sought also to introduce into evidence Exhibit 11.[275] Respondents challenged the admissibility of that exhibit on the grounds that it constituted hearsay, that there was a lack of foundation for the exhibit, and that Respondents had not had an opportunity cross-examine Dr. Sainsbury regarding all of the documents contained in that exhibit.[276] The ALJ sustained Respondents' objections and limited the admissibility of the exhibit to those documents within Dr. Sainsbury's file that were actually discussed at the deposition, on the ground that to do otherwise would be fundamentally unfair.[277]

Looking at the broader picture, the ALJ's basic decision to limit the admissibility of the documents within Exhibit 11 to those documents actually discussed at the deposition is well within the ALJ's discretion. Any document not discussed at the deposition would at the very least suffer from the flaw that Respondents could not cross-examine Dr. Sainsbury regarding that document. That is true even where Respondents could have chosen to raise the topic of the particular exhibit at the deposition and did not do so. Respondents were not required to discuss documents potentially harmful to their case that Petitioners chose not to discuss.

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[273] *Id.*, Bates Nos. 026390-93; Email attached to Petitioners' brief as Exhibit F.
[274] Tab 359, Bates Nos. 026384-85.
[275] Tab 680, Bates No. 052504.
[276] *Id.*, Bates No. 052506.
[277] *Id.*, Bates No. 052511.

More specifically, although the email to Dr. Sainsbury's contact is referenced in Dr. Sainsbury's deposition, and the date of the email and the reason for the email were discussed, the content of the email itself was never discussed or disclosed.[278] Accordingly, the particular email that Petitioners wished to have admitted via Exhibit 11, was properly excluded from evidence at the hearing.

7. **FDO's Findings of Fact**

Petitioners also assert that the FDO violated the APA and Petitioners' Due Process rights, because the factual findings contained therein were conclusory and incomplete. Again, the Court is not persuaded.

Pursuant to the APA, findings of fact in a final decision of an agency in a contested case:

> [S]hall be accompanied by a concise and explicit statement of the underlying facts supporting them. If a party submits proposed findings of fact that would control the decision or order, the decision or order shall include a ruling upon each proposed finding. Each conclusion of law shall be supported by authority or reasoned opinion.[279]

Moreover, an administrative agency's failure to make adequate findings of fact constitutes a Due Process violation.[280]

Michigan courts have provided a great deal of guidance as to what is required in order to comply with this requirement. It is clear that conclusory and unsupported findings are insufficient.[281] However, the purpose of an agency's findings of fact and

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[278] Tab 359, Bates Nos. 026390-93.
[279] MCL 24.285.
[280] *Thomas V Busch*, 7 Mich App 245, 254-255; 151 NW2d 391 (1967).
[281] *Consumers Power v Mich Public Svc Comm'n*, 78 Mich App 581, 585; 261 NW2d 10 (1977).

conclusions of law in a final decision is to facilitate appellate review by providing a precise statement of what evidence in the record supports the agency's decision.[282] To that end:

> The standard [for review of factual findings] is one of adequacy for review by the Court and for guidance to the parties. The standard does not require an artful presentation or an exhausting itemization of the underlying factors.[283]

An agency's decision need only be "adequate to allow for meaningful review and to enable [the reviewing court] to determine whether [the agency's decision] is authorized by law and supported by competent, material, and substantial evidence."[284] As the Michigan Supreme Court has explained:

> Courts are indulgent toward administrative action to the extent of affirming an order where the agency's path can be discerned even if the opinion leaves much to be desired.[285]

Further, under the APA an agency's final decision need only address those proposed findings of fact that would control the decision, and the Michigan Court of Appeals has recognized that certain factual findings can eliminate the need for the final decision-maker to address other proposed findings or issues raised by the parties.[286]

The findings of fact and conclusions of law contained in the FDO in this case (which largely adopt the findings of fact included in the PFD and then add to those findings), are extensive and detailed. To be sure, not every fact referenced by the ALJ or the final decision-maker is supported by a specific cite to the record. Further, in some

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[282] *Butcher v Dep't of Natural Resources*, 158 Mich App 704, 707; 405 NW2d 149 (1987); *Consumers Power, supra*, at 585.
[283] *Lansing School District v Mich Employment Relations Comm'n*, 117 Mich App 486, 492; 324 NW2d 62 (1982).
[284] *Gudeman v Dep't of Treasury*, unpublished per curiam opinion of the Michigan Court of Appeals, Docket No. 284749, decided December 17, 2009.
[285] *Viculin v dep't of Civil Svc*, 386 Mich 375, 406; 192 NW2d 449 (1971) (Internal citation omitted).
[286] *Dyer v Mich Dep't of State Police*, 119 Mich App 121, 26; 326 NW2d 447 (1982).

instances the findings of fact or conclusions of law are less detailed than might have been preferred. Overall, however, the FDO is adequate to allow for meaningful review and to allow the reviewing court to determine whether the MDEQ's decision is authorized by law and supported by competent, material, and substantial evidence. Moreover, the MDEQ's path and rationale can easily be discerned, and the findings taken as a whole certainly cannot be said to be merely conclusory or unsupported. Under these circumstances, the findings of fact in the FDO are sufficient to satisfy the requirements of the APA and the Due Process clause.

The Court notes that Petitioners have also asserted that the factual and legal conclusions contained in the PFD were improper, because those factual and legal conclusions are directly contradicted by the overwhelming preponderance of the evidence. Petitioners have not provided any real analysis of this alleged error, however, beyond merely asserting that the ALJ stated in the PFD that Petitioners failed to establish their prima facie case when in fact the ALJ's findings of fact in fact establish every element of Petitioners' prima facie case. It is not enough for a petitioner to announce a position and then leave it to the Court to unravel the legal basis for the claim.[287]

8. **Violation of the Fair and Just Treatment Clause**

Finally, Petitioners assert that by engaging in all of the procedural errors discussed above the FDO violated Petitioners rights under the Fair and Just Treatment Clause of the Michigan Constitution. There is simply no basis, however, for such a finding.

The Fair and Just Treatment clause provides that:

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[287] *Ward v Franks Nursery*, 186 Mich App 120, 129-130 (1990).

> The right of all individuals, firms, corporations and voluntary associations to fair and just treatment in the course of legislative and executive investigations and hearings shall not be infringed.[288]

This clause was a product of the McCarthy-era investigations and was "intended to protect against the excesses and abuses of Cold War legislative or executive investigations or hearings."[289] As such, the clause "clearly connotes some active conduct [on the part of the agency directed toward the person] during the 'course of 'a hearing or investigation."[290] Accordingly:

> An administrative agency's interpretation or implementation of a statutory provision can hardly amount to a violation of the 'fair and just treatment' clause simply because plaintiff disagrees with the agency's interpretation or implementation.[291]

Here, the actions of which Petitioners complain are simply the same procedural issues that they argue in their Due Process clause arguments. There is nothing about those claims of error that would seem to bring this case within the limited scope of the Fair and Just Treatment clause. Moreover, as discussed above, no procedural or evidentiary error occurred in this case. Accordingly, there was no violation of the Fair and Just Treatment clause.

C. Challenges to the Completeness of the Application:

Petitioners assert that the FDO is unlawful and must be set aside because the MDEQ's grant of the Part 632 permit was in violation of MCL 324.63205(11)-(12), because Kennecott's permit application did not meet all of the requirements set forth in Part 632.

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[288] Const 1963, art 1, § 17.
[289] *By-Lo, supra*, at 40.
[290] *Id.*, at 41.
[291] *Id.*

The Court notes that this argument is different than Petitioners' argument raised below but not raised here, that the MDEQ improperly found Kennecott's application to be administratively complete in violation of MCL 324.63205(4)-(5). The ALJ found that Petitioners lacked standing to challenge whether or not Kennecott's application was administratively complete, and Petitioners do not appear to challenge that ruling on appeal to this Court.

Instead, the challenges raised here are based on MCL 324.63205(11)-(12), which require the MDEQ to base its decision whether to grant or deny a permit application, in part, on whether the application complies with the various requirements set forth in Part 632. To a large extent, the same issues that gave rise to Petitioners' claim that the application was not administratively complete also are the basis of Petitioners' claims that the application did not comply with the requirements of Part 632. Nonetheless, the issue here is not a challenge to the administrative completeness pursuant to MCL 324.63205(4)-(5), but rather a challenge to the application's compliance with the requirements of Part 632 pursuant to MCL 324.63205(11)-(12). Accordingly, there is no issue of standing, and Petitioners' challenges to the completeness of Kennecott's Part 632 application are properly before this Court.

MCL 324.63205 sets out the application process for a Part 632 permit. Sub-section (2) of that statute sets forth the documentation that an applicant must submit in conjunction with his or her Part 632 permit application. That sub-section provides, in relevant part, as follows:

> (2) An application for a mining permit shall be submitted to the department in a format to be developed by the department. The application shall be accompanied by all of the following:

* * *

(b) An **environmental impact assessment** for the proposed mining operation that describes the natural and human-made features, including, but not limited to, flora, fauna, hydrology, geology, and geochemistry, and baseline conditions in the proposed mining area and the affected area that may be impacted by the mining, and the potential impacts on those features from the proposed mining operation. The environmental impact assessment shall define the affected area and shall address feasible and prudent alternatives.

(c) A **mining, reclamation, and environmental protection plan** for the proposed mining operation, including beneficiation operations, that will reasonably minimize the actual and potential adverse impacts on natural resources, the environment, and public health and safety within the mining area and the affected area. The plan shall address the unique issues associated with nonferrous metallic mining and shall include all of the following:

(i) A description of materials, methods, and techniques that will be utilized.

(ii) Information that demonstrates that all methods, materials, and techniques proposed to be utilized are capable of accomplishing their stated objectives in protecting the environment and public health, except that such information may not be required for methods, materials, and techniques that are widely used in mining or other industries and are generally accepted as effective. The required information may consist of results of actual testing, modeling, documentation by credible independent testing and certification organizations, or documented applications in similar uses and settings.

(iii) Plans and schedules for interim and final reclamation of the mining area following cessation of mining operations.

(iv) A description of the geochemistry of the ore, waste rock, overburden, peripheral rock, and tailings, including characterization of leachability and reactivity.

(v) Provisions for the prevention, control, and monitoring of acid-forming waste products and other waste products from the mining process so as to prevent leaching into groundwater or runoff into surface water.

(d) A **contingency plan** that includes an assessment of the risk to the environment or public health and safety associated with potential significant incidents or failures and describes the operator's notification and response plans. When the application is submitted to the department, the applicant shall provide a copy of the contingency plan to each emergency management coordinator having jurisdiction over the affected area.[292]

Sub-sections (11) and (12) of that statute set forth the grounds upon which the MDEQ must grant or deny a Part 632 permit:

(11) [. . .] [T]he department shall approve a mining permit if it determines both of the following:

(a) The permit application meets the requirements of this part.

(b) The proposed mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources, in accordance with part 17 of this act. In making this determination, the department shall take into account the extent to which other permit determinations afford protection to natural resources. For the purposes of this subsection, excavation and removal of nonferrous metallic minerals and of associated overburden and waste rock, in and of itself, does not constitute pollution, impairment, or destruction of those natural resources.

(12) The department shall deny a mining permit if it determines the requirements of subsection (11) have not been met.[293]

[292] MCL 324.63205(2) (Emphasis added).
[293] MCL 324.63205(11)-(12).

Petitioners' assert that the MDEQ violated MCL 324.63205(12) when it granted Kennecott's permit application, because Kennecott's environmental impact assessment, mining reclamation and environmental protection plan, and contingency plan each failed to comply with the requirements set forth in MCL 324.63205 and in Part 632 in general, and because the application failed to comply with various other Part 632 requirements.

1. Deficiencies in Kennecott's Environmental Impact Assessment

Petitioners assert that Kennecott's Environmental Impact Assessment ("EIA") failed to meet the requirements set forth in MCL 324.63205(2)(b), because the Assessment:

a. Improperly and too narrowly defined the affected area, and failed to include any assessment for areas beyond the footprint of the mining operation itself;

b. Failed to survey the flora and fauna over at least a two-year period;

c. Failed to assess Eagle Rock as a place of worship and to provide measures that would reasonably minimize the adverse impacts of mining on Eagle Rock; and

d. Failed to contain an analysis of the cumulative impact of the mining operation on the affected area.

a. Improperly and Too Narrowly Defined the Affected Area, and Failed to Include Any Assessment for Areas Beyond the Footprint of the Mining Operation Itself

MCL 324.63205(2)(b) requires that a Part 632 permit applicant provide an environmental impact assessment not only for the mining area itself, but also for the affected area that may be impacted by the mining. MCL 324.63201(b) defines the term "affected area," as used in Part 632, as:

> [A]n area outside of the mining area where the land surface, surface water, groundwater, or air resources are determined through an environmental impact assessment to be potentially affected by mining operations within the proposed mining area.[294]

Petitioners assert that Kennecott improperly determined that there would be no potential effects on any area outside of the mine footprint itself, and therefore improperly and too narrowly identified the "affected area" in its EIA and failed to provide an assessment in the EIA of the proper "affected area." The evidence set forth above in connection with Petitioners' evidentiary arguments, however, demonstrates that the mining operation will have a de minimus impact on the area outside the footprint of the mine itself.

With regard to pollution from particulate matter, Martin, Kish, and Depa each testified that even under conservative estimates that overestimate the amount of contaminants that will be produced by the mine, the mine's air emissions will be well below state and federal limits on air pollution.[295] Depa further testified that although particulate deposition will occur over a wide area, broader than merely the mine footprint, this deposition will be of no consequence because of the extremely low levels of concentrations being deposited even at the points of highest concentration.[296] He explained that the amount of copper and nickel that will be deposited as a result of mine emissions will be an order of magnitude less than the amounts of those substances already in the soil, and therefore that any impact, even at the points of highest concentration, will be de minimus if any at all.[297] He further advised that there will

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[294] MCL 324.63201(b).
[295] Testimony of Martin, Bates Nos. 053922-24; Testimony of Kish, Bates Nos. 054014-15; Testimony of Depa, Bates No. 054079.
[296] Testimony of Depa, Bates Nos. 054092-93.
[297] *Id.*, Bates No. 054098.

likewise be no impact on area waters from particulate deposition, even during times of heavy snowmelt, because even taking the total deposition amount for a twelve month period and assuming that all of the particulate matter ended up in the water, the water would still meet state water quality standards.[298] Kapustka confirmed Depa's analysis, stating that the projected concentrations of heavy metals are sufficiently low, even in the zones of maximum concentration, that even without accounting for such things as leaching, which will decrease the actual amount of the metals in the soil and water, the concentrations of metals emitted by the mine will be below the capacity for analytical chemistry to detect the emissions.[299] Accordingly, he stated that he did not believe that would be any substantial impact from particulate deposition beyond the mine footprint.[300] Adams likewise testified that pollutants in area streams as a result of mine operations will be in concentrations below the Michigan standards, even at the point of highest concentration and even in times of pulses in metal concentrations due to snowmelt.[301]

With regard to fragmentation and potential loss of diversity of flora and fauna, Kailing testified that the area is already highly fragmented due to historic logging activities, and Koss testified that no wildlife would be affected by the placement of the mine because they would simply go around the relatively small mining area.[302] Kailing also testified that the mine will result only in a temporary relocation of any wildlife that populate the mine footprint to other adjacent, similar habitats, of which there are many.[303]

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[298] *Id.*, Bates Nos. 054091-92, 054109.
[299] Testimony of Kapustka, Bates Nos. 055474, 055822, 055834.
[300] *Id.*, Bates No. 055876.
[301] Testimony of Adams, Bates Nos. 055932, 055936, 055937, 055950, 055982, 055987, 055991.
[302] Testimony of Kailing, Bates Nos. 055387-88; Testimony of Koss, Bates Nos. 056925, 056927.
[303] Testimony of Kailing, Bates Nos. 055349, 055390-93, 055405, 055407.

Likewise Workman testified that the displacement of wildlife from the mine footprint will not have any effect on the streams in the region and their aquatic species because displacement already occurs in the area on a regular basis due to logging activities.[304]

With regard to noise pollution, Arlaud testified that even at its loudest point, noise from blasting will be at the level lower than that of spoken conversation at the edge of the mine footprint.[305] Kailing stated that noise pollution will not have any substantial impact on area wildlife because of the various measures that Kennecott will be taking to prevent or lessen noise pollution, and because of the existence of natural sound buffers such as trees and shrubbery.[306]

As to road dust and road traffic, Martin and Kailing testified that the road dust situation will be no worse than it currently is, and possibly will actually be improved from its current situation, because Kennecott will be taking dust control measures, while no such measures are currently undertaken.[307] Kailing further testified that road use associated with the mine will not have any real impact on wildlife because the road is already graded weekly and well-used.[308]

With regard to the effects of blasting, Arlaud testified categorically that the blasting will have no effect on the fish in the Salmon Trout River, because the blasting energy generated at the mine will be well below the level that would be harmful to them.[309]

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[304] Testimony of Workman, Bates Nos. 055750-51.
[305] Testimony of Arlaud, 058427, 058438.
[306] Testimony of Kailing, Bates No. 058428.
[307] Testimony of Martin, Bates Nos. 053909, 053925, 053928; Testimony of Kailing, Bates Nos. 055404-05.
[308] Testimony of Kailing, Bates Nos. 055394-95.
[309] Testimony of Arlaud, bates Nos. 058425-26.

Based on the above, Kailing stated categorically that the impacts on wildlife from the construction and operation of the mine would effectively be limited to the mine's footprint, and that any impact outside of the footprint would be minimal.[310]

With regard to the effects of a groundwater table drawdown, all parties agree that some degree of a drawdown will occur. Respondents presented testimony, however, that none of the wetland types in the area would suffer any adverse affect from a groundwater draw down.[311] Respondents further presented testimony that any flow change to the Salmon Trout River would at most be just .0006 of a foot decrease, while the East Branch of the Salmon Trout River would actually see a .0001 of a foot increase due to the influx of water from the Wastewater Treatment Plant.[312]

With regard to ARD, Respondents presented evidence that, in addition to neutralizing agents naturally present in the area, effective measures are in place to prevent or control any ARD that might be generated either during the mining operation or after mining is completed.[313]

In light of the above, while it is clear that the mining operation will have some effects outside the boundaries of the mine footprint, the evidence demonstrates that any such effects will be de minimus. Accordingly, Kennecott properly determined that there will be no "affected area" outside of the mine footprint, and properly omitted the assessment of those areas outside the mine footprint from its EIA.

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[310] Testimony of Kailing, Bases Nos. 055349, 055406-07.
[311] Testimony of Tilton, Bates Nos. 055490-91, 055546.
[312] Testimony of Wiitala, Bates Nos. 055140-41.
[313] Testimony of Logsdon, Bates Nos. 054155-56, 054160, 054221, 054223, 054288-89; Testimony of Eary, Bates Nos. 057017-18, 057024, 057025, 057027.

b. Failed to Survey the Flora and Fauna over at Least a Two-Year Period

MCL 324.63205(2)(b) requires that a Part 632 permit applicant provide an environmental impact assessment for the proposed mining operation "that describes the natural and human-made features, including, but not limited to, flora, fauna . . . and baseline conditions in the proposed mining area and the affected area . . . ." Administrative Rule R 425.202(2)(y) provides that for flora and fauna this analysis must include an assessment of "species and abundance of aquatic and terrestrial flora and fauna, and predicted variations in their occurrence based on at least 2 years of relevant information."

Petitioners assert that pursuant to the above authority Kennecott was required to conduct an environmental impact assessment over at least a continuous 24-month period. Because Kennecott did not do so, Petitioners assert that Kennecott failed to comply with the requirements of MCL 324.63205(2)(b) and R 425.202(2)(y), and therefore that the MDEQ erred, pursuant to MCL 324.63205(12), when it granted Kennecott's application for a mining permit. Petitioners, however, have misinterpreted this authority.

MCL 324.63205(2)(b) does not anywhere state that it requires at least 24 months of continuous study. Rather, it states only that the study of flora and fauna contained in the EIA must be based on "at least 2 years" of relevant information. Moreover, Respondent's witness Peter Kailing, the wildlife biologist who conducted the wildlife studies for Kennecott, testified that it is not standard in the industry to conduct twelve-

month studies.[314] Rather, it is the practice to target these studies to breeding and migratory seasons.[315] Further, Kailing advised that he was not aware of any authority that recommends doing wildlife surveys all twelve months out of the year.[316]

This testimony was confirmed by MDEQ employee and wildlife biology expert Michael Koss. Koss testified that the baseline data collected by Kennecott regarding the flora and fauna in the region was sufficient to comply with the requirements of Part 632 and its associated administrative rules.[317] He further advised the Court that the surveys that were done by Kennecott were performed at the appropriate times of the year, i.e. at those times when wildlife could reasonably be expected to be active.[318] Koss explicitly stated that in general the winter months are not a good time to conduct wildlife surveys in Michigan, because a lot of species in the area migrate or are dormant during the winter months.[319] Moreover he explained that there was no need to conduct wildlife surveys in the winter because those species active in winter are also active at other times of the year. Finally, Koss informed the Court that the flora and fauna analysis contained in Kennecott's EIA was much more comprehensive and much more scientifically based than any EIA he'd ever seen before.[320]

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[314] Testimony of Kailing, Bates No. 055359.
[315] *Id.*
[316] *Id.*
[317] Testimony of Koss, Bates Nos. 056906. 056967, 056969.
[318] *Id.*, Bates No. 056907.
[319] *Id.*, Bates Nos. 056906-07.
[320] *Id.*, Bates Nos. 056942-43, 056964.

In light of the above, and in light of the fact that Kennecott conducted surveys on approximately 1,360 acres in and around the mine area over the course of three consecutive years,[321] the Court finds that Kennecott's EIA flora and fauna survey complied with the requirements of MCL 324.63205(2)(b) and R 425.202(2)(b).

c. Failed to Asses Eagle Rock as a Place of Worship and to Provide Measures that Would Reasonably Minimize the Adverse Impacts of Mining.

MCL 324.63205(2)(b) requires that a Part 632 permit applicant provide an environmental impact assessment for the proposed mining operation "that describes the natural and human-made features . . . in the proposed mining area and the affected area . . ." Administrative Rule R 425.202(1) expands on this requirement, requiring that the EIA include, among other things, for each applicable natural and human-made feature, an identification and description of the feature as it currently exists, an analysis of the potential impacts of the proposed mining activities on the feature, a reference to the measures proposed to be taken to reduce or mitigate the potential impacts on the feature, and an analysis of feasible and prudent alternatives. Administrative Rule R 425.202(2)(p) provides that the natural and human-made conditions and features to which the above statute and administrative rule apply include:

> Residential dwellings, places of business, places of worship, schools, hospitals, government buildings, or other buildings used for human occupancy all or part of the year.

Shortly before the administrative hearing, Petitioners filed a witness list that included the names of numerous witnesses who Petitioners indicated would be called to testify regarding such matters as treaty rights and the cultural and religious significance

[321] Testimony of Kailing, Bates Nos. 055346, 055406.

and use of Eagle Rock.[322] Respondents immediately filed a Motion to Exclude Claims and Evidence Regarding Cultural Resources and Treaty Rights. In this motion and the brief filed in support of this motion Respondents noted that Petitioners' witness list made it clear that Petitioners planned to raise claims and present substantial evidence "related to alleged violations of [the KBIC's} treaty rights and alleged harm to its cultural and **religious** resources as a result of Kennecott's permitted mining activity."[323] Respondents argued various grounds under which they asserted such evidence was not properly before the tribunal and should therefore be excluded.

Petitioners filed a response to Respondents' motion and brief, in which Petitioners explicitly stated as follows:

> Petitioners intend to call witnesses from the [KBIC] **. . . to establish standing and to establish why one of the [P]etitioners, [the KBIC], is an "affected federally recognized Indian tribe" that is entitled to notice under Part 632 of the application and this contested case. As such, none of the witnesses identified by [P]etitioners will seek to assert new "claims" as referred to by Kennecott.**[324]

Based on Petitioners' response, the ALJ determined that the motion was moot, and therefore denied Respondents' motion. The ALJ explained as follows:

> [The KBIC's] response to the motion essentially renders it moot. The response disavows any intention to present any witness or evidence relative to treaty rights of cultural or resource [sic; religious?] issues and that the identified witnesses will be presented for the sole purpose of developing a record concerning [the KBIC's] standing in this matter. Therefore, the motion is **DENIED** without prejudice based on counsel's

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[322] Petitioners' Witness List, located at Tab 35, Bates Nos. 00831-32.
[323] Brief in Support of Kennecott Eagle Mineral Company's Motion to Exclude KBIC's Claims and Evidence Regarding Cultural Resources and Treaty Rights, located at Tab 40, Bates No.001056 (Emphasis added).
[324] Petitioners' Response to Kennecott's Motion to Exclude Claims and Evidence Regarding Cultural Resources and Treaty Rights Regarding Part 632 Contested Case, located at Tab 50, Bates No. 002104 (Emphasis added).

> representations. In the event that such evidence which [Kennecott] asks this Tribunal to exclude does surface, the matter may be revisited by renewal of this motion or objection during the hearing.[325]

Notwithstanding this ruling, at the hearing Petitioners sought to present testimony regarding the religious significance and use of Eagle Rock by the KBIC. Respondents renewed their objections, but the ALJ opted to allow the testimony to be presented, taking the question under advisement. Subsequently, the ALJ relied on this testimony and found that Kennecott had failed to assess Eagle Rock as a place of worship in its EIA and to provide measures that would reasonably minimize the adverse effects of mining on Eagle Rock. The ALJ accordingly found that the MDEQ had improperly granted Kennecott the Part 632 permit.[326] The final decision-maker, however, reversed this ruling, finding that based on Petitioners' response to Respondents' motion to exclude:

> The testimony concerning the spiritual significance of Eagle Rock to members of [the KBIC] and treaty rights is admissible only as it pertains to that entity's standing to challenge the permits at issue in this case. More importantly, the effect of the stipulation precludes any consideration of Eagle Rock as a place of worship or treaty rights, rendering the recommendation in the PFD invalid.[327]

Accordingly, the final decision-maker found that Kennecott was not required to assess Eagle rock as a place of worship or to provide measures that would reasonably minimize the adverse effects of mining on Eagle Rock, and therefore that the MDEQ had not erred in granting a permit without requiring Kennecott to do those things in its EIA.[328]

The final decision-maker further set forth three additional reasons on the basis of which he found that Kennecott was not required to consider Eagle Rock's religious significance and use in its EIA:

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[325] Order Addressing Various Pending Motions, located at Tab61, Bates No. 002252 (Emphasis in original).
[326] Proposal for Decision, located at Tab 699, Bates No. 005412.
[327] FDO, located at Tab 118, Bates No. 007402.
[328] *Id.*

1. Because Part 632 is a resource-protection statute, and any purported impact to Eagle Rock as a place of worship is outside the regulatory reach of Part 632.

2. Because Eagle Rock does not fall within the definition of a "place of worship" for purposes of the EIA; and

3. Because this question was controlled by the lease signed between the MDEQ and Kennecott, which lease was previously affirmed by the Ingham County Circuit Court, and therefore could not be collaterally attacked in the Part 632 contested case hearing;

Petitioner now challenges each of these four reasons.

1. Stipulation:

Petitioners argue that they never stipulated or agreed to exclude testimony relating to the religious significance of Eagle Rock. With regard to stipulations, the Michigan Supreme Court has made the binding nature of stipulations crystal clear:

> To the bench, the bar, and administrative agencies, be it known herefrom that the practice of submission of questions to any adjudicating forum, judicial or quasi-judicial on stipulation of fact, is praiseworthy in proper cases. It eliminates costly and time consuming hearings. It narrows and delineates issues. **But once stipulations have been received and approved they are sacrosanct. Neither a hearing officer nor a judge may thereafter alter them.** This hold requires no supporting citation. The necessity of the rule is apparent. A party must be able to rest secure on the premise that the stipulated facts and stipulated ultimate conclusionary facts as accepted will be those upon which adjudication is based. Any deviation therefrom results in a denial of due process for the obvious reason that both parties by accepting the stipulation have been foreclosed from making any testimonial or other evidentiary record.[329]

Looking closely at Petitioners' response to Respondents' motion, it is true that Petitioners do not explicitly state that they will not be presenting evidence regarding the religious significance of Eagle Rock. Rather, they state only that they will not be calling witnesses "for the purposes of establishing that any portion of the mining area is listed on

[329] *Dana Corp v Appeal Bd of Mich Employment Sec Comm'n*, 371 Mich 107, 110; 123 NW2d 277 (1963) (Emphasis added).

a register of historic sites . . . ."[330] Petitioners then go on to state, as quoted above, that they will be calling witnesses from the KBIC "to establish standing and to establish why . . . [the KBIC] is 'an affected federally recognized Indian tribe' that is entitled to notice under Part 632 . . . ."[331] Petitioners then further state that "[a]s such, none of the witnesses identified by petitioners will seek to assert new 'claims' as referred to by Kennecott."[332] Kennecott's motion clearly and unequivocally referred in its motion and brief to the religious significance of Eagle Rock as one of the new "claims" that Petitioners disavowed in their response.[333]

Petitioners note that they stated unequivocally in their portion of the parties' Joint Pre-Hearing Statement that one of the issues they intended to raise at the hearing was the religious significance of Eagle Rock. They further assert that because counsel for Respondents signed that Joint Pre-Hearing Statement, that even if Petitioners could somehow be found to have "stipulated" not to raise that issue, they and Respondents disavowed that stipulation by signing the Joint Pre-Hearing Statement. The fact that counsel for Respondents signed the Joint Pre-Hearing Statement, however, does nothing to change the fact that the stipulation, once entered into, was "sacrosanct." Moreover, in light of the ALJ's statement in his Order denying Respondents' Motion to Exclude that should Petitioners attempt to introduce testimony in violation of their stipulation Respondents were entitled to renew their motion and their objections, Respondents were

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[330] Petitioners' Response to Kennecott's Motion to Exclude Claims and Evidence Regarding Cultural Resources and Treaty Rights Regarding Part 632 Contested Case, Bates No. 002104.
[331] *Id.*
[332] *Id.*
[333] Kennecott Eagle Mineral Company's Motion to Exclude claims and Evidence Regarding Cultural Resources and Treaty Rights, located at Tab 40, Bates No. 001054; Brief in Support of Kennecott Eagle Mineral Company's Motion to Exclude, Bates Nos. 001056, 001059-62, 001066-67.

justified in believing that regardless of what Petitioners asserted in the Joint Pre-Trial Statement, no evidence regarding Eagle Rock as a place of religious significance and use would be permitted at the hearing.

Under these circumstances, and in light of the clear directive from the Michigan Supreme Court set forth in *Dana Corp*, *supra*, Petitioners were precluded from raising the issue of the religious significance and use of Eagle Rock and Kennecott's failure to address that issue in its EIA at the hearing.. Accordingly, the final decision-maker properly reversed the ALJ's ruling on this point, and properly found that Kennecott was not required to address the question of Eagle Rock as a place of worship in its EIA.

2. Outside the Regulatory Reach of Part 632:

Petitioners also argue that the impact of the mining operation on Eagle Rock as a place of worship is not outside of the regulatory reach of Part 632, and that the final decision-maker erred in so finding. This Court disagrees.

The Legislature enacted Part 632 in order to allow the State to reap the economic benefits of nonferrous metallic mineral mining while ensuring the preservation of the State's natural resources and environment.[334] In so doing, the Legislature expressly adopted the Michigan Environmental Protection Act ("MEPA") standard as Part 632's substantive permitting standard. Thus, a mining permit under Part 632 shall be approved if the permit application meets the requirements of Part 632 and if:

> The proposed mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources, n accordance with [MEPA].[335]

[334] MCL 324.63202.
[335] MCL 324.63205(11).

This is the only substantive standard contained in Part 632, and there is no mention in this standard of cultural or religious resources. Moreover, in connection with this standard the Michigan Supreme Court has explicitly held that "social and cultural environments are matters not within the purview of the MEPA and outside its legislative intent."[336]

The MDEQ itself – the agency that helped draft Part 632 and that is charged with implementing Part 632 – has found that Part 632 does not require a permit applicant to include in its EIA an assessment of, or a provision of measures to reasonably minimize the effects on, any features listed in Rule 405.202 that do not implicate the resource protection purposes of Part 632. "The construction given to a statute by those charged with the duty of executing it is always entitled to the most respectful consideration and ought not to be overruled without cogent reasons."[337] While these constructions are not binding on the courts:

> "[T]he practical construction given to doubtful or obscure laws in their administration by public officials and departments with a duty to perform under them is taken note of by the courts as an aiding element to be given weight in construing such laws."[338]

This is especially true with regard to the MDEQ's interpretation of the Administrative Rules that the MDEQ itself promulgated in order to implement Part 632:

> [I]n the situation in which the meaning of an agency's rule is at issue, the agency as the author of the rule is in a superior position as to the proper interpretation of the rule.[339]

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[336] *Poletown Neighborhood Council v City of Detroit*, 410 Mich 616, 635; 304 NW2d 455 (1981); overruled on other grounds in *County of Wayne v Hathcock*, 471 Mich 445 (2004).
[337] *In re Complaint of Rovas Against SBC Michigan*, 482 Mich 90, 103; 754 NW2d 259 (2008).
[338] *Id.*
[339] LeDuc, *Michigan Administrative Law* (2001 rev vol), § 9:42, p 676.

The statute does not require that an applicant for a Part 632 permit include in its EIA an assessment or a presentation of measures that would reasonably minimize the impacts of the mining operation on any feature. Instead, it merely requires a description in the EIA of the features that may be impacted by the mining operation and the potential impacts on those features.[340] Only the Administrative Rules promulgated by the MDEQ in order to implement Part 632 contains such a requirement.[341] Under these circumstances, where the MDEQ is interpreting its own rules, and where the MDEQ's interpretation does not conflict with the spirit and purpose of the statute that those rules were promulgated to implement, the Court finds the MDEQ's interpretation persuasive.

3. Not Within the Definition of "Place of Worship":

Petitioners additionally argue that the final decision-maker improperly found that Eagle Rock does not fall within the definition of "place of worship" as that definition is used in Part 632 and its related administrative rules. Again, the Court disagrees.

Administrative Rule R 425.202(1) provides that the EIA "shall include, but is not limited to . . . ." R 425. 202(2) then provides a list of various features that must be included in the EIA. Of relevance here, subsection (p) lists the following:

> (p) Residential dwellings, places of business, **places of worship**, schools, hospitals, government buildings, or other buildings used for human occupancy all or part of the year.[342]

The ALJ found that Eagle Rock was a "place of worship" within the meaning of R 425.202(2)(p), and that Kennecott was therefore required to include consideration of Eagle Rock as a place of worship in its EIA but had not done so. The final decision-maker reversed that decision.

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[340] MCL 324.63205(2)(b).
[341] R 405.202.
[342] R 405.202(2)(p).

This issue turns on the proper interpretation of R 425.202. The Court's objective in interpreting a statute is to ascertain and give effect to the Legislature's intent.[343] In this regard, when a statute is clear and unambiguous, a court must assume that the Legislature intended its plain meaning and must enforce the statute as written.[344] A court "may not read into a statute or rule that which is not within the manifest intention of the Legislature as gathered from the statute or rule itself."[345] It is only when the statutory language is ambiguous that a court is permitted to look beyond the statute to determine the Legislature's intent.[346] A provision in a statute is ambiguous only if it irreconcilably conflicts with another provision or when it is equally susceptible to more than a single meaning.[347] A provision is *not* ambiguous merely because a reviewing court questions whether the drafter intended the consequences of the language under review.[348]

Moreover, a court must assume that every word has some meaning when applying the Legislature's intent, and must give effect to every provision if possible.[349] In so doing, a court must give words their plain and ordinary meaning unless the words are otherwise defined by the Legislature.[350] Finally, statutory language should be construed reasonably, keeping in mind the purpose of the statute.[351] A court must not consider a statute's language in isolation, but rather must consider each word and phrase in light of its placement and purpose within the statutory scheme.[352] Provisions must be read in the

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[343] *Casco Twp, supra*, at 390.
[344] *Id.* at 390.
[345] *United Parcel Service, Inc v Bureau of Safety and Regulation*, 277 Mich App 192, 202; 745 NW2d 125 (2007).
[346] *Id.*
[347] *Lansing Mayor v Pub Service Comm*, 470 Mich 154, 166; 680 NW2D 840 (2004).
[348] *City of Romulus v MDEQ*, 260 Mich App 54, 65; 678 NW2d 444 (2003).
[349] *Danse Corp v Madison Heights*, 466 Mich 175, 182; 644 NW2d 721 (2002).
[350] *Ford Motor Co v Woodhaven*, 475 Mich 425, 438-439; 716 NW2d 247 (2006).
[351] *Walters v Leech*, 279 Mich App 707, 709; 761 NW2d 143 (2008).
[352] *Herman v Berrien Co*, 481 Mich 352, 366; 750 NW2d 570 (2008).

context of the entire statute.[353] In this regard, a court must take care not to render any portions of the statute meaningless, because a court cannot assume that the legislature intended to do a useless thing.[354]

Petitioners assert that the term "places of worship" is not ambiguous and, therefore, that the Court must give the term its plain and ordinary meaning. Because the rule does not define the term, Petitioners point to various dictionary definitions that ascribe to the term "place" a much broader meaning than merely a building. As the Michigan Supreme Court has noted, however, under the doctrine of *noscitur a sociis* the "meaning of statutory language, plain or not, depends on context."[355] Thus, "a word or phrase is given meaning by its context or setting," and, "as a general matter, words and clauses will not be divorced from those which precede and those which follow."[356] When construing a series of terms a Court must be guided by the principle that "words grouped in a list should be given related meaning."[357]

The purpose of Part 632, which R 425.202 was promulgated to implement, is to assure that the environment, natural resources, and public health and welfare are adequately protected.[358] Read in that context, and considering the other terms that precede and follow the term "places of worship," it is readily apparent that the MDEQ's intent in including subsection (p) among the features to be considered in an EIA was to ensure the public health and welfare of those individuals who have reason to be located within a building in or near the mining area, whether that be from injury from the

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[353] *Macomb Co Prosecutor v Murphy*, 464 Mich 149, 159; 627 NW2d 247 (2001).
[354] *People v Pfaffle*, 246 Mich App 282, 296; 632 NW2d 162 (2001).
[355] *Griffith v State Farm Mutual Auto Ins Co*, 472 Mich 521, 533; 697 NW2d 895 (2005) (internal citations omitted).
[356] *Id.* (internal citations omitted).
[357] *Id.* (Internal citations omitted).
[358] MCL 324.63202(e).

blasting, harm from the increase in pollutants in the air, or any other danger. This is particularly clear when it is recalled that pursuant to *Poletown Neighborhood Council, supra*, social and cultural environments are matters not within the purview of Part 632 and are outside its legislative intent.[359] Furthermore, looking at the common link between the features listed in subsection (p), all are buildings. The term "places of worship," therefore, also is properly interpreted to refer to buildings.

Petitioners also rely on the last antecedent rule, which provides that a modifying clause is confined solely to the last antecedent.[360] Under this rule, Petitioners argue that the phrase "or other buildings used for human occupancy" applies only to the immediately preceding phrase "government buildings," and not to the entire list of features. Accordingly, Petitioners assert that it is not necessary for "places of worship" to be buildings in order to fall within subsection (p). The Michigan Supreme Court, however, has explicitly held that the last antecedent rule does not apply where the modifying clause is set off by a punctuation mark such as a comma.[361] The phrase "or other buildings used for human occupancy" in subsection (p) is set off by a comma from the term "government buildings." Therefore the last antecedent rule does not apply.

Petitioners additionally argue that R 405.202(2) is merely an illustrative list and not a limitation on the scope of conditions and features that must be assessed in the EIA. Petitioners further point to the language in R 405 202(1), which discusses the basic contents of the EIA and which states that the EIA "shall include, but is not limited to . . ." the features listed in the rule as additional support for this argument. The Michigan

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[359] *Poletown Neighborhood Council, supra.*
[360] *Cameron v Auto Club Ins Ass'n*, 476 Mich 55, 71; 718 NW2d 784 (2006); reversed on other grounds in *Regents of Univ of Mich v Titan Ins Co*, 487 Mich 289 (2010).
[361] *Id.*

Supreme Court, however, has held that the doctrine of *ejusdem generic* applies to such language, stating that "[w]here specific words follow general ones, the doctrine of ejusdem generic restricts application of the general term to things that are similar to those enumerated," because "if the general term was given its full and natural meaning, it would include the objects designated by the specific words, making the latter superfluous."[362]

For each of these reasons, the Court is not persuaded that the FDO erred in finding that Eagle Rock was not a "place of worship" that must be considered by Kennecott in its EIA.

4. Collateral Attack on Lease:

Finally, Petitioners assert that the lease signed between the MDEQ and Kennecott is irrelevant to the question of whether or not Kennecott was required to consider Eagle Rock as a place of worship in its EIA. The Court agrees.

The previous case between these parties challenging the MDEQ's lease of State-owned land to Kennecott for the purpose of constructing a portal and above-ground facilities for the proposed mine focused on the agency's right to lease the land for the stated purposes. In the present argument Petitioners are not asserting that the MDEQ erred in allowing Kennecott to use the land for Kennecott's stated purpose. Rather, Petitioners are arguing that the MDEQ erred in not requiring Kennecott to assess Eagle Rock in its EIA as a place of worship. Accordingly, Petitioners' argument here does not constitute an improper collateral attack on the lease. This fact is irrelevant, however, in

[362] *Belanger v Warren Consolidated School District*, 432 Mich 575, 583-584; 443 NW2d 372 (1989).

light of the above analysis, which demonstrates that Kennecott was not required to assess Eagle Rock in its EIA as a place of worship or to provide measures that would reasonably minimize the adverse impacts of mining on Eagle Rock.

The Court notes that Petitioners have also argued that Kennecott was required to include an analysis of Eagle Rock in its EIA even if Eagle Rock does not constitute a "place of worship," because MCL 324.63205(2)(b) requires a permit applicant to assess impacts on "natural and human-made features, including but not limited to . . . hydrology, geology, and geochemistry . . . ." Petitioners note, as the Court does as well, that Eagle Rock is unquestionably a "natural feature" that will potentially be impacted by the mining operation. Petitioners then assert that because Kennecott did not include an assessment of Eagle Rock in its EIA on even this limited ground, the MDEQ erred in granting Kennecott the mining permit. Kennecott, however, *did* consider Eagle Rock in its EIA. Kennecott specifically conducted an archeological survey of the area, including Eagle Rock, and found that there were no indications that Eagle Rock constituted a cultural resource.[363] Moreover, while not explicitly referred to, clearly Eagle Rock was among the areas covered in the EIA's environmental assessment. Accordingly, this argument also does not provide a basis for reversal of the FDO.

d. Failed to contain an analysis of the cumulative impact of the mining operation on the affected area.

MCL 324.63205(2)(b) requires that a Part 632 permit applicant provide an environmental impact assessment for the proposed mining operation "that describes the natural and human-made features . . . in the proposed mining area and the affected area . .

[363] Environmental Impact Assessment, located at Tab 135, Bates No. 009686.

. ." Administrative Rule R 425.202(1) expands on this requirement, requiring that the EIA include, among other things, for each applicable natural and human-made feature:

> An analysis of the potential cumulative impacts on each of the conditions or features . . . within the mining area and the affected area from all proposed mining activities and through all processes or mechanisms. The analysis shall consider additive effects . . . .[364]

Petitioners assert that Kennecott failed to include any cumulative impact analysis in its EIA, and that therefore the MDEQ violated MCL 324.63205(12) in granting Kennecott the requested mining permit. The Court disagrees.

Petitioners' point to the fact that their witness, Dr. David Flaspohler testified at length regarding cumulative impact analyses and provided illustrations of how he believed such analyses should work.[365] Petitioners also put great emphasis on the fact that Kennecott's own witness, Dr. Lawrence Kapustka, also testified at some length regarding what components he believed should be included in a cumulative impact analysis.[366]

Petitioners ignore, however, the fact that Kapustka also stated that he believed those components were provided by Kennecott in its permit application.[367] They further discount or ignore the testimony of Kennecott's witness, Peter Kailing, who testified that the cumulative impact of multiple stressors is very difficult to measure, that there is no established protocol for evaluating the effect of multiple stressors, at least with regard to wildlife, and that Kennecott followed the standard method of assessing cumulative impacts in its EIA.[368]

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[364] R 405.202(1)(b).
[365] Testimony of Flaspohler, Bates Nos. 051390-95.
[366] Testimony of Kapustka, Bates Nos. 055875-81.
[367] *Id.*, at Bates No. 055877.
[368] Testimony of Kailing, Bates Nos. 055401-03.

Moreover, Petitioners ignore once again the legal principals that:

> The construction given to a statute by those charged with the duty of executing it is always entitled to the most respectful consideration and ought not to be overruled without cogent reasons,"[369]

and that:

> [I]n the situation in which the meaning of an agency's rule is at issue, the agency as the author of the rule is in a superior position as to the proper interpretation of the rule.[370]

Here, the Statute governing the inclusion of an EIA in a permit application itself does not require that such EIA must include a cumulative impact analysis. Only the Administrative Rules promulgated by the MDEQ in order to implement Part 632 contains such a requirement.[371] The MDEQ, through the ALJ and the final decision-maker, found that such analysis as Kennecott included in its EIA was sufficient to meet the statutory requirements. Under these circumstances, where the MDEQ is interpreting its own rules, and where the MDEQ's interpretation does not conflict with the spirit and purpose of the statute that those rules were promulgated to implement, the Court finds the MDEQ's interpretation persuasive.

In light of the above analysis, the Court finds that Kennecott's EIA satisfied the requirements set forth in MCL 324.63205(2)(b).

2. Deficiencies in Kennecott's Mining Reclamation and Environmental Protection Plan

Petitioners assert that Kennecott's Mining Reclamation and Environmental Protection Plan failed to meet the requirements set forth in MCL 324.63205(2)(c), because the plan:

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[369] *In re Complaint of Rovas Against SBC Michigan*, 482 Mich 90, 103; 754 NW2d 259 (2008).
[370] LeDuc, *Michigan Administrative Law* (2001 rev vol), § 9:42, p 676.
[371] R 405.202(1)(b).

a. Improperly and too narrowly defined the affected area, and failed to include any plan for areas beyond the footprint of the mining operation itself;

b. Failed to reasonably minimize the adverse impacts on Eagle Rock;

c. Failed to include provisions for the prevention, control, and monitoring of acid-forming waste products to prevent runoff into surface water; and

d. Failed to include information demonstrating that the proposed materials, methods, and techniques proposed to be used are capable of accomplishing their stated objectives in protecting the environment and the public health.

a. Improperly and Too Narrowly Defined the Affected Area, and Failed to Include any Plan for Areas Beyond the Footprint of the Mining Operation Itself.

As set forth above, MCL 324.63205(2)(c) provides that an application for a mining permit pursuant to Part 632 must include a mining, reclamation, and environmental protection plan covering both the mining area and the affected area. Petitioners assert that the FDO improperly found that Kennecott's mining, reclamation and environmental protection plan was complete, because that plan did not include any plan for any area outside the area of the mine's footprint itself. For the same reason that Petitioners' argument regarding the proper scope of the EIA lacked merit, this argument also is baseless. In short, the evidence on the record indicates that any impact outside of the mine's footprint will be de minimus. Accordingly, there is no "affected area" outside the mine footprint to be considered.

b. Failed to Reasonably Minimize the Adverse Impacts on Eagle Rock a Natural Resource and as a Part of the Environment

MCL 324.63205(2)(c) requires that an application for a mining permit pursuant to Part 632 must include a mining, reclamation and environmental protection plan for the proposed mining operation "that will reasonably minimize the actual and potential adverse impacts on natural resources, the environment, and public health and safety within the mining area and the affected area."[372]

Petitioners assert that pursuant to MCL 324.63205(2)(c), Kennecott was required to include measures to protect and minimize adverse impacts on the cultural, religious, and social conditions associated Eagle Rock, because they are features of "the environment." As discussed *supra*, however, the only substantive requirement contained in Part 632 is the standard imported from the MEPA: that the mining activities must not "pollute, impair, or destroy, the air, water or other natural resources or the public trust in those resources . . . ."[373] As noted previously, there is nothing in this standard that references any cultural, religious, or social resources. Moreover, again as previously noted, the Michigan Supreme Court has explicitly held that "social and cultural environments are matters not within the purview of the MEPA and outside its legislative intent."[374]

Further, even reading this statute *in pari materia* with the Natural Resources and Environmental Protection Act, as Petitioners assert is necessary, fails to assist Petitioners' argument because MEPA is a part of that Act. Given that MEPA is cited explicitly within Part 632 as providing the applicable permitting standard, if any section of NREPA

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[372] MCL 324.63205(2)(c).
[373] MCL 324.63205(11)(b).
[374] *Poletown Neighborhood Council v City of Detroit*, 410 Mich 616, 635; 304 NW2d 455 (1981); overruled on other grounds in *County of Wayne v Hathcock*, 471 Mich 445 (2004).

is to be read *in pari materia* with Part 632 it would be MEPA. As noted, the Michigan Supreme Court has explicitly found the term "environment" as used in MEPA not to include social and cultural environments."[375] Accordingly, this Court is convinced that read in its proper context MCL 324.63205(2)(c) does not require an applicant for a mining permit under Part 632 to include in its mining, reclamation, and environmental protection plan measures to protect and minimize adverse impacts on cultural, religious, or social conditions.

Petitioners also argue that pursuant to MCL 324.63205(2)(c), Kennecott was required to include measures to protect and minimize adverse impacts on Eagle Rock itself because it is a "natural resource." Again the Court disagrees.

First, the evidence on the record makes clear that there will be no adverse impacts on the surface of Eagle Rock. The portal will be located approximately 110 feet west of the outcrop, in an area that was clear cut within the last twenty years, with the decline running below the outcrop itself.[376] There will be no drilling into the outcrop itself, as such activities are barred by the terms of Kennecott's Surface Use Lease, and blasting activities will not affect the outcrop.[377]

Second, the mining operations that take place under and near Eagle Rock also cannot be considered to constitute an impact subject to inclusion under MCL 324.63205(2)(c). This is so because MCL 324.63205(11)(b) explicitly provides that:

> For the purposes of this subsection, excavation and removal of nonferrous metallic minerals and of associated overburden and waste rock, in and of itself, does not constitute pollution, impairment, or destruction of those natural resources.[378]

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[375] *Id.*
[376] Testimony of Arlaud, Bates No. 053736.
[377] *Id.*, Bates Nos. 053737-38, 058444-45, 058447-48.
[378] MCL 324.63205(11)(b).

Thus, although Eagle Rock unquestionably constitutes a "natural resource," there simply are no impacts to be minimized.

c. Failed to Include Provisions for the Prevention, Control, and Monitoring of Acid-Forming Waste Products to Prevent Runoff Into Surface Water

MCL 324.63205(2)(c)(v) requires an applicant for a Part 632 mining permit to include in its mining, reclamation, and environmental protection plan provisions for the prevention, control, and monitoring of acid-forming waste products to prevent runoff into surface waters. Petitioners assert that Kennecott failed to include such provisions in its mining, reclamation, and environmental protection plan and, therefore, that the MDEQ violated MCL 324.63205(12) when it granted Kennecott the requested permit. Petitioners, however, have not provided any evidentiary support for this assertion, and have provided no argument on this point. It is not enough for Petitioner to announce a position and then leave it to the Court to unravel the legal basis for the claim.[379] Accordingly, this issue is not properly before the Court and will not be considered here.

d. Failed to Include Information Demonstrating that the Proposed Materials, Methods, and Techniques Proposed to Be Used Are Capable of Accomplishing Their Stated Objectives in Protecting the Environment and the Public Health

MCL 324.63205(2)(c)(ii) requires than an applicant for a Part 632 mining permit include in its mining, reclamation, and environmental protection plan information that demonstrates that:

> All methods, materials, and techniques proposed to be utilized are capable of accomplishing their stated objectives in protecting the environment and public health, **except that such information may not be required for methods, materials, and techniques that are widely used in mining or other industries and are generally accepted as effective.**[380]

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[379] *Ward v Franks Nursery*, 186 Mich app 120, 129-130; 463 NW2d 452 (1990).
[380] MCL 324.63205(2)(c)(ii) (emphasis added).

Petitioners assert that Kennecott failed to include such information in connection with the filter to be placed on the mine's exhaust stack, and therefore that the MDEQ violated MCL 324.63205(12) in granting the requested permit.

It is true that Kennecott did not include any such information regarding the exhaust stack in its mining, reclamation, and environmental protection plan. Kennecott's witness, Andrea Martin, however, testified that similar filter systems are widely used in other industries, and that they are generally considered to have a 95% efficiency rate.[381] Accordingly, Kennecott was not required to include such information in its mining, reclamation, and environmental protection plan.

In light of the above analysis, the Court finds that Kennecott's EIA satisfied the requirements set forth in MCL 324.63205(2)(c).

3. Deficiencies in Kennecott's Contingency Plan

MCL 324.63205(2)(d) requires an applicant for a Part 632 mining permit include with its application a contingency plan that:

> [I]ncludes an assessment of the risk to the environment or public health and safety associated with potential significant incidents or failures and describes the operator's notification and response plans.[382]

Petitioners assert that Kennecott's contingency plan was deficient because it failed to contain a contingency plan for "the most predicted and potentially fatal failures,"[383] including subsidence or crown pillar failure, catastrophic events, long-term closure of the Waste Water Treatment Plant, significantly greater mine inflow than estimated, failure of the exhaust stack, or contaminated water leakage from the re-flooded mine. In support of this assertion Petitioners cite to the testimony of MDEQ employee

[381] Testimony of Martin, Bates Nos. 053884-86.
[382] MCL 324.63205(2)(d).
[383] Petitioners' Brief in Support of Petition for Review, p 87.

Joseph Maki, who Petitioners assert testified that Kennecott's contingency plan did not include consideration of the above-listed contingencies. This argument, however, is simply incorrect.

First, the testimony cited to by Petitioners does not support their assertion. In a number of the pages of testimony cited to by Petitioners, Maki was discussing the requirement set forth in MCL 324.63205(2)(c)(ii) that the application must include information that demonstrates that all methods, materials and techniques proposed to be utilized are capable of accomplishing their stated goals. He was *not* testifying regarding the contingency plan.[384] In the remainder of the pages of testimony cited to by Petitioners, Maki was discussing the contingency conditions included in the *permit*, not the contingency plan submitted by Kennecott.[385] In fact the only testimony in the pages cited by Petitioners regarding the contingency plan submitted by Kennecott is Maki's insistence that he did *not* state that there was nothing in Kennecott's contingency plan regarding crown pillar failure.[386]

Second, the contingency plan Kennecott submitted with its mining permit application contains information regarding each of the contingencies identified by Petitioners. Subsidence or crown pillar failure is addressed in section 8.1.11.[387] Catastrophic events such as fires, earthquakes, floods, severe thunderstorms, blizzards, and forest fires are addressed in sections 8.1.4 and 8.1.9.[388] Extended closure of the Waste Water Treatment Plant is addressed in sections 8.1.5 and 8.1.10.[389] Unexpected

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[384] Testimony of Maki, Bates Nos. 056305-08.
[385] *Id.*, Bates Nos.056175-78, 056508-09.
[386] *Id.*, Bates Nos. 056308-09.
[387] Contingency Plan, located at Tab 123, Bates Nos.007541-42.
[388] *Id.*, Bates Nos. 005734-35, 007540-41.
[389] *Id.*, Bates Nos. 005735-37.

amounts of inflow into the mine and possible leakage of contaminated water from the reflooded mine are not addressed individually, but fall within the scope of the Waste Water Treatment Plant sections cited above as in both instances water will be pumped from the mine into the Waste Water Treatment Plant. Kennecott's contingency plan does *not* address a failure of the mine exhaust stack. Kennecott did not determine that the filter on the mine exhaust stack was necessary, however, until long after the permit application was submitted, and Petitioners have not pointed to any statute or regulation that requires Kennecott to update its contingency plan after its initial submission. Accordingly, this failing is not dispositive.

The Court notes that Petitioners have particularly objected to the fact that Kennecott's contingency plans are stated in some cases in the form of multiple steps that might be taken should a given contingency occur, rather than being stated in the form of one definitive action or series of actions that will be taken. However, not every situation requires the same steps to mitigate or correct a problem. Given the multiple different variables that may come into play should any given contingency occur, such as the scope of the problem and the cause or causes of the problem, providing a range of possible measures that will be considered and undertaken is a reasonable approach to drafting a contingency plan.

For the above reasons, the Court finds that Kennecott's contingency plan was not deficient.

4. Application Failed Compliance with Other Part 632 Requirements

Petitioners assert that Kennecott's application was deficient because it failed to comply with all of the Part 632 requirements because it:

a. Failed to demonstrate that Kennecott could achieve the required level of reclamation required under MCL 324.63209(8);

b. Failed to demonstrate that Kennecott could meet Part 632's ban on perpetual care, set forth in MCL 324.63209(8); and

c. Failed to comply with other applicable statutes and regulations.

a. Failed to Demonstrate that Kennecott Could Achieve the Required Level of Reclamation Required Under MCL 324.63209(8).

MCL 324.63209(8) requires, in applicable part, as follows:

> Both the mining area and the affected area shall be reclaimed and remediated to achieve a self-sustaining ecosystem appropriate for the region . . . with the goal that the affected area shall be returned to the ecological conditions that approximate premining conditions subject to changes caused by nonmining activities or other natural events.

Petitioners assert that Kennecott's application failed to satisfy this requirement because it did not demonstrate that it could achieve the required level of reclamation for the affected area. Specifically, Petitioners point to the water quality expected in the reflooded, post-closure mine.

Petitioners assert that Kennecott's predictions regarding the amount of contaminants in the water in the reflooded mine were up to three magnitudes too low, based on various allegedly incorrect assumptions made by Kennecott, and that the water quality of the water in the reflooded mine will in fact exceed Michigan's water quality standards. Respondents' witnesses, however, addressed this very issue in connection with Petitioners' ARD evidentiary argument, including both Kennecott's allegedly incorrect assumptions and the possibility of ARD in the water of the reflooded mine, and, as set forth above, the Court has found that the ALJ's finding in this regard was supported by competent, material, and substantial evidence on the whole record. Moreover, to the extent that Petitioners are asserting that contamination from metal

leaching will occur, the MDEQ's witness, Dr. Edmond Eary, testified that the first step in metal leaching is the existence of acidic conditions.[390] Accordingly, Eary advised that the same measures that will prevent ARD in the reflooded mine water will also prevent metal leaching.[391] Furthermore, under the conditions of the mining permit Petitioner will be required to monitor the water quality within the reflooded mine and to take measures to address any problems with the water quality.[392]

Petitioners also assert that it is "highly likely"[393] that contaminated water will escape from the reflooded mine through faults and other weaknesses in the mine walls and roof, and will contaminate area surface and ground water. As discussed in connection with Petitioners' wetlands evidentiary argument, however, Kennecott's testing determined that only one such fault exists, and that this fault is not very large and is not connected to any other faults.[394] Moreover, Kennecott's testing also determined that the vertical gradient in the area of the mine is negligible, meaning that there is no basis for assuming water in the reflooded mine will seep up through the overburden.[395]

In light of the above, the Court finds that Kennecott's application sufficiently demonstrated that Kennecott can achieve the required level of reclamation under MCL 324.63209(8).

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[390] Testimony of Eary, Bates Nos. 057113.
[391] *Id.*
[392] Testimony of Donohue, Bates Nos. 052642-43.
[393] Petitioners' Brief in Support of Petition, p. 79.
[394] Testimony of Wozniewicz, Bates Nos. 054864-65, 054871-72.
[395] *Id.*, Bates Nos. 054858-59.

b. Failed to Demonstrate that Kennecott Could Meet Part 632's Ban on Perpetual Care

MCL 324.63209(8) also requires that both the mining area and the affected area must be reclaimed and remediated to achieve a self-sustaining ecosystem "**that does not require perpetual care following closure** . . . ."[396] Petitioners assert that Kennecott's application failed to meet this requirement because Kennecott has not shown that the monitoring, pumping, and treatment of water in the reflooded mine post-closure will end within a set period of time, or that it will not be perpetually needed, and because Kennecott has severely overpredicted the water quality in the reflooded mine.

In the first place, as discussed *supra* this Court has already found that Petitioners' arguments regarding Kennecott's water quality predictions are without merit, as are Petitioners' arguments regarding the potential for water from the reflooded mine to escape from the mine. Moreover, while MCL 324.63209(8) bars a reclamation plan that requires perpetual care following closure, there is nothing in that statute that requires that all monitoring and necessary treatment of any problems arising post-closure must be stopped within a stated time frame short of perpetuity, nor that an applicant for a Part 632 permit provide an exact timeline for completion of its reclamation plan. Accordingly, the Court finds that Kennecott has satisfied the perpetual care requirement of MCL 324.63209(8).

c. Failed to Comply with Other Applicable Statutes and Regulations

MCL 324.63209(9) provides that:

> Compliance with the provisions of [Part 632] does not relieve a person of the obligation to comply with all other applicable tribal, state, federal, or local statutes, regulations, or ordinances.

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[396] MCL 324.63209(8) (emphasis added).

Petitioners assert that this provision requires Kennecott to comply with all other applicable statutes, regulations or ordinances as a condition to obtaining a Part 632 mining permit, and that Kennecott failed to meet this obligation because it:

> 1. Failed to obtain a National Pollution Discovery Elimination System permit for discharges of waste water into the Salmon Trout River system pursuant to Part 402 of the federal Clean Water Act ("the CWA");[397]
>
> 2. Failed to comply with the CWA's anti-degradation rules; and
>
> 3. Failed to provide for monitoring of the groundwater-surface water interface ("the GSI") as required by Administrative Rule R 425.406(4).

MCL 324.63209(9), however, does *not* set forth a condition precedent to obtaining a Part 632 mining permit. Instead, this subsection merely provides that obtainment of a Part 632 permit does not relieve an applicant from its obligation to comply with all other statutes, regulations and ordinances. In other words, this subsection merely warns applicants that simply by complying with the requirements of Part 632 they cannot assume without review of other applicable statutes, regulations, or ordinances that they are acting lawfully. Accordingly, the question of whether Kennecott is in compliance with the CWA and R 425.406(4) is irrelevant to the question of Kennecott's entitlement to the requested mining permit.

D. Other Miscellaneous Arguments:

Petitioners have also raised several other arguments that do not fall under any of the above categories. Specifically, Petitioners have asserted the following claims:

> 1. That the PFD incorporated factual and legal conclusions directly contradicted by the overwhelming preponderance of its own factual findings;

[397] 33 USC 1342.

2. That the activities permitted under Kennecott's permit fail to satisfy the requirements of MCL 324.632091), because those activities violate other parts of the Act , including Michigan's Water Legacy Act, MCL 324.32721; and

3. That the proposed mining activities will violate Part 303 of NREPA, the Wetlands Protection Act, which prohibits conduct that drains surface water from a wetland without first obtaining a permit.[398]

Petitioner, however, has done nothing more in connection with these claims that merely make the bald assertion that these errors occurred. Petitioner has presented no argument in support of these claims and no legal support. Accordingly, these issues are not properly before the Court and will not be considered here.

Based on the foregoing, the Court enters the following Order:

ORDER

IT IS HEREBY ORDERED that the MDEQ's decision to grant the mining permit under Part 632 to Kennecott is **AFFIRMED**.

This order resolves the last pending claim and closes this case.

Dated: November 21st, 2011

Hon. Paula J.M. Manderfield (P-34319)
Circuit Court Judge

[398] Petitioners' Brief in Support of Petition, p 96.

PROOF OF SERVICE

I hereby certify that I served a copy of the Order Affirming Grant of Part 632 Permit upon Bruce T. Wallace, William J. Stapleton, Angela L. Jackson, F. Michelle Halley, Eric J. Eggan, Joseph M. Polito, John R. Baker, Robert P. Reichel, Rodrick W. Lewis, Jeffrey W. Bracken, and Daniel P. Ettinger by placing said order in an envelope and placing same for mailing with the United States Mail at Lansing, Michigan, on November 21, 2011.

Jean M Smydra

Jean M. Smydra
Judicial Assistant to Judge Manderfield