

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

IN THE MATTER OF:) Docket No. 09-2801
MEDICINE BOW FUEL & POWER, LLC)
IAR PERMIT CT-5873)

DEPOSITION OF ANDREW KEYFAUVER
Taken October 29, 2009

APPEARANCES:

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For Plaintiff.

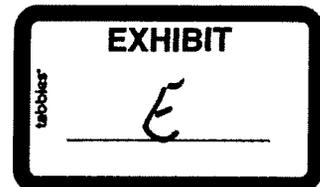
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For Medicine Bow Fuel & Power.



1 ANDREW KEYFAUVER,
2 called as a witness, being first duly sworn, testified
3 as follows:

4 EXAMINATION

5 BY MS. ISSOD:

6 Q Good morning, Mr. Keyfauver.

7 A Good morning.

8 Q Can you please state your full name and
9 address for the record.

10 A It's Andrew Keyfauver. My work address is
11 122 West 25th Street, Cheyenne, Wyoming 82002.

12 Q And you're currently employed by the Wyoming
13 Department of Environmental Quality, correct?

14 A Correct.

15 Q And have you appeared at a deposition before?

16 A No.

17 Q This is your first. So let me go over some
18 ground rules. I'm basically just going to ask you a few
19 questions about your job and about the permit for the
20 Medicine Bow facility, the Medicine Bow Fuel and Power
21 facility. If at any time you don't hear me or if you
22 don't understand the question, then just say so. Ask me
23 to repeat the question or tell me that you don't
24 understand it, and I will rephrase it.

25 Try to state your answers clearly. A nod of

1 Q And what would you be looking for,
2 specifically?

3 A How they define routine -- say, routine
4 maintenance and repair.

5 Q Okay. What's the purpose of the flares at
6 the Medicine Bow facility?

7 A The flares, as I recall they were represented
8 in the application, were for startup, shutdown, and
9 malfunction.

10 Q So the planned operation and the flares is
11 during startup, shutdown, and malfunction events,
12 correct?

13 A They would be a control device during those
14 periods.

15 Q So would you say that the normal operation of
16 the flares includes operation during startup, shutdown,
17 and malfunction?

18 A Assuming it does not include commissioning
19 activities, yes.

20 Q Emissions from the flares during startup,
21 shutdown, and malfunction events were not included in
22 Medicine Bow's potential to emit, correct?

23 A As I recall, they were represented during the
24 cold start or commissioning activity: Here's what
25 represents worst-case from the facility.

1 factors -- or emissions based on counts.

2 Q Okay. Do you recall the number of components
3 Medicine Bow used to estimate its fugitive component
4 leaks?

5 A No, I do not.

6 Q Is there a document that you could quickly
7 look through to refresh your memory?

8 A It would be in the application. Probably in
9 Appendix B where all the emission calculations were.

10 Q Okay. Well, regardless of the number, how
11 did you verify this number?

12 A I verified the emission factors that they
13 used, based on what they say is the service and the EOC
14 content and compared those with the known EPA factors.

15 Q How did you verify the number of components?

16 A That was provided to us by the applicant,
17 based on their -- their latest design drawings.

18 Q Did they provide to you their latest design
19 drawing?

20 A No.

21 Q Did you ask for their latest design drawings?

22 A No.

23 Q Okay. Are emissions from fugitive component
24 leaks a large source of volatile organic -- strike that;
25 start over -- volatile organic compounds?

1 THE WITNESS: It is DEQ Bates number -- or
2 Bates number DEQ 001415.

3 Q (By Ms. Issod) Can you explain that permit
4 condition?

5 A That -- okay. That Medicine Bow Fuel and
6 Power is supposed to demonstrate, when safe completed
7 construction of the facility, that based on the as-built
8 component count, they are to essentially estimate their
9 HAP emissions to ensure that they're a minor source.

10 Q Okay. So how would DEQ verify the final
11 equipment count?

12 A I don't --

13 MS. VEHR: Again, I'm going to object, just
14 on, he's the permit engineer, not the person --

15 A I don't know -- I don't know what the
16 district engineer decided he would do, but he could go
17 to the plant and . . .

18 Q (By Ms. Issod) Okay. So is the permit
19 essentially out of your jurisdiction at this point?

20 A I'd pretty much say yes, once it's finalized.

21 Q Okay.

22 A Unless they need to come in and do an
23 amendment to it.

24 Q Okay. Well, this permit condition seems
25 to -- it's a requirement prior to startup. It sounds

1 Medicine Bow Fuel and Power will be required to obtain a
2 revised permit application and possibly conduct a MACT
3 analysis prior to startup. Do you agree with that
4 statement?

5 A Yes, I do.

6 Q Okay. How did you determine that the
7 emission factors Medicine Bow used to estimate fugitive
8 component leaks were appropriate?

9 A Since they used a -- the EPA emission
10 factors, you look at the gas -- or the composition, the
11 service. If it's gas service or liquid service, look
12 through those tables, and you can come to the emission
13 factors.

14 Q Did you verify the components for which the
15 emission factors were developed resembled the components
16 that will be used at Medicine Bow?

17 A I do not have sufficient knowledge to know
18 what EPA used to develop those.

19 Q Okay. Did you verify the components at the
20 Medicine Bow facility, and the components used to
21 develop the emission factors have the same number of
22 fugitive emission points?

23 A Component count doesn't factor into, I
24 believe, what you're asking.

25 Q Okay. My understanding is there's different

1 emission factors for different components? Is that
2 right?

3 A Correct.

4 Q Okay. So the emission factors were developed
5 by looking at actual emissions from specific types of
6 components; is that right?

7 A As I understand it, emission factors were
8 generated for pumps, valves, flanges, if that's what
9 you're asking.

10 Q So EPA would look at some pumps to develop
11 the emission factors for pumps; is that right?

12 MS. VEHR: Objection, in terms of foundation,
13 what knowledge he has of how EPA estimates.

14 A To the best of my engineering judgment, I
15 would assume that's what they do, but I do not know.

16 Q (By Ms. Issod) Okay. So there's one
17 emission factor for pumps, period. There's not -- let
18 me strike that question.

19 Are there different emission factors for
20 different types of pumps?

21 A As I recall, yes.

22 Q Okay. So what criteria do you need to look
23 at to determine which pump emission factor you can use?

24 A Type of service -- type of service.

25 Q Okay?

1 A Light liquid, heavy liquid.

2 Q Okay. Is there any other characteristic that
3 differentiates emission factors like number of possible
4 fugitive emission points from a pump?

5 A Not that I recall.

6 Q Okay. Are you aware that EPA has determined
7 that actual emissions from fugitive sources can be
8 significantly greater than estimates from these 1995
9 factors?

10 A Not that I'm aware of.

11 Q Okay. Are you aware that the State of
12 California has determined that actual emissions from
13 fugitive sources can be significantly greater than
14 estimates from these 1995 factors?

15 A Not that I'm aware of.

16 Q Okay. Did you conduct or review a BACT
17 analysis for the fugitive component leaks?

18 A Yes.

19 Q Okay. Did you conduct a top-down analysis?

20 A That was the modified analysis. Because it's
21 difficult to do a top-down BACT analysis for fugitive
22 emissions.

23 Q Why is that?

24 A Because there is typically only one control
25 strategy for fugitive emissions, as I understand, for