WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY (WDEQ) INFORMATIONAL PUBLIC MEETINGS AND COMMENT PERIOD The following is a transcript of the public comments given during the Public Meetings held on Monday, May 20, 2019, and Tuesday, May 21, 2019, at Riverton, Wyoming, and Thermopolis, Wyoming, respectively, regarding renewal of permit WY0002062 expanding the discharge of produced water from the Moneta Division Gas Field operated by Aethon Energy. The meetings were overseen by Mr. Kevin Frederick, DEQ Water Quality Administrator. 

(The following comments were made during the hearing held on May 20, 2019, in Riverton, Wyoming, at the Central Wyoming College:)

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MR. FREDERICK: To make it easier for the court 00:08:25 00:08:27 reporter, if you would just step over here. I know that she also needs to read lips probably. I think we'll have enough 00:08:34 time to capture everyone here, but if you can keep your 00:08:53 comments direct and ideally try and provide suggestions or 00:08:57 ideas or recommendations or questions that you think the 00:09:06 Department needs to take into consideration that would be 00:09:12 helpful and we'll start out -- hopefully we'll have enough 00:09:14 time. If we start running short I might have to try and 00:09:19 limit, limit the amount of time each one has so... 00:09:22

14 TOM HENDERSON: I'm Tom Henderson, T-o-m 00:09:29 15 H-e-n-d-e-r-s-o-n, I live in Shoshoni. I use Boysen 00:09:37 16 Reservoir on a weekly basis in the summertime on a weekly 00:09:39 17 basis when it's possible to use it. I am very opposed to 00:09:42 18 raising the salt limits to these levels of 1400 tons per 00:09:46 19 month which was on one of the projections shown. 00:09:51 I don't 20 think people really understand what 1400 tons is. A coal car 00:09:55 21 holds 80 tons so we're going to be dumping about 80 coal cars 00:10:02 22 into the lake. My math isn't very good, you can all figure 00:10:07 23 it, but -- per month, dumping more than 50 -- I don't know, I 00:10:12 24 don't know how many they're dumping, but it's a bunch of 00:10:18 25 train car loads of salt. It's not good, we're going to kill 00:10:22

1	the fish.	00:10:28
2	MR. FREDERICK: Thank you. Appreciate it. Let's start	00:10:29
3	over here, someone I think had their hand up. Yes, sir.	00:10:30
4	State your name. Try and talk slowly enough so she can catch	00:10:38
5	the words.	00:10:42
6	JOHN RADER: I'll do my best. John Rader, R-a-d-e-r.	00:10:43
7	I'm concerned about chemicals associated with fracing	00:10:51
8	potentially over 4200 new wells. The draft permit, as I read	00:10:58
9	it, doesn't adequately address these chemicals and their risk	00:10:59
10	to both public health and to downstream wildlife. And I	00:11:02
11	don't know exactly what will be in the produced water from	00:11:06
12	the new wells, but I've looked at publicly-available data	00:11:08
13	from other Aethon wells that are in the Gun Barrel Unit and	00:11:11
14	they use many ingredients that are toxic in small	00:11:15
15	concentrations. Eric, you explained that there is modeling	00:11:20
16	and some testing for the BTEX chemicals, but there are dozens	00:11:22
17	of others that include known acute toxins, carcinogens,	00:11:26
18	chemicals that cause germ cell mutations, reproductive	00:11:30
19	toxins, neurotoxins, highly toxic alkaline agents and toxins	00:11:38
20	that are particularly destructive to aquatic life, so with	00:11:42
21	the effluent limits and the proposed monitoring that I've	00:11:45
22	seen they don't address these chemicals or the risk that they	00:11:49
23	present. Thank you.	00:11:53
24	MR. FREDERICK: Thank you, John. I'll get over there,	00:11:54
25	just be patient. We're starting on this side and we'll work	00:12:04

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our way over there. Yes, sir. 1 00:12:09 BOYD LARSEN: My name is Boyd Larsen. This is in 2 00:12:20 3 support of the discharge permit for Frenchie Draw. I feel 00:12:27 that DEQ and the energy company who have been involved in 4 00:12:30 this effort have provided sufficient evidence to prove that 5 00:12:34 6 they considered the impacts both of approving and not 00:12:37 7 approving the permit application. The potential benefit for 00:12:39 approving this permit and allowing increased development of 8 00:12:44 9 natural gas and oil from this proven field is significant 00:12:47 10 both to Fremont County and the State of Wyoming tax base and 00:12:50 11 very important to support industries and individuals who are 00:12:52 12 employed in this area as they continue to develop those 00:12:56 13 resources. Natural gas is one of Wyoming's must abundant and 00:12:59 14 available natural resources and has been one of the key 00:13:05 economic drivers of the state. Natural gas prices have 15 00:13:07 16 remained flat for the last several years requiring producers 00:13:11 17 to develop more efficient ways to produce gas in order to 00:13:13 18 stay profitable. Increase in the gas production volume from 00:13:17 19 a known source is far more efficient than trying to discover 00:13:20 20 new sources. Declining the permit application for Aethon 00:13:23 21 would greatly restrict the volumes of gas available from 00:13:27 22 production in that field. The wells in the Moneta Divide 00:13:30 23 area including Frenchie Draw have surface discharge that 00:13:34 24 generated production water for many years going back to the 00:13:38 25 original developer of Exxon with positive impacts because of 00:13:40

their beneficial use to wildlife and livestock. It has also 00:13:43 1 been necessary to determine the impacts various levels of 2 00:13:48 3 production water could have on the associated drainages 00:13:52 downstream of the source point including Boysen Reservoir and 00:13:54 4 5 the Wind River downstream of the Boysen River Dam. 00:13:58 Our 6 understanding is that both the DEQ and Aethon established at 00:14:01 7 the beginning of the permitting process the need to maintain 00:14:05 8 the Wind River as a class 1 waterway which has allowed the 00:14:08 9 professional consultants and agency staff to use that 00:14:12 10 determination in formulating the parameters of the permit. 00:14:15 11 As I understand, the load value for total dissolved solids 00:14:19 12 and the concentration values for chlorides have all been 00:14:23 adjusted with the health of Boysen Reservoir and the Wind 13 00:14:26 14 River as the driving criteria. It is also my understanding 00:14:26 that the production waters previously discharged into the 15 00:14:32 16 Alkali Creek and Badwater Creek have been monitored for many 00:14:35 years and the concentration level of chloride historically 17 00:14:39 18 has not impacted those tributaries negatively. I think the 00:14:43 19 effort to study and evaluate the potential increased volume 00:14:47 20 of production water from this source over the past several 00:14:51 21 years by the DEQ, Aethon Energy and previous operator, Encana 00:14:54 22 Oil & Gas, have provided solid information that enabled this 00:14:58 23 permit to be drafted in its current form. It is obvious from 00:15:00 the multimillion dollar investment by the energy companies in 00:15:03 24 25 the construction and operation of the Neptune water treatment 00:15:07

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facility that they are committed to comply with the 1 00:15:10 2 requirements associated with the permit and are committed to 00:15:12 3 long-term development of these resources which are a benefit 00:15:15 to Wyoming. 4 Thank you. 00:15:19 MR. FREDERICK: Okay. Over here. Next commenter. 5 00:15:21 Yes, 6 sir. Come on up, please. Try not to talk quite as fast as 00:15:32 7 Representative Larsen. State your name, please. 00:15:41 TIM SALAZAR: My name is Tim Salazar, S-a-l-a-z-a-r. My 00:15:43 8 9 comment is this, this issue is about jobs, hundreds of 00:15:51 10 families being allowed to put food on the table is at stake, 00:15:55 11 and I would ask that before any decision is finally made that 00:16:00 12 you consider the economic impact to this community with this 00:16:06 13 decision. I truly believe that this is an essential project 00:16:07 14 that needs to go forward and I believe that hundreds of 00:16:13 families and their wellbeing are at stake. Thank you. 15 00:16:17 16 MR. FREDERICK: Yes, sir. Come on up. I'm sorry, 00:16:28 17 ma'am. State your name, please. 00:16:31 18 KRISTIN McCLELLAND: Kristin McClelland, 00:16:31 19 M-c-C-l-e-l-l-a-n-d. I'm a lifelong resident of Wyoming and 00:16:43 20 have 15 plus years in the oil and gas industry work 00:16:46 21 experience, and I would also like to support this permit. 00:16:49 22 The average drilling rig if it's working actively provides 00:16:54 23 over 400 jobs full time that are much above the median income 00:16:58 and they provide families with the opportunity to own homes, 24 00:17:03 25 for their children to go to college, to have a better life. 00:17:05

Riverton's economy is not good right now and we need this 1 00:17:10 I have experience in both drilling and 2 development. 00:17:14 3 completions in and have worked with the DEQ, the BLM and the 00:17:19 current and past operator of Frenchie Draw. I have skin in 4 00:17:23 5 the game. I love Wyoming, I've lived here all my life, I 00:17:27 6 hunt, I fish, I have never found either operator I've worked 00:17:32 7 with at Frenchie Draw that they have ever done anything that 00:17:34 8 would affect the environment negatively. They have 00:17:38 9 cooperated with the BLM and the DEQ on all aspects of this 00:17:41 permit in the past and now. I would also like to address the 00:17:45 10 11 concerns about frac water. The chemicals that come back out 00:17:51 12 of a well or the water fluid that is returned from a well 00:17:57 after fracing is commonly referred to as flowback fluid in 13 00:17:59 14 the industry. Once a well is fraced and it is turned to 00:18:03 flowback the fluid that was pumped plus 30 to 70 percent more 00:18:08 15 16 fluid that is actually in the earth to begin with comes back 00:18:13 17 out of that. That water is disposed of completely 00:18:19 18 The water that we're talking about here has separately. 00:18:22 19 nothing to do with fracing, it is not flowback water, it's 00:18:24 20 water that is naturally occurring in the ground as it was 00:18:28 when the earth was formed. It's not water from the drilling 21 00:18:32 22 or fracing process, that fluid is disposed of separately, and 00:18:36 23 a well is not considered to be on production until more than 00:18:40 100 percent of that fluid has been returned and it is 24 00:18:44 25 disposed of in approved facilities that have nothing to do 00:18:47

with the waterways in Wyoming. So I'd just like the DEQ to
 consider that when they make their decision. Thank you.
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MR. FREDERICK: Okay. I'm working that way, just be 00:19:07 patient. Over here. If you change your mind you're going to 00:19:09 have to shift over that way and get in line. Yes, sir. Come 00:19:19 on up. 00:19:24

7 RICH GARD: My name is Rich Gard, G-a-r-d. This has 00:19:36 been a hard thing to work on and the representative -- this 8 00:19:46 9 has been a hard case to work on. We've worked really hard 00:19:51 10 with Aethon and with Representative Larsen. All the 00:19:57 11 representatives down in Cheyenne, we've looked into this, and 00:20:00 12 we appreciate the DEQ's efforts to help us with the 00:20:04 monitoring and the levels that they brought us to. It is 13 00:20:08 14 about jobs, it is about Fremont County. They are doing their 00:20:13 very best to protect the water quality in our rivers. And I 15 00:20:18 16 have in my possession a letter signed by myself, a letter 00:20:23 17 signed by the Lander mayor and the Dubois mayor. I talked 00:20:28 18 with the Shoshoni mayor today, he's in Texas, but he is in 00:20:32 19 support also of the project. We need jobs. We are not 00:20:35 20 00:20:40 trying to affect any of the waterways, all the waterways are 21 important to us. We believe as we sat down over the months 00:20:45 22 of working through this that we answered most of those --00:20:48 23 well, not most, all of those questions. This is a safe 00:20:52 process and it will be good for Boysen and the class A waters 00:20:56 24 25 downstream. We do appreciate the effort that the DEQ has put 00:21:04

into it and the willingness to look at this and help us 00:21:07
expand our employment. Thank you. 00:21:11

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3 ROB HENDRY: Rob Hendry, H-e-n-d-r-y. My name is Rob 00:21:26 Hendry, and I'm a rancher out in the field, some of that 4 00:21:32 5 field that takes in the country that we run on. We've owned 00:21:36 6 that country since 1965, my dad leased it before that. We 00:21:40 7 have always had that water going through our pasture, our 00:21:48 8 cows have utilized that water, and that has been a water 00:21:52 9 source for our cattle in the wintertime for a long, long 00:21:58 10 time, since '65, that's when we bought it. When I was a 00:22:02 11 little kid I remember my dad going to the company, at that 00:22:07 12 time Exxon, and asking them to turn on a couple wells in a 00:22:11 13 pasture in a place or two so that we could have that water 00:22:16 14 for the livestock. So we've mentioned the class 1 waters 00:22:19 downstream, that class 1 watershed has been there for a long 15 00:22:25 16 time and this field has been discharging water since it was, 00:22:30 17 it was drilled so if it was going to affect that waterway it 00:22:36 18 would have done it by now. We were told in our -- another 00:22:42 19 thing that I do, I reclaim locations for the oil company. 00:22:47 20 Tom Brown had it back about -- in here somewhere 00:22:53 21 (indicating). They allowed me to reclaim the locations to 00:22:57 22 get it back to grass, that's what we cared about, and we've 00:23:02 23 been doing that since 2000, we've been working out there and 00:23:04 24 reclaiming them, and so the companies have always been good 00:23:10 25 to the environment, they want to reclaim them back. I 00:23:14

started reclaiming them back closer to the wellhead so that 1 00:23:18 there's more feed for our cattle and for wildlife. 2 The 00:23:22 3 fisheries, those fisheries would not be there if this was 00:23:27 It has been going on since the '60s. There were 4 bad. 00:23:34 5 several comments that have been made over the years. One, 00:23:41 6 one comment by the Wyoming Game and Fish employee was that 00:23:46 7 they could not put water from the RO system directly into 00:23:50 Boysen because it would be too clean and it would kill the 8 00:23:56 9 fish, it was -- I was there and I heard it. You were there, 00:24:00 10 you heard it. That's -- in my pea brain let the trout come 00:24:04 11 over to the good water and let the trash fish go to the other 00:24:13 12 side of the lake. They talk about the erosion on Badwater 00:24:17 13 and I've lived up on Badwater Creek, the headwaters of 00:24:21 14 Badwater, all my life, I'm third generation, been there since 00:24:25 15 The reason Badwater got its name is it would come down 00:24:31 1906. 16 and wash the Indians' teepees away, they started calling it 00:24:37 17 Badwater because of the flash floods, and I would hope that 00:24:42 18 the DEQ would not -- you talked about the erosion up and down 00:24:44 19 Badwater, a lot of that is caused by those spring storms and 00:24:50 20 the fall storms. Those -- Badwater is -- runs like Wind 00:24:55 21 River right in front of our house which is about six miles 00:25:00 22 from the headwaters of Badwater. A neighbor called me up 00:25:04 23 once, it ran over our meadow down by the house six times in 00:25:08 24 five days, and so I would hope that the company doesn't --00:25:12 25 there's a mechanism that the erosion that's happened on 00:25:18

Badwater for years and years the company wouldn't get tagged00:25:22for that erosion. But I'm going to let it go at that, but00:25:26just remember that that has been going on since the '60s and00:25:34there's still class 1 waters going down below Boysen. And00:25:38we'll be submitting written comments. Thank you.00:25:43

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MYKENNAH LOTT: I'm a resident of Riverton, Wyoming. 6 My 00:26:21 7 name is Mykennah Lott, I'll spell it out for you, 00:26:26 M-y-k-e-n-n-a-h L-o-t-t. And I believe that this is entirely 00:26:35 8 9 experimental, I don't believe that they actually know what 00:26:39 10 they're doing, like they said that it is just a model. 00:26:42 So 11 with that being said I oppose it and I don't believe -- I 00:26:49 12 also don't believe that the proper people were consulted or 00:26:53 are aware of what's taking place. I know that everybody here 00:26:56 13 14 has probably driven through the Wind River Canyon and when 00:27:01 15 you're driving you see Entering Wind River Reservation, 00:27:04 Leaving Wind River Reservation. I look around this room and 16 00:27:09 17 I hardly see any Native people here, any people from the 00:27:14 18 Reservation, and I'm not sure -- that should have been a 00:27:16 19 question. I'm not sure if they've reached out, but I know 00:27:18 20 that a lot of my family don't even know what is going on. 00:27:20 21 And I believe that all of our lives are in danger, and I 00:27:24 22 believe that the water is more important than any job that 00:27:32 23 will come from this or any money that we'll make from this. 00:27:35 I was actually really surprised to hear ranchers agree with 24 00:27:40 25 what's going on because I've been all across the United 00:27:45

States seeing this happening in places where it's happening 00:28:01 longer. There is no turning back from them anymore, and we 00:28:04 3 have the chance to do that right now, say no, and so I am 00:28:09 saying no to this and it doesn't end at this public comment. 00:28:12 Thank you. I think we did reach out to 5 MR. FREDERICK: 00:28:21

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the tribes both at a meeting we had April of last year if I'm 00:28:28 not mistaken and I think you and Jason also talked to Dean 00:28:33 Goggles. Okay. Thank you. 00:28:37

9 BETHANY BALDES: My name is Bethany Baldes, B-a-l-d-e-s. 00:28:44 10 I would like to first say -- I'm going off of script here for 00:28:49 11 a second, my husband is Native American from this tribe and a 00:28:52 12 lot of my story tonight has to do with him. I am a lifelong 00:28:57 13 resident of Riverton, oil field wife and mother of three. We 00:29:03 14 have been an oil field family for 12 years. In that time we 00:29:07 have seen many of our friends, family and co-workers forced 15 00:29:11 16 to leave our community. They choose to leave home to be near 00:29:14 17 dad. Our family over these years has considered moving to 00:29:18 18 the DJ Basin, Powder River Basin and other areas. Like many 00:29:23 19 other families ultimately we sacrificed dad to stay near 00:29:28 20 grandparents. What is this doing to our Wyoming families? 00:29:33 21 We are bleeding out Wyoming men. Last year Jared did a small 00:29:36 experiment while in North Dakota. He asked on social media 22 00:29:41 23 if someone could bring him something. Within 10 minutes he 00:29:43 had made a connection and had something from Riverton to 24 00:29:46 25 North Dakota, another Indian reservation, faster than Amazon 00:29:50

Prime could have. I am so thankful for Aethon and the 1 00:29:56 2 persistence they have shown on this project. They will bring 00:29:59 3 many jobs on our community. It is bigger than just them 00:30:04 though. The job my husband is on right now is in Cheyenne, 4 00:30:07 it has five service companies on it, there are 28 guys on 5 00:30:12 that location 24 hours a day. Fun fact, of the 14 on day 6 00:30:16 7 shift on that particular location four are from Riverton my 00:30:22 8 husband being the only one that still calls Riverton home. 00:30:27 9 As we move forward I think it is important to not just look 00:30:35 10 at this as a cash cow. This is our opportunity to diversify 00:30:38 11 our economy while supporting the oil field industry with a 00:30:44 12 new local hospital and the Shoshoni Business Park on the 00:30:47 13 horizon, we are ready to bloom into whatever we want to be. 00:30:50 14 I'm a huge supporter of the Moneta Divide Project. Let's do 00:30:54 this so that we can find our path into tomorrow. Let's bring 00:31:00 15 16 our fathers, sons, husbands home. Think you again, Aethon, 00:31:03 17 for your commitment to our state, county and city. 00:31:07 18 MR. FREDERICK: Come on up. If you could let this 00:31:22 19 gentleman through, please. Thank you. 00:31:26 20 00:31:35 BEAU WEAVER: My name is Beau Weaver, I'm the mayor pro

21tem of Shoshoni. And Joel Highsmith, who is the mayor, is00:31:4022out of state, wanted me to say how much he supports this00:31:4423going through as well as I do. I am also an avid00:31:4624outdoorsman, I hunt and fish all through there. I'm through00:31:5025there even shed hunting, not a whole lot of sheds out there,00:31:56

but I go out there because I love it out there, but it's 1 00:31:58 2 about the jobs. They're watching what's going on with the 00:32:00 3 water. Fremont County needs the work, and I just wanted to 00:32:02 make sure that that was clear that we do support this and we 4 00:32:05 really would like to see this happen because it's about jobs 5 00:32:09 6 for this area also. Thank you. 00:32:11

7 TRAVIS BECKER: Travis Becker, B-e-c-k-e-r. Rising up 00:32:26 in support of this project. I've been watching this project 8 00:32:31 9 for many, many years, in fact my dad worked in that field, he 00:32:35 10 first started working for them when it was Tom Brown so I'm 00:32:41 11 very familiar with the Frenchie Draw Project, the Moneta 00:32:44 12 Divide Project, however you want to call it. Very familiar 00:32:51 13 with the wildlife out there, that's where I got my first deer 00:32:53 14 believe it or not. So as far as the fishery in Boysen, I'm 00:32:56 extremely concerned with that. I'm an ice fisherman, I don't 00:33:03 15 go in the summer but I go in the wintertime. And I've looked 00:33:05 16 at the modeling, I've looked at the draft permit that the DEQ 00:33:08 17 18 has spent time on. I'm in support of it. I think first and 00:33:13 19 foremost the DEQ is not going to step back and let us pollute 00:33:18 20 the waters, they have a job to do because they work in 00:33:24 21 essence -- and you may not like this, but they kind of work 00:33:27 22 for the EPA, okay, we know where that's at. So we've got 00:33:31 23 that, but most importantly for Fremont County is the economic 00:33:36 development that this will provide for the next 40 to 50 24 00:33:41 25 years. Folks, take that into consideration. That is a, that 00:33:44

is a big game changer if we can get this moving through. And 00:33:49 1 2 I look at all these faces in the crowd, I appreciate your 00:33:55 3 being here, this is fantastic, but we've got, we've got a 00:33:59 college, we've got a beautiful college, we can't put people 4 00:34:02 in here if we don't have the jobs. This is our life blood, 5 00:34:06 6 we can do it, and I believe that the DEQ will take care of 00:34:11 7 this, the permit will take care of it. I've read it, I would 00:34:16 strongly urge you to read it as well, it's on the website. 8 00:34:21 9 Thank you. 00:34:26

10 LINDA OLINGER: Linda Olinger, O-l-i-n-g-e-r. I've read 00:34:35 11 the draft permit, I read the DEQ website last night and this 00:34:45 12 comes from there. It said that you expect an increase in 00:34:53 pollution levels in times of short periods of servicing or 13 00:34:57 14 malfunction of treatment facilities. How many servicings 00:35:04 occur on a monthly basis? Will the public be aware of the 15 00:35:08 16 dates of these services -- servicings? Also I was just not 00:35:13 clear on who does the monitoring, is it the DEQ or is it self 00:35:24 17 18 monitoring by the company? One curious thing on the website 00:35:28 19 said you expect only chloride and only in the month of April 00:35:37 20 to reach the upper deviation limit. Why is this, why April? 00:35:43 21 Just curious as that's my birthday month. All discharging 00:35:50 points will be tested annually. Will the results be made 22 00:35:58 23 public? Will they be on the DEQ website? That's it. 00:36:02 24 MR. FREDERICK: Any other public comments here? 00:36:20

JOHN ROBITAILLE: John Robitaille, Petroleum Association 00:36:26

of Wyoming. Can you hear me? We support this permit and 1 00:36:32 2 believe that the science is showing that the requirements of 00:36:38 3 any DEQ rule is being followed, that includes the anti-00:36:42 degradation and the beneficial use requirement, all the way 4 00:36:49 5 down to Boysen and beyond. This was modeled very 00:36:52 00:36:57 6 conservatively, the assumptions were very conservative. We 7 do not see any adverse effects taking place. I need to make 00:37:01 it clear that this permit, the proposed permit is more 8 00:37:05 9 protective than any permit that has gone prior to this so 00:37:08 10 that's very important to acknowledge. We're not really sure 00:37:13 11 how much of this water is going to reach Boysen, it is 40 00:37:18 12 miles downstream. I'm sure in times of wet like April there 00:37:22 13 are opportunities that some of it may reach, but as we all 00:37:26 14 know in these areas this is ephemeral drainage and most of 00:37:31 that water will not even reach the Boysen Reservoir. When it 00:37:39 15 16 is on the ground, as Commissioner Hendry said, it is 00:37:41 17 available to wildlife and livestock which would otherwise not 00:37:46 18 There are many places in the Big Horn Basin be available. 00:37:49 19 where this is the case, if that water were to dry up a lot of 00:37:53 20 those ranchers would be in a lot of trouble because they 00:37:58 21 would not be able to have the water to feed their livestock. 00:38:01 22 I think it's also important to note that Aethon has been 00:38:05 23 monitoring and they will continue to monitor. It's important 00:38:10 to have a baseline, which we have, in case there's any 24 00:38:14 25 fluctuations that do occur they can be addressed in a timely 00:38:20 manner. All of these things are very important to keep in00:38:23mind, and we urge DEQ to go ahead with this permit.00:38:26

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3 CORTE McGUFFEY: My name is Corte McGuffey, C-o-r-t-e 00:38:45 M-c-G-u-f-f-e-y. I'm a '95 graduate of Riverton High School. 00:38:53 4 I just moved back to Riverton this fall, I've been in 5 00:38:56 6 Colorado the last 12 years, it took me 12 years to see the 00:39:02 7 light and get back to Wyoming where I want to raise my 00:39:06 family. Evidently I'm one of the few, even though I feel 8 00:39:10 9 like I'm getting older, one of the few people moving back to 00:39:15 10 Wyoming and it comes down to jobs. We need to have jobs to 00:39:19 11 get young people back here and this will be -- have a huge 00:39:23 12 economic impact. I am the CEO of -- well, CEO in training of 00:39:29 13 BTI Trucking and BDW Railroad out of Shoshoni. We've had a 00:39:35 14 tough year. There was a fire at Conoco Phillips Gas Plant, 00:39:42 we've had to lay off people, but with a project like this 15 00:39:45 16 we're going to be able to create jobs for Fremont County. So 00:39:48 17 I think there's a way that we can get this done in a smart 00:39:52 18 way and make it a win win for everybody. We can protect our 00:39:57 19 water, make it safe for everyone and create jobs at the same 00:40:01 20 time and keep our community moving forward. The last thing 00:40:05 21 I'd like to say is everything in this room, the meal you had 00:40:10 22 before you got here, the clothes that are on your back that 00:40:17 23 you shop for here in Fremont County, I'm a trucker now, they 00:40:20 came in on a truck, trucks run on diesel fuel, okay, and we 24 00:40:24 25 get diesel fuel from oil and gas, so I'm for this project and 00:40:29

I think we can do it in a smart way. Thank you. 1 00:40:34 RUBY CALVERT: Ruby Calvert from Riverton. I probably 2 00:40:55 3 know most of you here. I've been a lifelong resident like 00:40:59 Rob Hendry of Fremont County, also lived in Shoshoni and for 4 00:41:03 10 years at Boysen Lake. We've done everything you can think 00:41:08 5 of at Boysen Lake, fished, you know, been swimming, ice 00:41:12 6 7 skating, everything for 50 years. And I love Boysen Lake, 00:41:16 it's important to me, I know it's important to Fremont County 00:41:22 8 9 and to all of you or you wouldn't be here, but I'm also here 00:41:24 10 to support this water discharge permit. I think -- I have a 00:41:28 11 lot of faith in the DEQ. As you see in the data that they 00:41:33 12 presented tonight I think they're keeping tabs with all their 00:41:37 13 monitoring stations and they will continue to do so with 00:41:40 14 this, with this permit if it were granted, and I think we've 00:41:43 heard from everybody here about the necessity of jobs. 15 00:41:48 Ι 16 would like to mention one other thing we haven't talked about 00:41:52 and that is the wellness of our families and our communities. 00:41:56 17 18 One of the factors that the federal government always looks 00:42:00 19 at is, you know, what is the free and reduced lunch ratio in 00:42:03 20 your community and in the last 10 years that has gone from 44 00:42:09 21 percent as an average across Fremont County to 77 percent of 00:42:12 22 our students are on free and reduced lunch and that's just --00:42:17 23 that's horrible for this county. That's really a wellness 00:42:22 factor for our young families here and I just hope that --24 00:42:27 25 you know, this is just one step in the permitting process, 00:42:32

they still have to go through a complete EIS, environmental 1 00:42:36 2 impact study, and, you know, that's another thousand pages. 00:42:41 3 If you've read the 600 pages of this report there's another 00:42:44 thousand in that EIS which I kind of went through last night, 4 00:42:48 but, you know, we really need to think about modern 5 00:42:52 6 technology, monitoring, the capacity of the water treatment 00:42:57 7 center that's out there and can that continue to handle more 00:43:02 water. I mean I think we have to have faith in our 8 00:43:07 9 technology today, our DEQ and our good corporate partner in 00:43:10 10 Aethon and Burlington Resources. I think they've been there, 00:43:16 11 I mean I believe that they want to be here and help this 00:43:21 12 community and help us develop our resources in a responsible 00:43:24 way, so I'm for this project. And my brother Eli would be 13 00:43:28 14 here tonight if he could be and I hope he approves of this 00:43:34 message, but anyway, thank you all for being here and thank 15 00:43:38 16 you for allowing us to comment tonight. Thank you. 00:43:41

MR. FREDERICK: Public comment. Anyone over here?

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18 JOHN VINCENT: John Vincent, Riverton. I apologize, I 00:44:29 19 was late getting here, but I have been spending time reading 00:44:34 20 about this project and talking to different people about it. 00:44:38 21 There -- I am convinced that the science supports what is 00:44:41 22 proposed. I also had a question answered that I've been 00:44:50 23 wondering about when Mr. Robitaille said that most of the 00:44:54 water won't even get to the lake, that's what I've been 24 00:44:58 25 trying to figure out is how that water is going to last 40 00:45:01

00:43:54

1	miles going down the dry creek, but anyway I, I, I'm	00:45:05
2	convinced, for what that matters, but I am convinced that	00:45:09
3	this is a worthy project and it's well thought out. The	00:45:15
4	other thing is that we all have family members that have	00:45:18
5	either gone through school working in the oil field or still	00:45:24
6	work in the oil field, it's this is a blue-collar state,	00:45:29
7	this is our industry. And there's always things to fuss	00:45:34
8	about and Lord knows I've fussed about some of them, but you	00:45:39
9	have to remember what brings us all here today, we want jobs	00:45:42
10	for our kids, for our grandkids, we want to be able to see	00:45:49
11	our family members as we go through our lives, we want to see	00:45:51
12	our friends as we go through our lives and we don't want to	00:45:55
13	have to drive to Colorado to do that. And so I'm hoping that	00:45:58
14	the project goes forward, and I don't know what I can do to	00:46:04
15	help it or not, but for what it's worth I know I used to	00:46:09
16	be mayor here so I have some idea of what how important	00:46:14
17	jobs are to people. And Ruby's comment about the rate of	00:46:19
18	free and reduced lunches, when I started as a lawyer in	00:46:27
19	Riverton 40 years ago or more there wasn't one school in	00:46:31
20	Riverton that had that, not one, in fact I don't know that	00:46:35
21	there were on the Reservation either, but there may have	00:46:38
22	been, but there weren't any in Riverton and now every school	00:46:41
23	has that designation, right, Rube? Yeah, that's so I	00:46:45
24	mean, you know, we can fuss and worry, but it's time to start	00:46:48
25	acting, and things aren't quite working the way they should,	00:46:55

there will be modifications made, that's life, you have to 1 00:46:59 2 change and adapt and go forward and that's what we'll do. SO 00:47:02 3 anyway, that's about it. Thank you. 00:47:08 MR. FREDERICK: Any other public comment? 4 Yes, sir. 00:47:17 5 Come on over. 00:47:19 00:47:33 6 RYAN KINDERVATER: Dr. Ryan Kindervater, 7 K-i-n-d-e-r-v-a-t-e-r. I see a lot of people in the room 00:47:42 8 that I've probably seen over here at the hospital. Jobs are 00:47:44 9 certainly a big concern here. I see a lot of patients who 00:47:49 10 can't afford their medicine like insulin, and I see a lot of 00:47:52 11 people with chronic lung disease and cancer, some of those 00:47:56 12 are from smoking, some of those from the uranium mining boom 00:47:58 13 that happened a long time ago. I wonder if there were 00:48:02 14 similar meetings back in the day. Whether or not there were, 00:48:05 I think there was some lack of foresight at that time. 15 00:48:08 16 Looking through the data, as far as I can tell I think there 00:48:11 17 has been insufficient examination of things like we talked 00:48:14 18 about earlier, dissolved hydrocarbons some of which have been 00:48:18 19 addressed, but one of the issues that actually the Society of 00:48:24 20 Petroleum Engineers, which I referenced earlier, raises with 00:48:28 21 disposing of waste water from these sites is that it's 00:48:31 22 difficult to tell what is in there, unless you were to test 00:48:36 23 specifically for compounds you may not know it's in the 00:48:38 water. These things don't tend to affect trout or cattle and 00:48:41 24 25 cause cancer, they don't live long enough, they tend to 00:48:45

affect us years long down the road. These chemicals are 1 00:48:48 2 increasingly in our food and water from other sources as well 00:48:54 3 and so every little bit does matter. Like I said, I think 00:48:57 that dumping this waste water in this class 1 water is a 4 00:49:03 radical departure and would probably be considered so even by 00:49:09 5 industry professionals. I think if you want to talk about 6 00:49:13 7 jobs, properly treating and disposing of this water is going 00:49:15 8 to bring even more jobs, and so I don't think that these are 00:49:18 9 necessarily diametrically opposed interests, I think we all 00:49:26 10 want what's best for each other, and I don't think that is a 00:49:32 11 -- my opinion a shortsighted dumping of this waste water into 00:49:35 12 our drinking water. 00:49:40 Thanks.

MR. FREDERICK: Any other public comments? 13 As I 00:49:49 14 mentioned before, the public comment period is open till July 00:49:57 5th and we'll be taking written comments until then. 15 Ιf 00:50:04 16 you're in Thermopolis tomorrow night we'll have another 00:50:07 17 public meeting, another opportunity for public comment in 00:50:12 18 Thermopolis. We are taking electronic comments on our 00:50:15 19 website, they can be submitted that way as well. And again, 00:50:19 20 once the comment period closes we'll be developing written 00:50:24 21 responses to all of those comments and those will all be made 00:50:30 22 publicly available at the time we make a decision on the 00:50:34 23 draft permit. Yes. Question in the back. 00:50:38

24JIM GORES: I'm Jim Gores, G-o-r-e-s. I think, you00:06:0325know, we've heard an awful lot of really interesting comments00:06:10

and concerns this evening. I think that there's a lot of 1 00:06:14 2 questions that may yet need to be answered. We don't 00:06:19 3 necessarily have to have all the answers today. As this 00:06:23 field continues to develop we will discover things that will 4 00:06:28 5 lead to solutions that aren't evident to any of us today, and 00:06:34 6 I have no doubt that as this field develops those 00:06:39 7 technologies will be discovered and applied and everything 00:06:45 8 will be continued to be handled as it has for so many decades 00:06:50 9 in a responsible manner. I'm an avid fisherman and hunter, I 00:06:56 10 don't want to see those assets diminished. I'm also 00:07:02 11 dependent upon the income that the industries generate here 00:07:08 12 and the tax bases that they supply and I don't want to see 00:07:17 13 that diminish either. So I think we're all in the same boat 00:07:21 14 with this, we can "what if" ourselves to death asking 00:07:27 15 questions for which there is no answers today, I have no 00:07:36 16 doubt whatsoever, though, that as time goes on we'll discover 00:07:39 17 answers and the technologies will provide solutions to those 00:07:43 18 The real question is do we want to jump in and go problems. 00:07:48 19 forward or do we want to hold -- let our suspicion hold us 00:07:53 20 back and let our timidity to rule us rather than our 00:07:59 21 confidence in the future. And I for one would like to 00:08:04 22 support the permit as presented, I think it's been well 00:08:08 There are questions that I could ask as well, 23 thought out. 00:08:16 24 but I'm sure that those will be addressed as time goes on. 00:08:20 25 Thank you. 00:08:26

MR. FREDERICK: Okay. Really appreciate the 1 00:08:33 2 information. 00:08:38 (The following comments were made during the 3 00:08:38 hearing held on May 21, 2019, in 4 00:08:38 Thermopolis, Wyoming, at the Thermopolis 5 00:08:38 6 High School:) 00:-59:-03 7 MICHAEL NELSON: My name is Michael Nelson, 00:-59:-03 M-i-c-h-a-e-l N-e-l-s-o-n. 8 9 MR. FREDERICK: Michael, I can tell you too, it looks 10 like you've got several pages there, do you intend to read 11 those? Okay. So you can also submit written comments, we 12 take those as well just so you know. 13 MICHAEL NELSON: Okay. Thank you. First I would like 00:19:43 14 to thank the Department of Environmental Quality for the huge 00:19:46 15 amount of work they have done and are doing and for bringing 00:19:48 16 this to our attention. One of the biggest arguments for oil 00:19:52 17 and gas fields is there will be new jobs, but I have not 00:19:57 18 heard one mention of how many new jobs or if any will be 00:20:04 19 created by the oil company. One can be sure that any new job 00:20:09 20 if created will be mostly short term. Pollution of the 00:20:18 21 waterways will be very long term and continued for a very 00:20:22 22 long time from the leachate fields long after the wells are 00:20:27 23 no longer used and the entire field is closed. The vast 00:20:33 24 majority of the wealth that is extracted from Wyoming does 00:20:38 25 not go into Wyoming economy but actually lines the pockets of 00:20:42

out-of-state billionaires. They extract what would be 1 00:20:48 2 Wyoming's wealth and make it theirs. The corporations 00:20:54 3 exploit Wyoming people to make themselves rich with Wyoming 00:20:57 resources, the resources that should be controlled and 4 00:21:03 distributed by Wyoming people. For the privilege of a few 5 00:21:06 new jobs you trade your health, your children's health and 6 00:21:11 7 your grandchildren's future. Cancer and birth defects are 00:21:15 8 evident everywhere. More precious than any wealth is clean 00:21:21 9 water, more precious than wealth is good health. The Boysen 00:21:29 10 Reservoir is currently being and has been degraded. 00:21:33 There 11 are people who will not eat fish caught in Boysen. 00:21:37 12 Apparently the Department of Environmental Quality is unsure 00:21:43 13 where the pollution is coming from, but rather than figure 00:21:47 14 out where the problem is they are ready to let the most 00:21:51 obvious possible point and source to increase their pollution 00:21:56 15 16 by seven times. It appears to me that after 50 years of 00:22:00 17 concentrating hazardous waste in the evaporation leachate 00:22:07 18 fields, it is beginning to migrate into the Reservoir in 00:22:13 19 sufficient qualities to affect the overall water health. Ι 00:22:17 20 suspect that this is just the tip of the iceberg and as time 00:22:23 21 passes the runoff will be bring greater concentrations of 00:22:28 22 hazardous waste steadily increasing over time unless there is 00:22:33 23 some sort of hazardous soil mitigation. You will completely 00:22:36 lose this Reservoir. Removing hazardous soils from all the 24 00:22:40 25 outfall points and the 40 mile runs is guite a big job, that, 00:22:47

however, would create some jobs and employ some people and 1 00:22:52 2 improve the environment. That is a win win. Because the oil 00:22:56 3 company cares so much for the people, water, the environment 00:23:01 while falling over itself to give everybody jobs, I'm sure 4 00:23:07 the oil company will want to take responsibility for their 5 00:23:10 6 hazardous waste and mitigate it at all possible points. I 00:23:14 7 could possibly be wrong about this. My questions are, one of 00:23:20 my greatest concerns is about industrial hazardous materials 8 00:23:29 9 being ingested by humans through their water source and food. 00:23:33 10 Have soil samples been taken from the fall points and 00:23:40 11 evaporating leachate fields and if so what was tested for and 00:23:46 12 what was the concentrations? What is being done to prevent 00:23:49 13 cattle destine to enter the public's food supply from 00:23:54 14 drinking and eating tainted food sources in the hazardous 00:23:59 waste drainages? What are the ramifications for an oil 15 00:24:05 16 company if found to be a point of source in polluting a major 00:24:09 17 waterway? What is being done with fracing and drilling 00:24:16 18 hazardous materials? What are the ramifications for an oil 00:24:21 19 company if found to be out of compliance? If the oil company 00:24:28 20 is self-monitoring, what is being done to verify those 00:24:30 21 results? And I have one more question is, do they monitor 00:24:37 22 the water that is now coming down that is now filling the 00:24:42 23 reservoir from these flash floods and from this stuff? Thank 00:24:49 24 you very much. Have a good week. 00:24:55 25 MR. FREDERICK: Just so you know, I am going to leave 00:25:01

myself the option to limit the time for public comments 1 00:25:06 2 because I don't think any of us want to be here all night, 00:25:09 3 but I want to make sure everybody gets a chance, so if we get 00:25:13 too lengthy I'm going to utilize that option. Also, keep in 4 00:25:16 mind that part of the reason of a public comment is to 5 00:25:20 6 provide information to the Department that you wish us to 00:25:23 7 take into consideration in making a decision on a permit. 00:25:27 You can go ahead and express your personal opinions all you 8 00:25:31 9 want to and that's certainly your prerogative here, but it's 00:25:35 10 much more helpful, I think, to us if you could point out some 00:25:42 11 specific issues with respect to the permit that concern you. 00:25:45 12 Did you have a written comment or --00:25:54

13 Thank you for the opportunity. My name is 00:26:04 HENRY YAPLE: 14 Henry Yaple, I live in Powell. It's spelled Y-a-p-l-e, it's 00:26:07 like maple only with a Y. I'd like to make a couple of 15 00:26:15 16 comments about -- which stem from my own experience. This is 00:26:20 very interesting. I'm sure it's all sound science and all 17 00:26:24 18 the rest of it, but I would caution you, sir, this is proof 00:26:30 19 and can be used in a court. Let me explain. My wife was 00:26:32 20 prescribed to take Fen Phen and after she died I received a 00:26:38 21 settlement in six figures because of why it shortened her 00:26:45 22 life. I am also a survivor myself of Non-Hodgkin's lymphoma 00:26:51 23 and I'm part of the class action suit, 13,000 individuals, 00:27:00 which has been awarded -- two previous things have been 24 00:27:03 25 awarded, two billion dollars for individuals that have been 00:27:07

affected with cancer, Non-Hodgkin's lymphoma, because of 1 00:27:14 2 cancer-causing components in Roundup. This is germine, you 00:27:20 3 provided the proof, and I know from my own experience there 00:27:24 are packs of tort lawyers roaming the country looking for 4 00:27:27 The State of Wyoming, and I know this because I'm 5 00:27:32 torts. 6 part of the Wyoming retirement system, a beneficiary, is a 00:27:36 7 deep pocket, Aethon is a deep pocket, maybe not as deep as 00:27:40 Wyoming, now all of this is proof and if you have irrigators 8 00:27:45 9 who have problems, if you have people with cancer that has 00:27:51 10 problems, if you are sued by the Native American tribe just 00:27:55 11 up the river because of this, all of this can be used. 00:28:00 Μv 12 caution is don't do it, this is merely bureaucratic prose to 00:28:05 make it possible for an oil company to earn money. 13 Thank 00:28:10 14 you. 00:28:28 15 MR. FREDERICK: State your name. 00:28:28

16 KATHY CROFTS: My name is Kathy Crofts. I am a resident 00:28:34 17 of Cody, Wyoming, and a past resident of Thermopolis. Ι 00:28:40 18 represent many recreationalists and conservationists from 00:28:45 19 Cody and the Big Horn Basin. I'm also a wildlife biologist 00:28:51 20 and work in the fly fishing profession as a fly fishing 00:28:55 21 quide. I would oppose the renewal of this permit on these 00:29:03 22 grounds. The first grounds is that the DEQ is in violation 00:29:07 23 of a 2003 mandate which occurred after the Red Stone decision 00:29:13 which requires them to consider all discharges in the entire 24 00:29:21 25 drainage system and calculate the accumulative effects and so 00:29:28

this would be effects not only in Moneta Divide but across 1 00:29:33 2 the valley towards Riverton and other discharges down through 00:29:38 3 the Big Horn Basin; I have not seen any evidence that they 00:29:42 considered those options. The toxic discharge is predicted 4 00:29:48 5 to kill young fish in Boysen Reservoir. The accumulative 00:29:51 6 effect will also harm fish species in Boysen Reservoir. 00:29:57 7 According to the report, DEQ is in collaboration with the oil 00:30:05 8 company, Aethon. This permit depends on the treatment 00:30:10 9 facility Neptune to operate at its maximum to cleanse the 00:30:16 10 water, however, historical records show that the Neptune 00:30:21 11 facility is highly unreliable and it in operation less than 00:30:26 12 half of the time. I don't believe that the DEQ has 00:30:31 13 adequately addressed a non-biased monitoring system for the 00:30:36 14 discharge. I also believe that DEQ has not adequately 00:30:41 addressed guarantees that there will be timely enforcement of 00:30:46 15 16 the permit. Historically DEQ has failed at enforcement. А 00:30:51 17 prime example is the Willwood Dam disaster that occurred in 00:31:00 18 the Cody area. The second example is that Aethon or Akita 00:31:04 19 was in violation of their permit for over 11 years before 00:31:14 20 they were brought back into the standards. I would hope that 00:31:20 21 the denial of this discharge permit would encourage the oil 00:31:24 22 company to have the injection wells put into place and to 00:31:32 23 take that toxic discharge and put it back where it was 00:31:37 24 originally found. Thank you. 00:31:42 25 I'm Beau Weaver, I'm the mayor pro tem of BEAU WEAVER: 00:32:21

Shoshoni. I spoke with both Mayor Rich Gard of Riverton and 1 00:32:26 2 Joel Highsmith of Shoshoni both of whom could not be in 00:32:31 3 attendance tonight, Rich Gard has a council meeting and 00:32:36 Highsmith is working in Texas. Both send their regrets on 4 00:32:39 5 not being able to attend. I have letters of support and why 00:32:43 they support this from the mayors of Dubois, Riverton, Lander 00:32:46 6 7 and Shoshoni I would like to give you. As a former guide in 00:32:54 8 Wyoming and an avid outdoorsman I also have concerns, but 00:32:58 9 believe they have been addressed, my concerns. I also 00:33:03 10 believe this is a game changer for our counties. 00:33:06 It will 11 boost our economy and bring in jobs. If we bring in local 00:33:10 12 jobs people will be able to stay with their families rather 00:33:13 13 than travel for work far away from their homes. I believe 00:33:18 14 it's about the jobs and it's also about our waters, but I do 00:33:23 believe that has been addressed. There's a lot of support 15 00:33:27 16 from our surrounding communities and I believe this needs to 00:33:30 17 be done. Thanks for your time. 00:33:33

18 KATHY CAMPBELL-WALLACE: I'm Kathy Campbell-Wallace. 00:34:00 19 Cyanobacteria, also known as blue-green algae, can multiply 00:34:03 20 quickly in surface waters and form blooms when favorable 00:34:13 21 conditions prevail such as high temperature, intense light, 00:34:18 22 high ph and increased availability of nutrients especially 00:34:24 23 prosperous and nitrogen artificially released by 00:34:30 24 anthropogenic activities. In humans exposure to cyanotoxins 00:34:36 25 can occur in various ways however the oral route is the most 00:34:39

important. This is mainly through drinking water or by 1 00:34:44 2 eating contaminated foods. It may even involve ingesting 00:34:47 3 waters during recreational activities. Furthermore, derma 00:34:53 exposure and inhalation are both possible. Depending on the 4 00:34:59 concentration and the aquatic environment, they can cause 5 00:35:01 severe poisoning and produce chronic diseases such as cancer. 00:35:06 6 7 Cyanotoxins are an important group of chemical compounds from 00:35:11 8 the point of view of ecotoxicology, toxicology and 00:35:14 9 environmental chemistry. Cyanotoxins can be divided on the 00:35:19 10 basis of two main criteria. One, their action mechanism in 00:35:25 11 land vertebrates, especially mammals, in three principle 00:35:31 12 classes, hepatotoxins, neurotoxins, dermatotoxins and, two, 00:35:35 13 their chemical structure within which they may be classified 00:35:42 14 as cyclic peptides, alkaloids or lipopolysaccharides. 00:35:45 Another type of toxic produced by many cyanobacteria also are 00:35:52 15 16 gram negative bacteria in this group of lipopolysaccharides 00:35:57 17 which are involved in toxic shock syndrome. Boysen Lake is a 00:36:03 18 well-known destination for residents of Wyoming and tourists 00:36:07 19 who enjoy aquatic activities. Introducing a higher prolonged 00:36:12 20 level of nutrients into the water increases the possibility 00:36:17 21 of blooming frequency, propagation and sustained growth of 00:36:20 22 algal colonies. How will the class 1 and class 2A waterways 00:36:27 23 be monitored for algal bloom and tested for potential 00:36:30 24 cyanobacteria toxicities? Thank you. 00:36:38 25 Thank you for your comments. MR. FREDERICK: Not 00:36:43

1necessarily related to the permit but nevertheless an00:36:432important issue and you need to visit with Lindsey Patterson00:36:463and she is on top of that. So thank you. Do you intend to00:36:514read that?00:36:51

KEITH BECKER: I'll try and condense it a bit. 5 I'm 00:37:25 6 Keith Becker of Hot Springs County. Keith, K-e-i-t-h, 00:37:26 7 Becker, B-e-c-k-e-r. Okay. My comments reflect my interest 00:37:43 in the quality of the municipal water supply in Thermopolis 8 00:37:45 9 in the class 1 water that is our river both in the Wind in 00:37:52 10 the canyon and the Big Horn River as it flows on downstream 00:37:56 11 and the blue ribbon fishery that we have below Boysen 00:38:04 12 Reservoir. It seems to me that the State of Wyoming and the 00:38:10 13 DEQ has a regulatory and a fiduciary responsibility in 00:38:12 14 protecting those interests. Let me point to an elephant in 00:38:20 the room, I refer to the collapse of the coal industry in the 00:38:25 15 16 state. The -- though largely unforeseen, it was inevitable 00:38:30 17 given the economics of the energy industry. From a purely 00:38:37 18 economic perspective, when the cost of an energy resource 00:38:42 19 exceeds the cost of an alternative resource the market 00:38:47 20 collapses. Today the cost of nonfossil renewable energy is 00:38:52 21 less than the operating cost of some coal fired plants. I 00:38:57 22 bring up the coal industry because the other hydrocarbon 00:39:05 23 industries are approaching a similar economic challenge. We 00:39:10 have a huge reserve of fossil fuels in the state, all of them 00:39:13 24 25 are approaching the point where the cost of production is 00:39:17

rapidly rising and the value is stagnant or declining. Many 1 00:39:21 2 billions of dollars have been invested in hydraulic 00:39:30 3 fracturing in order to produce unconventional reserves in the 00:39:32 state. From financial reports in Forbes, Bloomberg, Business 00:39:37 4 Insider and the Wall Street Journal we learned that the place 00:39:43 5 6 in fracing natural gas line structures have yet to profit the 00:39:47 7 industry. Even higher levels of technical advancement have 00:39:51 also failed to, in fact, bring profits to the industry. The 8 00:39:55 9 assumption was that the price of the product would increase. 00:40:03 10 That now seems highly unlikely as the cost of renewals are 00:40:07 11 rapidly decreasing and technological advancements in 00:40:14 12 generating capacity and battery banks to level the supply is 00:40:18 bringing the price down rapidly. The price of natural gas, 13 00:40:24 14 on the contrary, would almost have to double for the fracing 00:40:28 industry to be profitable. Renewables are destine to be 15 00:40:32 16 competitive for something like in the next year at current 00:40:37 17 prices not waiting for them to go up. Like the coal 00:40:43 18 industry, the gas industry may well be headed for collapse if 00:40:49 19 it can no longer meet its promises to clean up its water and 00:40:56 20 00:41:01 is thus asking us to pick up those costs in the degradation 21 of our water --00:41:07 22 MR. FREDERICK: Excuse me, sir. Do you have a comment 00:41:11 23 that's specific to the Moneta Divide permit that you would 00:41:11 like to make? 24 00:41:15 25 KEITH BECKER: I can go to the conclusion which I think 00:41:18

		1
1	is specific.	00:41:19
2	MR. FREDERICK: I'd really like to stay focused on this	00:41:20
3	permit if we can, okay, and if not I'll take your written	00:41:25
4	comment and I'll address it. Thank you.	00:41:27
5	KEITH BECKER: Okay. Thank you. So on economics alone,	00:41:29
6	never mind the trillion dollar costs of the climate crisis,	00:41:35
7	intensified flooding, wildfire and hurricanes, the	00:41:41
8	destruction of our ocean through planet heating, approving	00:41:43
9	this discharge permit for the gas field expansion may be	00:41:48
10	extremely costly for communities along the river for	00:41:52
11	negligible gain in meeting the nation's energy requirements.	00:41:57
12	It seems to me that any degradation of our irrigation water,	00:42:00
13	our municipal water and our fisheries and that, that	00:42:08
14	additional production will introduce more concentration of	00:42:13
15	pollutants into the Wind River and the Big Horn River,	00:42:23
16	there's no way that you can permit a certain level and not	00:42:26
17	have an increase in this river and we don't need any	00:42:30
18	increases. Thank you.	00:42:33
19	WENDY BARTEAUX: My name is Wendy Barteaux, it's	00:42:47
20	W-e-n-d-y B-a-r-t-e-a-u-x. I am happy to be here tonight. I	00:42:59
21	do want to thank especially this gentleman over here for his	00:43:01
22	questions, they're my questions too. My major concern is	00:43:05
23	about flooding. The Badwater Creek and Alkali Creek are	00:43:10
24	ephemeral meaning they dry up, I belive, even with the	00:43:19

25 addition of this water, is that --

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MR. FREDERICK: Yes.

WENDY BARTEAUX: And so I have to think that these 2 00:43:24 3 elements are collecting in the soils of these streams and 00:43:27 when there are thunderstorms and we have flooding I have to 4 00:43:32 5 think that that moves a bunch of this sediment downstream and 00:43:37 6 I wonder if we know, you know, what the salt levels and the 00:43:43 7 organic levels are in the mixture area when these floods 00:43:50 8 occur, you know, have we actually tested this during 00:43:55 9 flooding. I am concerned that we're, we're basically tilling 00:43:58 10 up these soils and having these soils dump into the Reservoir 00:44:04 11 and at concentrations that are much higher than what is 00:44:11 12 normal or average. And so I, I also wonder if we're only 00:44:17 13 looking at water quality quarterly, I think that's what was 00:44:25 14 said, is it possible that we're missing plumes of 00:44:29 contaminants going downstream? And I think Bill said 15 00:44:39 16 yesterday that the concentration of the discharge into Boysen 00:44:43 17 will be the same with this new permit as it is now, but we're 00:44:44 18 dumping, we're dumping basically twice as much material into 00:44:49 19 Boysen. And then, you know, in the process of the soils 00:44:54 20 being stirred up are we sending a plume down the, down the 00:45:03 21 Wind River that we won't even detect because we're not 00:45:09 22 testing at that particular time? So that's my point. 00:45:15 My 23 other thing is that I am concerned about ERM being the 00:45:20 modeler and the tester of water for Aethon and that the DEQ 24 00:45:27 25 isn't actually doing the testing. I have the same concerns 00:45:33

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as this gentleman over here, that I've worked for00:45:36organizations before like ERM who have done work for oil00:45:41companies -- or, for mineral resource companies and I have00:45:47found that they have great influence over the vendor who is00:45:53actually doing this job and I'm concerned that DEQ is not00:45:57doing some blind testing and modeling -- testing the veracity00:46:04of the model on their own. Thank you.00:46:09

MR. FREDERICK: Thank you. Comments on the permit. 8 00:46:12 9 TERRY JACKMAN: My name is Terry Jackman. I've been 00:46:21 10 here for 50 years in this community. We are starting to --00:46:23 11 we've lost our lumber yard, we've lost the hometown shopping 00:46:27 12 mall, it's just a little mall, but we need this in our 00:46:33 13 community, people, we need this to survive. They've tried to 00:46:36 14 take our Pioneer Home, we don't want that. That is something 00:46:40 that could boost our economy to get us going for the next 20, 00:46:44 15 16 30, 40 years. That's all I got to say. 00:46:49

MR. FREDERICK: Thank you.

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18 JOHN BUCK: My name is John Buck, and I took time out to 00:47:03 19 come to this. My son is in his 4-H meeting, he is presenting 00:47:08 20 a little duckling and how to raise that over at the annex 00:47:14 21 building, but I think this is a very important issue. You 00:47:21 22 know, the water quality is class 1 through the Wind River 00:47:24 23 Canyon and it's something that we need to preserve as a 00:47:28 community. I disagree with that other man that just came up 24 00:47:31 25 here, we don't need to sell ourselves to these corporations 00:47:34

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for their jobs because of a promise, just some pie in the sky 00:47:37 1 2 that you're trying to sell us, but really, you have the 00:47:44 3 numbers right in front of you, it goes from 8 as a ph up to 9 00:47:47 and a half, what's that going to do for our ranchers and our 4 00:47:52 5 farmers in this community, what's that going to do when they 00:47:55 put that water on their fields, it's already alkaline, and I 6 00:47:57 7 don't think you really care. You know, what is the benefit 00:48:02 to Hot Springs County. These corporations wouldn't be asking 00:48:04 8 9 for this permit if it wasn't in their best interest and they 00:48:08 10 want to dump this in our community and send the money to 00:48:12 11 what, Texas? It's not going to go to our community. Now I 00:48:16 12 understand what this gentleman over here, the Fremont 00:48:19 municipalities, and they want to say the -- you know, 00:48:23 13 14 Shoshoni, Riverton, Lander, well, the water is not going that 00:48:26 way, of course they're not going to take it, it's coming to 15 00:48:28 16 Hot Springs County. You know, where are these promise of 00:48:33 17 jobs? Are you going to employ 100 people from Hot Springs 00:48:36 18 County for the next 50 years to be employed at the Neptune RO 00:48:39 19 facility? You know, why aren't there being more of these RO 00:48:45 20 facilities being created or evaporation units where you can 00:48:49 21 take care of this water. It's the cheapest way you can do 00:48:55 22 it, you're going to contaminate our water source and we have 00:48:57 23 to take it on some pie in the sky promise. I think I covered 00:49:00 24 all my points. I just encourage you, you know -- the 00:49:08 25 approval of this permit will hurt Hot Springs County and it 00:49:12

will hurt the people of Wyoming. Thank you very much. 1 00:49:16 2 BRADYN HARVEY: My name is Bradyn Harvey from 00:49:27 3 Thermopolis. I am for this permitting. Oil and gas is one 00:49:30 of the major resources to Wyoming's economy. Generations of 4 00:49:35 families have built their livelihoods in the oil and gas 5 00:49:40 industry. Without oil and gas Hot Springs County -- most of 6 00:49:44 7 it wouldn't even exist. DEQ and EPA monitor the oil and gas 00:49:47 industry with very strict standards and they're enforced with 00:49:52 8 9 heavy fines and shutting down of wells. Every point of 00:49:55 10 testing along the water's route are to ensure that the water 00:49:58 11 quality remains as good as they are now. Wyoming already has 00:50:02 12 many discharges that have not affected the river water as it 00:50:06 13 is. Oil is used for so much more than fuel and energy, it is 00:50:09 14 used in almost every good produced. 00:50:13 JOEL FARBER: My name is Joel Farber, I live just north 15 00:50:25

of town here, Hot Springs County. First I want to thank 16 00:50:29 17 Kevin and Bill for this meeting. It has been some time since 00:50:35 18 I've been involved in issues such as this. This was my work 00:50:39 19 for a long, long time. And I have known Kevin for a great 00:50:44 20 many years, and I forgot what a tough job you have and how 00:50:48 21 well you handle it and I appreciate that. I am for oil and 00:50:54 22 gas too, folks. I started my career with Texaco. It's 00:51:02 23 important to our state and it's important to our community. 00:51:06 Many people derive their livelihood from it, it's a big deal 24 00:51:11 25 and I get that, but I also get that this water supply is a 00:51:18

big deal to our community, not only to me but to my kids and 1 00:51:25 my grandkids some day I hope. The technical work that has 2 00:51:30 3 been done by ERM in my opinion is incomplete and technically 00:51:38 inadequate and I will provide written comment on that --4 00:51:47 those factors or those -- my review of their work on those 5 00:51:51 6 things. I attended the meeting last night in Riverton 00:51:57 7 because I wanted to get an understanding of one key issue. 00:52:02 ERM is not licensed to practice, they don't have any business 00:52:06 8 9 presence in this state if you research them. It appears that 00:52:12 10 the folks that performed this work have no credential in 00:52:16 11 terms of professional license, they, they are from 00:52:22 12 Pennsylvania and India. I'm not sure that they understand 00:52:29 13 the environmental factors that they wrote a report on or 00:52:36 14 developed the model for, in fact I'm pretty sure they didn't, 00:52:41 and those will be in my comments to you in writing. My 15 00:52:45 16 concern is that they are not accountable for this work, and 00:52:50 17 they state up front in their report that I can't rely on that 00:52:55 18 report and I don't think DEQ can. The report was written for 00:52:59 19 Aethon. There's a limitation of liability statement at the 00:53:06 20 front of that report that says I can't rely on their work. 00:53:10 21 If I can't then -- I'm speaking to you as a member of the 00:53:16 22 public -- I don't think you can, Kevin, and that's why I 00:53:20 23 asked if you had determined if they were licensed to practice 00:53:25 24 before our professional boards in this state, specifically 00:53:31 25 the engineering board, and the reason I ask for that is 00:53:36

because they are proposing to use Boysen Reservoir as a water 00:53:40 1 2 treatment facility to reach their discharge requirements 00:53:45 3 under the permit that is being drafted. Water treatment in 00:53:50 our state is performed under the supervision of a 4 00:53:57 professional engineer, that's a requirement. It's just good 5 00:54:02 6 business, it holds people accountable who could harm the 00:54:07 7 public. I don't know whether the proposed discharges will 00:54:14 harm me or the public at large based off of that report 8 00:54:20 9 because I do think it's inadequate, and I can't hold them 00:54:25 10 accountable and I can't hold you accountable for that. 00:54:30 Thev 11 also make assumptions based off of the geology of the area 00:54:35 12 and those -- that work is also required to be performed by a 00:54:42 13 professional geologist. I think that's important. They have 00:54:47 14 none of those credentials. None of the people that are cited 00:54:52 as authors of that report nor is the company licensed before 15 00:54:56 16 either board in our state and that concerns me greatly. So I 00:55:01 17 wanted to stand here today and inform you that I will be 00:55:09 18 filing complaints before each board against the company ERM 00:55:13 19 and the people that are cited to author that work because 00:55:19 20 they're not -- they shouldn't be -- they shouldn't be able to 00:55:23 21 do that and I'm concerned that you should know that. You are 00:55:30 22 familiar with this. This work should have been performed 00:55:33 23 under professionals that meet the requirements of our state. 00:55:39 24 Next, and I'll be brief, because Boysen is proposed as a 00:55:45 25 water treatment facility under this permit, it should have 00:55:52

that as a beneficial use. The beneficial uses for Boysen 1 00:55:57 2 Reservoir are of record, they are of law, they include fish, 00:56:02 3 wildlife and recreation. Last evening a physician in 00:56:10 Riverton inquired, asked a question, what effect would these 4 00:56:15 discharges have on the health and wellbeing of people who 5 00:56:21 6 recreate at Boysen or eat the walleye or sauger or other fish 00:56:26 7 that are caught there and propagate there. There has been a 00:56:36 8 long-standing understanding between DEQ and the Wyoming Board 00:56:42 9 of Control that you would take beneficial use into 00:56:48 10 consideration in your permitting process. Water treatment is 00:56:53 11 not a recognized beneficial use for Boysen Reservoir and in 00:56:57 12 fact by creating a mixing zone that potentially impacts fish 00:57:06 13 or humans who recreate at Boysen -- this is our state park, a 00:57:14 14 state park. By creating that through your department that is 00:57:23 creating a new beneficial use that I believe impacts or harms 00:57:33 15 16 the existing and recognized permitted beneficial uses for 00:57:39 Boysen Reservoir, okay, therefore I will also be filing a 17 00:57:47 18 complaint, and I will copy you with these complaints, with 00:57:54 19 the Board of Control. I think that you have not fully 00:57:57 20 realized the impacts from a regulatory standpoint of what is 00:58:04 21 being proposed under this permit, and I just wanted to stand 00:58:10 22 here and tell you these things face to face. I think this is 00:58:14 23 not being handled well, there should be work done. If it's 00:58:20 viable, and I'm not saying it's not, I don't know, I don't 24 00:58:29 25 think the work that has been done is sufficient to make that 00:58:31

decision, but if it is viable there should be work that 1 00:58:33 2 assesses the risk to human health and the health of the 00:58:40 3 environment, eco risk assessment, human health risk 00:58:47 assessments should be done to validate the reasonableness of 4 00:58:50 this permit. This is a big deal, this is a big deal to a lot 00:58:59 5 6 of people. People are looking to it for jobs and people are 00:59:05 7 worried about their water supply. Thank you. 00:59:08

JOHN GIBSON: John Gibson. It's kind of hard to step up 00:59:21 8 9 in front of here, I just climbed out of a doghouse, I was in 00:59:28 10 the oil field today, but I want to present my opinion 00:59:31 11 non-biased as I can so if you guys could take that and throw 00:59:36 12 it out. I do smell like crude oil. I worked in the 00:59:40 13 laboratory for cement in Laramie for three years and we did 00:59:48 14 this exact same research but on the ground level. This is 00:59:50 the kind of stuff that will shut down ground plants because 15 00:59:53 16 that's what we could use to make cement, we fire blast the 00:59:57 17 rock. Everything looks on point. Mercury and fluoride are 00:59:58 18 I think, and you can ask my science teacher up big ones. 01:00:03 19 there, when you run tests like these it's nice to have a 01:00:07 20 constant or a reference to know if this is biased oil field 01:00:11 21 judgment, if they're skewing numbers, maybe if they're 01:00:18 22 fudging numbers, it's just a judgment that's passed along, a 01:00:22 23 lot of people get that feeling all the time, and this sounds 01:00:25 wild, but we conveniently in all tests performed across all 24 01:00:28 25 boards you always like to have a constant which is a frame of 01:00:34

We bring in this frame of reference is what they 1 reference. 01:00:38 2 have as the discharge, so we find a natural water discharge 01:00:42 3 that is flowing out of the ground naturally, and I happen to 01:00:46 think of a couple of them because we are Thermopolis, I don't 01:00:49 4 5 know if you guys have ever thought about just testing the 01:00:53 6 natural water in these grounds. These numbers are parts per 01:00:58 7 million and they're radical when you look at arsenic and you 01:01:01 get it wild in your head, it's like it's going to kill me. 8 01:01:05 9 It's nice to have a constant so maybe if you consider tapping 01:01:08 10 in -- not tapping in but taking monthly tests on constant 01:01:13 11 wells of natural water as a frame of reference to inform the 01:01:18 12 public that maybe some of these elements are always found 01:01:22 everywhere you go. Reverberating back to that laboratory 13 01:01:27 14 thing, we did the ground, we did the rock as opposed to 01:01:33 water, and these numbers were, these numbers were always in 15 01:01:36 16 the mix. So thank you, everyone. 01:01:40

17 ROSE BASKO: My name is Rose Basko, B-a-s-k-o. 01:01:53 Thank 18 you first of all. I used to be an NPDES permit writer for 01:02:02 19 the state of West Virginia and I've been on both sides of the 01:02:08 20 fences, you know, both as a regulator and also 25 years in 01:02:12 21 the coal industry so I know that trying to reach that balance 01:02:15 22 is a really hard spot that you guys are in. I kind of have 01:02:20 23 two big comments that -- and questions. I know these 01:02:26 24 skimming ponds are basically going to be collecting the water 01:02:34 25 and any kind of large precipitation event or whatever could 01:02:39

cause them to overflow. I was interested in finding out what 01:02:43 1 2 kind of storm event criteria was used to make sure that these 01:02:46 3 ponds would contain enough and have enough retention time, 01:02:51 you know, was it the 10 year storm, was it the 50 year storm 4 01:02:56 or the 100 year storm. And in the event that they would 5 01:03:01 6 overflow, you know, what is the time period for Aethon to 01:03:06 7 report an exceedance or how is the sampling going to be 01:03:12 8 conducted. The other thing that I'm concerned with is that 01:03:17 9 some of the parameters, they were given different 01:03:22 10 frequencies, like some were daily, some others were monthly, 01:03:28 others quarterly, some yearly, however the reporting is only 11 01:03:32 12 required to be done semiannually, twice a year. I was 01:03:37 wondering -- I'm assuming that the company will be on the 13 01:03:43 14 eDMR system and that they will be allowed to report more 01:03:47 often than semiannually and hopefully that these reports will 01:03:53 15 16 be looked at closely. We used to have like an enforcement, 01:03:59 17 an enforcement inspector that would be, you know, like for 01:04:06 18 certain mines and I imagine that -- I hope that you all have 01:04:13 19 something like that so that that inspector can take samples 01:04:16 20 and keep a closer eye than just the DMR system or the eDMR 01:04:20 21 system. Does this make sense? Okay. All right. 01:04:28 That was 22 my questions and I will, I guess, write them to you. 01:04:30

23MR. FREDERICK: Okay. Thank you. A show of hands, how01:04:3424many people are left that want to make a comment? Can I just01:04:3925get a show?01:04:41

JOHN ROBITAILLE: John Robitaille with the Petroleum 1 01:04:50 Association of Wyoming with a couple of quick points. One of 01:04:53 2 them is this is a 50, 60 year old field, this stuff has been 3 01:04:56 on out there for a long time, it has been discharging since 4 01:05:02 5 the beginning. This proposed permit is the most stringent 01:05:05 6 proposed permit to date so to suggest that anything dramatic 01:05:10 7 is going to happen -- if anything it will go the other way. 01:05:19 This is, this is going to be the cleanest water that has been 01:05:22 8 9 released out of that field for 60 years. There is a 01:05:26 10 tremendous amount of monitoring going on, there is also a 01:05:32 11 tremendous amount of background information already 01:05:36 12 available. That's very important, the background is very 01:05:38 important, in case something should happen it can be 01:05:41 13 14 remediated very quickly and very easily. We also really have 01:05:44 no idea how much of this water is actually going to reach. 15 I 01:05:50 16 know that it's still winter, apparently, and we've had a lot 01:05:53 of rain recently, but in most years this little bit of water 17 01:05:59 18 is not going to reach 40 miles downstream. If it happens to 01:06:03 19 I believe DEQ has taken appropriate steps, their science is 01:06:10 20 sound, the monitoring is sound, the modeling is very sound. 01:06:14 21 All of these things are very appropriate and very well done. 01:06:17 22 These quys are professionals, they know what they're doing, 01:06:20 23 they're not here to harm anyone, they're not here to harm any 01:06:23 fish. I am an avid fly fisherman, I have walked from the top 01:06:26 24 25 of that dam down the Wedding of the Waters and fished every 01:06:31

damn inch of that water and I love those hard-fighting trout 1 01:06:35 in there. If I believed for one minute that this was going 2 01:06:39 3 to harm any of that or any of you I wouldn't be standing here 01:06:41 today. Very, very important to me, all of this is. 4 I've 01:06:45 lived in Wyoming my whole life. This is a very important 5 01:06:49 6 resource and I do not believe that it's -- any harm is going 01:06:52 7 to come to it. One other point I would like to make is last 01:06:55 year, 2018, the oil and gas industry in Wyoming paid taxes 8 01:06:59 9 for every man, woman and child in this state of \$2,600. 01:07:05 Ι have a wife and three children, that's over 10 grand to me, 10 01:07:11 11 that's very important. This is a great industry, it's a very 01:07:15 12 important industry and it's a very reliable industry. We 01:07:20 13 should be damn proud to have them here. 01:07:23

14 DEB GUEST: Deb Guest, G-u-e-s-t. This was a little 01:07:44 15 difficult. I'd like to thank the gentleman that just spoke, 01:07:52 16 I believe that he is sincere, but I have concerns about the 01:07:55 17 operations that are allowed by the DEQ in the state of 01:07:59 18 Wyoming relative to what's in the permit. In the permit -- I 01:08:03 19 have a few things. In the permit it mentions that Aethon can 01:08:08 20 decide due to technology or economic considerations how to 01:08:14 21 dump its water, whether to use Boysen or what methods to use, 01:08:20 22 and that's a pretty broad statement, economic considerations. 01:08:25 23 Now, is that a national turndown or does that mean the CEO 01:08:30 dropped his wallet? It's not specified. Who will determine 24 01:08:36 25 what is a significant economic consideration or is it as 01:08:39

simple as to determine that you want to increase your profit 1 01:08:43 2 margin by two percent? That's not addressed. The permit 01:08:47 3 does not address what will be done and what monitoring can be 01:08:51 done to look at potential spills from these fields from these 01:08:56 4 5 I know we're going from 800 wells to possibly over wells. 01:09:01 As an example the Bakken in North Dakota had 10,000 6 4,000. 01:09:08 7 wells drilled, it has had 3,000 spills. Now if we 01:09:14 8 extrapolate 10,000 to 4,000 and 3,000 spills, one could 01:09:23 assume a similar number here in Wyoming in this area. 9 01:09:26 None 10 of the factors about how those things will be handled are 01:09:32 11 addressed. Also in discussing silting of this Reservoir 01:09:35 12 there is no discussion of, and I'm sure it has been 01:09:41 13 published, what the useful live of Boysen Reservoir has been 01:09:45 14 projected to be and how this silting will affect it. As we 01:09:49 15 look at those creeks and the massive amount of water, not a 01:09:53 little bit, massive amounts, millions of barrels per day 16 01:09:57 17 dumped into Boysen and flowing down creeks and pipelines, 01:10:05 18 that's going to massively increase the opportunities for 01:10:08 19 silting which will flow into the Reservoir and how will that 01:10:12 20 be monitored, that's not addressed in the report. And I 01:10:16 21 would point out relative to this that the U.S.G.S. has been 01:10:18 22 monitoring the water quality in Boysen since 1952, it would 01:10:23 23 be interesting to see a comparison of numbers similar to this 01:10:28 from 1952 until today or the '70s. It's not there. And also 01:10:31 24 25 the seismology and the hydrology of the Owl Creeks is not 01:10:40

sufficiently addressed in the document. We know that the Hot 01:10:45 1 2 Springs water that we depend upon for so much in our town is 01:10:48 3 ascribed to come from the Madison Formation in the Owl 01:10:54 That is not totally understood, a lot of that is 4 Creeks. 01:10:57 5 speculative, there are things we do not know, but we know 01:11:01 that that Madison Formation underlies all of the Owl Creeks 6 01:11:04 7 and slopes from the north down into our valley. That 01:11:09 8 formation also extends southward on the Owl Creeks. We're 01:11:14 9 going to be putting massive amounts of water injected through 01:11:19 10 those wells right at the base of the Owl Creeks on the south 01:11:24 11 side. We're also -- will be withdrawing massive amounts of 01:11:28 12 water from the same area, and we've seen what's happened with 01:11:33 13 the cluster earthquakes in Oklahoma. I understand this isn't 01:11:37 14 settled science, but it should have been addressed with more 01:11:44 seriousness than there was in the document, but I do thank 15 01:11:45 16 you for coming. 01:11:49 17 Thank you. My name is Boyd Larsen. BOYD LARSEN: Ι 01:12:08

18 live in Lander. I do have a few comments that I'd like -- I 01:12:11 19 spoke a little bit last night in Riverton, but I've pondered 01:12:14 20 some of the discussion there and I do have some 01:12:18 21 recommendations for the DEQ that I'd like to just suggest. I 01:12:20 22 think it's important that DEQ make clear that it's not their 01:12:25 23 job to determine what methods Aethon should use to dispose of 01:12:32 the production water. I think there was some comments on 24 01:12:36 25 what methods can be used and all methods that can be used 01:12:39

will be used and that's what drives the industry and that's 1 01:12:42 the -- but you guys' focus is on this permit, just can we 2 01:12:48 3 renew this permit at these levels and what impact. It has 01:12:54 nothing to do with fracing, it has nothing to do with 4 01:12:58 5 anything else, and somehow it just -- talk about that maybe 01:13:01 6 on the website, try to differentiate that it's just this 01:13:04 7 point in time. I think also I might suggest that as the DEQ 01:13:08 puts up some of the pictures there was a lot of erosion shown 01:13:14 8 9 there, but it didn't indicate that that erosion has been 01:13:19 10 taking place since 1960 and there has been a plan in place by 01:13:22 11 industry to pipe that water from that number 1 outfall down 01:13:27 12 to Badwater Creek. Getting the permit from the BLM has been 01:13:33 the holdup on getting that done. The reason for the erosion, 01:13:39 13 14 of course, is the grade of the land. Some discussion, is 01:13:42 15 this all about jobs? No, but it is about jobs, but not all 01:13:48 16 about jobs and it's about what is -- what can we do overall 01:13:53 17 for Wyoming and it's not -- you know, we talk about the 01:13:58 18 greedy corporations and the greedy oil companies and, you 01:14:01 19 know, I would just suggest that as I look at this wonderful 01:14:06 20 facility that we're standing in that we didn't have to pay 01:14:10 21 for because of the severance taxes generated off of the 01:14:13 22 resources generated by oil and gas, and so when we talk about 01:14:18 23 the impact it has it's because we have these resources that 01:14:21 24 none of us have to pay corporate tax, none of us have to pay 01:14:26 25 a state income tax. So, you know, they may be evil, no-01:14:30

account or whatever you want to call them, but thank heavens 1 01:14:35 2 they produce these resources that we have and pay a severance 01:14:40 3 tax that we can send our kids to college with the Hathaway 01:14:44 Scholarship, that we fund our children K through 12 of 4 01:14:49 15,000, \$16,000 a year per child now. We don't have to pay 5 01:14:58 6 for any of that, that's produced off the revenue we get from 01:15:00 7 our natural resources. So what's acceptable in this whole 01:15:03 process and that's what you're trying to do. We have the Hot 01:15:05 8 9 Springs here that has been putting these same constituents, 01:15:08 10 chloride, some sulfates and sodiums, into the Wind River. I 01:15:18 11 qot this little thing I looked up last night, it was really 01:15:22 12 interesting, from 1926 when they did one of the first studies 01:15:25 13 on that, I don't think that has necessarily adversely 01:15:28 14 affected downstream users of irrigation water or other 01:15:30 15 things, so then what is acceptable. What this Department I 01:15:35 16 believe has determined that the foundation for determining 01:15:39 17 what is acceptable on this permit is to maintain the Wind 01:15:43 18 River as class 1 waters, that's the canary in the coal mine. 01:15:48 19 We have to maintain that and we have to comply with the Clean 01:15:53 20 Water Act. We can't just go to the governor and say, 01:15:57 21 "Governor, we want a waiver, we don't like this rule that the 01:16:01 22 DEQ has in place, we want them to grant that permit and let 01:16:05 23 them drill baby drill." We can't do that because we have to 01:16:08 24 comply with the Clean Water Act or we lose the primacy over 01:16:12 25 governing these waters. We don't want to go there. And so 01:16:17

when you think that the DEQ is in bed with the industry or 1 01:16:21 that there's some nefarious action going on, the 2 01:16:24 3 ramifications for being amiss or causing mischief on this is 01:16:27 far greater to our state than the benefit of issuing this 4 01:16:33 permit. They can't go there and there's no malicious intent 5 01:16:37 I think another question that I would perhaps 6 to go there. 01:16:41 7 like to ask the Department is if the introduction of this 01:16:45 production water into Boysen is at the same magnitude of 8 01:16:49 9 concern as the introduction of nitrates and e coli that are 01:16:56 10 being introduced from irrigation sources and water treatment 01:17:01 11 sources. I think we have to look at the whole broad scope of 01:17:05 12 the things that are impacting and I think we've alluded to 01:17:09 that, not only Boysen but the downstream users and how that 13 01:17:12 14 is being used. We've talked about algae someplace here and I 01:17:15 think that perhaps the generation of that algae -- and I know 01:17:21 15 16 that it's on the radar, but I think to approach that might be 01:17:23 worthy of discussion. I have been listening and 17 01:17:28 18 participating in discussion with the agency and I would just 01:17:38 19 commend their efforts thus far in looking at this and making 01:17:45 20 sure that they preserve that class 1 water and yet being 01:17:49 21 farsighted or foresighted or -- enough to look at the 01:17:58 22 opportunities that allow us to develop our resources, that 01:18:03 23 allow us to continue to have facilities like this and the 01:18:07 24 roads that we drive on and the other things that we have and 01:18:11 25 allow companies, greedy, no-account companies who risk their 01:18:14

bottom line to come and try and do business in Wyoming at a 1 01:18:23 depressed gas market and sink millions and millions of 2 01:18:27 3 dollars into our economy hoping to get a return. And so I 01:18:31 support what you've done, I support the permit, I think 4 01:18:37 it's -- I think that this discussion is healthy, I appreciate 01:18:42 5 the multiple public meetings that we've had, and thank you 6 01:18:45 7 for your time. 01:18:48

D-o-o-l-i-t-t-l-e. I just wanted to 8 KAREN DOOLITTLE: 01:18:49 9 express one of my concerns I really haven't heard addressed 01:19:16 10 by anyone yet. Today I was looking on line. We had a lot of 01:19:20 11 talk in Riverton about the high level of chloride and I'm not 01:19:23 12 very knowledgeable about that so I was just looking up -- you 01:19:27 know, typing in chloride pollution seeing what comes up and 01:19:29 13 14 what came up with a whole bunch of references to what's going 01:19:35 on in Minnesota and they have a lot of lakes they're real 15 01:19:38 16 proud of there and right now they've discovered that over 50 01:19:41 17 of them are what they call -- are classified as impaired and 01:19:45 18 that's because they're increasing the saline level in those 01:19:50 19 lakes and they're feeling pretty sure that what's going on -- 01:19:54 20 they aren't having fracing that I know of to any degree. 01:19:57 21 They're pretty convinced what's happening there is the 01:20:01 22 chloride coming out of water softeners and the chloride 01:20:04 coming out of the de-icer used on the highways that they use 23 01:20:09 a lot of in Minnesota and all of that is getting into the 24 01:20:11 25 ground water and going in the lakes and from my limited point 01:20:14

of view at a pretty alarming rate, that recently there has 1 01:20:19 2 been 50 lakes designated impaired, just 15 years ago there 01:20:23 01:20:28 3 was only four, so they're seeing just a real rapid increase in this increasing salinity in their lake water. 4 There's 01:20:31 some projections that by 2050 if they don't do something to 5 01:20:36 stop this their fish will die because of the salt. And so as 01:20:39 6 7 I look at we're going to dump 2,000 -- over 2,000 tons a 01:20:44 month of some kind of salt compound into Boysen it just makes 01:20:48 8 9 me wonder how long we can do this. It's nice to have that 01:20:53 10 buffering capacity of Boysen. There's certainly a lot of 01:20:59 11 salt coming down the rivers. I know I have a water softener 01:21:03 12 at home. My water out of the Wind River sand formation has 01:21:07 high salt, older people, young kids aren't supposed to drink 01:21:12 13 14 So all that salt is adding into the watershed going down 01:21:13 it. to Boysen, and I hate to lose that buffering capacity of 15 01:21:17 16 Boysen by filling it up with salt from industrial waste that 01:21:20 17 maybe can be managed increasing the RO facilities or 01:21:24 18 I think there's some alternative, it's not whatever. 01:21:28 19 either/or, but that concern of all that salt over time -- I 01:21:31 20 mean I know Boysen is a big place, but I don't know how much 01:21:36 21 salt you can put in there and still buffer things 01:21:40 22 effectively. 01:21:43

23YVONNE HARTMAN: I work for Wind River Canyon White01:22:0124Water Flying Fishing and I've been floating this river for01:22:0625eight years, and I also have a boyfriend that is a top drive01:22:10

1	tech for Cyclone and most of my family does do oil patch	01:22:12
2	work, but I do believe that this is not right. I have a few	01:22:20
3	questions. What is the is this only for the money? Isn't	01:22:29
4	there other options that we can can we is there other	01:22:45
5	options that we could use, I mean is this only about the	01:22:50
6	expense? Most of the people that want to do this, I just	01:22:53
7	want to know why I mean are they downstream or upstream?	01:22:59
8	What's the safe, what's the safe fail plan? I just want to	01:23:03
9	know if it's really worth it, I mean I feel like it's not	01:23:22
10	worth it, I feel like there's not enough research about it.	01:23:27
11	I agree with everybody and, yeah, that's all I have to say.	01:23:34
12	BRUCE LAWSON: My name is Bruce Lawson. I'm from	01:23:59
13	Casper, I drove up from Casper tonight to attend this	01:24:02
14	meeting. Thank you for your time. Heard a number of	01:24:04
15	comments tonight about how important jobs are in Wyoming and	01:24:09
16	I agree with that. You know, I'm a little bit like Mr.	01:24:13
17	Robitaille here, when I was growing up in Casper I've	01:24:21
18	lived in Casper my whole life, I still live there, and I've	01:24:24
19	made my living in the extractive industry, I'm 63 years old,	01:24:27
20	but growing up in Casper my dad my dad was a petroleum	01:24:33
21	geologist and he was one of the best petroleum geologists in	01:24:40
22	Wyoming, many awards, but he always had a bumper sticker on	01:24:43
23	the back of the car and it stated "Wyoming oil and gas is my	01:24:46
24	bread and butter." I haven't seen those for a long time, but	01:24:51
25	truth that's very true, put me through college. So I've	01:24:55
		1

1	followed this. One thing I want to say to you, I deal with	01:24:59
2	your agency a great deal, DEQ, and, you know, we live in	01:25:03
3	Wyoming because we want it all and I want it all. I want you	01:25:13
4	to keep paying my taxes, Mr. Robitaille, okay, but I want	01:25:16
5	the reason I live in Wyoming is to hunt and fish and enjoy	01:25:21
6	the outdoors and enjoy clean water and enjoy my horses and	01:25:25
7	ride wildly on some wild spaces. And we can have it all, we	01:25:31
8	can have employment, but we want to maintain what we have and	01:25:36
9	in my 63 years I've seen just a gradual degradation of the	01:25:41
10	things that we cherish in Wyoming, and I just hope that DEQ	01:25:49
11	and the Water Quality Division continue to hold industries'	01:25:54
12	feet to the fire and what we need is let's leave it better	01:25:59
13	than we found it, let's leave the wood pile higher, and we	01:26:06
14	can do that, but, you know, it's going to take some	01:26:10
15	commitment, it's going to take some sacrifice. I looked at	01:26:13
16	this company from Texas, what little I've read about them,	01:26:17
17	they're probably going to make you tell me, Mr.	01:26:21
18	Robitaille, billions of dollars, billions of dollars off of	01:26:27
19	that project? So why can't they do more reverse osmosis, why	01:26:30
20	can't they do more reinjection, why can't they leave the wood	01:26:35
21	pile higher, but I almost have to say that I am disappointed	01:26:41
22	with you, Kevin, in the Water Quality Division. When I look	01:26:44
23	at what's happened in the Powder River Basin with the coal	01:26:49
24	bed methane discharge and how that has impacted the	01:26:54
25	landowners from the Powder River Basin, how it has killed	01:26:57

their cottonwood groves, how the mobilization of clay in the 1 01:27:04 2 soils from their discharge waters have destroyed a lot of the 01:27:07 3 riparian bottoms in the Powder River Basin that most of those 01:27:13 ranchers rely on, and what I've found and I find from this 4 01:27:17 5 discussion from your agency is kind of a general statement 01:27:21 6 of, you know, "Trust us, everything is going to be fine," but 01:27:25 7 when I looked at how you handled coal bed methane discharge 01:27:27 in the Powder River Basin, the damages that came out of that 8 01:27:32 9 to the land and the landscape and the livelihood of those 01:27:37 10 ranchers, frankly I don't trust you. And this is based on a 01:27:41 11 model, correct? So you're predicting that this is what's 01:27:45 12 going to happen based on a model. Sometime you should look 01:27:49 at the model the Game & Fish prepared for the Wyoming mule 13 01:27:53 14 deer range and see what happened to that Wyoming mule deer 01:27:57 herd, so don't put your faith in modeling, but, Mr. 15 01:28:00 16 Robitaille, you keep paying my taxes, okay, but like I say, 01:28:05 17 jobs are important, you got to have a job to live in Wyoming 01:28:08 18 and enjoy the things you do, but we need to make sure that we 01:28:10 19 leave the wood pile higher, we leave it better than we found 01:28:16 20 it, and we can do that, but there has got to be some 01:28:20 21 sacrifices. Thanks for your time. 01:28:25 22

RYAN ORTIZ: I got just two quick comments. My name is 01:28:40
Ryan Ortiz, I come from Riverton. Two quick comments. One, 01:28:44
I saw some constituents that are not going to be tested for 01:28:49
anymore based on previous tests and non-detect limits or 01:28:55

whatever. I'm not in favor of abandoning testing completely 1 01:28:59 2 on those types of constituents, I think that they should 01:29:05 3 still be tested as a permit renews itself every five years, I 01:29:12 think it's important that those don't completely become 4 01:29:16 sunsetted, that they continue to monitor those at least once 5 01:29:19 6 through the permit cycle. Also I think -- I ask that you 01:29:23 7 quys be mindful of total TDS limits being discharged by one 01:29:31 permit and consider all, all of the loads that are entering 8 01:29:37 9 into the waterways so that we don't compromise future oil and 01:29:46 10 gas production upstream of that, so not letting one permit 01:29:53 11 dictate or take up an enormous volume of load entirely that 01:30:02 12 could impede downstream water quality. That's it. 01:30:09

MR. FREDERICK: Thank you. All right.

13

14 MIKE WILLIAMS: My name is Mike Williams. I'm from Cody 01:30:33 and I've been working with Wyoming DEQ for many, many years 15 01:30:37 16 on part of the regulated community. I wanted to -- because 01:30:42 17 from my perspective I wanted to maybe inform some of the 01:30:46 18 people in the audience about how thorough the operation is 01:30:50 19 overseen by the DEQ. Every time we try to reapply for a 01:30:59 20 permit there's a vast assortment of constituents that must be 01:31:05 21 tested for from the outfall and if any of those constituents 01:31:11 22 come up that are at a level of concern then they're added to 01:31:15 23 the permit. The DEQ has also the right to reopen the permit 01:31:18 at any, at any time and add additional constituents to our 24 01:31:23 25 permit. There is also provisions in the permit that require 01:31:29

01:30:14

us to report to the DEQ within 24 hours of our knowledge of 1 01:31:33 2 any exceedance whether that be flow, whether that be a 01:31:38 3 chemical constituent or whether that be some observation that 01:31:43 we're able to make of that water. So I think that that's 4 01:31:48 important to understand that it's not just the permit but the 01:31:53 5 permit process that has to be looked at as a whole. And also 01:31:57 6 7 besides that the DEQ has personnel that come around 01:32:05 unannounced and inspect, test and collect samples from our 8 01:32:09 9 outfalls and they send them off to an independent laboratory, 01:32:15 10 the State of Wyoming's laboratory, for analysis, so it's not 01:32:19 11 like there's ever any independent collaboration of what the 01:32:25 12 quality of that water is. And then finally, I think that 01:32:31 there was a couple of comments made during the evening that 13 01:32:34 14 said, you know, why don't you just treat all the water with 01:32:37 RO. Well, I'm also a water treatment professional and I got 15 01:32:40 to interject here that RO is a tremendous -- it produces a 16 01:32:47 17 tremendously pure water and if you just release that water 01:32:55 18 out onto the landscape it would -- it has to re-mineralize as 01:32:58 19 it makes its way back down the draw to Boysen Reservoir so 01:33:04 20 you would end up with probably the identical quality of water 01:33:08 21 by the time it made it to Boysen as it does now after it has 01:33:12 22 been re-mineralized. So that might be something for further 01:33:17 23 elucidation from the permittee back to DEQ about how that 01:33:25 24 relationship might exist. Thank you. 01:33:33 25 MARVIN BLAKESLEY: Marvin Blakesley. M-a-r-v-i-n 01:33:33

B-l-a-k-e-s-l-e-y. My name is Marvin Blakesley, I was born 1 01:33:59 and raised in Thermopolis, graduated from Hot Springs County 2 01:34:02 3 High School here. I worked in the water discharge permitting 01:34:07 business for over 30 years, I know what the DEQ does, I know 4 01:34:10 the regulations of scrutiny they're under not only by their 5 01:34:16 6 own rules and regulations but also the EPA. I think you guys 01:34:22 7 have done a great job of evaluating the permit. I think the 01:34:26 model is accurate and good and I'm a hundred percent 8 01:34:29 9 confident that should this permit be issued, and it should 01:34:34 10 be, you'll see zero impact on the class 1 water and the class 01:34:38 1 waters below it or above it. There's not a more avid 11 01:34:45 12 outdoorsman in this group than me and if I thought for one 01:34:50 second that this was going to impair the fishery in Boysen or 01:34:54 13 14 Wind River I would be opposed to it and I don't believe that 01:35:00 for one second. As I was fishing today at the Wedding of the 01:35:03 15 16 Waters I was standing besides a natural stream that was 01:35:08 17 putting water into the Wind River and water very similar, 01:35:11 18 probably, to what this discharge would be from the Madison 01:35:16 19 Formation. And you can go all the way past Boysen Dam, there 01:35:19 20 are natural mineral springs coming into Boysen Reservoir, 01:35:24 21 Wind River Canyon, the Wedding of the Waters, the Big Spring 01:35:24 22 here, below the Big Spring Red Lane and you guys -- some of 01:35:34 23 you folks want to make a mountain out of mole hill, 01:35:38 absolutely incredible. I resent your environmental scare 01:35:41 24 25 tactics, that's what they are. You come to our communities, 01:35:46

you try to scare us, and if people really knew what you were 1 01:35:49 2 about they would probably usher you all right on out of here. 01:35:53 3 I support it. Thank you. 01:35:56 MR. FREDERICK: Okay. Got a hot mike here. Is that it? 01:36:04 4 Thanks. Any other public comments? Okay. Seeing none, 5 01:36:11 6 thank you very much for coming tonight. Hopefully you've 01:36:21 7 learned something. I think there's definitely a lot of 01:36:25 questions out there that are worth answering and we will do 8 01:36:28 9 that as part of our process. Just one last time, the public 01:36:32 10 comment period is open until July 5th. We do take written 01:36:40 11 comments and provide electronic comments through our website. 01:36:46 12 At the time a decision is made on the permit we will provide 01:36:53 13 to the public written responses to the comments that we've 01:36:58 14 received just so you know. 01:37:02 15 (The meeting was concluded after which an 16 amended written statement was received from 17 Mr. Tom Henderson which is attached as 18 Henderson Exhibit A.) 19 20 21 22 23 24 25

1	CERTIFICATE OF THE REPORTER
2	STATE OF WYOMING )
3	COUNTY OF LARAMIE )
4	, ,
5	I, JEANNIE GEBES, RPR, freelance court reporter and
6	Notary Public, hereby certify that I was authorized to and
7	did record in stenotype the foregoing pages, numbered 1-61,
8	inclusive.
9	I further certify that I am not an agent, attorney
10	or counsel for any of the parties hereto, nor am I interested
11	in the outcome thereof.
12	Dated this 31st day of May 2019.
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15	JEANNIE GEBES, RPR
16	Court Reporter
17	My Commission Expires:
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