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Jim Ruby, Executive Secretary Environmental Quality Council

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL STATE OF WYOMING

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IN THE MATTER OF MEDICINE BOW FUEL & POWER AIR PERMIT CT-5873

Docket No. 09-2801

DEQ'S RESPONSE TO SIERRA CLUB'S STATEMENT OF FACTS

DEQ responds to Sierra Club's WYO. R. CIV. P. Rule 56.1 Statement of Facts as

follows:

The Wyoming Supreme Court has defined a material fact as:

One having some legal significance, that is, under the law applicable to a given case, it would control in some way the legal relations of the parties; as one upon which the outcome of litigation depends in whole or in part; as one on which the controversy may be determined; as one which will affect the result or outcome of the case depending upon its resolution; and one which constitutes a part of the plaintiff's cause of action or of the defendant's defense. A fair summary of these definitions is that for purposes of ruling upon a motion for summary judgment a fact is material if proof of that fact would have the effect of establishing or refuting one of the essential elements of a cause of action or defense asserted by the parties. Such a fact must in some way control, define, or modify the legal relations of the parties in some tangible manner and, thus, have the clear effect of establishing or refuting the essential element of a claim or defense asserted by the parties.

Fiscus v. Atlantic Richfield Co., 773 P.2d 158, 161 (Wyo. 1989).

- 1. In 1997, the DEQ determined it was reasonable to follow EPA's PM₁₀ Surrogate Policy because EPA had not provide all of the tools needed for DEQ to analyze PM_{2.5}, and the DEQ has been following the Policy ever since. See DEQ's 56.1 Annex at ¶¶ 43-46; see also DEQ Ex. 34 and 43; In re Basin Dry Fork, EQC Docket No. 07-2801, Order Granting Basin Electric Cooperative's and Department of Environmental Quality's Motions for Summary Judgment Regarding Protestants' Claim VII (Dec. 8, 2008) at ¶¶ 55-60. If Sierra Club's "reasonableness inquiry" refers to the Trimble case, the DEQ answers that EPA did not comment on DEQ's use of PM₁₀ as a surrogate and the EPA issued the Trimble Order more than five months after the DEQ issued Permit CT-5873. Sierra Club has mischaracterized Mr. Keyfauver's Deposition testimony. See Sierra Club Ex. 1 at 89-92. Finally, the DEQ notes that Sierra Club's Petition did not allege that DEQ should have, could have or failed to conduct a "reasonableness analysis." See Petition at ¶¶ 70 – 77.
- 2. DEQ followed EPA's PM₁₀ Surrogate Policy as required by Wyoming's SIP. *See* DEQ's 56.1 Annex at ¶¶ 43-46; *see also* MBFP Ex. G, G1 and G2.
- 3. DEQ followed EPA's PM₁₀ Surrogate Policy as required by Wyoming's SIP. *See* DEQ's 56.1 Annex at ¶¶ 43-46; *see also* MBFP Ex. G, G1 and G2.
- 4. Sierra Club's characterization that the flares are designed to "release" syngas is incorrect. During any startup, shutdown or upset events, Medicine Bow represented that syngas will be sent to the flares for combustion, not release. Ex. 15 at 78-000031, -000042, -000054.
- 5. Sierra Club mischaracterizes Medicine Bow's Response at ¶36. Medicine Bow's Response stated in full:

MBFP admits the allegations in paragraph 36 that the project design includes construction of both a high pressure and a low pressure flare. MBFP denies the remainder of the paragraph to the extent that it mischaracterizes the purpose of and the normal operation of the flares. The flares are emission control devices which will usually operate in standby mode with only a pilot flame. The flares will combust process emissions infrequently during startup, shutdown and maintenance events.

MBFP Response to Appeal at ¶ 36. Medicine Bow characterized warm startup/shutdown events as part of normal operations and included in the Facilities PTE of 36.6 TPY SO₂. Schlichtemeier Aff. ¶ 52; Ex. 11; Ex. 15; Ex. 21; Ex. 25.

- 6. DEQ agrees that Medicine Bow's SO₂ emissions are limited to 36.6 TPY and that this 36.6 TPY SO₂ emission total is less than the 40 TPY PSD significance threshold. Medicine Bow represented that during period maintenance events occurring as part of normal operations, SO₂ flare emissions would be 3.64 TPY. Ex. 21; Ex. 25 at DEQ000039; Ex. 26 at DEQ001419.
- 7. DEQ maintains that malfunctions, by definition, cannot be part of the facility's operation or design, and therefore cannot be included in the facility's PTE. 6 WAQSR § 4(a) and 1 WAQSR § 5. Therefore, any SO₂ flare emission estimate is immaterial.
- 8. Sierra Club misrepresents DEQ's Permit Application Analysis at pgs. 7-9 as including estimated emissions from malfunctions. Table Va is titled "Medicine Bow IGL Plant Emissions (tpy) Cold Startup Year Emissions" and the total in the SO₂ column equals 256.69 TPY. Ex. 11 at DEQ000513.
- 9. Sierra Club misrepresents Medicine Bow's Response. DEQ maintains that the Facility's PTE included flare emissions from normal operations and maintenance activities, as characterized by Medicine Bow to include Warm Startup/shutdowns. Ex. 11; Ex. 21; Ex. 25. Initial Startup occurs only once and is excluded from PTE. Ex. 15, Ex. 21, Ex. 25 at DEQ000039; Ex. 55 at DEQ001697. Medicine Bow estimated cold startup/shutdowns may occur approximately every four years, Ex. 15, Ex. 21, Ex. 25. Malfunction events are addressed through Chapter 1, Section 5 of the WAQSR, not through permitting. 1 WAQSR § 5.
- 10. Sierra Club misrepresents Mr. Keyfauver's deposition testimony. Neither DEQ nor Mr. Keyfauver admitted that Medicine Bow's estimate of malfunction emissions means that malfunctions are likely to occur:

Q: (By Ms. Issod) Okay. So I asked you a question: Why would Medicine Bow estimate emissions from malfunctions if they will never occur?
MR. COPPEDE: Same objection.
MS. VEHR: Objection.
A: [Mr. Keyfauver] I'm not an expert, but I guess any – any company can estimate the malfunctions if they believe they would occur.

Sierra Club Ex. 1 at 23:11-17.

11. Sierra Club has misrepresented the facts. Ex. 11 at DEQ001485 actually states: "Per the licensor process design packages, every three to four years the plant is expected to perform a full plant shutdown for major maintenance requirements. At the end of this shutdown a cold startup will be performed with higher emissions than normal years."

- 12. On September 5, 2008, the DEQ requested Medicine Bow "address PSD applicability for SO₂ emissions from the plant during routine operations including normal startup emissions. Ex. 18. On October 14, 2008, Medicine Bow provided their initial response. Ex. 20. The Sierra Club's quotation from DKRW's October 14, 2008 letter to the DEQ is accurate. Ex. 20 at DEQ001529. On November 11, 2008, Medicine Bow provided "further clarification regarding normal Medicine Bow Fuel & Power (MBFP) SO₂ emissions as follow-up to the MBFP October 14, 2008 letter, concluding that "MBFP continues to be below the 40 tons per year emissions limit for SO₂ (total for normal and normal maintenance emissions . . . now equals 36.3 total tons per year SO₂). Ex. 21 at DEQ001485.
- 13. The Sierra Club's quotation from the EPA letter appears accurate. Ex. 31 at DEQ001658.
- 14. Sierra Club's characterization of the EPA letter is inaccurate. It appears that Sierra Club is attributing the quoted language to EPA. Ex. 31 at DEQ001658. However, the quoted language appears to be a quote from the Application. *Id. citing* "MBFP application, page B-1".
- 15. The flares were designed to operate as control equipment for emissions occurring during startup/shutdowns or malfunction events. Ex. 15; Ex. 25 at DEQ000040. The DEQ did not establish flare SO₂ emission limits as BACT as there are no traditional EPA reference methods for monitoring compliance if any such limit was set. Ex. 25; Ex. 41 at 73:5 77:13. The DEQ requested, and Medicine Bow provided, an SSEM plan as BACT during startup/shutdown operations to minimize the duration of such events and the corresponding SO₂ emissions. Ex. 9 at DEQ003254 55, Ex. 11 at DEQ000530-31 and 000587 591, Ex. 21, Ex. 25 at DEQ000045 and 000052-54.
- 16. Sierra Club has mischaracterized. See Keyfauver Deposition at 80:18 82:23 and 84:24 88:19.
- 17. Sierra Club's quotation is accurate but incomplete. Mr. Keyfauver explained that although Wyoming generally follows EPA's top-down BACT analysis, except when Wyoming will require the most stringent technology (or "top") technology. See Keyfauver Deposition at 44:18 46:1.

- 18. Sierra Club's representation is accurate but incomplete. The DEQ also established the SSEM plan as BACT during startup/shutdown operations. Ex. 11 at DEQ000530-31.
- Sierra Club's characterization is incorrect. The DEQ did not establish flare SO₂ emission limits as BACT as there are no traditional EPA reference methods for monitoring compliance. See Ex. 25, Ex. 41 at 73:5 77:13. The SSEM Plan is an alternative BACT to apply during startup/shutdown operations. Ex. 11, Ex. 25; see also Ex. 41 at 68:23 69:8.
- 20. Sierra Club's characterization is incorrect. See *supra* at ¶ 19.
- 21. Sierra Club's characterization of the EPA Comments is incomplete; the DEQ addressed the EPA comments in its Decision. Ex. 25 at DEQ000039 43.
- 22. Sierra Club's characterization of the EPA Comments is incomplete; the DEQ addressed the EPA comments in its Decision. Ex. 25 at DEQ000039-43.
- 23. Sierra Club's characterization of the EPA Comments is incomplete; the DEQ addressed the EPA comments in its Decision. Ex. 25 at DEQ000039-43.
- 24. Sierra Club's characterization of the EPA Comments is incomplete; the DEQ addressed the EPA comments in its Decision. Ex. 25 at DEQ000039-43.
- 25. Permit CT-5873 limits the Facility's SO₂ emissions to 36.6 TPY and flare emissions to 3.6 TPY; and requires the SSEM Plan. Ex. 26 at DEQ001409 (¶ 2); DEQ001415 (¶¶22-24); DEQ001416 (¶¶ 25, 31) and DEQ001419-1424. The Permit also
- 26. DEQ objects. See *supra* at ¶ 25.
- Permit CT-5873 establishes emission limits, not the SSEM Plan. See supra at ¶
 25. The SSEM Plan is a work practice BACT designed to minimize the duration of startup/shutdowns and the corresponding SO₂ emissions. Ex. 25, see also supra at ¶ 25.
- 28. The SSEM Plan, and therefore its implementation, is required by Permit CT-5873. *See supra* at ¶ 25.
- 29. Sierra Club mischaracterizes Mr. Keyfauver's deposition testimony. See Keyfauver Deposition at 58:4 60:9.

- 30. This is not a statement of fact.
- 31. Medicine Bow estimated HAP emissions greater than 10 TPY of a single HAP in its Application. Ex. 15 at DEQ000078 000023.
- 32. DEQ acknowledged in its Permit Application Analysis that the Facility would be a major source for HAPs. Ex. 11 at DEQ000512, 000531.
- 33. Following public comment, the DEQ requested Medicine Bow address major source applicability for HAP. Ex. 17. Medicine Bow responded, noting that following additional engineering re-design, it was not a major source for HAPs. Ex. 19 at DEQ002918-19 and DEQ002925 – 27.
- 34. Sierra Club's statement is incomplete. See Ex. 26 at DEQ001415 (¶¶ 19-21).
- 35. Sierra Club's statement is incomplete. See Keyfauver Deposition at 80:18 89:8.
- 36. Sierra Club misstates and mischaracterizes Ms. Winborn's deposition testimony. See Winborn Deposition at 41:8 56:20.
- 37. Sierra Club mischaracterizes Mr. Keyfauver's deposition testimony. See Keyfauver Deposition at 60:10 66:9.
- Sierra Club mischaracterizes Mr. Keyfauver's deposition testimony. See Keyfauver Deposition at 60:10 – 66:9. See also Ex. 11 at DEQ000525; Ex. 25 at DEQ000051 and DEQ000058.
- 39. Sierra Club mischaracterizes Mr. Keyfauver's deposition testimony. See *supra* at ¶ 38.
- 40. Sierra Club mischaracterizes Ms. Winborn's deposition testimony. See also Ex. 15 at DEQ000078-000054; Ex. 35 at pp. 13, 15-16.
- 41. Sierra Club's statement is incomplete. Measuring "actual emissions" requires a facility to be operating and emitting. The Facility has not yet been built. DEQ requires Medicine Bow to calculate "actual emissions" after the Facility is operating. See Ex. 25; Ex. 26 at DEQ001415 (¶¶ 19-21).
- 42. This is not a statement of material fact. Medicine Bow provided methanol emission calculations which were reviewed by the DEQ. See Ex. 15; Ex. 25, Ex. 26.

- 43. This is not a statement of material fact. BACT is required for both major and minor sources. See 6 WAQSR § 2(c)(v).
- 44. This is not a statement of material fact. DEQ's Application analysis noted that 59.6 TPY VOC emissions were estimated from equipment leaks. See Ex. 11 at DEQ000512 and DEQ000514.
- 45. Medicine Bow's Application estimated fugitive equipment leaks. See Ex. 15 at DEQ000078 000231 through -000249.
- 46. This is not a statement of material fact. The DEQ notes that Medicine Bow's LDAR program is based on an EPA promulgated NSPS. Ex. 11, Ex. 25, 72 Fed. Reg. 64860.
- 47. Sierra Club's statement is incomplete. The WAQSR requires BACT. 6 WAQSR $\S 2(c)(v)$ and $\S 4(a)$.
- 48. DEQ agrees that LDAR was identified as BACT and the Permit requires LDAR and additional requirements. Ex. 4 at DEQ000151; Ex. 11 at DEQ000525; Ex. 15 at DEQ000078-000082; Ex. 25 at DEQ000037 and 000059; Ex. 26 at DEQ001415, Condition 21.
- 49. Sierra Club's statement is an incomplete statement about the required LDAR program. See *supra* at ¶ 48; see also 72 Fed. Reg. 64860, 64883-95.
- 50. Sierra Club's statement is an incomplete statement. DEQ established additional requirements in the permit. See *supra* at \P 48.
- 51. DEQ established LDAR and additional requirements as BACT for fugitive component leaks. See *supra* at ¶48.
- 52. This is not a material statement of fact. Wyoming's BACT definition states in part, "Application of BACT shall not result in emissions in excess of those allowed under Chapter 5, Section 2 or Section 3 of these regulations and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by the EPA but not yet adopted by the State of Wyoming." 6 WAQSR § 4(a).
- 53. Sierra Club mischaracterizes the facts. The LDAR program does not prohibit use of leakless component technology. See 72 Fed. Reg. 64860; see also Ex. 49 at § 5.1; *supra* at ¶ 48.

- 55. This is not a material fact. DEQ agrees that LDAR may be BACT and established LDAR and additional requirements in the Permit. See *supra* at \P 48.
- 56. DEQ evaluated and established the LDAR program as BACT. See *supra* at ¶ 48.
- 57. DEQ agrees with this statement.
- 58. Sierra Club mischaracterizes the facts and law. The DEQ does not endorse short term (24-hour) modeling for predicting impacts from fugitive particulate sources because of the uncertainties in the performance of the recommended EPA models. Ex. 25 at DEQ000043; see also Ex. 52, 60 Fed. Reg. 47290, Nall Aff. at ¶ 22. The Applicant is required to demonstrate the proposed facility will not prevent the attainment or maintenance of any ambient air quality standard. 6 WAQSR § 2(c). DEQ determined that the Facility would comply with the PM₁₀ NAAQS and WAAQS. Ex. 11 at DEQ000542-46; Ex. 25 at DEQ000037, 000043, 000045 and 000046.
- 59. Sierra Club mischaracterizes the facts. The MOA was part of the DEQ's decision. See *supra* at 58; see also Ex. 58.
- 60. This is not a material statement of fact. The DEQ agrees that the Facility is located in Carbon County.
- 61. Sierra Club misrepresents the facts. The DEQ does not include short term (24 hour) modeling of fugitive PM_{10} emissions. See Nall Aff. at ¶22, see also *supra* at ¶ 58.
- 62. This is not a material statement of fact. Wyoming Regulations require the Applicant demonstrate the proposed facility will not prevent the attainment or maintenance of any ambient air quality standard. 6 WAQSR § 2(c). See also *supra* at ¶ 58.

63. This is not a material statement of fact. The Facility is anticipated to emit greater than 100 TPY PM. Ex. 11 at DEQ000512.

DATED this 4th day of December, 2009.

FOR RESPONDENT DEQ:

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CERTIFICATE OF SERVICE

I hereby certify that I have served a true and correct copy of the foregoing DEQ'S RESPONSE TO SIERRA CLUB'S STATEMENT OF FACTS through United States mail, postage prepaid on this 4th day of December, 2009 addressed to the following:

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In re Medicine Bow Fuel & Power, LLC Air Permit CT-5873 – EQC Docket No. 09-2801 DEQ'S RESPONSE TO SIERRA CLUB'S STATEMENT OF FACTS Page 10 of 10