WORKGROUP FOR GLOBAL AIR PERMIT POLICY DEVELOPMENT FOR TEMPORARY OIL AND GAS DRILL RIGS

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Room 602, Robert A. Atwood Building

550 West 7th Avenue, Anchorage, Alaska

FACILITATORS:

Tom Turner, ADEC/AQ

Jim Shine,

Special Project Assistant, ADNR/Commissioner's Office

WORKGROUP MEMBERS PRESENT:

Alice Edwards, Director, Alaska Department of Environmental Conservation/Division of Air Quality; Williams Barron, Director, Alaska Department of Natural Resources/Division of Oil and Gas; John Kuterbach, ADEC/AQ; Gordon Brower, Deputy Director, North Slope Borough Planning Department; Brad Thomas, ConocoPhillips and Alaska Support Industry Alliance; Nikki Martin, Alaska Oil and Gas Alliance; Alejandra Castano, BP Exploration; Mike Munger, Executive Director, Cook Inlet Regional Citizen's Advisory Council.

PUBLIC MEMBERS PRESENT:

Al Trbovich, SLR Environmental Consultancy; Ben Wedin, Nordic-Calista Services; Bill Britt, Hillcorp; Chris Kent, ASRC Energy Services; Erin Strang, Environmental Resources Management; Jeanne Swartz, ADEC/AQ; John Neason, Nabors Alaska Drilling; John Pavitt, U.S. Department of Environmental Protection; Kate Kaufman, Hillcorp; Mike Peters, Doyon Drilling; Noel Therriau, Nordic-Calista Services; Ron Wilson, Doyon Drilling; Sara Longan, ADNR; Tom Chapel, H&H Consulting; Tom Damiana, AECOM; Wally Evans, Hillcorp Energy; Sally Ryan, Cardno ENTRIX; Eric Fierson, Caterpillar; Ann Mason, SLR Consulting; Randy Kanady, CPAI.

(Beginning of proceedings)

THE REPORTER: On the record at 1:04 p.m.

MS. EDWARDS: Thanks. Welcome, everybody. Good afternoon. This is the third meeting, I guess, of the Drill Rig workgroup. And so first, as we have in all the other meetings, I'd like to go around and just do introductions and see who is in the room. And we'll see who is on the phone. I've heard a few people call in. So I'll start with myself and we'll go around the table, and then we can go around the room, and then we'll go to the phone. So I'm Alice Edwards, the director of Air Quality at DEC.

MR. KUTERBACH: John Kuterbach, the Air Permits Program manager for DEC.

MR. BARRON: Bill Barron, director of Oil and Gas, DNR.

MR. SHINE: Jim Shine, special assistant to the Commissioner of DNR.

MR. THOMAS: Brad Thomas. I'm here representing the Alaska Support Industry Alliance.

MS. MARTIN: Nikki Martin with the Alaska Oil and Gas Association.

MR. TURNER: Tom Turner, Air Permits, DEC.

MR. WILSON: Yeah, Ron Wilson, president and general manager of Doyon Drilling.

MR. PETERS: Mike Peters, HSC manager, Doyon Drilling.

MR. NEASON: John Neason, HSE, with Nabors Alaska Drilling.

MR. PAVITT: John Pavitt with the Air Compliance Program of EPA.

MR. EVANS: Wally Evans with the Air Compliance Program of Hillcorp.

MS. KAUFMAN: Kate Kaufman. I'm a drilling environmental specialist with Hillcorp.

MR. BRITT: I'm Bill Britt, (indiscernible) with Hillcorp.

MS. LONGAN: Sara Longan, DNR, Office of Project Management and Permitting.

MR. THERRIAU: Noel Therriau, operations manager of Nordic-Calista Services.

MR. WEDIN: Ben Wedin, field superintendent, Nordic-Calista Services.

MS. CASTANO: Alejandra Castano, BP Alaska.

MR. KENT: Chris Kent, ASRC, Energy Services.

MS. STRANG: Erin Strang, ERM.

MS. SWARTZ: Jeanne Swartz, ADEC.

MS. EDWARDS: And on the phone? Can we try and see who is there?

MS. RYAN: Sally Ryan, Cardno ENTRIX.

MR. TRBOVICH: Al Trbovich, SLR.

MR. MUNGER: Good afternoon. This is Mike Munger,

executive director of Cook Inlet RCAC.

MS. EDWARDS: Hi, Mike. Welcome.

MR. MONGER: Hi.

MR. CHAPEL: This is Tom Chapel at H&H Consulting.

MR. DAMIANA: This is Tom Damiana with AECOM.

MS. EDWARDS: Do we have others on the phone? Great. So those of you in the room, if you haven't signed in, please sign the sign-in sheet so we know who was here today, and also if you haven't been here before so we can get you on our list. I would also note that this is the first meeting we've got the transcriptionist here today. So it would probably be helpful to her, I imagine, if we identify ourselves before we speak. That should help. But for the -- just for those of you on the phone know that there's transcription going on today as well. So with that, I wanted to start off with an agenda check. I didn't get the agenda out very far in advance for this meeting so we didn't get a good chance to go through it. But we did post an agenda this morning on the website and so it's available there for those of you on the phone. And so I guess I would ask Mike, on the phone, and also the members of the workgroup that are here whether we're okay with the agenda as it stands or whether you have some other changes that we'd like to make for today?

MR. THOMAS: The agenda, you mean?

MR. BARRON: The agenda looks fine with me.

MS. EDWARDS: Okay. Mike, did you have any concerns with the agenda?

(No audible response.)

MS. EDWARDS: Okay. So we'll proceed with the agenda that we have. And, you know, we'll see how -- the timing may slip a little bit here or there, but at least we've got kind of a path forward. Obviously, the objective of the meeting today was to work some more on our goal statement for the workgroup and start to move up toward a path forward here on how to proceed. I circulated, I think yesterday, the meeting summary from the last meeting. And I just wondered if any of the workgroup members have any comments or changes to the meeting notes?

MR. THOMAS: What's the right way to get the changes? Because there's some questions and answers that I've noticed that aren't quite accurately captured. So can we just.....

MS. EDWARDS: If you want to go ahead and make some edits and email them back to us, we can do it that way, if that works.

MR. THOMAS: Okay.

MS. EDWARDS: I just wanted to make sure we had an opportunity to get those edits into them. So that would be fine. Can we try and get those back in the next day or so?

MR. THOMAS: Okay.

MS. EDWARDS: That would be great. Bill, did you have anything to start out with today?

MR. BARRON: It's going to be a full day. You know, trying to make sure that we get a really good statement of our goals, I think is important. And then as we ease into trying to find, you know, the issues and some potential solutions, we'll get to what we get to. But I think spending the right amount of time on understanding what we're trying to solve is important.

MS. EDWARDS: So how would the group like to begin on this then? I know we had our first meeting, we laid out some of the issues. We had presentations at the last meeting with a lot of the background. I know we have some specific issues that have been raised. But I also wondered if those specific issues sort of point to a more broader problem statement or whether we want to kind of hone in directly into there. I think we've had, what, three or -- three issues, three primary issues raised at this point? And it seems to me, when I look at those issues, and this is just from my perspective, that they all coalesce around sort of a broader issue, which is I think what everybody wants to get to, is to have more operational flexibility for the temporary drill rigs. I think that all of the other more detailed issues seem to stem from this desire to

have more operational flexibility. And I don't know if that's the case, but.....

MR. THOMAS: I mean it is the case that the ambient air quality standards in the permitting programs, as its structured, is having the effect of more restricted operations. But the way the -- the Title V firms, for example, have operated in the last several years, I'm not sure there's a flexibility issue with that. But there is the risk, if we continue forward down this path, that we will lose flexibility. So we don't want that to happen.

THE REPORTER: When you make a comment make sure the mic gets close to the people who are speaking, please. Thank you.

MS. EDWARDS: And also for the people on the phone, just a quick phone check. Are you hearing us all right today?

UNIDENTIFIED MALE: Yes, I am.

ERIC FIERSON: Alison, this is Eric Fierson with Caterpillar. Not really. I can hear you, but all the other speakers are completely cutting out.

MS. EDWARDS: Okay. So we'll try and do better to get the speakerphone mics closer to the people that are talking at the table. So I guess the question I would have is how do we want to start framing this goal statement then?

MR. THOMAS: What do you want? Do we want to identify

first the problems we're trying to tackle for -- do that?

MS. EDWARDS: We can do that.

MR. THOMAS: I' remember throwing that out before.

MR. BARRON: No, I think that's fine. I think we will probably pounce between the two.

MR. THOMAS: Yeah.

MR. BARRON: So I'm kind of flexible on -- I mean we just need to get the wheels rolling so.....

MS. MARTIN: Right. So I mean we can -- we've kind of gone over, as Alice said, the three main problems we've identified, I think in correspondence previously between member companies, industry and ADEC, and then also during the last two meetings, but those -- those three main issues from our perspective. And we've been meeting on these issues outside of this room, too, so you know that we've been putting in some effort collaborating with the support industry. And a lot of those contractors are represented in the room. But the first one just being that drill rigs to date have been unable to model compliance with the new NAAQS so it's a modeling issue. And Brad did a pretty thorough job of going through that issue during the last meeting just two weeks ago. And then the other -- the second problem would be that drill rigs, there's been requirements that they've been connected to highline power and they -- drill rigs without highline power cannot model

compliance with the (indiscernible). So we've talked about that problem. And then also that they have to stay on a given pad for more than two years or are prohibited from returning to a pad for at least two years.

MR. THOMAS: Well that's not exactly right.

MS. MARTIN: Oh, okay. Well clarify.

MR. THOMAS: Do you want me to handle that one?

MS. MARTIN: Yeah, sure.

MR. THOMAS: When drill rigs have to demonstrate compliance with the increment, they can't do it without highline power as we -- with the existing increments. And one flowing issue from that, if you will, is that if a rig leaves a pad, one way to protect the increment by, you know, State decisions, is to stay away from the pad for two years. So drill rigs have to demonstrate compliance with the increment if they're on a pad for two or more years. But if they leave a pad, even if they're on it for less than two years, then the desire is, by the State, is for them to stay away from two years before they come back. Did I get that right, John?

MR. KUTERBACH: Well other than it being the desire of the State, that has been one option on -- and probably the most conservative option of the length of time between consecutive operations that would be reasonable to consider it has something new and not consuming the increment, more

or less, permanently. All right? But it's not -- it has not been established in any specific permit yet.

MR. THOMAS: Right.

MR. KUTERBACH: And so it's not really State policy that that has to be the time period. But it does raise a good point that the concept of operating for less than two years so that it doesn't consume increment, and then moving off, if another rig is immediately moved on, then you're having the same impact on ambient air as if the original rig stayed there the whole time. And so the question is how much time do we allow the air quality to recover before having another operation on the rig. Or if, operationally, you have to continually operate on the rig, what is the best way to address the air quality impacts?

MR. THOMAS: Does that -- is that problem fairly stated, though, that when increments are in play, when rigs have to demonstrate compliance with increments, the existing increments, we can't do it without highline power?

MR. KUTERBACH: But that's the existing rigs.

MR. THOMAS: Correct. When you say rigs do you mean the increments?

MR. KUTERBACH: Well the -- no. The existing increment and the existing equipment that we have.

MR. THOMAS: Right, right. Are rigs. You said rigs, not regs.

MR. KUTERBACH: Rig. Yeah, rigs, not regs. Okay.

MS. MARTIN: And then the other problem, you know, arguably somewhat less of an issue, but still an important issue that we've talked about, are the requirement that we've seen in direct permits to be responsible for maintenance of equipment that is on the rig, boilers, etcetera, that is outside of -- that is not owned by the lessees themselves, but is owned by contractors. And I know we talked about that a little bit last time. And it may just be a language clarification issue. It may be something really simple to fix where we, you know, bring in the draft permit language and say this is our interpretation of what this means. And you guys say, you know, well that's not what we intended at all, and we just work through that. But that's still an important one we want to make sure is addressed. But I think overall these issues highlight the larger issue, as Alice was saying, of desiring a more streamlined, efficient permitting process or just process for the operation of drill rigs on the Slope and in Cook Inlet and Alaska. And I think a lot of these problems stem from trying to permit the rigs right now as stationary sources.

MR. KUTERBACH: And so that's one possible option for solving the problem. Right now, if I understand rightly, the main problem is that the traditional way of obtaining a

permit is proving difficult for the drilling operations due to the tighter federal standards.

MR. BARRON: No doubt.

MR. KUTERBACH: So that's really the essence of the problem.

MR. THOMAS: When you say -- and just to be clear on one point. The traditional way is the way that we've done it in Alaska for the last decade or so. You know, permit drill rigs either via the Minor Permitting Program or through Title V. So I just wanted to define traditional ways, the way we've done it in Alaska for the last decade or so. It's not common anyplace else, but that's the way we've done it here. And with the tightening federal standards, it is becoming more difficult.

MR. KUTERBACH: And we've actually did permitting even longer than 10 years ago.

MR. THOMAS: We did? I guess at Alpine we did. We did at Alpine.

MR. KUTERBACH: We did it at various staged area sources. And I know ConocoPhillips did it differently from BP back in '90s, okay, when we had the program. The current generation, which is the last 10 years, is when we've had the Minor Permit Program, which was established in 2003 by the Legislature.

MR. THOMAS: Right.

MR. KUTERBACH: But before that, we had stationary source permits. So combined with the EPA negotiated definition of facility on the North Slope and the Minor Permit Program, those two things have combined to make it more regulatory than it had been. Although, we've always attempted to ensure ambient air quality compliance from all sources.

MR. THOMAS: So we -- you know, you heard what the three major problems are from the perspective of the lessees. But the question I have is does the State perceive a problem in the context of regulating drill rigs as temporary construction activities? And that's a key point. In that context does -- is there a belief that there's a problem with compliance with the National Ambient Air Quality Standards around these operations? Because that's a, to me, a pretty critical thing to ask and get on the table. Is there a perceived compliance -- or a perceived problem with compliance with the National Ambient Air Quality Standards? Because that's -- that's a big driver, it seems to me.

MR. KUTERBACH: I'm not really sure what you're asking.

MR. THOMAS: Well it gets at the whole purpose of regulating drill rigs in a stationary source permitting programs. You know, the purpose of regulating the rigs in

a program, I think, and I'm going to put this out here, John, for your response, but it was because of the concern about compliance with the National Ambient Air Quality Standards. Does that perception persist?

MR. KUTERBACH: The quality of emissions that a rig puts out clearly has -- if they were maximum emissions and the weather conditions are right, I believe we have no evidence to say that they couldn't threaten ambient air quality standards. So if the question is, is the perception that drill rigs are something we still have to look at for ambient air quality, I would say yes, we still have to look at them for ambient air quality. Whether we think they're actually threatening the ambient standard, you know, you provided some monitoring information at the last meeting. But as we know from other activities, the quantity and quality of data really needs to be specific to the issue at hand, have a good confidence that it shows what it's appearing to show. I mean we look at that with the global warming data that we had 15, 20 years ago. People weren't confident about that because of the data that they had and the conclusions they were trying to draw from it. So in this particular case, your information provides just that. It provides information. It provides an indication. But it does not provide proof, in our mind, at this point, that drill rigs are not a problem or

couldn't -- or would never be a problem. That would be a better way to put it. We don't think they're a problem now, but right now they're regulated.

MR. THOMAS: That seems -- you know, if that's something that could be a problem or if it's a concern, it seems like we should capture that, perhaps, as one of the problems, you know, when we identify what the problems are. That's why I asked the question. Is it -- I mean it -- because that would be a driver to capture the drill rigs in a regulatory program. Because outside of that -- outside of that, I'm not sure there would be one.

MR. KUTERBACH: Yeah. I don't know whether it's a goal or a guardrail. Our interest is ensuring that we don't have ambient air quality violations.

MR. THOMAS: Right.

MR. KUTERBACH: And that we have -- we meet the Clean Air Act requirements, that we have rules in place that allow us to prevent ambient air quality violations.

MR. THOMAS: Right.

MR. KUTERBACH: All right. If a well-defined, well-planned study showed that drilling operations have absolutely no chance of ever violating ambient air quality standards, I think we'd be perfectly happy pursuing that conclusion and not having any regulations for them. I mean we don't have air quality regulations on people smoking

cigarettes out on the street, because we don't think it contributes to ambient air quality standards violations. Now it might be a public health thing, but that's not my realm. But I don't think we're there yet as far as demonstrating that drill rigs, unlimited operation, unrestricted operation, unregulated operation, if you will, of drill rigs would never cause an ambient air quality problem.

MR. THOMAS: Okay.

MR. MUNGER: Good afternoon, folks. This is Mike Munger again.

MS. EDWARDS: Hi, Mike.

MR. MUNGER: And I apologize for cutting in. One of the things that you said at the start of the meeting, Alice, was for speakers to identify themselves. And I apologize for not being there in person today, but it's extremely hard to follow who is actually talking. That would -- I think it would really help the people on the phone if you could do that.

MS. EDWARDS: We will endeavor to do better, Mike.

MR. MUNGER: Appreciate it.

MS. EDWARDS: That was a conversation between Brad Thomas and John Kuterbach.

MR. BARRON: Yeah, this is Bill. Part of what I'm hearing that tends to give me some concern is while we are

trying to make sure that the ambient air quality compliance is in existence, we're seeing a dichotomy of what are you basing that on. We're seeing, on one hand, a dataset that has been -- and it may not be -- it may not be representative. We'll just acknowledge that. But it's at least a dataset that's been presented of real data. Contrast that to a model that is based on what? I mean that's the frustration from a technical side. As an engineer, I look at a model, and I go if you don't know what the basis of the model is then you can't validate it with actual data. So I'm just wondering if we're -- if we're really comparing the right two things as we go forward in trying to formulate how the State needs to look at the impact of the emissions of the equipment. Is it going to be based on a model that might be a national standard, but based on what? Right? Again, big question marks in my mind, because I just don't understand it just yet. Or is it going to be based on, you know, ongoing, routine, actual data gathering to certain standards? It would -- I mean that's something I think we need to wrestle to the ground in some form or fashion. And if there's latitude on how we progress that, I think that would be beneficial. Because I kind of always fall on the fact that if I can measure something and validate the data that I'm getting, that's always better than a model that I probably

need to modify to end up matching the history that I'm -- of performance. And then over time, the two get closer and closer together. That, to me, would be a reasonable approach going forward, but I just don't know how to do that. But to me, that's a real -- the elephant in the room is we're trying to judge and establish criteria based on something that isn't matching what we've measured. And that just doesn't seem to fit.

MS. EDWARDS: So this is Alice. I think one of the disconnects that we have when we talk about the monitoring data that's been presented and the modeling issue that -- where they say we can't demonstrate compliance with the model, but we're demonstrating, you know, through the monitoring that we've looked at, we aren't seeing any problems with the NAAQS. The difference is that when we model for permitting purposes, we're looking at the allowable emissions for those units, when they operate, in whatever configuration it is, and wherever they're located, what those allowable emissions are. That may not be how they're actually operated in the real world, because everybody wants to have enough flexibility within their permit to have periods where they're running maybe at more of a maximum output. Other times, they may be running with less output. We could be looking at more than one rig in a particular area. So there's different configurations that

could happen. But when we're modeling for permitting, we're looking at the maximum allowable emissions that can exist in that location without creating a problem with either the standard increments, whatever those requirements apply. But that doesn't mean that in the real world that's actually how they're being operated. But in the permit, if you wanted to take and restrict that to make it look more like the actual operations, it might be that the model would perform more appropriately and might show that it's in compliance with the standard, just as the monitoring data does. But what we do in the permitting is -- I think we're permitting more emissions, potentially, than what's actually being emitted in the real world. And so because of that, and to get that flexibility, we're having troubles. That's why, I think, we see a disconnect between actual monitoring, which is happening under our regulated system already, so they're already meeting whatever permit requirements that they have, which have been designed to try and meet the ambient standards. Albeit, the one-hour standards didn't exist at the time that these were permitted. So I think there's -- I think when we go and look toward solutions on this modeling/monitoring aspect, one of the things we have to really ask ourselves is how do you really verify whether the model is being overly conservative versus what it actually would be produced

under those conditions versus, you know -- so the question is are we comparing the right monitoring to the right modeling? So if you took the monitoring data and you actually modeled those actual conditions, how would those compare? And I'm not sure we've done that at this point. But to me, that's how you would determine -- in a simplistic view, how you might determine whether the model is performing accurately. And it just may be that the model actually does -- it may or may not, the model may perform accurately. It may not. But that's the only way you could figure that out, I think, is to actually run the model under an actual condition where you have a lot of monitoring data that you can use to help calibrate it in some respects.....

UNIDENTIFIED MALE: And the metadata.

MS. EDWARDS: .....and the metadata that goes with it. And then you can figure out whether the model seems to be finding the concentrations that you're seeing in the real world. As opposed to a more inflated, perhaps, modeling exercise where you're trying to allow additional -- potentially more emissions to be emitted, how far can we go before we violate those requirements, the NAAQS or the increment. I don't know if that helped?

MR. BARRON: No, that does help. But I think that that circular logic, I think is part of what's causing the

problem. Is you try and permit to a maximum operational potential, knowing that you're never going to do that, or have just a very remote chance of that activities taking place, and then you try and compare actual to a model. But no one can validate the model, because there's no actuals that the model is based on. So again, my head kind of just freezes when I'm trying to sit there and say how do I ground-truth the information. And the only way that I can do it is -- while I love models, right? As an old (indiscernible) engineer, models are really cool. But I tend to always know that I've got to modify the model with actual data. I mean, you know, and again I revert back to my old (indiscernible) days, is you just don't throw a model together without validating production history. I mean you change the model to match actual. So that may be something that the industry needs to come back to this group with is ideas of how do you do that. Is it preferential to permit based on what you actually think you're going to be operating at? And maybe that's a question for the regulatory portion of the community. Do you have a maximum for a period of time stipulation and a normal, general operation kind of, you know, base or is it all or nothing? And that's a question I don't know. But I think there needs to be some flexibility for the industry to understand that, yes, on the worst case scenarios, these

things might happen and, yes, we might run every piece of equipment and every boiler and everything that charges an emission all at one time for a period of time. But day in and day out, we have this operating condition. And kind of have a two-step process in terms of how you permit for that. That's one thing that I think we ought to think through, not knowing how the permit is structured to begin with. But to me, you've got two ends of the bookends. And I'm still trying to get -- you know, one of the goals that I would like to see through this is having more flexibility, having rigs being able to come and go off pads as needed without, again, violating the air quality standards. But being able to understand how do you get equipment on location, off location, you know, another drilling contractor coming on at a different time, without having this two year kind of benchmark. And it needs to be something -- and again, I think it's a process issue that we have to deal with, but being able to move on, move off, come in, go away with more flexibility I think is what is right for the State. But always keeping in mind that we don't want to violate the air standards. And I get that. But how do you get both? And there's got to be a way to do that. And it may be how we're measuring or modeling. We have a question?

MR. WILSON: Well, Bill, about 15 years ago, or I

can't remember how long, but we actually did actual modeling.....

MR. TURNER: Can you identify yourself?

MR. WILSON: Yeah, Ron Wilson with Doyon Drilling.

MS. EDWARDS: Can we get you closer to the mic, please?

MR. WILSON: And (indiscernible) Gordon, he just -- he came in kind of late.

MS. EDWARDS: Oh. Hi, Gordon.

MR. BROWER: I was stuck in traffic (indiscernible).

MR. WILSON: Yeah. As far as the modeling goes, about 15 years ago, approximately, the IDC and all the drilling contractors worked with the oil companies and did an actual modeling of a rig on a location. We took the biggest rig with the, you know, more equipment than any rig, the worst case scenario. And I think it was a Parker 245 that they modeled on a pad for several months drilling wells. And we came way, way under at that time, you know, on the air quality measurements. And the model was 100 percent. And I argued that a lot and tried to explain that we can't run all that equipment at the same time. So you have all these coal-start engines, other small pieces of equipment, even coal-starts. They threw everything in the pot and ran everything at 100 percent and that was the model they were going to use for the emissions for a rig. And to us, it

didn’t equate. We figured that when we do actual modeling, here we have the data, but the data wasn’t used, so the model was a system of 100 percent of the equipment. And I don’t know if it’s changed, the modeling, since that time or not, but I do remember that. And maybe you remember the Layman Dirty Air Bill at that time? It was tagged with. And that’s what we were trying to do at that time is what the federal regulations were just to keep the emissions at that. And we kind of lost the battle on that, so. But there has been actual modeling done and testing done to match up with models. So I think it can be done. We’ve come a long way as far as the type of equipment on there and emissions and, of course, the air quality has changed as well. It’s monitored a lot closer than we ever have before.

MR. BARRON: Okay. Thank you.

MR. THOMAS: To follow up, Bill. This is Brad Thomas speaking. To follow up, Bill, on what you said, the way the Regulatory Program works, the Permitting Program works for any source that has to model is typically, and you can correct me if I’m wrong, John, but typically the rate at which you model and obtain your -- and demonstrate compliance to obtain your permit, that is the rate to which you’re limited henceforth in the permit. And so if you model at a decreased capacity then you can’t operate above

that capacity going forward in the permitted operations. So from my perspective, trying to model actual emissions -- expected actual emissions to show that that expected actual operating rig still comply doesn't get us a whole lot, because it restricts us to that one scenario. And the unexpected conditions that one can find subsurface, let alone above the surface because of weather, demands that you have the flexibility to use different equipment at different times. And we don't want to be limited to operating at what we expect to be the actual conditions. It's just there's too much that could go on. And that's why we've made the case, since last December when we met the first time about this, that assurance exists based on monitoring data that the ambient air quality standards are being met. So our plea is to base the Regulatory Program on the ambient monitoring data that's been collected. And speaking for, you know, myself, I don't object to continuing collecting it. But what you brought up, though, is the -- is a central point. It has to be worked. You know, there's the traditional approach of modeling to get a permit, but modeling at potential or allowable emissions, versus what actually goes on and what the actual ambient air quality impacts are, which you do base your permitting decisions on? Which of the two? Can you bridge that gap? I don't know. I don't know.

MS. EDWARDS: And I think that's, you know, if we come back to the problems -- a problem statement, that's one of the things that we -- this is Alice, by the way, that that's, I think, one of the -- you know, if we're going to work through this particular problem, you know, there's probably a number of different ways that it could be approached. But, you know, I think there's -- I know it's going to be a pretty technical, you know, path forward. At least let's trying and find a recommendation on what might help to either inform that issue further or, you know, find a solution to that problem. I think there's some paths forward there, probably several different paths forward that could be taken and looked at. But it comes down to trying to figure out how to frame that within the context of the permit decisions that we are making.

MR. KUTERBACH: This is John Kuterbach. Maybe to circle back to what we're trying to do here. You know, we've had a good discussion, but I think we're trying to drift into how do we solve the problem rather than what is the problem.

MR. THOMAS: Yeah, you're right.

MS. EDWARDS: We're very good at that.

MR. KUTERBACH: Yes.

MR. BARRON: Well to that point -- this is Bill. To that point, I think we've identified that the discrepancy

or the utilization of model versus monitoring is a problem. I think we've identified that while it may not be a problem, it's a desires -- it's an acceptable outcome or a desired outcome, at least from some parties, is to have the ability to move equipment on and off location without a two-year hiatus or any timeframe. I mean it should be not a timeframe issue. It should be an air quality issue. And I may be mixing metaphors there, but, to me, one does not necessarily translate to the other. It might. I just don't know. I think there's a -- I think one of the problems is, is that we are trying to, or requiring, or asking the industry to model on worst case, but recognize that the probability of operating in a worst-case scenario is out in your P-99.9 realm, almost like never happens. But yet converse to that, the industry wants the flexibility to have that in their permit. So I mean it's -- you know, some of the time it's be careful what you ask for, because you might get it or it might hold you to a point where you can't do anything. So I think there's got to be balance between those discussions. So -- and undercutting all of that continues to remain that we want to stay within the ambient air compliance, knowing that that will continue to change. I think, because that's part of what's happening now, is you're now under a one-hour standard whereas before you didn't have that.

UNIDENTIFIED MALE: Right.

MR. TURNER: Do we have a question from the audience?

MR. EVANS: Hi. This is Wally Evans with Hillcorp. It seems like the group is on the right track. You know, they're trying to figure out modeling versus monitoring and how to cope with this problem. But it almost seems like we're trying to reinvent a wheel here. I mean across the country, drill rigs come and go. How do they do it? How do they comply with the same ambient air quality standards as Alaska has to comply with? That would be what I would be looking at to try to get, you know, a starting point on how to solve what seems to be a difficult problem.

MR. BARRON: So let me -- let me rephrase that. This is Bill. Let me rephrase that and maybe capture it in a different mode. Are we also dealing with definitional standards of rigs as construction? Is that part of the issue? Is there a definitional issue around what is a drilling rig, what is the operation associated with that rig, and are other state agencies defining it differently that allows different operational models?

MR. KUTERBACH: And this is John. And as a corollary to that, I think that's a very good point. What are the conditions and what are the sizes that they're operating on in the other states? You know, where does the ambient air begin around those drill rigs? You know, are they in the

middle of private land somewhere or are they -- do they have kind of the tighter ambient air boundaries that we have on the North Slope or in Cook Inlet? And what are the sizes of the units involved? Are they significantly -- the same size, bigger, smaller? All those things have to factor into how they're regulated down South versus what would be appropriate for Alaska.

MR. BARRON: Yeah, this is Bill. I think there's some good points there. In terms of rig size, I'm sure the industry can get us some comparisons of rigs. I don't know that I understand the difference between private air and public air, but I'm sure there's a difference there somewhere. If you -- I'm not trying to be factious. I really don't understand how that defines the difference of if it's private land versus public land.

MR. KUTERBACH: Not private land versus -- necessarily versus public land. It's a matter of the ambient air quality boundary. This is John again. The ambient air quality boundary is where the general public has access. Okay? And as we discussed last time, if you had a larger area around the drill rigs where the public was excluded, it would be easier to comply, even using the tools that we currently have for modeling.

MR. BARRON: Yeah, that would be an interesting -- that would be very interesting to see, because a lot of the

operations in the Lower 48 are fairly proximal to roads, and those are public access roads. So I would offer that there's probably a -- while there may be a definitional thing that we need to think about, or the industry needs to think about, in terms of what is public, right? As we talked last time, the irony was that somebody from ASRC on location had a Doyon rig running, the Doyon employees would not be public, but the ASRC employee would be general public, even though they were under contract by the same operator.

MR. KUTERBACH: No. If they were under contract by the same operator then they were all considered employees.

MR. BARRON: Oh, okay.

MR. KUTERBACH: It's only if it's different -- under different control.

MR. BARRON: Okay. Well that's interesting, because I heard that differently. I appreciate the clarification. So, I mean, those are some of the definitional things we might want to work out is how does that play into -- is that another knob for us to turn relative to the gentleman from Hillcorp's question about how do other regulatory regions handle this same problem? Because they have the same problem. I'm sure they do. It's just how they -- how are they managing it?

MR. THOMAS: Well this is Brad. Just to clarify or

respond to what you said, Bill. You said they have the same problem. I'm not sure it is a problem. They have -- and I'm not even sure they have the same issue that we're talking about here, because in the Lower 48, for whatever reason, we're not finding where states, perhaps outside of California, does anything with drilling rigs. They apparently treat them as mobile sources, non-road engines, beyond the reach of the Stationary Source Permitting Program. And there's evidentially been no measured ambient air quality issues connected to drill rigs that we know of. I do know that, like, BLM has taken an interest in drill rigs on federal lands in the context of environmental impact statements. But state programs, we're just not finding where states are addressing drill rigs at a Stationary Source Permitting Program. And to respond to what Wally stated as well. As a result, I'm not sure that they're doing anything. I'm not sure that they're doing anything.

MR. BARRON: This is Bill. You know, that -- if that's the case, that is a really, really big piece of information, you know, from my perspective. I mean if we are singularly looking at this kind of equipment, uniquely to the rest of the United States, that's something that we need to ask ourselves. If we are, why? And there may be very good reason. Right? I'm not saying it may not be a

good reason, I mean, if we are. But we need to be able to answer that question as a state and recognize that there might be a very good reason we do so. Conversely, there might be an epiphany going ah-ha, why are we doing that? So I think that's one of the problems that -- or issues that needs to be -- that this group needs to resolve is why, and should we, if we are that unique?

MS. MARTIN: And I agree with that. And I just wanted to also say that we have started to.....

UNIDENTIFIED MALE: Who are you?

MS. MARTIN: Oh, sorry. Thank you. Nikki with AOGA. We have started to look at other states. And our operators have started to reach out to their colleagues in other states and say, you know, hey, how are these regulated there. And the response, as Brad says, has been so far, you know, they're not permitted as stationary sources. And that they're, you know, allowed to transport their rigs on and off. And so I think that is worth pursuing, but I don't -- I'm not sure that it helps develop our goal statement now. I think that could be a really great, you know, agenda item in a future meeting where we all come in and say, look, you've talked to DEC offices in all other -- you know, in some other states, in Texas and North Dakota or wherever, and here's what they're doing. And we say here's what we found from our contractors and our

operators. And that would be really helpful to developing a solution, but I don't think that's helpful to developing the goal statement. But I've heard a lot of really great things that I think we are all on board with. You know, upholding, ambient air quality standard, we don't want to be in violation of the ambient air quality standards. And I think any goal statement has to include that. And what that means and what that looks like, I don't think we're going to be able to determine that today. But it also has to allow for a flexible, as Bill said, and streamlined approach. So that's my two cents. So I don't know.....

MR. MUNGER: Part of this is -- this is Mike Munger.

MS. EDWARDS: Go ahead, Mike.

MR. MUNGER: Brad alluded to, with the exception of California -- Brad, could you maybe elaborate a little bit what California does on drill rigs for air quality standards?

MR. THOMAS: What I know about California, I saw referenced in a 1998 letter, I think signed by John Stone from ADEC, referencing a California registration program for drill rigs. That's all I know about it.

MR. MUNGER: Okay.

MR. KUTERBACH: And this is John Kuterbach.

MR. MUNGER: Thank you.

MR. KUTERBACH: I looked into it a little bit. I

haven’t gone in depth on the California program. But as you know, California has a little bit different structure for their air quality regulation. A lot of their quality is done by the local air pollution control districts. And so, for example, Ventura County Air Pollution Control District has the registration program, but then they have extra requirements. They don’t permit them as stationary sources. You’re right, Brad. But they do have extra requirements. The first one is, they have to hook up to highline power if at all possible. If it’s not possible, they have to demonstrate that it’s not possible. And then they have to use best available control technology on the engines. And if it’s a new rig coming in, they have to be Tier IV engines. So it’s quite stringent, some of the control requirements, that could be part of that type of registration program.

MR. THOMAS: That’s an outgrowth. This is Brad. That’s an outgrowth of the Clean Air Act, Section 209(e). California gets to do this with non-road engines thing, now right?

MR. KUTERBACH: No. I don’t believe it is. Because I believe California is allowed to -- they’re not establishing emission limits. All right? All they are, are usage standards that they have to use. And any state can use those type of standards. The best available

control technology, that would be -- that might be a stretch. I'm not sure exactly where that comes from.

MR. THOMAS: Okay.

MR. MUNGER: This is Mike Munger again. From your limited research, either Brad or John on this issue, are drill rigs in other oil and gas producing states, are they all consider mobile sources or stationary or is there a mish-mash?

MR. THOMAS: Probably all mobile would be my guess.

MR. KUTERBACH: I don't know. I haven't done the research into that.

MR. MUNGER: Okay.

MR. THOMAS: Yeah, if they were considered stationary, Mike, they would be roped into permitting program routinely, I would think, because -- because it would include the engines and the potential to emit, and you would exceed minor permitting thresholds, which these states have.

MR. MUNGER: Sure. Thank you.

MR. BARRON: Well this is Bill again. I think that's a piece that we really have to boil down on. You know, that could be just a definition that we need to get our arms around as a team and ask ourselves why are we -- why have we labeled it one versus the other and what's the pros and cons. I'm not trying to, at all, be judgmental and

lean toward any direction right now. I'm just trying to identify that that's an issue that we need to kind of figure out.

MR. THOMAS: And this is Brad. Bill, the issue that you just mentioned that we need to figure out, can you restate it?

MR. BARRON: Whether it's -- you know, is it mobile or is it stationary, the rigs? You have non-road engine versus -- I mean that whole definitional thing that we were just discussing.

MR. THOMAS: I don't -- this is Brad again. I don't -- in Alaska, I don't think there's any disagreement or dispute about whether we consider the rigs to have non-road engines. I think we pretty much unanimously agree they're all non-road engines. And that would be case, unless they stay in one spot for 12 months or more, which doesn't happen. So does that.....

MR. BARRON: So how does that -- then I'm getting confused. I'm easily confused. You know, if it's a non-road engine and it's not, and therefore it's a non-permanent source, and everybody else is classifying them as non-road mobile sources, then how did we end up where we are? I thought we were where we are is because we defined them differently.

MR. KUTERBACH: Well, Bill, this is John. I don't

know, first of all, that your statement that everybody else calls them mobile sources is true. We haven't done that research yet.

MR. BARRON: Supposition.

MR. KUTERBACH: We haven't done that research yet. We agree that the non-road engines are regulated as mobile sources under Title II of the Clean Air Act. Okay? Title II of the Clean Air Act does not regulate heaters, boilers, incinerators, any other kind of emission sources. So those are not regulated under the Clean Air Act as mobile sources. Now what we have with a drill rig is a conglomerations of non-road engines and these other types of sources. All right? So the Clean Air Act wouldn't regulate drilling rigs, this combination. It does regulate the non-road engines as far as the purchase and, you know, what you can buy for non-road engines, and what those have to meet, the various tiers. The Clean Air Act also may regulate the boilers and heaters on there through federal stationary source standards, new source performance standards. So they're actually a mixture of both mobile sources and stationary sources, sources regulated under Title II of the Clean Air Act and sources regulated under Title I of the Clean Air Act.

MR. BARRON: Okay. This is Bill again. Now I know why I'm totally confused. It seems to me the emissions

standards.....

MR. BROWER: It seems to me the emissions standards -- this is Gordon Brower from the borough. If you make a determination on the definitions of what is a mobile source and not, and make it and define it, you know. A drill rig with all these components, it seems to me, that boiler is now a mobile source.

MR. BARRON: That's exactly -- this is Bill. That's why we're so confused, Gordon. Thank you. I mean that's kind of -- how do you have an (indiscernible) of equipment and part of it being stationary and part of it being mobile on something that moves? I mean that's -- to me that's -- you and I are saying the same thing. To me that's a confusion.

MR. BROWER: It's housed under a drill rig. That's, you know.....

MR. KUTERBACH: Well this is John. It all goes back to how the Clean Air Act regulates their pollution. Okay? The Clean Air Act has a specific title under -- under the Clean Air Act, Title II regulates mobile sources. And it does not regulate boilers and heaters and incinerators and stuff that moves, moves around, just because it moves around. Otherwise, anybody who wanted to permit an incinerator would put it on the back of a truck. All right? Because then you could just move it around. It

would be a mobile source. There would be no rules for it. So what the Clean Air Act does is it regulates things that are, under Title I, things that the Clean Air Act defines as stationary sources. And those stationary sources are the types of things that are not regulated under Title II. Title II regulates basically the manufacturers of engines and, you know, the purchase of engines and that sort of thing. And it regulates them that way, not because they're mobile, but because it's easier to control those types of sources by regulating the manufacturer at the federal level rather than letting each state regulate the sources at the state level.

MR. THOMAS: So this is Brad. John, everything you said is absolutely true and I agree. But regarding treating the small boilers and heaters that you find on rigs as mobile, you're right, in the Clean Air Act that's -- they're considered stationary sources and they're handled that way. But in this context, I think we have the luxury of being able to do that, because so far there's no federal emissions standards that apply to temporary boilers. Heaters that small are below the thresholds for the federal standards. And when you add up the potential to emit from those heaters and boilers on the rigs, they just don't -- they just don't rise to the level of the Minor Source Permitting Program. So it seems that we have

the flexibility in this context to treat the boilers and heaters on the rigs, just like we do the engines, as mobile. So we could do it. I mean it might take a little bit of math to demonstrate that, but it seems like we could do it.

MR. BARRON: This is Bill. I think that's a very worthwhile exercise for this group to take on in trying to understand what that does and then what kind of options we have once we have that dataset.

MR. KUTERBACH: This is John. Brad, I'm a little bit confused, because one of the problems that you had said was the maintenance requirements. Were those for the non-road engines?

MR. THOMAS: No. The context was the boiler met, before the rules were revised, to include the temporary weather provisions. That's why it came up originally.

MR. BARRON: Okay. So that issue is no longer an issue then?

MR. THOMAS: It's not immediate.

MR. BARRON: Okay. Just because it's always fun to be the one that's confused.

MR. MUNGER: You can add me to the list, Bill.

MR. BARRON: Yeah, but you don't have a room full of people looking at you and laughing, Mike. But I'm used to that so I'm good with it. I still think that an issue that

Nikki brought up is still a valid issue for us to resolve. And that is owner versus operator and the distinction between who is responsible for the maintenance and the documentation and compliance of the equipment. And I still think that's really important. Maybe to a lesser degree today, but, you know, I'm trying to project in the future, you know, if we have some resource plays that take off, and we have an elevated activity level with new contractors, new drilling equipment, you know, new operators, I really think it's important for us to think, not to solve the problem today, but kind of project ourselves out a little bit and ask ourselves where do we think we might be in five to 10 years and think that one through relative to the morass that might take place with the resource plan.

MR. THOMAS: This is Brad. And I agree, Bill. If you'd go back to the question you were asking a moment ago. The boiler (indiscernible), before it had the temporary boiler language in it, it had very prescriptive maintenance, recordkeeping, reporting requirements.

MR. KUTERBACH: Right.

MR. THOMAS: So it was very in-your-face, if you want. It was there. It was huge. And when we saw the language in the draft permit, it was a bit alarming, to say the least. Not so anymore, because of the temporary boiler language. The EPA, you know, corrected that problem by

including the temporary boiler provision, so it made that go away. But there is still some recordkeeping issues that apply to the lessee if they're carrying the rigs and permits for the contractors. And that would be the maintenance records associated with the state's good air pollution control practice standards. So there's that. Not as huge in my mind, but it's still there.

MR. KUTERBACH: All right. Well this is John. I don't quite understand the issue. I guess I'm the confused one now.

UNIDENTIFIED MALE: It's all so clear to me.

MS. MARTIN: Again, I think that might be something where we just bring in that draft language.

MR. THOMAS: Yeah. And this -- this was -- Mike knows all the language. I mean if the lessee remains the permittee, if you will, this is one that we can resolve with just some language. It doesn't seem huge, but it's still an issue until that language is ironed out. But it's not as huge as those first two issues that we raised.

MS. EDWARDS: All right, I tried to write something down, which you guys can -- I'm going back to the goal statement again. So listening to everything and knowing that we have a whole lot of different sort of multiple issues that we would want to talk about, but trying to bring us back maybe to a little bit higher level, this is

what I wrote down on my piece of paper. And you can see I've got like 85 cross-outs on it, so it's definitely not pretty. But maybe the goal of the workgroup is to develop recommendations to streamline the air permitting process for temporary drill rigs with a particular focus on both operational flexibility and compliance with the standards, air quality standards. And maybe that's the broad piece. And that under that, there are a number of these issues that relate back to it that we need -- that we want to explore to try and see if we can figure out how to make this more streamlined, more flexible, and still environmentally sound.

UNIDENTIFIED MALE: That's a good goal statement.

MS. EDWARDS: I don't know. If it's too broad, that's okay. I just -- I'm just trying to figure out if there's something we can coalesce around so that we can -- and then -- because I think all of these are subparts of trying to get there. But that's just my suggestion as maybe trying to coalesce around a statement that we could work with. Or somebody may have a completely different idea.

MR. THOMAS: Alice, this is Brad. Alice, maybe a suggestion.

MS. EDWARDS: Do you want me to write it up?

MR. THOMAS: If you write that on the board, and then we can take a break and people can think about it and then

maybe comment on it after the break.

MR. BARRON: Mike, I'll expect you to read this and read it back to us.

MS. EDWARDS: Sorry, my handwriting is not that good.

MR. THOMAS: Take me off mute, Mike.

MS. EDWARDS: All the people on the phone, I'm writing furiously. Okay. Can you sort of read that?

UNIDENTIFIED MALE: Yeah, we can.

MS. EDWARDS: That's what I said. So the goal of the workgroup is to develop recommendations to streamline the air permitting process for temporary drill rigs with a particular focus on both operational flexibility and compliance with air quality standards.

MR. THOMAS: Do you want to take a break and then.....

MS. EDWARDS: Do you want to think about that?

UNIDENTIFIED MALE: Yeah. Let's take a break and noodle on it a little bit.

MS. EDWARDS: How long you guys want?

UNIDENTIFIED MALE: Four hours.

MR. THOMAS: You know, we've gone for an hour and 10 minutes. I feel like we got a lot done.

UNIDENTIFIED MALE: How about 10 minutes?

MS. EDWARDS: Do you want to do 10 minutes now.....

UNIDENTIFIED MALE: Yeah, do 10.

MS. EDWARDS: .....and we'll come back and pick it up

again?

UNIDENTIFIED MALE: Yeah.

MS. EDWARDS: Did you guys catch that on the phone? We're going to take a quick 10-minute break. We'll be back at about 25 after.

THE REPORTER: We're off the record at 2:12 p.m.

THE REPORTER: Back on the record at 2:27 p.m.

MS. EDWARDS: Thanks, Teresa.

THE REPORTER: You're welcome.

MS. EDWARDS: Great. So we're back from break. Just a quick check in, especially for the folks on the phone. Have we had anyone join the call who didn't introduce themselves originally? Okay, thanks. I just wanted to do a quick check, because I wouldn't know you're there if didn't sign in. We had a couple people join the room. Gordon Brower from the borough joined us partway through, and I think we mentioned that. And I think Ann Mason is here as well. Do we have anybody else who joined, after we did introductions, in the room? Okay. Thanks for that. So we're back from break. Where do you guys want to go next? Do you want to pick apart this or do you want to start wordsmithing or do you want to go a different direction or what do you guys think?

MS. MARTIN: I think we go ahead with discussing the goal statement if everyone else supports that.

MR. THOMAS: Yeah, let's work to finalize the goals statement. That seems like a good idea.

MS. EDWARDS: Okay.

MS. MARTIN: I think this is a really, really well written statement. And I'm not going to pick it apart, I promise.

MS. EDWARDS: Well you're welcome to.

MS. MARTIN: This is Nikki with AOGA, for the record. But I think we can -- I think it's general enough to cover all the issues we've discussed. But I think it might be worth considering listing some of those issues or adding something that says including, you know, initially looking at, and then start listing some of these bigger topics we've talked about like modeling versus monitoring, the definition of temporary, the definition of non-road activities. And I'm hesitant to say that, because I don't want to limit what it is we're looking at, but I think it could help provide the roadmap for our future meetings. So, you know, we pick a day and say we're talking about non-road definition or activities for this section of time, and we stay away from talking about modeling, or vice versa. I know they kind of go back and forth. But I think that would be helpful to provide a path for us to go through this process. And then I think also just adding -- let's see, develop informed recommendations. I think that

would that help. Yes, I am wordsmithing.

MS. EDWARDS: That's all right.

MR. BARRON: But now we've got to be informed.

MS. MARTIN: Yeah. We have to be informed based on the list below. And then instead of temporary, you know, maybe that's something we need to explore, but I think we were thinking transportable drill rigs.....

MS. EDWARDS: Transportable?

MS. MARTIN: .....is more the category that it encompasses.

UNIDENTIFIED MALE: That wasn't my word, by the way.

MR. BROWER: It seems like putting transportable would still kind of lead into just being transportable, but it could still be considered -- I don't know. I think we were looking at definitions here and.....

MS. EDWARDS: Do we need the modifier or is it just drill rig? Can we have drill rigs in general? I don't know if we have a distinction there that we need to make.

MR. KUTERBACH: Well this is John. The -- and that's -- well I want to get kind of a little more definition around transportable versus temporary. What we're talking about is drill rigs that are designed to move and that actually do move. Correct? So they're not just designed to move and they're not just temporary, they're kind of both. They're not.....

MR. THOMAS: Let me just add. There's no drill rigs that don't move, are there?

UNIDENTIFIED MALE: The Liberty rig.

MR. THOMAS: Yeah, one.

MS. EDWARDS: Just one.

MR. THOMAS: The Liberty rig? That doesn't exist though, right?

UNIDENTIFIED MALE: Yeah. They're not operating it.

UNIDENTIFIED MALE: It's non-operating.

(Indiscernible -- multiple speakers at the same time.)

MR. KUTERBACH: How long would they stay at a particular site? You could let them set there for 10 years on the same -- I know they don't. I know they don't. What I'm saying is what's the length of time -- what's the maximum length of time a rig may stay at a site?

MR. THOMAS: If you define site as a well.....

MR. KUTERBACH: No, I don't define site as a well.

MR. THOMAS: Okay.

MR. KUTERBACH: I define site as a pad, at this point.

MR. THOMAS: In my experience in exploration production, which is five and a half years long, it's not been more than that threshold you're talking about, two -- you're probably thinking of, in fact, two years. I've not seen them stand on location for that long. It's always less than that.

MR. KUTERBACH: Well we have drilling operators in the room here. Do we have any -- what's the maximum length of time that a rig may stay on a pad?

MR. WILSON: I say this day and age, not very long. We're moving rigs sometimes a few days to weeks to months, six months. It's not like it was in the older days when you had it on a pad and you get (indiscernible) drill up the pad before you can move this (indiscernible).

MS. EDWARDS: So for those of you on the phone, the answer to that question was weeks -- days to weeks to months, maybe six months is more typical for a duration of a rig on a pad these days.

MR. WILSON: Correct.

MR. BARRON: Yeah, this is Bill. Let's make sure we don't cloud ourselves with where we are today and not think about where we might be tomorrow. I mean if we think about new discoveries, you know, a pioneer kind of operation, what Repsol (ph) has come out publicly and said, I mean those could be brand new developments. They could be back to where we were Prudhoe, Kaparuk, 20 years ago. And let's also not forget we've got Cook Inlet. And I don't know how that rolls into the dialogue, but some of those platform rigs, and I know Hillcorp is doing some modifications on that equipment, but some of those platform rigs have been on those platforms since the day they were set. So let's

-- we've got to keep that in mind. I mean there is that -- there is that spectrum that has to be reviewed.

MR. KUTERBACH: So in -- this is John. In the context of this workgroup, what do the workgroup members want to handle? Which drill rigs do we want to handle? Do we want to handle the permanent -- permanently placed rigs that are on platforms in this context?

MR. THOMAS: Are they -- this is Brad. If they're permanently placed on platforms are they non-road engines or no?

MS. KAUFMAN: No, they're part of the Title 5 permit for facility.

MR. THOMAS: Right.

MS. KAUFMAN: So then they're not -- I mean to me they would not be transportable. They would not fit into the scope.

MR. THOMAS: Okay. So we would not cover those.

MR. EVANS: Well but I think -- this is Wally with Hillcorp. I think what you would end up doing is just like you guys mentioned earlier, is if you could demonstrate that they were non-operational for the time that they were sitting idle, you know, disconnected from the fuel supply, whatever, to the satisfaction, then you could include them in this argument.

MR. KUTERBACH: Well, again, I'm bringing it back to

the workgroup members. This is John. What do we want to be able to handle in this? Because, you know, the universe of sources that we deal with is going to define the amount of work we have to do.

MR. THOMAS: This is Brad. Obviously, you know, the easy things to deal with are the transportable drill rigs that sit on a pad for less than two years. So, you know, we could tackle that one first. For more of the extended development drilling, where the rig may conceivably sit on a pad for more than two years, we might handle that second. Because it might be a little more -- there might be a few more issues to work through. For the types of rigs that you're talking about that they're permanently located on a platform, that's a new -- that's a new thing to me. So we.....

MR. EVANS: Well the difference is also logistics of the (indiscernible) rig on a platform is different than the logistics of putting a rig on pads. You know, you don't move the rigs on platforms. If you can leave it there until they can figure out where they're going with it next, you just let it sit. So you don't just wheel it off on a trailer.

MR. THOMAS: So perhaps can we handle that as a third category?

MR. EVANS: Possibly.

MR. THOMAS: So it seems like a step-wise way to handle it.

MR. BARRON: Yeah. I think that's a fine approach having, you know, and work our way through it and establish the priorities of which one we tackle first and second and third. I think it would be beneficial for us to at least put them on the list and work our way through it.

MR. KUTERBACH: Okay. And this is John again. So then does the word transportable add anything to this goal statement?

MULTIPLE SPEAKERS: No.

MS. EDWARDS: No.

MR. KUTERBACH: So we're back to temporary?

MS. EDWARDS: No, just the drill rigs.

MR. KUTERBACH: No, just drill rigs.

MR. MUNGER: This is Mike Munger. For clarification, for at least my end of the world here, since we do have two jackup rigs operating in the Cook Inlet, will this encompass those or is that a completely different category, too? Don't everybody speak up at once.

MR. KUTERBACH: Well this is -- this is John Kuterbach. Neither of those rigs are having any difficulties with their operation in this -- I mean there's nothing.....

MR. MUNGER: Compliance issues?

MR. KUTERBACH: Right.

MR. MUNGER: Okay.

MR. KUTERBACH: There's nothing in our regulations that's causing them any difficulties.

MR. MUNGER: Okay.

MR. KUTERBACH: So I'd rather not deal with those specifically within the context of this workgroup, if that's (indiscernible -- interrupted).

MR. MUNGER: In a little more specificity along the lines of the majority of Cook Inlet platforms now, now I haven't been on all those recently, but there's -- according to my information, and there's a representative from Hillcorp there, maybe they can elaborate a little bit, but they just undertook a project in the last few years and removed the majority of six rigs on those platforms with the anticipation that they'll be using mobile rigs, moving from platform to platform, in the future. Now why that doesn't encompass all the rigs out there, XTO still has fixed rigs on their platforms, two platforms, and I think there's a couple others, I think the majority of Cook Inlet rigs, for Hillcorp anyway, may be of a mobile nature in the future. I may be off-base and Wally can elaborate on that.

MS. KAUFMAN: This is Kate Kaufman. We have two drill rigs on two platforms, which have been there since they were installed, and they will remain. There aren't any

immediate plans right now for bringing a transportable rig, but that may be a possibility in the future.

MR. MUNGER: Right. One is the (indiscernible), one in -- some other one, but the majority of rigs on the now Hillcorp platforms, I believe, have been removed. Is that correct?

MS. KAUFMAN: Yes.

UNIDENTIFIED MALE: Right.

MR. MUNGER: Okay.

UNIDENTIFIED FEMALE: So can I.....

MR. DAMIANA: This is Tom Damiana. I'd just like to add that, you know, neither of the jackup drill rigs have had to deal with the new standards, which -- so we don't know what that compliance situation would look like. And if the mission statement has to do with streamlining the regulatory process, the jackup rigs are far from a streamlined process considering, you know, the short time that they would be on site. They have to go through a full minor permit with, you know, a full suite of modeling.

MR. THOMAS: This is Brad. I concur with Tom. I've heard some feedback from somebody who has one of the jackup rigs. And they're concerned about their inability to use the Minor General Permit, for example, so they want to take advantage of a streamlined process. So perhaps we could catch those as a fourth category.

MS. EDWARDS: Well I guess my -- this is my -- this is Alice. I guess my question is are the issues that we've been talking about and that have been raised, the more specific issues, are they primarily -- they seem -- I don't know. I guess my question is we've got these different categories of rigs. I clearly understand how some of the issues that we've talking about apply to the rigs that are actually transporting and moving around on a regular basis. I don't know how many of these issues are problems, per se, for either the fixed rigs that are, you know, staying in place, or is the Minor General Permit an issue, are those exploratory rigs an issue, the jackup rigs like we just discussed. And I guess my question was -- I mean I feel like we're broadening this and capturing more rigs than I think I had originally envisioned, but -- and that's fine if that's where the group wants to go, and we perceive that they have -- they have issues that need resolving. I'm just -- was wondering how many of these issues truly translate -- that were specific issues, truly translate over to these other categories of rigs? I understand the desire to make sure that all the rigs have a reasonable, streamlined approach for permitting that works, but I just don't know how many of these other categories really are having significant issues either getting their permits or complying with their permits or complying with the

standards when they’re doing this.

MR. THOMAS: Well this is Brad. In the case of the jackup rigs in (indiscernible) waters, which is, you know, within the northern region of Cook Inlet, they have the -- they have the same regulatory program as the rigs on shore. The only difference between the two is that the rigs -- the jackups are in the water. The ones on land are not. But they have the same compliance, permitting programs, structural issues. If they don’t have them now, they will. And where they’re deployed, I don’t think when you look at a rig on a pad on the North Slope and how it’s operated and how long it stays there and moves, I think a jackup is pretty similar in, you know, how long it goes out there, stays, and then moves. Is that -- that’s been my experience.

UNIDENTIFIED MALE: (Indiscernible -- away from microphone) out there quite a bit. They take them off (indiscernible -- away from microphone).

MR. THOMAS: So what we.....

MR. KUTERBACH: This is John. The difference with the jackup rig is they’re not going to a pad. All right? And so they move to their various locations, but it’s not -- there are differences where you’re not having them come back to the same location.

MR. THOMAS: That’s true.

MR. BARRON: Not true.

MR. THOMAS: Not true?

MR. BARRON: Not true.

MR. THOMAS: Okay.

MR. BARRON: They can come back to essentially -- in fact, the most recent drilling by Fury came back to the exact same location and reentered the temporarily-abandoned wellbore to reenter and drill out from one drilling season to the next. So eight months later, they came back to the exact same location, literally. So I mean I think we -- however, you know, back to the definition of general public, I would offer that general public is fairly limited in their accessibility to that jackup in the inlet. So that may fall into a whole other definitional structure.

UNIDENTIFIED MALE: Well -- and we do allow for that in modeling with the.....

MR. BARRON: So, you know, can we think about the highest priority and the most -- where all of us are trying to figure out the most bang for the buck is probably not fixed offshore facilities and probably not jackups. But if we can work our way through on-land drilling rigs, and I think -- I think go ahead and classify them as transportable, I mean we're back to adding the word back in, and work our way through that. I mean if we -- if we kind of narrow it down, I mean that's not a whole lot of

narrowing. We're talking onshore transportable drilling equipment. That will cover, what, 95 percent of the problems that we're talking about? I mean that would only end up with Liberty, if it ever gets put back together, fixed-platform installations.

MR. EVANS: This is Wally with Hillcorp. You know, for offshore, like Kate was saying, we are bringing -- we are mobilizing sources that move from platform to platform. And I can see the same problem with offshore as onshore, when the 24-month rule was in effect, where we can't bring it back on. You know? Because, typically, the drill rigs will stay for a drilling season, which is a summer, and then move to another platform for a summer, but they may want to come back, you know, within a reasonable time. Now the fixed ones are different. But like Kate said, we only have two of those.

MR. BARRON: Well then, okay, then let's just take the word onshore and just take -- put it back in as transportable.

MR. EVANS: Right.

MR. BARRON: Because I would offer that you guys can work year round on a platform. You're not -- you don't have a drilling window of summer months only.

MR. EVANS: Right. Correct. Right.

MR. BARRON: At least you used not to. So I guess

we're back to transportable drilling rigs?

MS. MARTIN: Before.....

MR. BARRON: Before you add it in, Wade?

MS. MARTIN: Yes. This is Nikki with AOGA. Before you add it back in, taking into consideration my seat as representing the industry as a whole and not just AOGA membership, I don't see them here today, but somebody who's been here in the past on behalf of Fury and Buccaneer has presented concerns to me about drill rigs specifically in the Minor General Permit Program. And I know, you know, their hope was that that would be compassed. And I think when we talked in the first meeting that making sure that Cook Inlet concerns were addressed, and I'm not proposing how it happens or what that looks like, you know, we were including not only the Hillcorps but also the jackup drill rigs. And so I know that they've had some concerns with trying to determine what sources should be included under Minor General Permit on their jackup rig. And then also some modeling requirements that, you know, they were just unclear of the definition for modeling requirements. So I don't want to -- you know, I don't want to make a.....

MR. BARRON: No, no, no. I.....

MS. MARTIN: .....decision right now to take that completely off the table without.....

MR. BARRON: No. This is Bill. Ironically, I think

by saying transportable, they clearly land in the bucket.

MS. MARTIN: Okay.

MR. BARRON: Because by definition, they're a transportable drilling rig. As long as we take onshore -- and, you know, because we talked about just having it for onshore, if we take the word onshore off and go back to transportable drilling rigs, in my mind, they clearly -- they're almost -- they're a poster child for the definition of transportable. They're just not on wheels. So I think they fit within the definition.

MS. MARTIN: Okay. I just want to clarify.

MR. BARRON: No, that -- what does the rest of the team think?

MR. THOMAS: I agree. One thing I wanted to make sure that -- I'll say this then seek concurrence. But what we're talking about is a program that addresses drill rigs which are largely non-road engines. So if all the equipment -- if all the rig categories we're talking about, if everybody agrees that those are non-road engines because they move around, then we can do that. We can translate the solutions to the onshore problem to the offshore. So that's what I throw out there, because I want to hear John's feedback.

MR. KUTERBACH: Well not all drill rigs are non-road engines.

MR. THOMAS: Well when we're talking about the jackups, that's what I'm talking about specifically. The ones that are permanently affixed to a platform and don't move. That's what I'm talking about.

UNIDENTIFIED MALE: No, no. Wally, would you like to speak to that point?

MR. EVANS: Go ahead.

UNIDENTIFIED MALE: Hillcorp has a turbine-driven rig that's transportable, or will be transportable, but they haven't mobilized it yet.

MR. THOMAS: I didn't know that.

MR. KUTERBACH: This is John. I don't see any reason why adding transportable adds anything to the goal statement.

MR. BROWER: You know, a drill rig, by definition, should just be a drill rig. It's designed to be temporary until production is there, and you go back and rework the well at some point.

MR. KUTERBACH: Yeah. I mean if it's a permanent drill rig then it should be permitted as a stationary source, and we shouldn't have a special process anyway. So I don't think it's really going to add any difference to our goal statement. That's my vote.

MS. MARTIN: I concur.

UNIDENTIFIED MALE: I think that's fine.

MR. THOMAS: I'm good.

MR. KUTERBACH: We can come to.....

MS. MARTIN: Either (indiscernible) I added that in.

MS. EDWARDS: Okay. What else have we got?

MR. BARRON: I'd like to talk about the word streamlined. I don't -- in my mind, I don't know that I'm -- if this team is trying to streamline -- while that may be an end result, to me, we're trying to modify, refine, optimize, clarify, something.....

MS. EDWARDS: Pick your word. Improve?

MR. BARRON: Yeah, improve. But to me, it's not streamlined.

MR. MUNGER: How about clarify?

MR. BROWER: How about we're trying to make it predictable?

MS. EDWARDS: Say that again. Was that Mike?

MR. KUTERBACH: Mike, what did you say?

MR. MUNGER: Possibly clarify?

MR. KUTERBACH: Clarify works.

MR. BARRON: Gordon mentioned predictable.

MR. KUTERBACH: Predictable.

MR. THOMAS: This is Brad. What about develop recommendations -- develop informed recommendations to, pick your word, the regulatory process for drill rigs, rather than have permitting?

MR. BARRON: No. That opens us up to all sorts of issues that could involve AOGCC and.....

MR. THOMAS: Well air regulatory process then.

MR. BARRON: Okay.

MR. THOMAS: Air regulatory process -- to replace the word permitting with regulatory.

MR. KUTERBACH: Okay. I don't have a problem with that. This is John.

UNIDENTIFIED MALE: Do you have a problem with changing permitting to regulatory?

UNIDENTIFIED MALE: Permitting to regulatory. I think that's fine.

MR. KUTERBACH: All right.

MR. THOMAS: Does that -- does that -- and the word streamlined, does that make sense to be there in that case?

MR. BARRON: To me, streamlined still doesn't fit.

MR. THOMAS: Okay.

MR. BARRON: I mean because I'm not -- I'm not cutting any time off. To me, streamlining is you're cutting time off of a process. And that's not, I don't think, the goal here. I mean.....

MR. THOMAS: That's true.

MR. BARRON: If the goal was the cut time off the process, you know, I'd be asking you guys well why are you permitting the way you are? Right? If it's - if it's a

matter of streamlining, it's change out your darned engines regardless of cost. Right? And then you've really streamlined. I don't think that's the -- do you see where I'm going with that? I mean to me, we're trying to -- recommendations for predictable or clarify or.....

MR. BROWER: Just recommendations.....

MR. KUTERBACH: This is John. I suggest we use the word improve. I think that covers every possible configuration that you have of changing, streamlining, modifying....

MR. BROWER: Well I think you want to develop a recommendation to provide for a predictable air quality regulatory process.

MR. THOMAS: Well, Gordon, this is Brad. The word predictable is a very broad word. And it could be predictable that their regulatory process for drill rigs is a process that results in no permits for drill rigs, predictably. And that's not an outcome I think we want. The word improve is satisfactory to me.

MR. KUTERBACH: Mike, what do you think?

MR. MUNGER: I try not to.

MR. KUTERBACH: That's why you're on the team.

MS. EDWARDS: Mike, do want us to read the statement again as it is right now?

MR. MUNGER: Please.

MS. EDWARDS: Okay.

MR. MUNGER: Yeah. There's been terms being going all over the place here a little bit.

MS. EDWARDS: Yeah. So the goal of the workgroup is to developed informed recommendations to improve the air regulatory process for drill rigs with a particular focus on both operational flexibility and compliance with the air quality standards. And then we want to include some additional language toward the end about some of the specific areas we want to explore. And we haven't quite figured out what that wording is yet, but that's the statement at the moment.

MR. MUNGER: Does the word improve, could that be taken as -- you know, and that may well be the case, but I'd be remiss if I didn't point it out, but does that point toward they're currently substandard? When you're trying to improve something, well why are you trying to improve it? Because, you know -- so I don't know if I'd go with the word improved, but I -- frankly, I don't have any recommendation to -- for a replacement there either.

MR. BROWER: That's a good question, I think. I mean is this the -- have we been using the right structure for this permitting? I mean it goes back to some of the questions related to what is Wyoming doing, what is California doing. And it's an altogether -- an alternative

structure then so you don't have to reinvent the wheel some more.

MR. BARRON: But to that regard -- this is Bill. I think you're right. But to me, that is encompassed in improved, so.

MR. EVANS: And this is Wally. I think that goes back to what Bill had said a couple of meetings ago that what was good 20 years ago may not -- may have been great back then, but we're not improving, we're changing with the times. So things have changes. The NAAQS have changed. The conditions have changed. So now we've got to change. You know, so improved doesn't necessarily mean it's broken. It just means it's different today than it was when it was developed.

MR. THOMAS: I can certainly land on improve.

MS. MARTIN: I can, too.

MR. THOMAS: Same here.

MR. TURNER: We're seeing a group of nodding heads in improve.

(Pause.)

MS. EDWARDS: I'm thinking. So other thoughts on this? I realize we probably need to wordsmith the ending here a little bit. But I was thinking about Gordon's point on predictability. And I'm wondering if -- I mean I have yet to find -- I could be wrong. You folks can tell me if

I'm way off base. Typically, you guys are looking for some sort of predictability as well. So I don't think that that was a bad thought at all to be thinking about. I don't know if we wanted to include that concept in here or maybe in -- below. But, you know, because you could look at particular focus on operational predictability, operational flexibility, compliance. I mean you could add it in to there.

MR. BARRON: I think -- I think that would be fine. You know, take out both and put in predictability.

MR. THOMAS: That's appropriate. I mean because predictability is pretty central to a regulatory process.

MS. EDWARDS: I mean, typically, I hear that a lot. I mean you guys want to have predictable processes. And clearly the point of everybody getting together to work on an issue like this is to see if we can find commonalities that allow for a more predictable process for everybody.

MR. THOMAS: So the word would be predictability, comma.

UNIDENTIFIED MALE: Comma.

MS. EDWARDS: Our scribe has failed.

UNIDENTIFIED MALE: You can wordsmith it later.

MR. THOMAS: That goal statement looks good to me.

MR. BARRON: So let's read it one more time for Mike.

MS. EDWARDS: So, Mike, here's what we've got right

now. The goal of the workgroup is to develop informed recommendations to improve the air regulatory process for drill rigs with a particular focus on predictability, operational flexibility, and compliance with the air quality standards.

MR. MUNGER: I'm fine with that.

MS. EDWARDS: Okay. Excellent work, everybody.

UNIDENTIFIED MALE: Right on time.

MR. THOMAS: I know. I was just going to say that.

MS. EDWARDS: And right on time. So I wanted to come back to Nikki's comment that we should add something that sort of outlines some of the areas that we wanted to explore and whether we want to -- I mean we can add it as, you know, onto this goal statement. But how do we want to frame that? Because I agree with you that it would be nice to lay some of these things out, but I also don't -- like you said, I don't want to limit our -- you know, we need to have some scope limitation for ourselves, I think, but I also don't want it to be perceived that those are the only things that we could potentially look at if -- as we move forward if we find that something leads us in a particular direction or another that we, as a group, feel is important to explore.

MR. BARRON: The classic line, including, but not limited to.

MS. MARTIN: Right. Or -- this is Nikki, something, you know, initially the workgroup will look at or address the following. Because, you know, undoubtedly, looking at any one of these categories is probably going to lead us to looking at a whole host of other issues we had not anticipated. Maybe not a whole host. Another issue.

MR. MUNGER: So is the suggestion that we add to the goal statement or try to put more specificity in the goal outlines?

MS. EDWARDS: Well that's the question we're kind of working through.

MR. MUNGER: That's what we're working on right now?

MS. EDWARDS: Whether or not we should add.....

MR. MUNGER: My suggestion is we leave the goal statement as is and -- because that encompasses a really broad range. And, frankly, I think if we start putting in too much specificity on that goal statement, it's, frankly, a little bit limiting.

MS. EDWARDS: Okay.

MR. THOMAS: Was that Mike speaking?

MS. EDWARDS: Yes.

MR. MUNGER: Yes, it was. I apologize.

MR. THOMAS: Well this is Brad. I think I agree with Mike. The goal statement is the mission. And then we spend our time now developing tactics so we can capture

those at a different place, if you will.

MS. MARTIN: The approach -- the approach -- a more detailed approach to.....

MR. THOMAS: Yeah. Well maybe we can call these the strategic items and -- it's a window washer -- the strategic items and, you know, we identify strategic items then we can list the tactics under each one. But that.....

MR. MUNGER: As the representative for AOGA, and I apologize for forgetting your name, but as you were speaking to this in saying that, you know, that one thing could easily lead to another, and that's why I'm a little hesitant about putting any more in the goal statement, because I believe you're correct there. And one thing will lead to another, and lead to another, and lead to another. And so to kind of put -- try to put sidebars on that right now, I think would be a little premature. And so that's why I'm advocating for kind of leaving the goal statement as we've just hammered out.

MS. MARTIN: And this is Nikki. And I agree with that. I certainly don't want to limit what it is we're looking at or all the -- you know, especially, we're getting into what's the definition of non-road engine, but I don't want it limited to that level of specificity, but I think it would be productive if we could layout some sort of roadmap. Because I agree that the mission statement or

the goal statement, it's good and it provides enough flexibility and it's broad enough to encompass all the issues, but it doesn't necessarily provide a structure for us to start laying out how we achieve the goal. So I guess my suggestion was more of how are we going to start addressing these things. Maybe identifying some of the topics?

MR. BARRON: Yeah, this is Bill. In listening to the dialogue, maybe if we have a -- I think everybody is right. I think keeping the mission statement, you know, succinct and crisp is a really good idea. And now maybe what we need is a section that, for lack of a better term, you know, strategic topics.

MR. MUNGER: Strategic plan. Yeah, something like that.

MR. BARRON: Yeah. If you've got strategic topics and then you could have a plan of each one of those topics.

MR. MUNGER: Right. Yeah.

MR. BARRON: You know, then we kind of layout -- I mean we're building a framework for the dialogue. So, you know, whatever those strategic topics are, let's try and get those listed.

MS. EDWARDS: All right. Do you want me to -- can I erase this? Has everybody.....

UNIDENTIFIED MALE: Has our scriber adequately caught

it?

MS. EDWARDS: I'm sure it's in the transcription. And then we could start -- so we can use the board a little bit, because I think it helps sometimes to be able to visually see stuff.

UNIDENTIFIED MALE: Okay. We have no objectives on the board. We're done.

MS. EDWARDS: And we can laugh at you, Tom, as you scribe. So just write strategic topics up there and we'll work with that for now.

MR. BARRON: Same topics?

MS. EDWARDS: Yes.

MR. THOMAS: Same topics.

MS. EDWARDS: So what are the -- so I kind of see this as sort of what are the -- right now we've got a list of issues that we need to explore further. I've heard we need to explore sort of the -- well there's the -- at one level, there's the definition issue. Sort of the approach -- I can't think of the right -- I haven't quite figured out what the right word is in my brain, but. So you have this sort of definition issue about what's happening in Alaska, what other states are doing, sort of what are the various regulatory approaches that exist for drill rigs both in here and in other places to see if -- exploring other regulatory approaches. So that's sort of -- that's the

definition piece. I also heard -- I mean we obviously have a modeling issue that we need to explore. And, you know, how to -- which sort of comes back to how do you demonstrate compliance. I mean how do we determine compliance, with whatever approach we're using, with the air quality standards? What else have we talked about?

MR. BARRON: I think another one is, and again I'm going to screw it up, so we'll just say that up front, is this whole idea of bundling temporary sources with permanent sources and how they're bundled together or not bundled. I think there needs to be some work around that. Stationary sources on mobile equipment, are they really stationary or are they mobile? And is there thresholds that we need to establish or look at? Is that making any sense?

MR. THOMAS: It does. It does.

MS. EDWARDS: Uh-huh (affirmative). Yeah.

MR. THOMAS: And I think all we're talking about is heaters and boilers and engines, right? That's.....

UNIDENTIFIED FEMALE: Yes.

MR. THOMAS: Because the heaters and boilers just have a different -- they're in a different category than the non-road engines. So it's can we -- how do we put those together?

MR. BARRON: Yeah. How do we bundle that

intelligently?

MR. KUTERBACH: This is John. A couple of things that I thought of that we haven't talked about yet is the public input, which is accomplished now through the Permitting Program. But if we move, in some ways, away from that, we want to make sure we address that aspect of it. Another thing would be if there's any mechanical or control equipment solutions that could contribute to improvement.

MR. THOMAS: Just for the sake of getting it out there, John, and this is Brad. When you say control equipment can you list some categories of what you're thinking regarding control equipment? I mean, you know, what comes to mind, obviously, is things like SCR, you know, select-catalytic reduction, but do you have other things in mind?

MR. KUTERBACH: I don't have anything in -- specific. I'm not aiming toward anything. I'm just trying to get categories of topics that we ought to discuss as part of our development of the solution.

MR. THOMAS: Okay.

MR. BARRON: You know, and I -- you know, maybe it's control equipment/equipment modification. It may be part of that answer is engine chain-outs or -- and just as a broad category. Do we need a category of compliance with air standards? I mean do we -- we always have to do a loop

back on are we in compliance with requirements.

MS. EDWARDS: Well and that's why I put how to determine compliance, because we have this modeling/monitoring question which has been raised. But when you look at -- you know, if you look at modeling and you think about what are we going to model and what will work and what won't work, and then you start feeding in well -- then you start thinking about well what kind of controls are there.....

MR. BARRON: Okay.

MS. EDWARDS: .....the ambient boundary issue, the -- is the model performing appropriately issue, the, you know, are restriction -- you know, is restricted operations something that might work? Are there other ways to look at operation in a way that would allow us to permit if we were going to stay in a permitting world? You know, what -- I think there's all sorts of things that feed into that, but it's all about how we ultimately determine whether there's compliance or not. So there's a lot wrapped up in there.

UNIDENTIFIED MALE: Okay. That's fine.

MS. EDWARDS: And I don't know how to deal with that. But I think we have to have some -- we have to have some -- as John said, it's sort of like if we don't look at control equipment, we're missing part of the equation that could be part of a solution. Because it might be that, for some

things, maybe it's figuring out a way to upgrade the equipment might be a solution, but it depends on how it's approached. It might be that looking at how the -- you know, we draw the boundaries of the pads or the -- for the leases or whatever, might be an approach that might help alleviate some of the compliance modeling concerns. So there's, I think, a number of different directions that we could go on in several of these topics. If we wanted.....

MR. MUNGER: This is Mike again.

MS. EDWARDS: Go ahead, Mike.

MR. MUNGER: John, you mentioned earlier that you had concern on the public component on this. Could you elaborate on that a little bit?

MR. KUTERBACH: Yeah, this is John. The reason why I suggested that it's a topic that we need to discuss is some of the solutions, or some of the information that we've had, is how other states regulate or don't regulate drilling operations. And if we were to move to those other types of state approaches -- for instance, suppose we decided we didn't need to regulate drill rigs through the program, all we needed was a registration program. Well what we'd be losing out of our permitting program is the opportunity for public review and comment. And how do we address that change? Do we just ignore it? Do we provide some way for the public to have input? It's something that

I feel we need to discuss as part of the workgroup in developing a solution.

MR. MUNGER: Is there -- have you ever been involved -- this is Mike again. Are you aware, John, or been involved in any process before where the State has, say, dropped an air quality regulation and went into a permitting program or anything similar to that before to -- for an example of how this was handled before?

MR. KUTERBACH: Nothing comes to mind immediately, but I'm sure if I waded back through my 20 years, I'd find something.

MR. MUNGER: I would image there's somewhere in the DEC -- this is Mike again, in the DEC regs where we've -- in my previous work with the State where we've, oh, modified reg. And if they're still existing regs then you go through the reg process as, you know, you're well aware. But when you drop regs, I don't know if there is a public process. I'm sure there's probably an example somewhere in the history of the DEC, at least.

MR. KUTERBACH: Oh, yes. This is John again. Yeah, for the change that we make, as does the regs, if we have to change our regulations to get rid of something, that would go through a public process. I guess what I was more concerned about was the ultimate end result. Right now when, for instance, the jackup rigs had their permit, we

had a public process whereby we could get public comment on that permitting. If we change the process, the change in the process would get public comment. But it may change it to a process where there won't be individual public comment on operations. And I think that's something that we ought to discuss as part of the workgroup is, is that something that's acceptable? Is that something we should address? If we go -- you know, and this is way down the road, and I don't even know that we're going to go there and have it, but it's just one of the strategic topics I think we should be aware of when we're kind of discussing the resolution of the issues.

MR. BROWER: You know, the -- that's a good point. I often worry about where the borough's input will be refocused. Where would my comments be better served in a changing climate all the time? Our example, in the borough, for 40 some years, anything that went on in Point Thompson, (indiscernible) Springs, some other parts of the borough, were only -- any -- if you want to do anything in these parts, it required a public hearing. Your application always required a public hearing. It took 40 years to change that. And we're now readapting to a new permitting climate and streamlining and optimizing how we best work in these types of changes. So, you know, a lot of times we -- we have to be able to adapt to the changing

-- and that's what we're doing in the borough. I mean the -- right now things in Point Thompson are in a -- it mirrors what goes on in the rest of the Prudhoe Bay and other areas. It's nowhere -- you know, if you want to put a bathroom up, you have a public hearing. If you want to put a drill rig, you have a public hearing.

MR. THOMAS: Gordon, this is Brad. Those are borough requirements?

MR. BROWER: Those were borough requirements.

MR. THOMAS: They were borough requirements?

MR. BROWER: They -- it was written hardwired into Title 19. And we finally made those changes with an operator wanting to develop over there.

MS. CASTANO: Just a quick comment. This is Alejandra Castano with BP. I'm not suggesting that we go the general permit route, but I've seen other states, when they do develop a general permit that is a more streamlined version of a permitting system they currently have, the general permit itself does go through a public comment process. So that's also something that we could look at as well.

MS. EDWARDS: And it's what -- that's the way our current general permit works, I believe. If we change that, it goes out to public comment.

UNIDENTIFIED MALE: But not the individual application to the general permitted individual sites.

MS. EDWARDS: Right.

MR. BARRON: Which -- this is Bill. Which actually might work well, because what we're talking about is being able to move a piece of equipment from site to site to site, so it wouldn't be site specific.

MS. EDWARDS: Right.

MR. BARRON: So that tends to fit a little bit in the model that we're trying to get our arms around.

MS. EDWARDS: Right. And I think when we've talked -- and when we talked about this at, I don't remember which meeting we talked about the minor general permit, but we did talk about it briefly. Which, of course, the minor general permit was designed, you know, because of the way we model and do -- you know, put everything together was we modeled a particular scenario to demonstrate compliance. And so people that fit within that, those assumptions, can use that minor general permit. It just hasn't fit for every type of operation that's going on out there.

MR. BARRON: Any other topics that anybody can think about?

MR. BROWER: Is there still an issue about this -- you've talked about 24 months of not -- when you're returning to a stationary air permit source, if they -- if we had a different type of permitting climate would it still kick in the increment -- to protect the increment

from a stationary source from a temporary source?

MR. KUTERBACH: Well actually that's a good point and maybe that's something that we have to talk about as part of the solution is how we manage the -- or how we prevent the deterioration of air quality with respect to the increment. Because, I mean, yes and no. I mean you could structure it either way.

MR. BROWER: I've just heard concerns about a drill rig not being able to return to work to a particular site. And you've have a determination made and you've got 24 months before you can come back, or something to that effect.

MR. KUTERBACH: Well and -- yeah, you weren't here at the -- this is John. You weren't here at the very beginning of the meeting where we actually addressed that a little bit. That's not -- that was one proposal in one permit that has not been finalized yet. But it does raise a very good question, which is how constant can the activity be at a site where -- with things continually returning to it, before it becomes a permanent degradation of air quality there versus a temporary degradation. In other words, if the same guy comes back every day and does the same thing, that's more or less a permanent operation, even though he leaves every night.

MR. TURNER: This is Tom. Looking through my notes,

one comment was owner versus operations or lessor versus the lessee.

MS. EDWARDS: Well my -- I guess my question -- I was thinking about that, too, because I know it's an issue. And it could be in the context of our current structure that we could deal with that by working together on permit language. But that, depending on where this goes, that might or might not be what needs to happen. So do we want to capture that idea for now or do we want to wait and pick it up depending upon where this evolves to?

MR. BARRON: Yeah, this is Bill. I think we ought to put it in as a strategic topic. And if it's something that we can resolve quickly, then good on us. If not, then it's still out there and we've captured it. But I think what I was hearing is, you know, the industry representatives brought that issue up several times. So I mean I don't want to not capture it, because it's been brought up several times. I think you're right.

MR. THOMAS: This is Brad. I just spoke with Randy, and so I'll ask the question now so everybody can hear the question that I asked him. You know, I wonder if it's strategically a good idea to develop a picture of how rigs are actually deployed, how they're actually used, so people get a sense of how often they visit a site, how often a site is left unoccupied by a rig. I mean would that be

helpful to bring that information to the table to show, typically, in different fields this is how rigs are deployed, so that we know, typically, you know, what we're regulating? You know, because, John, you expressed concern about, you know, clustering of rigs or high-density activity of rigs. So would it be helpful to present a historical record, really, of how rigs have been deployed in different fields?

MR. KUTERBACH: This is John. So, Brad, that would be something that you'd be kind of agreeing to operate that way in the future in perpetuity?

MR. THOMAS: No, no, no. It would just so people -- everybody understands how is it is deployed in Alaska typically.

MR. KUTERBACH: At this point in time?

MR. THOMAS: Historically. It would be based on historically. It would be based on, you know, looking back. Would that be helpful, I wonder? And that's the question I asked Randy a second ago.

MR. KUTERBACH: Well I don't think it's a strategic topic.

MR. THOMAS: It's not -- it's not a topic that we have to work, but it's a fact that could be brought to bear on some concerns.

MR. MUNGER: This is Mike. I would appreciate that

information myself, Tom.

MR. THOMAS: Yeah, this is Bill. I think a tangent off of that, that would be beneficial, would be some sort of dialogue from the industry in terms of what kind of rigs are available. What are we -- are we talking, you know, just class of rigs. I mean you've got your big rotary rigs. You've got your small work-over rigs. You've got coil-tubing rigs. I mean just sort of a breakdown of the class -- the stuff that Hillcorp was trying to get on their platforms. You know, how do we -- how do we capture what kind of rig, what kind of capacities, what kind of emissions, just in -- what kind of equipment? And I think that would be valuable, because -- I mean to along with the idea of how do things come and go? Because you can have more than one rig on a pad. If you think in general terms of having a drilling rig and a work-over rig and a coil rig, in concept, you could have all three of those at one location. I mean it's highly unusual, but, I mean, you could. So I think the dialogue is valuable in terms of how do you -- because, to me, that gets into the modeling/monitoring and the increment kind of discussion.

UNIDENTIFIED MALE: Rig compilations?

MR. TURNER: I don't know what the -- I don't know where it would be under strategic topics.

MR. THOMAS: It wouldn't be.....

MS. EDWARDS: It's more of a background, another background piece.

MR. BARRON: So have we moved into defining what background information we need to collect?

MS. MARTIN: This is Nikki. I think you have control equipment and modifications up there. I think it's fine to have a topic that's, you know, broader than equipment, looking at what equipment we use now, you know. Maybe that discussion is part of using the illustration of what drill rigs have looked like historically and how they're used. I think people have said that would be helpful. But I think equipment itself.....

MR. THOMAS: Well that's -- does that go along with what Bill was saying?

UNIDENTIFIED MALE: Yeah, it does. It does. Yeah.

MS. MARTIN: I'm just trying to encompass everything Bill said and (indiscernible -- interrupted).

MR. BARRON: I mean that kind of fits with what I was talking about, which you mentioned and Mike said would be valuable for him. I mean, again, whether it's background or a topic, I think it's something that we need to -- and I think it's important for the public to understand. You know, especially when you start to get into transcription and people start reading this on the website, you know, a rig is not a rig. I mean I think people need to have that

appreciation.

MS. EDWARDS: Other sorts of strategic topics that we might want to look at? I was trying to think back a couple meetings and some of the things that we've talked about and whether we've captured all of those ideas, since we've kind of gone down this trail a couple times.

MR. BROWER: In the operation of a drill rig, on how it's used, would it be important to note if there are certain procedural differences as they're putting them together? Like, certainly, I think there's a ramp-up of power sources as you get going, especially when you're getting ready to spud. And once you spud, there's a certain time that you get to bottom hole depth and threshold (indiscernible) and that kind of stuff that -- that uses a certain amount of energy versus the other -- you know, you can have 20 days before you spud, if that's important information to -- because some of the things that I've heard is you turn everything on and that's what you try to permit at, the extreme source.

MR. KUTERBACH: Yeah, that's what people have been applying for, certainly.

MS. EDWARDS: So one of the things that I was -- I was thinking back to one of our early discussions, was also this concept, and maybe it's coming back to just determining compliance and maybe it doesn't need its own

thought, but I was thinking back to the public and the public input and the concept of areas near communities or how do you deal with prox -- do we need to talk about proximity to any -- we've got ambient -- we have ambient air in the context of the ambient air that's maybe not readily accessible to people, but still is technically maybe ambient air. But then we've also got the issue of sort of proximity to, you know, where people really are living and recreating and, you know, subsistence and that sort of thing. And I'm just wondering if there's something we need to think about or capture, topic wise, maybe that relates to public input, but sort of the potential or how do you deal with the community-based aspect of this where we're -- when we're in proximity to communities.

MR. THOMAS: This is Brad. Perhaps that could be captured under the heading ambient air boundaries. Because if our mission is to protect ambient air quality standards, and we do it at the boundary, does that not address.....

MS. EDWARDS: It should address it. I'm not -- I'm just -- but I'm thinking in the context of public, maybe, perception and.....

MR. THOMAS: Well.....

MS. EDWARDS: Because we always -- I mean when we permit, we -- or when we're trying to do this, we're trying to maintain compliance with the ambient air quality

standards so that should be protective of public health. But yet we have -- when we work in proximity to residences, homes, villages, communities, we expect more scrutiny of those sources, I think, than when we're in more remote locations. I think it's reasonable that we would expect the public to be more concerned with development that they are -- that is closer to them. So I just -- I didn't know if there's a way to -- or if we need to capture that kind of concept in what we're looking at from a topic perspective. And I remember Gordon talking about cumulative impacts and being -- you know, what does it mean when these rigs come -- you know, are in proximity to these communities, especially on the Slope. But this could also be true in Cook Inlet or in other parts of the state depending on where drilling occurs. It's more of a public aspect, but I just -- if we build a system that maintains the ambient air quality standards, we should be -- we're doing our job, but we also have to be able to ensure that the public feels like they understand that, I guess.

MR. BARRON: Yeah, this is Bill. Isn't that a subset of public input?

MR. BROWER: Wouldn't the drilling operation that you're permitting be a component of an exploration plan that went through some public process? It's just a component of an exploration plan or a plan of development.

MR. THOMAS: This is Brad. Gordon, in some cases, but not always. In most of the cases we're talking about, in this context, we're talking about infield drilling, you know, the more routine drilling, in a developed field.

MR. BARRON: This is Bill. That should still be identified in your plan of development, which is -- which is.....

MR. THOMAS: Oh, absolutely.

MR. BARRON: Which is reviewed and by PA every year. So, I mean, if you're coming on to a new site -- or coming back to a location within that PA, you're going to say you're going to do work-overs or drill wells, that should be part of your POD, which is -- goes through a public process.

MR. THOMAS: And that's important to look at.

MR. KUTERBACH: I have one strategic topic that I kind of hesitate to bring up, but -- and that would do with the funding on the implementation of whatever result that we have. How would it be funded? Because right now, our work -- regulatory work is funded through fees.

MR. THOMAS: This is Brad. Do you have, in your regulations, a time and materials category to which that could be built or would one have to be created?

MR. KUTERBACH: We have, under our statutes, fees for permits. Okay? And so we can charge for permitting work.

At the -- but the overall funding, if we come up with a different regulatory scheme on how we're going to regulate these sources, the funding has to be there for us to be able to discharge our responsibilities under that other regulatory scheme.

MR. THOMAS: So is there no regulatory authority or statutory authority right now to do it? I mean I'm trying to get at.....

MR. KUTERBACH: I don't know what our regulatory scheme is going to be. So if we have permits that allow me to charge fees, then yes. If we have some other regulatory scheme that doesn't fall under that statute, maybe not.

MR. THOMAS: That's a strategic item, right?

MS. MARTIN: Probably one for later (indiscernible).

MR. BROWER: Yeah. None of our fees in the borough go toward cost recovery or for our portion of being able to go out there and do an enforcement action. All those are legislatively -- we go out and fight for our budget, what are we going to need to operate for that season, and go through the budget cycle for -- and I've always tried to advocate for that we need to be able to funnel our fees so we can do more things with them, but (indiscernible) is just that way. And all our other fees go into a general fund, and we fight for a budget. And.....

MS. EDWARDS: Well, Chris, we get through the

legislature for our budget is well, but we have particular revenue sources that were under statute.....

MR. MUNGER: This is Mike. John, isn't that more of a question, and I'm just -- and I don't have the answer here, but isn't that more of a question for the Department of Law? Or, you know, if, in fact, we go into another regulatory process between the DEC and the Department of Law to determine that and not so much the workgroup?

MR. KUTERBACH: Yeah. This is John. Yeah, I think -- I think ultimately we would have to involve the Department of Law and come up with the solution on that. However, I think it's valuable for the workgroup to consider how their recommendations would be funded. And perhaps even including recommendations on how to change the funding, which would be informed by the Department of Law input. But I still think it's something that's useful for the workgroup to touch on in its recommendations.

MR. THOMAS: This is Brad. I think, Alice, you're right. That is an appropriate strategic topic, but one that we would tackle at the end.

MS. EDWARDS: Right. Once we have an idea of where we're headed then we would know whether this is really an issue that we need to tackle or not. But I think -- I don't know that we would have to come up with the ultimate solution to the funding, but the funding -- or the

implement -- how we would deal with implementation costs. But I think if we develop something that we clearly don't have the revenue to implement then that would be something we would want this group to be able to consider.

MR. THOMAS: Right. Right.

MR. BARRON: And Gordon and I will take copious notes on how we can increase our revenue stream.

MR. THOMAS: So this is Brad again. So under the bullet, the second bullet, I'm not sure if that's the second or the third, how to determine compliance. We might want to put, under that bullet, the ambient air boundary, because that's relevant. We do want to be clear on what the ambient air boundary is, because in different locations in the state, it's different. You know, it's off the pad on the Slope; it's on the pad in Cook Inlet, for example. So we want to tackle that.

MR. KUTERBACH: All right. This is John. I have one other item for discussion as far as a strategic topic. And that would be to discuss -- and I'm not sure whether this is a strategic topic or a boundary value for our recommendations, but that our final solution may need to be approved by the EPA if it changes our SIP. And it certainly has to be legally defensible, whatever we come up with. So maybe that's criteria on the solution rather than a strategic topic for discussion.

MS. EDWARDS: Yeah. And Brad had brought up guardrails that, you know, when we talked about the agenda. But when we got our emails about the agenda, I think, you know, for us those are sort of two of our generalized guardrails that we have. And, you know, as we go through some of these topics, you know, we may come back to, okay, well here's sort of how the Clean Air Act would work with guard two. You know, modeling may have certain requirements or they may -- so when we look back at trying to be approvable by EPA, we may end up trying to work through certain interpretations on various issues where we're trying to figure out what we can and can't control, what would be defensible, what, you know, meets requirements, what might not. And I didn't want to limit us to getting real specific today on all those guardrails. But, of course, those are sort of -- aside from, you know, dealing with how do we maintain compliance with the standards, which is, of course, important to us for many reasons, clean public health, you know, we do sort of have this guardrail that whatever we come up with, if we change our SIP, we change our State Implementation Plan, or however we're doing business, and we have -- we may need to get that approved. And if we need to get that approved by EPA then we'll need to be taking that into consideration. And we've got folks at EPA that are willing to be resources

for us so that we can ask them those questions as we go along as well. John says it's time for a break. Do you guys feel like you need another break?

UNIDENTIFIED MALE: Yes.

MS. EDWARDS: We are getting kind of quiet.

UNIDENTIFIED MALE: (Indiscernible -- away from microphone.)

MS. EDWARDS: Yeah. Why don't we do that? Why don't we take another 10-minute break, and we'll come back and we'll -- either we can circle back on the strategic topics, and then maybe we can start talking about maybe how we want to -- how we want to tackle this, as far as moving forward.

UNIDENTIFIED MALE: Okay. Good.

MS. EDWARDS: Okay. So for all of you on the phone, about 10 minutes, which should put us around, oh, I don't know, 10 'til or so by my watch.

UNIDENTIFIED MALE: Ten 'til would be good.

THE REPORTER: Okay. Off the record at 3:40 p.m.

THE REPORTER: Back on the record at 3:53 p.m.

MS. EDWARDS: Thanks. So coming back, I want to circle back one more time on sort of our strategic topics. And I mean we can -- if we need to add to this later, we probably can. I don't see why we would have to limit ourselves. But is there anything that anybody thought of during the break that we've missed that we want to include

at this point? Because what I'm thinking is, if we're okay with this list, we should figure out what we want to do for the next -- you know, what we can start doing in regards to any -- well I don't know if we want to take on all of them or if we want prioritize a couple and figure out what we want to work on first, or if we want to get some ideas on what we need to do to, to sort of flush out some of these to get the right people working on looking at them and bringing information back to us.

MR. THOMAS: Well this is Brad. It comes to mind, at some point, as we work through the list, we will have to cross the bridge of permitting or not permitting, you know, registration or not registration, the regulatory vehicle. Is that a strategic item or is that a conclusion?

MS. MARTIN: I thought that could be captured -- this is Nikki. I thought that could be captured in how to determine -- I mean compliance, so at the end of the day, you're still trying to comply with the ambient air standards.

MS. EDWARDS: I guess I understand where you're going to, Brad. I don't -- it may be more of a -- I mean it may be this is the solution that we come to or this is the recommendation. It may be that, in some cases, maybe it -- I mean it might be different depending -- we might come up with more than one option. So I don't know. I'm afraid if

we put it a -- I was thinking in terms of the way Nikki was laying this out about how this might help drive the next meetings. And I think that a lot of this stuff, we might need to explore before we actually got to that final -- to that kind of a -- sort of calling that kind of a question. I don't know. That's my -- just my topic.....

MR. THOMAS: It does feel like more of a crescendo, you know, an end point, rather than something that we work as one of these.....

MS. EDWARDS: It's sort of like if we put it at the top of the list and we worked it first.....

MR. THOMAS: We wouldn't do that. Yeah.

MS. EDWARDS: .....I don't see -- I think we would miss -- I think we would miss a whole bunch of stuff.

MR. THOMAS: Right.

MR. BROWER: It seems to me that you identify problems and issues relating to the current permitting climate and you look at making a determination on what are we actually doing? Is this -- are we permitting a stationary source or are we permitting a mobile, transportable piece of equipment with all of its, you know, housing units and -- what you label it is probably going to dictate how you're going to permit it or certify it or register it.

MR. THOMAS: I agree. And just to be clear, Nikki, on that bullet, how to determine compliance, I interpret that

as how to determine compliance with the air quality standards, right?

UNIDENTIFIED MALE: Yeah.

MS. MARTIN: Right.

MS. EDWARDS: I'll even put it up there. Green, right? In green?

MR. TURNER: Right.

MS. EDWARDS: That's my shorthand for standards.

UNIDENTIFIED MALE: And that includes.....

MS. EDWARDS: Increments are already up there. So I don't know.

MR. THOMAS: That's okay. We can leave it off. It's.....

MS. EDWARDS: I was thinking maybe we could tackle some other things first. I mean I think we need to gather some information first, perhaps, to get to that point.

MR. THOMAS: Maybe we could prioritize these.

MR. KUTERBACH: Well this -- this is John. Maybe our next step now, for the next -- whatever time we have left here, would be to take a look at the strategic topics and see which ones we want to explore for the next meeting.

MR. THOMAS: Agreed.

MS. MARTIN: I agree.

MR. KUTERBACH: Good.

MS. EDWARDS: So what do you -- so Mike's at a

disadvantage, because he, hopefully, has written down his list, but doesn't have the list on the board to stare at and ponder so.

MR. MUNGER: Yeah. If you could go through it again, I'd appreciate it.

MS. EDWARDS: Okay. So we sort of -- the list we have, and, of course, this is going to -- they may not be worded quite a eloquently as people explained them, but we have sort of this definitions, you know, what definitions are there for the mobile, the stationary, the owner versus operator, those sorts of definitions. What other states are doing from a regulatory approach or non-regulatory approach. We have this topic about how to determine compliance with the NAAQS or increments. So there we have things like modeling, monitoring, the ambient air boundary issues. We had a topic on sort of this concept of the stationary -- as Gordon just said, you know, sort of how do these drill rigs come together as a combination of both sort of the stationary types of devices and the non-road devices. We had a topic on public input and sort of community issues, and how where we go may influence or change how the public has -- the process from -- if we change our process, how does that change people's opportunity to provide input and how might we consider that. We had a category, which we, I think, broadened to

more equipment. So things like what is the current equipment and how does it operate? What are -- what types of controls are out there? What kinds of modifications or upgrades are available? How are they operated? And in the category of equipment, we might even think about operational practices or best management practices. There are operational kinds of things as well as, you know, sort of more physical control kinds of things. And I would put the engine tiers in that category, too. If people want to understand the engine tiers better, we could look at that -- explore that as well. We had the owner versus operator topic, which dealt with the, you know, sort of in the current structure of the permitting where they've had some -- there's been some concerns about proposals of how you deal with the operators coming -- contract operators on the pads and how that integrates into the permits that exist for the lessees. And then John had raised the, you know, overall, in the end if we do something dramatically different than the way the program is implemented now, maybe it's not a permanent program anymore, do we have the fund -- you know, there's a fund -- maybe a funding hook there that we might want to look at toward the end, depending on sort of where the recommendations seem to be going and whether or not there's a funding mechanism already setup in state statute to implement that or whether

we'd be having to look at budget issues or things like that. So that was sort of the list.

MR. MUNGER: Okay.

MR. THOMAS: So this is Brad. A question for Bill. The first bullet point up there is definitions. Is that captured by the other bullet points? I mean if we address each of the other bullet points in turn would we address your concern with definitions? Do we need to have a separate category?

MR. BARRON: This is Bill. I'm not sure. Because at the break, that's one of the things the representative of Hillcorp and I were talking about is if we continue to stumble into definitional quagmire, and, you know, the words that I use for, say, construction are not necessarily the same that somebody else would deem is construction. So I don't know if it's a single item or as we go through the subsequent topics that we probably need to stop and make sure whatever we are talking about on the day, we get grounded on what the definitions are of that subtopic.

MR. THOMAS: So it is a subtopic then (indiscernible -- interrupted).

MR. BARRON: I think it might be, yeah.

MR. THOMAS: Yeah.

MR. BARRON: Right? Because that's my concern is I think we're going to get kind of all beetle-juiced out

again on what does that really mean.

MS. EDWARDS: I would note that we did try, in the binders that we gave the workgroup members, to at least put some of the regulatory definitions that we currently use in there.....

MR. BARRON: Well that -- this is Bill.

MS. EDWARDS: Which is helpful, but I know -- I know some of us haven't internalized all those definitions yet, because they're just words on paper for us. But at least we have some references that we can use. And I think it's a good point that we need to understand -- that everybody's on the same page in understanding what we're saying as we go along.

MR. BARRON: Well that gets real critical, especially as I'm currently reading some of the like non-road engine or the stationary source. And stationary source is referenced as an AAC. And then it's in Alaska statute. And then it goes to a CFR. And it's one tied to another, tied to another, and I finally get to the bottom, and it says go back to 990. And I went, wait a minute, that's full circle. And so I mean that's kind of why I think it's a subset that I think we have to readdress almost every time so that we don't lose track of where we are.

MS. EDWARDS: So maybe one of the things we should think when we're bringing ideas back to the workgroup or to

work on, things at the next meeting and subsequent meetings, is when we're tackling one of these issues and we know that we -- that we're clear that when we're using our technical jargon or, you know, some of these terms that we are real clear about what we're bringing to the table in that regard.

MR. BARRON: That would be very beneficial to me.

MS. EDWARDS: Okay. So that being said, if we put definitions in as sort of an ongoing educational effort for all of us, to make sure we're all on the same page, then what do we think we want to tackle or start tackling first?

MR. THOMAS: Those first two bullets. If the definitions goes away, then it would be the other state's regulatory approach and then how to determine compliance with the NAAQS. That seems like two good starting points.

MS. EDWARDS: And then, I guess, then we get back to -- okay. So two things I'm thinking about. One, we've got to figure out sort of what we can all kind of contribute to that conversation. But then we also need to figure out how much time do we think it's going to take to pull that kind of information together, because that may drive when we can have our next discussion. If we can't pull it together in, you know, four weeks or -- you know, it may be we need more time. I don't know. We've had several meetings close together here, so I know we need a little more time between

now and the next meeting in order to actually develop some of this information and bring it back to the group.

MR. THOMAS: Well to develop -- this is Brad. To develop the other states' regulatory approaches, we could just dedicate somebody to calling state agencies to find out. You know, there's 49 other states. Would you do that, Tom? Is that.....

MR. TURNER: Well there's a couple -- this is Tom. I mean, yes, we certainly can start calling all the other agencies and start finding out how they do their approaches and follow up that way. But like everything else, it's who you talk to on the phone, what's going on. It might be useful to do a third-party contract and have a contractor actually come back and say this is how drill rigs are regulated across the states, in addition to additional information that staff can pull in or the industry itself knows about. So it would be -- yeah, it's sometimes nice to have that third-party this is how it's done. And we'll certainly start making phone calls when we get back. We'll get it from an agency perspective, and then you have someone do a comprehensive approach so that you have not -- they won't miss items or they don't interpret the items.

MR. KUTERBACH: This is John. What we can do immediately, putting the contract aside for a second, is we can contact our other agencies, EPA and some of the

organizations, WestStar, NACCA, and see if.....

MS. EDWARDS: And NARC.

MR. KUTERBACH: .....and NARC, and see if any of those have compiled this sort of information, all right, they've done comparisons. And so that would be a good starting point. And we can make individual contacts with not all 50 states, but at least several of the states where we know.....

MS. EDWARDS: There's oil and gas.

MR. KUTERBACH: .....there's oil and gas and drilling and it's been addressed in some way. So, you know, contact Wyoming, California.....

MS. EDWARDS: Colorado.

MR. KUTERBACH: .....and Colorado.....

MS. EDWARDS: New Mexico.

MR. KUTERBACH: Some of those.....

UNIDENTIFIED MALE: North Dakota.

MR. THOMAS: Let's talk about how we can do that as well, because like Tom mentioned, you know, it's -- the who you talk to piece is pretty important. So the more you talk to, the better information you're going to get. So we'll talk separately about engaging that for ourselves just so we have more information on the table. Because you guys will probably talk to different people than.....

MR. KUTERBACH: Now I think one of the things, in

order for us to really understand the other states', is we want to get is a good understanding of what -- not only what they do as far as air quality regulations are, but is there some other requirement or regulation that's having the effect of air quality, but they're doing it some other way. For instance, if you have a requirement that you run on electric -- highline electric power when you can, that would have an effect on air quality, but it may not be an air quality regulation. It might be some other community regulation. They also have -- I don't know whether it is just at the state level that the regulations would be. I know California has air quality control districts, which is a small -- like a super-county type of approach, or whether they have county requirements which limit what they can do. Also with this, which -- and I think, Brad, the industry folks may be most useful for is getting a good idea of what the equipment inventory is.

MS. EDWARDS: What kinds of equipment are operated in those states?

MR. KUTERBACH: You know, what is a typical drill rig? How big is it? What's -- you know, how long does it operated at a location? Does it operate close to other operations -- you know, basically how things operate so that we can understand the regulatory scheme of another state in the context of what they're regulating.

MR. BARRON: So that -- so that implies that we also need to have that same information for the drilling equipment that we currently have so that we can make sure that we can compare and contrast.

MS. KANADY: So that's currently in the permit applications (indiscernible -- away from microphone).

MR. BARRON: I think that would be reasonable, yeah.

MS. KANADY: So that (indiscernible -- away from microphone).

MR. BARRON: Yeah, we can pull the permit applications.

MS. EDWARDS: Because it would be -- because when we compare and contrast, for example, a lot of times we're located -- not universally, but we have drill rigs -- obviously, we have drill rigs that are isolated in operating -- exploratory drill rigs that are out there and operating in a more isolated setting, but we have a lot of them that are on major sources. That may not be as much of the case in the Lower 48. They may be more dispersed. So I think that's a context we need to think about, you know, when we start comparing and contrasting. And that was one of the things I was thinking about is that, you know, a lot of our issues are stemming from the fact that we're -- we've got them combined with these other major sources. And that may not be the way the world works down there. It

may be in some instances, but it may not. And I don't know. So some states may be closer to the kind of practical implementation as Alaska, and others may be different. It may be a much more dispersed network of drill rigs that aren't really -- you know, that they're just -- they're out in the basin and may not be as collocated with other types of facilities. I don't -- I don't know that, but I think that could be.

MR. BROWER: I think it's important to identify those, because it may lead to the type of permitting structure you want to have. You know? You permit them separate from this. Just because it's collocated together, you have to include them. Maybe they -- or we look at this drill rig and that's it and not the other stuff.

MS. EDWARDS: Right. So if you think about what -- you know, I think John's point is when you look at another state's program, you have to think about it in the context of their -- sort of their oil and gas -- the structure of their oil and gas development in their state.

MR. THOMAS: So with the brain trust we have in the room can we identify the state that we'll look at? I mean we don't want to -- like you said, we don't want to call all 49 other states. We can probably identify where there's a, you know, sizable amount of drilling going on. You know, we can say North Dakota, probably New York, Ohio,

Pennsylvania.....

MR. BARRON: Do we really want to do the gas drilling?

UNIDENTIFIED MALE: Why not?

MR. THOMAS: Well there's gas drilling in the inlet, right?

UNIDENTIFIED MALE: I mean it -- well I guarantee you, that bit doesn't know the difference between a gas zone and an oil zone.

UNIDENTIFIED FEMALE: Yeah, it's the same.

MR. KUTERBACH: Yeah. Those are awful small rigs.

MR. PETERS: Some of them are very -- actually, some of them are very large rigs.

UNIDENTIFIED MALE: Absolutely.

MR. PETERS: You know, even the Shell rigs in Texas tend to be very big.

UNIDENTIFIED MALE: Okay. I believe you in Texas. I know the Marshalla (ph) Shell rigs, at least the ones that I've seen, weren't all that big.

MS. KAUFMAN: Well we can look into it, get some information, and see if it's worth exploration.

MS. EDWARDS: So we've got North Dakota -- so you were saying North Dakota, New York, Ohio, Pennsylvania, Texas.....

MR. THOMAS: California, Colorado, and Wyoming.

UNIDENTIFIED MALE: California, Colorado, Wyoming.

MS. EDWARDS: I don't know about New Mexico or Montana.

UNIDENTIFIED MALE: Oklahoma.

UNIDENTIFIED MALE: Jeez, we're going to call all 49 states anyway.

UNIDENTIFIED MALE: So I've got North Dakota, Ohio, Pennsylvania, Texas, Colorado, Wyoming.....

UNIDENTIFIED FEMALE: Louisiana.

UNIDENTIFIED MALE: Louisiana is a pretty good one, too.

UNIDENTIFIED FEMALE: California.

MR. THOMAS: California, Louisiana.....

UNIDENTIFIED MALE: Oklahoma.

MR. THOMAS: ....Oklahoma. South Dakota?

UNIDENTIFIED MALE: No.

MS. EDWARDS: Not so much. New Mexico has some.

MR. THOMAS: South Dakota is still crying over that, but probably not worthwhile.

UNIDENTIFIED MALE: New Mexico.

UNIDENTIFIED MALE: They might get mad.

MR. THOMAS: Two, four, six, eight -- that's 10 states I've got.

MS. EDWARDS: Well I've got more than that so read your list.

MR. THOMAS: I've got North Dakota, Ohio,

Pennsylvania, Texas, Colorado, Wyoming, California, Louisiana, Oklahoma, and New Mexico.

MS. MARTIN: New York.

MR. THOMAS: New York.

MS. MARTIN: I think somebody said New York.

MR. THOMAS: Oh, I forgot New York. Yeah.

MS. EDWARDS: Do we have Montana?

MR. THOMAS: Do they drill in Montana?

UNIDENTIFIED MALE: Eastern.

MS. EDWARDS: Eastern Montana.

MR. THOMAS: I'll put that, Montana. That's 12.

MS. MARTIN: I think that's a good start.

MS. EDWARDS: I think that's plenty. Don't you guys think that's plenty?

UNIDENTIFIED FEMALE: Yes.

MR. THOMAS: That would be helpful.

MS. EDWARDS: And then do we -- okay. So you went through -- John, I think, mentioned a bunch of things that we should, and hopefully we've captured that, well obviously we've captured it. We've got a transcriptionist. But do we want to walk through what sorts of information? So want to know -- we need to know sort of what their regulatory -- or what sort of regulatory framework they use, if any. It would be -- and then John was mentioning we need to know sort of how their equipment and development

compares to our typical development.

MR. BARRON: So I -- let me back everybody up just a minute. Baker Hughes web app is kind of a cool thing to look at. So I'm looking at an application that -- from Baker Hughes, that talks about current rigs that are actively drilling. And the areas of interest look like Pennsylvania, West Virginia, Louisiana, Texas, Oklahoma, Kansas, Colorado, Wyoming, and North Dakota. That would be probably a 90 percent cut of all the rigs currently operating in the Lower 48.

MR. THOMAS: So that -- that would only add two to our list.

MR. BARRON: So it did add?

MR. THOMAS: It added West Virginia and Kansas.

UNIDENTIFIED MALE: And Kansas.

MR. BARRON: And Kansas has got just a smidgeon. So I mean if you wanted to -- no, Kansas has actually got a fair portion.

MR. THOMAS: So we can try to hit all 14.

MR. BARRON: So I'm just, as a reality check, just real quick. Montana has almost got none. So if Montana was on the list, you could probably cut them off.

MR. THOMAS: I'm okay with that.

MS. EDWARDS: Yeah. I just don't know if they've got any regulatory program in Montana or not. I would think

that’s the same basin that moves into North Dakota.

MR. BARRON: It is. It is.

UNIDENTIFIED MALE: And not one rig running in South Dakota.

MR. BARRON: Just throw it out there.

UNIDENTIFIED MALE: One on the border.

MS. EDWARDS: Okay. So we would want to understand their regulatory framework that they use, the types of equipment that they use, and how the developments are kind of laid out in comparison -- so that we can compare it to our own. What else did we -- what else did you have?

MR. THOMAS: Are there other regulations that impact air emissions?

MS. EDWARDS: Oh, right.

MS. MARTIN: Would that be under regulatory framework?

MR. THOMAS: Well the regulatory framework would be the air regulatory framework.

MS. EDWARDS: Yeah. I think it’s good to make that distinction.

MS. MARTIN: All right.

MS. EDWARDS: Because they may have things through either their leases or.....

MR. KUTERBACH: Just if there are any other requirements.

MS. EDWARDS: .....or other oil and gas commissions or

cities or whatever.

MS. MARTIN: That are related to the drill rigs.

UNIDENTIFIED MALE: How do they determine ambient boundary.

MR. THOMAS: Yeah. And then is.....

MR. KUTERBACH: Well they may not determine ambient boundaries, but kind of locations of where they are. Is it -- I don't know, how close do they operate to property boundaries, that sort of thing.

MS. EDWARDS: If we can figure that out.

MR. THOMAS: We can probably just get a map of the fields, right? I mean if you got a map of the fields that are being worked.....

MR. KUTERBACH: But you're not going to know where the property boundaries are.

MS. MARTIN: You have to understand land ownership in the area.

MR. THOMAS: Yeah. And that's pretty hard.....

UNIDENTIFIED MALE: Yeah, it is.

MR. KUTERBACH: But why are we asking about property boundaries again? Help me out here.

MR. THOMAS: Ambient air.

UNIDENTIFIED MALE: To talk about ambient air.

MR. BARRON: But again, property boundaries relative to public access or.....

MS. EDWARDS: Right. Because if they're on private lands then they're not necessary publicly accessible so.....

MR. BARRON: But if they're right next to a road, they're publicly.....

MR. KUTERBACH: That would be a public -- yes.

MR. BARRON: Okay. So I was -- so we would need to know the definition again.

MR. THOMAS: So we would need to know about it.

UNIDENTIFIED MALE: (Indiscernible) on private lands, it restricts the public access in some format, like on the North Slope where snow machines may be (indiscernible -- interrupted).

MR. KUTERBACH: I mean, typically, how big is a pad on the North Slope?

MR. WILLIAMS: I mean it -- and that's why we need to go through it, because Prudhoe pads are huge and Alpine pads are really small.

MR. KUTERBACH: Well how small are Alpine pads?

MR. WILLIAMS: Well there's 100 acres of gravel out there, so -- and there's -- well about maybe, I don't know, 10 acres, probably about 10 acres.

MR. BROWER: Is that development drilling or exploration drilling?

MR. BARRON: That's -- that's development drilling.

UNIDENTIFIED MALE: Per pad?

MR. WILLIAMS: Yeah, 10 acres per pad. Yeah, I can bring that back next month, acreages for Alpine pads versus Kaparuk pads. We have a PowerPoint slide on that.

MR. DAMIANA: This is Tom Damiana. I believe that the issue of private land is only applicable if they restrict the owner of that land from the use of that land while the rig is in place, right?

MS. EDWARDS: That could be.

MR. KUTERBACH: The owner of the -- no. The owner of the land can enter on his land. He’s not the general public.....

MR. DAMIANA: He’s still -- he’s still public.....

MR. KUTERBACH: He’s not the general public on his own land.

MR. DAMIANA: .....respect to the source, which is the drill rig, right, unless he owns the drill rig.

MR. THOMAS: No, Tom. What John is saying is that if he’s the landowner, he’s not the general public. It’s his land.

MR. KUTERBACH: If he leases the land to them and says, you know, I’m leasing this area, but generally they -- the landowner still has access to his own land.

MR. DAMIANA: I don’t -- I think that’s different in how you guys handled it on the Cosmopolitan project.

MS. EDWARDS: Well I guess the point we're -- I guess the point we're trying to make here is whether or not any other states have addressed sort of boundary-related issues.

UNIDENTIFIED MALE: Or ambient air.

MS. EDWARDS: Or ambient air boundary kinds of issues, because it may be that the structure of their programs doesn't lead them down that path. Other things we need to be looking for in the other states?

MR. THOMAS: Bill, that Baker Hughes app that you were just talking about -- this is Brad, does it just give the gross number of rigs operating on a state level or does it give in on a field level?

MR. BARRON: The app that I'm looking at only gives it -- I mean I can -- it gives me a pictorial. I think you can get on a real -- you know, on a real computer, probably down to the field level, but this just gives me pinpoints by state.

MR. THOMAS: Okay.

MR. BARRON: And it doesn't allow me to drill down by state, how many per state, at least in the app. And it gives me U.S., Canada, and International in terms of total. Let me show you. That's what I'm looking at.

MR. THOMAS: Oh, wow. So on a bigger monitor, you could probably see it in finer detail.

MR. BARRON: It may be. Well I mean it -- there's (indiscernible) basin.

MR. THOMAS: There you go. Okay.

MR. BARRON: All right, so.....

MR. THOMAS: Does it show the Slope?

MR. BARRON: There's that sweep right there is Eagleford.

MR. THOMAS: Yeah. And all the blue dots are drill rigs?

MR. BARRON: Oil wells are red -- or gas wells are green -- or injection wells.

MR. THOMAS: Okay. So that's not drill rigs?

MR. BARRON: That's rigs.

MR. THOMAS: Oh, okay.

MR. BARRON: Well rigs associated with oil, rigs associated with gas.....

MR. THOMAS: Okay. Okay.

MR. BARRON: .....and there's the Slope.

MR. THOMAS: Yeah. Quite bit of difference.

MR. BROWER: We have three drill rigs?

MR. BARRON: It looks like there's four.

MS. EDWARDS: Here's another question. And maybe this is -- if we're on our side if we're talking to the regulatory folks would be whether or not they're having any similar issues.

MR. BROWER: Oh yeah, yeah. Or concerns.

MS. EDWARDS: Or concerns.

UNIDENTIFIED MALE: I would ask them how they're (indiscernible -- away from microphone and interrupted).

MS. EDWARDS: I mean I know we may have a different structure, but they may be modeling issues, too. They may be having -- I mean I assume they're having modeling issues, too. But, you know, there might be -- you know, it might be worth knowing whether or not -- maybe they haven't -- are those -- you know, if we're talking to state contacts maybe we want to find out whether they've -- if these programs reflect new standards.

MR. BROWER: Would it be appropriate maybe to get one case study from each one on how their applicant is to file a product?

MR. KUTERBACH: That would be a good thing to get.

MS. EDWARDS: It takes some time.

MR. KUTERBACH: I don't know if we're going to get it by the next meeting, though. That would be really good to get.

MS. MARTIN: Maybe there's -- you know, after the next meeting and, of course, on all the -- sorry, this is Nikki, preliminary information, there's a couple of states that we might find some things interesting enough that you go on to the case study.

MS. EDWARDS: Okay. That might be a good approach.

MR. THOMAS: So that said, that's a good way to develop the information regarding other states. This is Brad. But we would also -- would you want to bring the next meeting and we do -- can we can bring to the next meeting a description of how we do it in Alaska, complete with equipment inventory and so on?

MS. EDWARDS: Sure.

MR. THOMAS: Okay, we can do that.

MR. WILLIAMS: And pad sizes.

MR. THOMAS: Okay.

UNIDENTIFIED MALE: And what?

MR. WILLIAMS: Pad sizes.

UNIDENTIFIED MALE: From Prudhoe to Alpine. Thank you.

MR. THOMAS: So when we develop or present how it's done in Alaska, the specifics, we would present our rig counts by field, typically, rig inventories including tier level of engines, types of rigs. That's what I've got. Anything else?

MR. BARRON: I don't know that we can do it. This is Bill. But again, I'm looking at the Eagleford map. It would be interesting to see density of rigs per square mile or some sort of comparison, not just because it's on a pad, but how many -- you know, just the density kind of

calculation, if that could be available.

MS. MARTIN: Would this be the appropriate time, this is Nikki, for you to give the illustration of, you know, how often your drill rig is there, how often it's moving, what it looks like?

MR. THOMAS: Can we do that by the next meeting?

MR. WILLIAMS: Sure, a rig schedule.

(Indiscernible -- multiple speakers at the same time.)

MR. THOMAS: Okay, there you go.

MS. EDWARDS: So it sounds like a chunk of work to do.

MR. THOMAS: Yeah.

MS. EDWARDS: Yeah.

MR. THOMAS: You know, this is Brad. In presenting this information, you know, we're presenting really facts, if you will, we've uncovered. So I don't expect there's going to be a lot of dialogue, debates in the meeting, and we'll get through this probably fairly quickly, maybe a couple of hours. So then we could use the last part of the meeting to talk about the second bullet, how to demonstrate compliance with the air quality standards.

MS. EDWARDS: So at the next meeting, we would go through the collected information on other state programs and figure out whether there's any we want to explore further or, you know, just maybe discuss ideas that might appear to be transferrable to our situation. And then,

Brad, what were you saying? So then -- and then try to -- so take some time to setup what we would do -- we would need some time to setup for the next meeting, subsequent meeting. And do sort of a similar thing to try and figure out what we need to bring to the -- or do you want to start into the.....

MR. THOMAS: Getting into the how to determine compliance with the air quality standards seems pretty fundamental to everything else we talk about. So the sooner we get into that, it seems like, the better.

MS. EDWARDS: So do you want to have a discussion more like this about what we need to go do or do you want to be bringing stuff back to start -- I mean do you want to work on that piece as well coming into the next meeting? I guess that's what I'm trying to figure out. Are we having -- are we going to start initiating the discussion, bringing information forward to initiate the discussion or are we going to lay the framework for gathering the different pieces of information we want to bring on that?

MR. THOMAS: Is it too soon to do that now?

MS. EDWARDS: I mean we could start working on just wondering resource and people wise if we -- if we're gathering all this state information, do we also have the resources to, amongst ourselves, to start developing that information as well so that we could start on that topic,

or do we want to frame that topic at the next -- more at the next meeting?

MS. MARTIN: This is Nikki. I think that's going to be a very substantive topic that's going to take the entire breadth of a meeting. And while I understand, you know, that we want to get into this as much as possible, as soon as possible, maybe we could start to get into it, but maybe that would be more fruitful as a framework discussion at the end of the next meeting. I don't know. I just feel like well we've outlined the information we're finding from these 14, 16 states will be a lot to cover and bring. And maybe it's that we find that there's nothing and so it's a short conversation. But, I don't know, that's just my -- (indiscernible) make the meeting, which I also don't want to do.

MR. THOMAS: Well this is Brad speaking again. We have until December, right? We want to conclude our efforts by the end of the year?

MS. EDWARDS: I think our -- we had originally said that we wanted to try and get this accomplished between now and the end of the year.

MR. THOMAS: So next month is August. And if we don't start the conversation with the NAAQS until September, we're -- we're getting close, very close.

MS. EDWARDS: I know.

MR. THOMAS: But -- and it is pretty fundamental through the whole issue so that's why I wanted to get into it sooner rather than later. That said, I'm a pretty simple guy so I'm looking for feedback from, you know, the other members here regarding what do you guys think ought to be brought to the table to nail that issue? Because, to me, demonstrating compliance with the NAAQS, you know, the threshold is we have to, whatever we do, make sure that we have reasonable assurance that the NAAQS is protected.

MR. BARRON: How about -- you know, this is Bill. If we get through the other states and clearly understand what they're doing, and then begin to frame the second bullet, and then time dependent, start getting into it if we've got time. But at least frame it. I think that could be a pretty robust meeting in its own regard.

MR. THOMAS: Okay. Okay. Is there anything in advance that we could bring in preparation for it, that you're thinking?

MS. EDWARDS: Do we want, do we need, a background piece? And I'm saying this on the technical side from a modeling/monitoring perspective where maybe we can get some technical background on the types of, I don't know, (indiscernible)? I don't know. John, what do you think? I mean to me that's sort of a different group of people in our shop. But I'm wondering if there's a background piece

on the modeling/monitoring piece that might be useful to start framing -- help frame that discussion? I mean we've got your information that you've presented, you know, to some extent. I mean this could -- that could end up being a very -- I mean the modeling/monitoring aspects of that could be really -- I mean it could be -- it's a pretty technical topic. I mean it could be something where we want to set some technical people up to work on some stuff and then bring it back to us. I don't know. But at least options or ideas or, you know, that sort of thing on what might -- what we have and what we might want or, you know, where else would we go with that.

MR. BARRON: Let me -- let me ask a tangential question. This is Bill. Is the discussion around -- and this is kind of for Gordon and I. Is the question really around NAAQS and the modeling/monitoring, is that a subset of establishing the stationary equipment on mobile equipment?

MR. THOMAS: No.

MR. KUTERBACH: Even mobile equipment has to comply with the NAAQS.

MR. BARRON: Okay. Okay. I was just trying to make sure we didn't get the cart before the horse routine. Because if we could establish what we were trying to include in the model, that would help us establish what

model we had to run. Do you see what I'm saying?

MR. BROWER: I think the earlier question I had was can a mobile NAAQS affect a stationary NAAQS?

MR. KUTERBACH: Well this is John. There's really only NAAQS. It's the value that's in the air. Okay?

MR. BROWER: Probably the increment, I guess, is.....

MR. KUTERBACH: Okay. So as far as the increment goes, yes, everything after the baseline, everything that happens after the baseline date either increases or decreases the increment that you have available. You shutdown sources, that increases the increment you have available. You put in new sources, that decreases the increment you have available. You have less traffic, it increases the increment available. You have more traffic, it decreases the increment available. All right? So everything that impacts the air has an effect on whether you comply with the NAAQS and whether or not you've consumed the increment. Okay? So there's really no different stationary versus mobile sources as far as the impact on the ambient air. The question, though, is when do you check it and how do you regulate it? Okay? Which kind of -- which is different between stationary sources and mobile sources. Mobile sources can be regulated by having requirements of how they can be used and what fuel they can use and how often they have to be inspected.

There’s requirements that way to keep them -- to regulate the mobile sources, and it’s done with a broader area modeling to show that that’s going to -- usually it’s done in places that have bad air. And so it shows how they can improve the air quality through those mechanisms. So I guess, Gordon, the answer to your question is there’s really no difference between mobile and stationary with respect to the NAAQS. They don’t have to comply.

MR. BROWER: I’m still kind of stuck on why we would think about -- and I think it was answered earlier about this 24-month interval.

MR. KUTERBACH: Well that’s the increment. And really the only reason we have the 24-month increment is to give people an exemption from increment. All right? So if you’re going to degrade air quality for only a short period of time and then air quality goes back, we don’t -- we don’t count that toward the increment. All right? But if you’re going to degrade air quality and it stays more or less permanent then that is counted against the increment. So that’s the only reason we have the 24-month is to give an exemption, not -- it’s not adding anything extra.

MS. EDWARDS: So I guess, Brad, coming back to your question a little bit is I’m just wondering -- I mean in the context of our current approach, I mean we have real specific federal guidelines that we use for modeling and

there's things that we have to do when we look at monitoring in lieu of modeling or in truing-up models and things like that. And I guess my question is, in the context of where we're headed right now, do you want to have some background on -- I mean would it be helpful for the group to have some technical -- I mean in framing the discussion, if that's what we can do at the next meeting, would it be helpful to have a little bit more technical background, knowing that this is a very technical issue, on sort of how that works or what those requirements are? Because there are paths to doing monitoring in lieu of modeling, but there's a very -- the EPA has some very specific guidelines in the federal requirements about how you go about doing that.

MR. THOMAS: For me, no, Alice.

MS. EDWARDS: I mean I think you probably know those things, but I know that probably not everybody at the table does.

MR. BARRON: This is Bill. It would certainly help me. I mean.....

MS. EDWARDS: And I don't know if we need -- I mean we've talked about some of the basic issues and, you know, why -- the problems that you've been having modeling compliance and things like that and the desire to use monitoring. And I just wonder if we need to go back and

talk about that technical framework a little bit more about what EPA is typically, in their guidance and requirements, what we look at when we deal with that.

MR. THOMAS: Yeah. In talking through this, I'm coming around to your way of thinking in that in the next meeting we work through what we find out regarding other states and what that means to us. And then we get to how we demonstrate compliance with the ambient air quality standards with the goal of framing it up, figuring out how to talk about it in the next meeting.

MS. EDWARDS: Okay.

MR. THOMAS: So that's -- so I made a note to myself to come with some ideas.

MS. EDWARDS: Yeah. Because I think that there's a couple different ways we could tackle this. Because this, to me, can be really technical. And we may want to come up with a specific approach to get the right people working on it who understand all of those really highly technical issues, and then they can get -- they can get past that initial background and into actual solutions probably faster than if we try to tackle them at this table.

MR. THOMAS: Okay.

MR. KUTERBACH: This is John. We don't have to do all the work here at these meetings. You know? It doesn't have to all come back here and we work on it. We can have

subcommittees working on stuff and reporting back to the group in, you know, the interim.

MR. THOMAS: Okay.

MR. KUTERBACH: So I think that's what we'll do is cue that sort of work up at the next meeting.

MS. EDWARDS: Okay. I think that, to me, makes a lot of sense. Just because, I think, we will struggle through bringing us all up to a level where we can all talk about it. And it think some of it is so nuanced and technical, but if we could just let the technical folks duke it out, so to speak, they may be able to come up with creative options to looking at some of these things and how things fit together that that would take us a long time to get to if we worked them at the table. So I think framing it, that sounds like a good idea for the next meeting. So when do we want -- we don't have John in the room now. He stepped out for a minute. But let's think in terms of timing. So a month out is essentially the first full week of August.

MR. THOMAS: The week of the 5th.

MS. EDWARDS: The week of the 5th. Do we think we can pull this stuff together in that amount of time? It seems pretty short. But I will say, for myself, I'm going to be gone the week of the 12th and half of the week of the 19th.

MR. BARRON: Yeah. I'll be gone the week of the 12th.

UNIDENTIFIED MALE: (Indiscernible) of the month is going to be tough.

MR. BARRON: So I think.....

MS. MARTIN: Oh, go ahead. Sorry.

MR. BARRON: Go.

MS. MARTIN: I was just going to say maybe later that week.

MR. THOMAS: The week of the 5th (indiscernible).

MS. MARTIN: And I'm just going to mention at this time that I actually will no longer be part of the workgroup, because I'm moving out of state, but......

UNIDENTIFIED MALE: No excuses.

MS. MARTIN: .....Alejandra will be filling in as the alternate until they designate.

MR. THOMAS: So you'll call in by phone?

MS. MARTIN: Yeah, sure, from the road. I should be in Oklahoma by that point.

MR. BARRON: Well you can give us a rig count on the way.

MS. MARTIN: Yeah.

MR. BARRON: You're going to be our Oklahoma contact on how they do it.

MS. EDWARDS: So it sounds like we have got a couple of options. If we want to stick with a month, which I think will be challenging.....

UNIDENTIFIED MALE: Very.

MS. EDWARDS: But if we want to stick with a month, that week -- we could look at that week of the 5th, maybe toward the end of the week, but I would think, you know, Wednesday, the 7th or the 8th.

MR. THOMAS: Yeah, the 8th is better.

MR. BARRON: Okay. Let's call it the 8th. I'm good with the 8th.

UNIDENTIFIED FEMALE: Same here.

MS. EDWARDS: Okay. And because it's that or we probably could go six weeks out and look at maybe the 22nd or the 23rd. That would be the other alternative I see. Although I could not be here for the meeting, too, if.....

UNIDENTIFIED MALE: We don't want that. That won't work.

MR. TURNER: Four weeks would be tough to get a lot of information, calling states in the middle of the summer with their leave, their vacation times, contacting people. Six weeks would give more opportunity to get more correct information.

MR. THOMAS: So are you suggesting we meet the week of the 19th?

MR. TURNER: Yes.

MR. THOMAS: I guess I'm okay with that. We would -- I wouldn't want to push -- well I guess I'm okay with that,

Tom. If we want to meet the week of the 19th, that's good with me.

MS. EDWARDS: What's your week of the 19th look like, John?

MR. KUTERBACH: Aren't you out that week?

MS. EDWARDS: Half that week.

MR. THOMAS: Doesn't school start that week?

MR. KUTERBACH: I can probably do something that week.

MR. THOMAS: Because school starts that week, that means I'll definitely be here.

MS. EDWARDS: I'm coming home on the 21st.

MR. EVANS: (Indiscernible -- away from microphone.)

MR. KUTERBACH: You're going to come home and go straight to this?

MS. EDWARDS: Well it's that or come here and then leave the next day.

MR. KUTERBACH: Or we push it back, otherwise it would be the 1st of August (indiscernible -- interrupted).

MS. EDWARDS: The 8th of August.

MR. KUTERBACH: .....which.....

UNIDENTIFIED MALE: No, I can't do the 8th.

MR. KUTERBACH: Okay.

UNIDENTIFIED MALE: I'm out.

MR. TURNER: Can we do it the first part of that following week when you come back?

MR. THOMAS: You're talking like the 19th?

MR. KUTERBACH: No, she comes back on the 21st.

MS. EDWARDS: I come back on the 21st so I could do it the 22nd or the 23rd, that week.

MR. TURNER: Or the following Monday or Tuesday?

UNIDENTIFIED MALE: The 22nd works for me.

MR. BARRON: Let's not push it past the 22nd. I mean my concern is that, again, keeping mind we're trying to get this thing done by the end of the year, that kind of pushes us way out in time.

MS. EDWARDS: So the 22nd then? Gordon, how does that look for you?

MR. BROWER: I think the 22nd can work.

MS. EDWARDS: Okay.

MR. BROWER: August 22nd?

MS. EDWARDS: Yeah. Mike, are you on the phone still?

MR. MUNGER: Yes, I am.

MS. EDWARDS: How does August 22nd look for you?

MR. MUNGER: That should work for me. I've got a few things. I may be back in D.C. right then, but I'll be sure to let you know pretty soon.

MS. EDWARDS: Okay. Okay. So if we shoot for August 22nd, that gives us six weeks. And we can pull together as much information as we can from the other states. We can start trying to bring -- you know, we can come to the

meeting with some ideas on how to setup the modeling -- you know, sort of the compliance -- or determine compliance with the NAAQS piece as well. And maybe come up with some approaches or ideas on how to tackle that one. We've got our list of states. We've got our list of questions. How do we want to present that information? Do we just want to go state by state and we can report out from each site on sort of what we found for those states or do you want to try and orchestrate it a little bit in advance?

MR. THOMAS: State by state. And then what each of us finds, we'll just bring to bear on that state.

MR. BARRON: That will work.

MS. EDWARDS: Okay.

MR. THOMAS: Now for the presentation of what goes on in Alaska that may be a presentation.

MS. EDWARDS: Oh, that could be a presentation.

MR. THOMAS: Yeah.

MS. EDWARDS: Absolutely. And I was going to say, if you have notes or something on each state that you want to use, bullet notes or something that you want to use, if you want to -- you know, if we have them early enough, we might be able to make a consolidated list of what was found if we get them in advance. Otherwise, maybe we can come with some sort of cheat sheet of notes.

MR. KUTERBACH: It would be worthwhile for us to be

able to setup either a web meeting or something so that people on the phone can see the stuff that we've got.

MS. EDWARDS: Good idea.

UNIDENTIFIED MALE: So we need a room with a DAV?

MR. THOMAS: So, Jim, that room we used last time was pretty good, wasn't it?

MR. SHINE: Yeah.

MS. EDWARDS: And, Jim, can you check on room availability? And then if we have a problem here, we can look further locations.

MR. SHINE: Yep.

MS. EDWARDS: Are there logistics or things we want to consider?

MR. TURNER: There may be a need to coordinate with different parties about what subjects are -- prior to the meeting, to organize how it's going to be presented.

MR. THOMAS: We can, yeah.

MR. TURNER: And that would be a subcommittee, just calling people, how are you going to do it, what's going to happen, for the logistics of it.

MS. EDWARDS: Okay. Somebody will have to take that on, because I'm not going to be here for like a week and a half before. But we should be doing it a couple of weeks out, so.

MR. TURNER: Because the last couple of times of

putting together, things come in the day of. And going to the website, if we get earlier, we can put it on the website, give it out to -- the website has been useful for people to go to, I'm assuming. And all the subject matter is there. And so we can put things onto the website as we get it. So if it comes in advance, we can always put that on the website. And if I'm not seeing stuff, I may give people a call and try to see what's up.

MS. EDWARDS: Okay. Very good. So just -- so I think we're good for the next meeting? So just a reminder, if you have any edits on the notes from the last meeting, please send them to Tom, and Jim can work on incorporating them.

MR. SHINE: You can just send them to me.

MS. EDWARDS: Tom or Jim, or send them to either.....

MR. TURNER: Actually send them to -- I'm going to be out so send them to Jim Shine for any edits to the minutes for the workgroup. And if you can consolidate those minutes and then send them to our staff, we can post it.

MS. EDWARDS: And we'll get it updated. And if we could get those this week, that would be great.

MR. TURNER: Excuse me. Jeanne, do you just want them directly to you?

MS. SWARTZ: Yeah, that would be so much easier.

MR. TURNER: Okay. So we'll send out a note to all

the workgroup members that the edits to the minutes, Jeanne sent an earlier email out to everybody, just send them to Jeanne Swart at the state. And she'll make all the edits and make sure it gets posted on the web page. Thank you.

UNIDENTIFIED MALE: Do you still want us to cc you?

MS. EDWARDS: Yeah, that would be great.

MR. TURNER: Just cc Jim and I.

UNIDENTIFIED MALE: Okay.

MS. EDWARDS: That would be great. Are there any other action items that I missed? I think we covered a lot of ground today, so I appreciate everybody's hard work.

UNIDENTIFIED MALE: It was a good meeting.

MS. EDWARDS: Excellent. Well unless there's anything else, I think let's call it good 10 minutes early.

MR. THOMAS: Good job.

THE REPORTER: Off the record at 4:50 p.m.

(End of proceeding.)

TRANSCRIBER'S CERTIFICATE

I, Gloria Schein, hereby certify that the foregoing pages numbered 3 through 138 are a true, accurate and complete transcript of the Global Drill Rig Policy workgroup meeting of July 9, 2013, transcribed by me from a copy of the digital sound recording to the best of my knowledge and ability.

_____ _____

Date Gloria Schein