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U.S. ARMY CORPS OF ENGINEERS  
DRAFT EIS MEETING  
NANUSHUK PROJECT

Location: Westmark Gold Room  
813 Noble Street  
Fairbanks, Alaska

Date: October 3, 2017

Time: 6:00 - 8:00 p.m.

P R O C E E D I N G S

1  
2 JOY HUNTINGTON: If you can please get seated and  
3 get ready for our fun presentation. My name is Joy Huntington  
4 and I am working with DOWL on the Nanushuk EIS under the  
5 leadership of the Army Corps of Engineers. So I'll be  
6 facilitating the meeting tonight.

7 We have a few folks in the room, so we'd like to get  
8 started. We have a presentation for you with a few comments  
9 we want to make. First, of course, welcome. Thank you for  
10 joining us. This is our second meeting in Fairbanks. As many  
11 of you might remember, we had a scoping meeting in March of  
12 2016 over at the Pipeline Training Center. So we appreciate  
13 you joining us this evening.

14 A few quick housekeeping items. There is a Liberty  
15 EIS meeting happening down the hall and it starts at 7:00. So  
16 if you'd like to kind of go back and forth or go check that  
17 one out after this meeting is over, this meeting is supposed  
18 to go till 8:00, so kind of depending on questions from you,  
19 as well. So we just wanted to inform you that that meeting is  
20 happening.

21 We wanted to thank Armstrong Energy LLC for  
22 providing the food, so hope you enjoy the cookies and  
23 everything.

24 As the facilitator tonight, my goal is just to help  
25 make this meeting be as productive and informative as it can

1 be. I am from Fairbanks so it's nice to be in my home town  
2 actually facilitating a meeting. We were in Nuiqsut and  
3 Utqiagvik last week, so it's nice to be able to be home. So  
4 thank you for joining us.

5 We'd like to hold questions until the end of the  
6 presentation, if possible. With that being said, if you have  
7 questions on the specific slides that are being presented, if  
8 you want a little bit of clarification from the presenter --  
9 you'll have a few different people presenting tonight --  
10 definitely, feel comfortable raising your hand. But for the  
11 bigger picture questions about some of the comparisons, if  
12 you'd like to just wait till we get to the end of our slides  
13 and the end of our presentation, that would be very helpful.

14 So if we could skip to the next slide, please. Just  
15 because there's several different projects around the state,  
16 and we all, you know, in our daily lives encounter different  
17 projects in different areas, we just wanted to make sure we're  
18 all on the same page. This is the proposed Nanushuk  
19 development.

20 Armstrong Energy LLC is the applicant and -- on this  
21 project, and we have a few representatives here, so we thank  
22 them for their time.

23 And this is about -- roughly, about  
24 six-and-a-half miles northeast of the village of Nuiqsut,  
25 southeast of the east channel of the Colville River. So this

1 is helpful little diagram.

2           Next slide, please. So our goals tonight are to  
3 cover a few main different areas. We also have some maps on  
4 the -- in the side of the room. Hopefully, you were able to  
5 look around at those, and we encourage you, at the end of the  
6 presentation, look as well.

7           We're going to do some introductions of the  
8 different members of our team and the Army Corps of Engineers,  
9 as well, so you kind of know who has been working on this EIS  
10 and know who is in the room. Ellen Lyons, our project manager  
11 with the Army Corps of Engineers is going to, then, give an  
12 overview of NEPA and the EIS process, as well, just to  
13 familiarize everyone.

14           Many of you are aware of -- I'm sure of this  
15 process, but we'll go through a little bit of an overview on  
16 that. And then, of course, talk about the project, what is  
17 being proposed here, what is the goals, and, of course, cover  
18 the purpose and need of that proposed project.

19           And one of the most important things that we have to  
20 share with you is the various alternatives. So we have five  
21 alternatives and you'll learn a lot more about those, what  
22 makes them different, how these alternatives were narrowed  
23 down from a different list, and why we feel that those are  
24 worthy of being looked at and discussed with different  
25 agencies and among the EIS team.

1           And then we're going to talk about -- you'll be  
2 given a presentation on each of these different key findings,  
3 throughout all the different components of what was looked at  
4 through the EIS process to get to this draft point. It,  
5 basically, became clear from communication with the community  
6 of Nuiqsut, their region, different representatives from  
7 different agencies, and just the general public that these are  
8 the key areas that are very important to that area.

9           And so we are going to discuss each of these,  
10 individually, so you get a brief overview of the key findings  
11 and how the different alternatives have different -- looking  
12 at the different key finding areas, how they compare on each  
13 one. So you'll get a good overview of that.

14           And then we'll talk about the next steps, moving  
15 forward from here, and you're a very important part of this  
16 process, of course. So we've been getting a lot of  
17 involvement in the different communities that we've presented  
18 in, so we appreciate your time and hope that you learn a lot  
19 more about this proposed project this evening, and absolutely  
20 weigh in, and I hope you ask questions and feel comfortable  
21 talking with our group tonight.

22           Thank you and I'll pass it over to Ellen Lyons.

23           ELLEN LYONS: Thank you, Joy. Okay, again, my name  
24 is Ellen Lyons and I am the project manager for the Nanushuk  
25 project for the U.S. Army Corps of Engineers. So right now,

1 we are working on the EIS for the Nanushuk project. This  
2 meeting tonight is about telling you about the draft  
3 environmental impact statement.

4 But as I said, we're the lead federal agency for the  
5 EIS. We have been working with four different cooperating  
6 agencies, the Native Village of Nuiqsut, the EPA, the State of  
7 Alaska Department of Natural Resources, and the U.S. Fish and  
8 Wildlife Service.

9 And tonight DOWL is in the room, and DOWL is our  
10 third-party contractor who is writing the EIS under the  
11 direction of the Corps of Engineers. If I could have  
12 everybody from DOWL stand up. So we have quite a few people  
13 here, some subject matter experts that are available to answer  
14 questions, also.

15 We also have the applicant in the room, Armstrong.  
16 If I could have folks from Armstrong stand up. Okay.

17 Next slide. So really quickly, I'm just going to go  
18 over the NEPA process. The National Environmental Policy Act,  
19 or NEPA, requires the federal government to evaluate  
20 environmental effects of a major federal action. It is the  
21 fact that this project is going to require a permit from the  
22 Corps of Engineers for the discharge of fill to construct the  
23 infrastructure for this project that makes it a major federal  
24 action. And it's the reason why we're doing an environmental  
25 impact statement.

1           Next slide. So the first thing that we do when  
2 we're going through the NEPA process is we start with the  
3 purpose and need. This is provided by the applicant, and then  
4 the Corps fine tunes it for the EIS process. Once we have the  
5 purpose and need, we work and develop alternatives that are  
6 reasonable and feasible and meet that purpose and need.

7           Next slide. Once we have all the alternatives, we  
8 evaluate effects of all the alternatives. We look at the  
9 direct, the indirect, and the cumulative effects and we  
10 compare the alternatives.

11           Another really important part of the environmental  
12 process or the NEPA process is the public review. And so,  
13 again, tonight, we're here to tell you what we found in the  
14 draft environmental impact statement, but, really, what we are  
15 seeking is -- are your comments on the environmental impact  
16 statement, the draft.

17           So we're looking for any kind of input you have on  
18 the purpose and need, on the alternatives, on the evaluation  
19 of the effects, any avoidance, minimization, or mitigation  
20 measures that you feel would be appropriate for this project.

21           Next slide. So this just -- schematic just kind of  
22 shows where we are in the process. As we said, in March of  
23 2016, we came to Fairbanks and had a scoping meeting. We took  
24 all the information from the scoping meeting and re -- we've  
25 been moving through the process. And right now, again, we're

1 looking at the draft environmental impact statement.

2 Next slide. So really quick, I'm going to give you  
3 an overview of the Nanushuk project. Again, the Nanushuk  
4 project is located approximately six-and-a-half miles to the  
5 northeast of the Native Village of Nuiqsut. Alpine is to the  
6 west of the project, Mustang is, generally, to the south,  
7 southeast. Kuparuk is to the east. And the Nuna project is  
8 to the north.

9 So we received an application from Armstrong Energy  
10 Limited LLC to produce, process, and transport sales quality  
11 oil to the TAPS. So, again, this project would require the  
12 discharge of fill into wetlands to construct the drill pads,  
13 operation pads, processing facilities, the roads, and the  
14 pipelines. The proposed project would also include the  
15 construction of ice roads for access and also screeding at the  
16 Oliktok Dock.

17 So we -- again, we started with the purpose and need  
18 for the proposed project, which is to safely produce  
19 commercial quantities of liquid hydrocarbons in its oil and  
20 gas leasehold by operating from a site east of the Colville  
21 River Delta to process hydrocarbons on or near the drill  
22 sites, and to transport sales quality oil through a new export  
23 pipeline to the Kuparuk sales oil pipeline and then to TAPS.

24 We took that purpose and need and we started working  
25 on the development of reasonable alternatives. We took input

1 from -- that we received during the scoping process and also  
2 from agencies during our agency -- cooperating agency meetings  
3 to develop an initial range of possible alternatives.

4 We went through a process to fine-tune those  
5 alternatives, and we looked at alternatives for various  
6 components of the proposed project. We started very  
7 broadly -- next slide -- as this shows, and we used a  
8 screening procedure to narrow it down.

9 Alternatives need to be -- to meet the purpose and  
10 the need. They need to be reasonable and feasible. They need  
11 to address public or agency concerns raised during scoping.  
12 And they needed to have a less impact on at least some  
13 resource that we looked at for the proposed project.

14 If you would like to have additional information  
15 about this screening process, there is an appendices in the  
16 draft EIS that you can look at.

17 So, again, we started with public and agency  
18 scoping. We did some brainstorming with the cooperating  
19 agencies, and we took a broad range of alternatives and  
20 narrowed it down to a smaller range.

21 Again -- next slide. Again, this goes over some of  
22 the screening criteria, meets the purpose and need, is  
23 feasible and practicable, reduces impacts. Two specific  
24 things that we looked at, based on comments received during  
25 scoping, is that we wanted alternatives to maximize the use of 9

1 existing infrastructure, and also maximize the socio-economic  
2 benefits to the public.

3 At the end of the alternatives process, we came down  
4 to one no-action alternative and four action alternatives, and  
5 I'll go over those in more detail in a moment. Next slide.  
6 So this schematic shows the applicant's proposed project, but  
7 it shows some of the components of the project that are the  
8 same for all alternatives.

9 So each alternative has three drill sites, a central  
10 processing facility, a separate operations center, an access  
11 road, the infield roads, a seawater import pipeline, and lake  
12 water withdrawals. Additionally, the Oliktok Dock screeding  
13 is the same for all alternatives, as is the construction of  
14 ice roads.

15 So for each alternative, the drill sites are located  
16 in the same location. So the next slide just shows the first  
17 alternative, which is the no-action. This is required by  
18 NEPA, and it's, basically, what would happen if the Corps did  
19 not issue a permit and if the project was not constructed.

20 Alternative 2 is the applicant's proposed action.  
21 This is what the applicant is applying for a permit for.  
22 Access is from the Kuparuk drill site 2M, slightly north of  
23 the Mustang facilities. In this alternative, the central  
24 processing facility is combined with the drill site 1 on the  
25 same pad.

1           Also, I'm going to talk a little bit about material  
2 sites for a moment. So the applicant has not proposed to  
3 develop a material site for the proposed project. The  
4 applicant is intending to use existing material sites. And  
5 right now, you can see two that they may obtain their material  
6 from, the North Slope Borough mine site F or the ASRC mine  
7 site.

8           The EIS, however, does analyze the potential to  
9 develop a new material site. Mine area D is kind of a general  
10 schematic showing where that mine site could potentially be  
11 located; however, it is not part of the proposed project,  
12 because, at this time, they feel that they can get all the  
13 material that they need to construct the project from the  
14 existing material sites.

15           So alternative 3 is the southern access, and this  
16 alternative was developed in response to the desire to use  
17 existing infrastructure as much as possible. So the access  
18 and import/export pipeline follow the Mustang Road and then  
19 the Alpine corridor. It then moves north into the oil fields  
20 and approaches from the south.

21           In this alternative, the central processing facility  
22 is not located on the same pad as drill site 1. It has its  
23 own pad. And just to make this schematic a little clearer,  
24 the yellow is the proposed project, and the red shows the  
25 alternative 3. So we put both of them up there. That can add

1 a little bit of confusion, but it's so you can compare the two  
2 alternatives.

3 And one other thing to note about this alternative,  
4 is it does require two additional bridges, compared to the  
5 proposed project, over the Kachemach River.

6 So alternative 4 is the northern access. Again, it  
7 was developed in response to the request to use existing  
8 infrastructure as much as possible. This accesses the area  
9 from the north using either the constructed or the permitted  
10 Nuna facilities. The central processing facility and the  
11 operations center are located near the access road where it  
12 connects to the infield road, and that's southeast of drill  
13 site 1. I'm sorry, go ahead.

14 SHAWN LOWRY: Is the Nuna facility already  
15 constructed, at this point?

16 ELLEN LYONS: Not all of it; a portion of it is. It  
17 is -- the whole road is permitted, but it hasn't been fully  
18 constructed.

19 So another thing to note about this alternative is  
20 that the tie-in -- the Kuparuk tie-in pipeline does not have  
21 road access for 7.3 miles. And this can increase the need for  
22 using helicopters for pipeline inspection, maintenance and  
23 repairs, and it makes response to any pipeline spills more  
24 difficult. Again, the alignment of the infield roads and the  
25 location of the drill sites are the same for this alternative

1 compared to the proposed project.

2           The last action alternative, alternative 5, is the  
3 reconfigured infield roads. And this was developed to  
4 maximize use of existing infrastructure corridors, but also to  
5 reduce development in flood plains, and to reduce the amount  
6 of infrastructure parallel to the Colville River. In this  
7 diagram, you can see that the purple is alternative 5 and  
8 yellow is the alternative 2, the applicant's proposed action.

9           So this moves the central processing facility and  
10 the operations center further inland away from the Colville  
11 River. They are located near the access road connection to  
12 the infield roads, which also moves it a bit closer to Nuiqsut  
13 compared to alternative 2, the proposed project.

14           This alternative minimizes development in the flood  
15 plain, and kind of reduces what we're calling a corral effect  
16 that can happen to caribou due to the construction parallel to  
17 the Colville River. So this alternative could reduce impacts  
18 to caribou, as well.

19           So the next slide shows a comparison of  
20 alternatives, very general, the length of new roads, the acres  
21 of new roads, number of bridges, total gravel foot print.  
22 There are handouts available outside on the table that has  
23 additional information for comparing alternatives. And also  
24 there is the draft -- the entire draft EIS that is available  
25 for review.

1           So the EIS also looks at a lot of topics that we're  
2 not going to cover here tonight. We chose the five primary  
3 effects that were addre -- or that were identified during the  
4 scoping process. But if you have any interest in other  
5 physical, biological, or social resources, you can find that  
6 information in the draft EIS.

7           So tonight, again, we're focusing on five key  
8 issues: Air quality, hydrology water quality, subsistence,  
9 human health and safety, and oil spill risk. And at this  
10 time, I'm going to turn it over to Kristen from DOWL to talk  
11 about some of these key issues.

12           KRISTEN HANSEN: Good evening. So as Ellen  
13 mentioned, I'm Kristen Hansen. I'm the project manager for  
14 the DOWL EIS team. We're the third-party contractor working  
15 under the direction of the Corps for this EIS. Can you all  
16 hear me in the back okay? Great, thanks.

17           So I'll be presenting a summary, slides for air  
18 quality, hydrology and water quality, and subsistence, and  
19 then I'm go to hand it over to Maryellen to cover the key  
20 findings for the human health and safety and oil spill risk.

21           So on these next slides, we're going to cover a  
22 general -- a very general summary of each of these key issues,  
23 the key findings in the draft EIS, and a general comparison of  
24 the alternatives. As Ellen mentioned, there's a lot more  
25 detail in the EIS, itself. We're trying to keep this

1 presentation relatively short, so we have time for questions  
2 and answers. So this is just a very broad overview of some of  
3 the key findings.

4 So on air quality, this was a key issue identified  
5 during public scoping, as Ellen mentioned. And, in  
6 particular, there were concerns raised about potential air  
7 emissions from the project during construction, drilling, and  
8 operations, and also concerns about the potential for changes  
9 to the air quality in the surrounding areas and, specifically,  
10 Nuiqsut.

11 As described in the draft EIS, the project would  
12 result in emissions of criteria air pollutants. And by that,  
13 we mean air pollutants, those that have air quality standards,  
14 so things like nitrogen dioxide, carbon monoxide, particulate  
15 matter, sulfur dioxide, and ozone.

16 The project would also emit hazard air pollutants,  
17 which are those pollutants that, above a certain threshold,  
18 concentrations are known to cause cancer or other serious  
19 health effects, so those are things like benzene and xylene.

20 The project would also have greenhouse gas emissions  
21 and would also generate fugitive dust from the project  
22 activities on gravel roads and pads.

23 So what the EIS analysis found was that the project  
24 would produce these emissions, and the air quality would meet  
25 all applicable national and Alaska ambient air quality

1 standards. The EIS also found that the hazard air pollutant  
2 concentrations would be well below all reference  
3 concentrations known to cause adverse health effects.

4 For Nuiqsut, the EIS analysis found the air quality  
5 impacts would be probable, minor, and medium term. So what  
6 does that mean? As we define it in the EIS, probable means  
7 that air emissions -- that these emissions are likely to  
8 affect air quality. Minor means that no criteria pollutant  
9 concentration would exceed 50 percent of the federal and  
10 Alaska standards. And medium term just means that the impact  
11 would last the life of the project, but it wouldn't exceed the  
12 life of project, which is 30 years.

13 So next slide. So when we compared all the  
14 alternatives in terms of impacts to air quality, what the  
15 draft EIS finds is that all of the action alternatives would  
16 have similar effects on air quality, specifically, the air  
17 quality in the project area and at Nuiqsut would meet all  
18 applicable air quality standards for all of the alternatives.

19 So similarly for all the alternatives, the hazardous  
20 air pollutant concentrations would be well below any reference  
21 concentrations known to cause adverse health effects. Air  
22 quality impacts in Nuiqsut would be minor for all of the  
23 alternatives, again, minor meaning that no model criteria  
24 pollutant concentration would exceed 50 percent of the air  
25 quality standards.

1           And so the only real difference between alternatives  
2 for air quality is that each alternative, as Ellen just  
3 pointed out, has a different CPF location. So, for example,  
4 alternative 3, which is the southern alternative, southern  
5 access alternative, would place the CPF about 11 miles from  
6 Nuiqsut, where alternative 4, which is the northern access  
7 alternative, would place it about 15 miles from Nuiqsut.

8           So -- however, it's important to emphasize that,  
9 even with these different locations for the CPF, all of the  
10 alternatives would meet the air quality standards in the  
11 project area and at Nuiqsut.

12           Next. Okay, so moving on to hydrology and water  
13 quality, this was another key issue identified during scoping.  
14 In particular, there were concerns raised about development of  
15 facilities within the Colville River flood plain, and for the  
16 potential for road and pads to interfere with water flow, and  
17 a potential for surface and ground water quality degradation  
18 from construction and operations.

19           What the draft EIS finds is that gravel pads, roads,  
20 ice roads, ice pads, and river crossings would result in  
21 potential changes to natural drainage patterns and alterations  
22 in water flows, as well as some changes to lake water  
23 quantities from water withdrawals used for ice infrastructure  
24 and dust suppression.

25           So more specifically, the key findings were that

1 roads and pads could result in increased depth and duration of  
2 water impoundment behind those facilities during spring  
3 breakup and other flood events, with possible changes in flow  
4 direction resulting from flow obstruction during that time.

5 And as a result, ice roads and pads and gravel  
6 infrastructure may change stream channel stability or  
7 alignment, including possible erosion of tundra or stream  
8 banks and resulting in deposition of sediment on the tundra or  
9 nearby -- in nearby rivers. And then this, in turn, could  
10 lead to the potential for increased turbidity from fugitive  
11 dust and erosion.

12 The EIS also finds that thermokarsting could occur  
13 where water is impounded behind facilities during spring  
14 runoff and other flood events. Thermokarsting is just where  
15 there's some localized thawing of ice ridge permafrost. And,  
16 last, the EIS finds that water withdrawals from lakes for  
17 water supply needs may result in changes to available lake  
18 water quantities.

19 Next slide. So as far as a comparison of the  
20 alternatives, unlike for air quality, there are some important  
21 differences between the alternatives in terms of impacts to  
22 hydrology and water quality.

23 So for alternative 4, this is the -- again, the  
24 northern access alternative. This would have the most direct  
25 effects to rivers and flood plains of all the alternatives.

1 And that's, basically, because it would have the highest  
2 number of streams requiring culverts and the most vertical  
3 support members that support the above-ground pipeline, and  
4 bridge piles placed below the ordinary high water mark and  
5 within the flood plain.

6 Alternative 2 -- that's the applicant's proposed  
7 alternative -- would have the most miles of new gravel roads,  
8 and the second highest number of vertical support members and  
9 bridge piles below ordinary high water, and the highest number  
10 of cross drainage culverts.

11 Alternative 3, the southern access alternative,  
12 would have more total bridges at river crossings, and more  
13 gravel road located in flood plains than any of the other  
14 alternatives.

15 And then alternative 5, which is the reconfigured  
16 infield road alternative would have the fewest direct effects  
17 to water bodies and flood plains than all of the alternatives.  
18 And that's because it would have the shortest length of road  
19 in the flood plain, and the second lowest number of stream  
20 crossings requiring culverts, and the fewest VSMS and bridge  
21 piles below ordinary high water. And alternative 5 would also  
22 have the lowest volume of water withdrawal needed over the  
23 life of the project.

24 Next slide. Okay, moving onto subsistence. The  
25 impact assessment methods for looking at subsistence in our

1 EIS drew on three sources of information. One, subsistence  
2 mapping and habitat or, excuse me, harvest surveys from nearly  
3 40 years of data going back to 1979. This included studies  
4 that were conducted by the applicant by Armstrong for this  
5 project. Two, they used fish and wildlife biologists impact  
6 assessments for this EIS. And, three, they used traditional  
7 knowledge from Nuiqsut community members.

8 So the key findings for the EIS, in summary, the  
9 greatest potential effect would be on caribou subsistence  
10 hunting. And that's, basically, because of the high  
11 importance and the high use of subsistence hunters in the  
12 area. High importance because caribou contribute highly to  
13 the subsistence diet for Nuiqsut folks, and high sharing and  
14 high participation.

15 It's a high-use area. Basically, our subject matter  
16 experts for subsistence looked at a two-mile buffer around all  
17 the project alternatives and found that there's been recorded  
18 88 percent of active harvesters reported using that area for  
19 caribou subsistence hunting. And the east channel accounts  
20 for 7 to 20 percent of caribou harvest. So those are the main  
21 reasons why caribou subsistence hunting is considered the  
22 potentially greatest effect for subsistence.

23 Fish and birds, not as much of an impact. They have  
24 moderate importance and moderate use. Other areas outside of  
25 the project had more use for these resources. And, primarily, 20

1 they're talking -- for birds, they're talking about eiders; 29  
2 percent of harvesters reported using the project area for  
3 eider hunting and -- yes?

4 JESSE NEE: (Indiscernible - away from mic). So  
5 you're saying the project is not necessarily going to affect  
6 the availability of caribou; it's just going to affect where  
7 they are able to hunt for caribou (indiscernible - away from  
8 mic).

9 KRISTEN HANSEN: You want -- oh, okay. So your  
10 question is whether -- so the --

11 JESSE NEE: Well, you're not saying that it's going  
12 to affect the caribou herd population or whether they're going  
13 to be there or not. You're just saying that it's going to  
14 affect where they can hunt for the caribou at, your two-mile  
15 buzzer zone?

16 KRISTEN HANSEN: Yeah, they did look at both whether  
17 there would be impacts to the caribou, itself, and whether  
18 there would be impacts to subsistence use in the project area.  
19 And I think the subsistence section, if you read it, does  
20 analyze both aspects of it.

21 I think the consideration here in terms of terming  
22 it in this EIS, a major -- potential major impact has more to  
23 do with the fact that they subsistence hunt in that area in  
24 the two-mile buffer. 88 percent of hunters using the two-mile  
25 buffer around all the project alternatives had more to do with,

1 it, but they did look at all those factors.

2 JESSE NEE: Okay. Yeah, thanks. I was just  
3 curious, then. Thank you.

4 KRISTEN HANSEN: Sure.

5 JOY HUNTINGTON: So if I could just interrupt really  
6 quickly. So our court reporter, it's really important  
7 throughout this public involvement process that we get all the  
8 comments written down and incorporated formally. And so you  
9 may see me running around, and if you have a quick question,  
10 I'm going to come running to you.

11 And if you could also say your name for the record,  
12 just so she can keep track of everybody and make sure that all  
13 of your comments are really highly valued and taken in. So if  
14 you give me a -- give me that ability to interrupt you and  
15 throw a microphone in your face, I'd appreciate that. Thank  
16 you.

17 KRISTEN HANSEN: Great. Okay. And so fish, as I  
18 was mentioning, are of lesser importance, three to four  
19 percent of harvesters reported fishing for arctic cisco,  
20 burbot, and arctic char. And there's been documented arctic  
21 grayling use, which is the primary fish harvested in the  
22 project area.

23 So fur bearers and small land mammals, about 50  
24 percent of harvesters use the area, but most of that is  
25 concentrated further south in the project area, and the

1 community's primary areas are located further upriver, so  
2 that's why our subject matter experts did not find that to be  
3 as of substantial of a potential impact there.

4 And, again, with moose, the documentation shows that  
5 moose hunting occurs further south and there are very few  
6 moose in the area. And then with marine mammals, there is  
7 some historic use in the east channel with some infrequent  
8 harvesting of seals, but mostly hunting occurs in the Beaufort  
9 and, therefore, un -- effects are unlikely from this project.

10 So as far as the comparison of alternatives, all the  
11 alternatives would have similar effects, but there are a few  
12 differences to point out that are described more in the EIS.  
13 So alternative 4, with this alternative kind of paralleling  
14 the east channel, as Ellen described, there's that potential  
15 for kind of a corralling effect. That's the greatest effect  
16 for this alternative, and so that one was deemed to have the  
17 potential -- highest user avoidance along the length of the  
18 east channel of the Colville River, and the greatest potential  
19 for obstructing or diverting caribou.

20 Also, higher number of eider harvests -- harvesters  
21 affected under that alternative, and I think as Ellen also  
22 mentioned, there is -- the helicopter impacts are a little bit  
23 heightened with alternative 4 due to the roadless portion of  
24 the pipeline.

25 Alternative 2, the applicant's proposed alternative, 23

1 on that one, the CPF is closest to the Colville and the  
2 Miluveach Rivers. There's the greatest potential for  
3 avoidance near those locations. And there -- the EIS does  
4 find a high likelihood for obstructing or diverting caribou  
5 under that alternative.

6 And the southern alternative, the southern  
7 infrastructure would be more likely to affect wolf and  
8 wolverine harvesters. There would be fewer impacts to eider  
9 harvesters between the lake and the Miluveach River.

10 And then under the alternative 5, the reconfigured  
11 infield roads, those were determined to have the least  
12 potential impacts to subsistence. And that's because it --  
13 that alternative moves the infrastructure out of the Colville  
14 River flood plain, reduces the roads paralleling the east  
15 channel, and just, in general, moves most of the  
16 infrastructure farther inland, thereby reducing user  
17 avoidance, and was deemed to be the most conducive for caribou  
18 movement, in general, through the area.

19 JESSE NEE: I got one more question (indiscernible -  
20 away from mic).

21 KRISTEN HANSEN: Sure.

22 JESSE NEE: So --

23 KRISTEN HANSEN: Just a moment.

24 JESSE NEE: (Indiscernible - away from mic). I  
25 imagine that most of these pipelines are built at such an

1 elevation that the caribou are able to get underneath them,  
2 right, so --

3 KRISTEN HANSEN: That is correct. The --

4 JESSE NEE: -- how is it going to corral them?

5 KRISTEN HANSEN: Right. I think, in general, what  
6 the EIS section on subsistence describes, is some level of  
7 potential avoidance that caribou may have to the  
8 infrastructure itself to any -- you know, whether it's noise  
9 or just human activity. It's not that they can't -- you're  
10 correct.

11 The pipelines will be constructed on an elevation  
12 that caribou can go underneath them, based on the North Slope  
13 Borough's requirements. This project will meet those  
14 requirements. Caribou should be able to pass through there.  
15 But it's a more kind of an indirect effects of general  
16 wildlife avoiding human activity areas, I think is what  
17 they're referring to.

18 JESSE NEE: Okay, thanks.

19 KRISTEN HANSEN: Sure.

20 JESSE NEE: Yeah, Jesse Nee.

21 KRISTEN HANSEN: Great. I'm going to now turn it  
22 over to Maryellen, and we're happy to take more questions on  
23 these things after the end of the presentation.

24 MARYELLEN TUTTELL: Thank you, Kristen. As Kristen  
25 mentioned, my name is Maryellen. And I'm going to talk a

1 little bit about the work that we did on evaluating the  
2 potential for human health impacts and human safety impacts.

3 Human health issues were one of the major issues  
4 raised in public scoping, particularly from the community of  
5 Nuiqsut. They had a lot of concerns about the potential for  
6 air pollution, pollution of soil or water or even  
7 contamination of their subsistence resources.

8 So we looked at human health and safety using two  
9 different perspectives. The State of Alaska Department of  
10 Health and Social Services has a framework that they call  
11 health effects categories. And so we went through those  
12 health effect categories and looked at the potential for  
13 changes in those.

14 And then the North Slope Borough actually produced a  
15 report, specifically looking at potential benefits and impacts  
16 from resource development on the North Slope. And so we also  
17 used that perspective and went through each of the impacts and  
18 benefits that the North Slope had identified, and evaluated  
19 that for this project.

20 So what we found was that there is the potential for  
21 both benefits to human health and safety and also some  
22 impacts. And most of the impacts in terms of some of the  
23 beneficial impacts of income and things like that are more  
24 direct impacts. Most of the health and social impacts tended  
25 to be a little more indirect.

1           So what we found was that some of the potential  
2 benefits from the project are the increased incomes to people  
3 in Nuiqsut and Native corporation shareholders and others.  
4 And those increased family incomes tend to be correlated with  
5 better health outcomes and higher levels of good health. And  
6 so increasing incomes in a community tends to result in better  
7 health effects.

8           Also, when you look at the increased revenues to the  
9 state, the borough, and to some of the Native corporations,  
10 that provides funding for some of the health facilities that  
11 are in the communities on the North Slope Borough. It can  
12 also provide funding for health programs and social programs,  
13 as well. And so those are some of the benefits that could  
14 potentially occur associated with the project.

15           On the other side, some of the concerns that the  
16 community had, had to do with the potential increase in safety  
17 issues. And that's related to -- you know, people are used to  
18 taking a certain path to get out to the area where they  
19 harvest their res -- their subsistence resources. And so if  
20 now they have to take a longer path on their ATV or in their  
21 boat, or they have to, you know, take a different path because  
22 they need to get around an existing developed area, that can  
23 increase the potential for accidents in transportation in  
24 getting to their facilities.

25           In addition, the fact that there could be roads in 27

1 areas that they need to cross, and increased industrial  
2 traffic, there could be potential increases in safety hazards  
3 during transportation. So that was one of the issues that we  
4 looked at.

5 As mentioned in the subsistence section, if there's  
6 a potential effect on the ability to harvest their subsistence  
7 caribou, that could, then, affect the diet of the people in  
8 Nuiqsut. And, for example, they could either have a shortage  
9 of food, not enough food if they don't get their caribou, or  
10 they could replace the nutritious caribou with other foods  
11 that may not be as nutritious. So there could be some  
12 potential indirect effects on health from changes in the diet,  
13 and, particularly, in the subsistence diet.

14 Other effects in terms of -- we didn't find any  
15 direct health effects from, say, the air emissions or, you  
16 know, in terms of contamination of subsistence resources or  
17 soil or water, but there's a lot concern in the community  
18 about it.

19 And when people are under high levels of stress for  
20 a long period of time, that chronic stress is correlated with  
21 a number of different health conditions. And so the increased  
22 stress levels can result, indirectly, in some adverse health  
23 effects.

24 The other issue we looked at was community cohesion.  
25 And there are some concerns in the community. There are

1 Native corporation shareholders in the communities who might  
2 benefit from the project a lot more than other people who live  
3 in Nuiqsut who aren't shareholders. And so, you know, the  
4 unequal distribution of the benefits of the project versus  
5 everybody kind of in the community having the potential to  
6 have some adverse effects, that can result in some -- you  
7 know, some tension in the community.

8           And there's also, in general, just more -- some  
9 people in the community who support development, and some  
10 people who do not support development, and that results in  
11 some tensions within the community, as well. And so those are  
12 the type of effects that we saw.

13           Most of the effects were minor and, like I said, a  
14 lot of them were very indirect; they weren't, you know, direct  
15 effects from the project. And, again, there's a lot more  
16 detail on this in the EIS.

17           In terms of the comparison between alternatives, for  
18 human health and safety, there's really not a lot of  
19 difference between the alternatives. The way the people --  
20 the people's concerns about air pollution or water pollution,  
21 you know, they really have the same concerns no matter which  
22 alternative you look at.

23           The health and safe -- the safety in terms of  
24 transportation, they're still kind of the same. You know, you  
25 might say that if the road is on the south versus the north,

1 you know, and maybe they have to cross it more often or  
2 something, but it's really not a substantial difference  
3 between the alternatives.

4 Because people, in particular, had a lot of concerns  
5 about the central processing facility, you know, the central  
6 processing facility, as both Ellen and Kristen mentioned, is  
7 in different locations for each alternative. So, potentially,  
8 if it's further away, maybe they would worry about it less,  
9 but, again, really, the impacts are the same for all the  
10 different alternatives when it comes to human health and  
11 safety.

12 So on the oil spills, in the EIS, we have an entire  
13 chapter that looks at the potential for spills of oil and gas  
14 or other materials associated with construction and operation  
15 of the facility.

16 And the risk assessment in the EIS is based on the  
17 40 years of history on the North Slope looking at the types of  
18 spills that occur, how large -- you know, how large spills are  
19 that -- and how often they occur, as well as how likely a  
20 spill is to get off of the developed pad area and get into the  
21 environment.

22 And based on the history on the North Slope, you  
23 know, the smaller spills that occur may be when you're  
24 maintaining a piece of equipment or, you know, if you're  
25 working on the process piping or something, and there's a leak,

1 at a gasket or something. You know, a lot of those smaller  
2 spills, they tend to be right on the pad, and there's very  
3 little potential for those to get out into the broader  
4 environment. But those happen more often and there's a higher  
5 likelihood of those small type spills occurring.

6 When you look at the medium to the medium-large  
7 spills, there, you're talking about something like a tanker  
8 trunk going off the road and spilling fuel or maybe, you know,  
9 a spill occurring when a tanker truck is being offloaded or  
10 something.

11 And so there, you're talking about, you know, a  
12 larger amount. Those are rarer than those little spills of  
13 very small quantities that might occur during maintenance and  
14 things. They also tend to be if a truck goes off the road, or  
15 there's a problem during offloading from the truck.

16 Those tend to be recognized pretty quickly, and so  
17 they get addressed pretty quickly. So there is the potential,  
18 like, if a truck goes off the road, that a spill could go off  
19 of the embankment into the environment. But, again, it's  
20 fairly limited and would typically be addressed pretty  
21 quickly.

22 In terms of the larger, very large spills, again,  
23 those happen pretty rarely. And so if you look at the history  
24 on the North Slope, it's just very unlikely for that type of  
25 very large spill to occur. It would have to be some type of

1 catastrophic event with a storage tank or with the pipeline or  
2 something.

3 And, again, those would typically be recognized  
4 pretty quickly. But they would have more potential to  
5 actually get into the environment, but, again, the risk of  
6 that happening or the potential for that happening, the  
7 likelihood is very low.

8 So in the EIS, in addition to the chapter we have  
9 looking at the potential for these different types of spills,  
10 then we also, in each chap -- each section of the EIS, each  
11 resource section has an oil spill section in it where they  
12 look at, okay, if a small spill occurs, what are the likely  
13 effects on this resource? If a medium spill occurs, what are  
14 the likely effects? And if a large spill occurs, what are the  
15 potential effects?

16 So we cover the oil spill scenario, both in a  
17 separate chapter where we look at the likelihood of it  
18 happening and getting out, and then in each resource area, we  
19 also look at the potential impact on each resource from  
20 different types of spills.

21 So with that, I'm going to turn it back over to  
22 Ellen and she is going to talk about kind of where we go from  
23 here on the EIS process.

24 ELLEN LYONS: Thank you, Maryellen. Okay, so,  
25 basically, what happens next? So right now, we're in a really<sub>32</sub>

1 important part of the EIS process, which is a public review  
2 process. We are looking for impacts -- or for input from you  
3 guys on the draft environmental impact statement, on the  
4 purpose and need, on the alternatives, on the effects  
5 analysis, on the avoidance and minimization, and any  
6 mitigation measures that you feel would minimize the impacts  
7 that may occur due to this proposed project.

8           You have until November 14th, 2017; so this November  
9 14th to provide that input to the Corps of Engineers. And in  
10 a minute, I'll tell you how to do that.

11           So the larger schedule is that that -- this public  
12 comment period closes November 14th. The U.S. Army Corps of  
13 Engineers is planning to release the final environmental  
14 impact statement in May of 2018, and a permit decision should  
15 be made by September of 2018.

16           So next slide. So these are some ways that you can  
17 participate. We do have a -- we are recording tonight's  
18 session, so anything you say tonight will be an official  
19 comment on the proposed project.

20           We also have comment forms in the back that you can  
21 pick up and submit to us. You can also go to the  
22 Nanushukeis.com website and submit your comments  
23 electronically or e-mail them to the e-mail address here. You  
24 can also mail your comments directly to myself.

25           And I would also like to say that there are two

1 things that are happening concurrently. So there's a comment  
2 period on this draft environmental impact statement and,  
3 again, go to the Nanushukeis.com website to get information on  
4 that.

5 But there's also a comment period on the public  
6 notice for the permit, the permit decision that the Corps of  
7 Engineers will be making and what is driving this whole EIS  
8 process. That public notice period closes the same day as the  
9 EIS.

10 And, then, there you have the opportunity to provide  
11 impacts -- input directly on the proposed project. So you can  
12 either submit comments in both processes or one. No matter  
13 which way you submit the comments, the Corps of Engineers will  
14 incorporate your comments in our permit decision process.

15 So with that, I am going to turn it over to Joy for  
16 facilitation of any questions or comments you'd like to make.  
17 And I thank you all very much for coming out tonight and  
18 expressing interest in the Nanushuk project.

19 JOY HUNTINGTON: Thank you, Ellen. And we can also  
20 flip back to different slides if you wanted to go back and  
21 look at anything and ask them clarifying questions on some of  
22 the maps or any of the alternatives, as well.

23 MARISA SHARRAH: My name is Marisa Sharrah. And I  
24 do have a question. I'd like some clarifying information  
25 about the data that was used to talk about the caribou

1 migration. You guys have talked about all the infrastructure,  
2 you know, would be built at the North Slope Borough  
3 requirements. And I know that there have been studies on  
4 caribou and how they do interact with infrastructure at  
5 (indiscernible - away from mic).

6 I was wondering if any of that data or any of that  
7 studies have been incorporated into this EIS process and if  
8 any of that has a bearing on any of the recommendations that  
9 were made for the EIS process?

10 KRISTEN HANSEN: Great question. Yes, we've looked  
11 at all of that data. We have ABR as our subject matter  
12 experts helping to put together the caribou and wildlife  
13 sections in the EIS, as well as Stephen Braund and Associates.  
14 They're our subject matter expert who wrote the subsistence  
15 section.

16 So they definitely have looked at all of that data,  
17 all the studies that are available. They've looked at the  
18 codes and regulations that I believe are put out by North  
19 Slope Borough. I believe the applicant is definitely planning  
20 and have designed their project to conform to the current  
21 standards that were -- have been recommended by the North  
22 Slope Borough. And maybe the State, I think, also has had  
23 some say in those recommended, you know, minimum heights for  
24 pipelines. Does that answer your question?

25 UNIDENTIFIED SPEAKERS: (Indiscernible - away from

1 mic).

2 KRISTEN HANSEN: The appendix? Yeah, so the data  
3 you may be inquiring about, there is an appendix in the EIS,  
4 specifically, on subsistence data that you may want to take a  
5 look at.

6 MARISA SHARRAH: Do you have that appendices number  
7 off the top of your head?

8 KRISTEN HANSEN: I don't off the top of my head, but  
9 I can, after the meeting, pull up the actual EIS on my  
10 computer and get back to you on that.

11 MARISA SHARRAH: So just to clarify, I wanted to --  
12 so it sounds like you have access to the information that  
13 the -- obviously, the research that's been done and there's  
14 data out there. I'm just curious, was that data considered  
15 through the recommendation process? Was that part of the  
16 consideration?

17 KRISTEN HANSEN: Yes. In terms of the EIS findings,  
18 yes. I -- our subject matter experts looked at all available  
19 information, research, data, studies that have been done on  
20 caribou use on the North Slope to come up with the EIS  
21 findings.

22 JOY HUNTINGTON: Any more questions or comments?

23 JESSE NEE: I'll go again.

24 JOY HUNTINGTON: I'll just stay over here.

25 JESSE NEE: So my question is, I just want to know

1 how Nuiqsut and Utqiagvik or -- what their stance on this  
2 project is. Are they in support of it? I'm assuming they  
3 are, or you wouldn't even be here talking about it.

4 KRISTEN HANSEN: So the Native Village of Nuiqsut is  
5 one of the cooperating agencies on this EIS. I would say they  
6 haven't come out in support or against the project, but  
7 they're working with us and definitely have been  
8 participating in all of our meetings, trying to convey what  
9 their concerns are, you know, how those concerns could,  
10 potentially, be addressed. So they are part of the process.

11 And Barrow -- I'm not going to try to pronounce  
12 their new name; I apologize. But that community, as well, has  
13 been involved and has provided input, and the North Slope  
14 Borough has also been heavily involved in the EIS development.

15 JESSE NEE: Okay. Well, I'm (indiscernible - away  
16 from mic) craftsman and welder and I spent a lot of time up  
17 there over the last 15 years or so. And, I mean, this is just  
18 my opinion, but I can attest that the animals, the caribou,  
19 you know, the wolves, the fox, they all get acclimated to the  
20 facilities and pipelines.

21 I spend a lot of time in the woods, you know,  
22 hunting, photographing, and I take a lot of my -- my best  
23 pictures up there because, I mean, that's -- the animals, they  
24 get acclimated. I see them under the mods, you know, CPF  
25 facility; caribous are in there milling around.

1           So I think that they're not -- I've never seen them  
2 like get scared off by that. You know, they -- when they're  
3 young, they spend time around them. They get acclimated.  
4 They come back every year. So I just wanted to put that out  
5 there, from my opinion, you know. I got a lot of respect for  
6 the people in Nuiqsut. I stayed there and worked there.

7           But, you know, I was born and raised here, hunting  
8 here my whole life. I mean, all the food I get comes out of  
9 the woods for my meat, anyway. So -- I mean, last year, I put  
10 on 640 miles on my snowmachine before I got a moose, so I'm  
11 not going to let a two-mile buffer zone, you know, keep me  
12 from getting my groceries. So I just wanted to put that out  
13 there.

14           KRISTEN HANSEN: Great, thank you for your comments.

15           JESSE NEE: All right.

16           DONNA BRADY ROBERTSON: Donna Brady Robertson. My  
17 interest is in the five alternatives. If the developer,  
18 Armstrong, has looked at -- did they provide input for those  
19 alternatives and have they looked at the costs and the  
20 schedule impact on these different alternatives? And have  
21 they -- is that anywhere in the data that we seen?

22           KRISTEN HANSEN: Yes, the applicant has been  
23 involved in at least some of the meetings that we've had in  
24 developing the alternatives. As Ellen mentioned, the actual  
25 development of the alternatives was based on information

1 provided to the Corps and the EIS team at the beginning of the  
2 project. Much of that was developed by the applicant before  
3 the EIS process even started.

4 But our third-party, you know, EIS team and the  
5 Corps and the cooperating agencies took a hard look at  
6 everything that was provided, whether additional alternatives  
7 should be looked at, as well, as part of the EIS, kind of made  
8 some refinements to the alternatives that the applicant had  
9 previously looked at, and then considered all the screening  
10 criteria that Ellen described.

11 And I would say alternative 5 was a new alternative,  
12 kind of a refinement of the previous alternatives looked at by  
13 the applicant, and that was included in the EIS analysis.  
14 But, yes, they're aware of all of the alternatives that are  
15 being considered in this EIS, and I believe they're doing  
16 their own design and, you know, engineering analysis. And I  
17 think Armstrong would like to respond on that, as well.

18 PATRICK CONWAY: My name is Patrick Conway with  
19 Armstrong. And one of the questions you asked was schedule.  
20 Alternative 3, so from a cost standpoint, a capital cost  
21 standpoint, the alternatives are relatively comparable. But  
22 alternative 3 would take an additional year to construct, just  
23 to answer that part of the question.

24 KRISTEN HANSEN: That's, yeah, a good point. Thank  
25 you. Did that answer your question?

1 DONNA BRADY ROBERTSON: It does.

2 BOB HUBBARD: Hi, I'm Bob Hubbard with the  
3 Pipefitters. If the stars were aligned and the permits were  
4 going to be issued, what timeline are we looking at; I mean,  
5 best case scenario for a project like this? And then what  
6 would it be at the three year build-out?

7 KRISTEN HANSEN: I guess I -- we could -- yeah,  
8 Ellen could start off with --

9 PATRICK CONWAY: Go ahead.

10 ELLEN LYONS: No, I -- go ahead. You an -- you have  
11 that.

12 PATRICK CONWAY: This is Patrick Conway, again. So  
13 it's a four to five-year build-out on each of them. Again,  
14 alternative 3 takes a little bit longer. And so there's some  
15 overlap between the way we look at the project, just sort of  
16 construction and then drilling, and then operations.

17 And so there's overlap between construction and  
18 drilling at about year three. And then operations would begin  
19 in about year four, and construction would be completed and we  
20 can have just sort of full operational mode by year five.

21 JOY HUNTINGTON: So for folks that are just walking  
22 in, we have gone through five different alternatives. And we  
23 are now taking public comment and questions, so just to kind  
24 of acclimate people that are just arriving. Welcome.

25 JIM: Jim (indiscernible - away from mic).

1 Alternative 5 looks like most direct route. Is it comparable  
2 to the others with lesser foot print, also, of the area --

3 ELLEN LYONS: Alter --

4 JIM: -- compared to the other alternatives?

5 ELLEN LYONS: Alternative 5 does result in the  
6 smallest foot print for all of the alternatives, yes.

7 JIM: Thank you.

8 SHAWN LOWRY: Shawn Lowry for the Operating  
9 Engineers. My question is more towards Armstrong. Is there  
10 potential for future expansion off of this -- off this area?  
11 So, right now, you're looking at three -- three pads, a  
12 central processing facility. And so the question is, is there  
13 potential for more development in this area?

14 PATRICK CONWAY: Okay. So this Patrick Conway,  
15 again, with Armstrong. And so we're continuing to explore.  
16 So Armstrong has control of around 750,000 acres that we have  
17 leased on the North Slope. We have a development unit called  
18 the Pikka unit, which is where this project would occur.

19 And this development would really focus on the  
20 southern portion of the Pikka unit. And so sort of moving  
21 into the future, we continue to explore. We're planning to  
22 drill a well this winter. That well will really be focused on  
23 this development. We drilled a well last year. That was to  
24 the south. That was not in unitized -- on unitized leases.  
25 You know, but we are continuing to look and hope that there

1 would be future projects, but there are none planned at this  
2 time.

3 JESSE NEE: Are you leasing this land from ASRC or  
4 is it from the State of Alaska (indiscernible - away from  
5 mic)?

6 PATRICK CONWAY: The question, again, was from I  
7 think Jesse. And, again, this is Patrick Conway. And the  
8 leases are a mix. So of all the leases we have, we do have  
9 some federal leases in the National Petroleum Reserve, a very  
10 small amount, proportionally. We have some leases with the  
11 State of Alaska, and then there are some that are a mix. The  
12 development project is -- Cindy, correct me if I'm wrong --  
13 but I think it's entirely in leases that are a mix of state  
14 and ASRC subsurface.

15 JOY HUNTINGTON: I know -- so I know not everybody  
16 likes a microphone and likes to speak in front of a group of  
17 people, so if there's not a lot of -- more, you know, public  
18 statements that are going to be made or questions -- we'll  
19 give it a few more minutes.

20 I'm sure the folks -- we do have some extra time, so  
21 I think if folks want to come up and look at the maps and  
22 maybe ask questions directly to Kristen with DOWL -- she's our  
23 project manager with DOWL -- or Ellen or any of us, I'm sure  
24 we'd be available and happy to answer those or talk one on one  
25 with you; I'm sure possibly the applicant, as well.

1           So -- but I'll give a few more chances for anyone  
2 that would like to make some comments for the record this  
3 evening before we turn the microphones off.

4           JESSE NEE: I'll go one more time. Yeah, my name is  
5 Jesse Nee. I'm a lifelong Alaskan, born and raised here. And  
6 I just want to say -- just speaking out for myself here, but I  
7 support Armstrong, and I just wanted to put that on the  
8 record.

9           And I think, you know, Alaska needs this and the  
10 workforce, you know. We all need this for Alaska to move  
11 forward and to help the economy. And (indiscernible - away  
12 from mic) and I think that we can do it in a responsible way.

13           You know, I mean, I'm -- live a subsistence  
14 lifestyle, but I still make my living, you know, from the oil  
15 fields, so I know it can be done safely. And I've worked with  
16 lot of people over the years from all over the world, and they  
17 say Alaska has the cleanest oil pads they've ever seen, and,  
18 you know, I know we can keep it that way in the future,  
19 so that's all I got to say.

20           ELLEN LYONS: Thank you for your comment. Does  
21 anybody else have any comments or questions?

22           MARISA SHARRAH: Thanks for opening the door, Jesse.  
23 My name is Marisa Sharrah, and I'm from the Greater Fairbanks  
24 Chamber of Commerce. And I did have a statement prepared for  
25 the record this evening. This wasn't exactly the format I was

1 expecting, but I'm going to go ahead and go, because Jesse  
2 started it.

3           So the Fairbanks Chamber is a business advocacy  
4 organization that represents over 700 local and statewide  
5 businesses that rely on economic opportunities to support a  
6 strong and stable business environment.

7           We do that by advocating for the programs and policy  
8 that will create a pro-business environment that encourages  
9 private sector investment and job creation. The oil and gas  
10 industry plays a critical role in the economic health of our  
11 entire state.

12           Additional production will translate into increased  
13 revenue for the State of Alaska in the form of royalties, and  
14 will increase the life span and efficiency of the Trans-Alaska  
15 Pipeline system.

16           New activity on the North Slope will translate into  
17 positive economic impacts in Fairbanks, as the support  
18 industry begins to spend more through the ramp-up and  
19 execution phases of this project.

20           The increases in activity that bring -- will bring  
21 back hundreds of jobs needed -- needed jobs for Alaskans  
22 looking to return to slope work, for our craft laborers, and  
23 for companies like Alaska Pipeline Service Company and  
24 Flowline Alaska. Growth in our oil and gas industry will  
25 create hundreds, if not thousands, of direct, indirect and

1 (indiscernible) jobs while offsetting the negative impacts of  
2 the recent annual declines in oil production.

3 This kind of project is exactly what our community  
4 and our state needs to start an economic recovery. The  
5 Fairbanks Chamber believes in responsible development and  
6 management of Alaska's natural resources that is critical to  
7 supporting a growing economy and improved quality of life for  
8 all Alaskans.

9 We encourage pursuing the development and balanced  
10 management of Alaska's natural resources, while protecting  
11 Alaska for future generations. Our North Slope producers have  
12 demonstrated excellent environmental and safety records, and  
13 this project builds on more than 30 years of proven technology  
14 and safe operation in the shallow waters of Alaska.

15 The Chamber will be providing more detailed comments  
16 in writing before the comment period closes, but we appreciate  
17 this opportunity to provide comments at today's hearing.  
18 Thank you.

19 ELLEN LYONS: Thank you very much. So is there  
20 anyone else in the room that would like to make any additional  
21 comments or have any questions? Okay, great.

22 SHAWN LOWRY: Once again, this is Shawn Lowry, the  
23 business representative for the Operating Engineers Union. I'd  
24 like to personally, as well as for the Local, support the  
25 second alternative. I believe there's a reason that they came

1 out with -- that Armstrong came out with that design.

2 The research that I've done shows that all of the --  
3 all of them are very comparable. The minor changes to the  
4 different proposed alternatives are really negligible. I  
5 strongly urge that we move this process forward as quickly as  
6 possible to, once again, bring a viable energy product online  
7 that will provide, not only value to the State of Alaska, but  
8 not only to the work force, but also to the village of  
9 Nuiqsut, as well.

10 ELLEN LYONS: Thank you.

11 JOY HUNTINGTON: All right. Well, I don't see  
12 anybody else. Oh, we have one more person.

13 JAMES MCMILON: Just one more?

14 JOY HUNTINGTON: Yeah, (indiscernible) one more.

15 JAMES MCMILON: I'm James McMilon with the  
16 Teamsters. I've worked on the North Slope for over 10 years.  
17 I've been a business representative for six. I've been out to  
18 multiple of Armstrong/Repsol's projects on the North Slope and  
19 have been very pleased (indiscernible - away from mic) with  
20 the way they have done their business.

21 I'm very -- not only with the Teamsters, you know,  
22 representing them, but myself, like Shawn. I feel very  
23 strongly about this project in a positive way. And I'd like  
24 to see it move forward.

25 I'm in favor of the second alternative; it's the

1 best one. And I look forward to seeing this project get  
2 underway. It really is huge, if you look at it, with \$5  
3 million in investment and the jobs that means on the North  
4 Slope.

5 But also, you know, the money it's going to create  
6 for tax revenue for schools in the State of Alaska for  
7 (indiscernible - away from mic) for, you know, across the  
8 (indiscernible - away from mic) money is cycled. Very excited  
9 about it. It's the next big project on the North Slope, and  
10 certainly don't want to see it slow down. Thanks.

11 UNIDENTIFIED SPEAKER: (Indiscernible - away from  
12 mic).

13 MR. CLEVELAND: Hi, (indiscernible - away from mic)  
14 Cleveland (indiscernible - away from mic) out here in  
15 Fairbanks. With all the (indiscernible - away from mic)  
16 expansion that's going on in that area out there  
17 (indiscernible - away from mic) last couple of years, has  
18 there been any consideration given to running a direct line,  
19 instead of going (indiscernible - away from mic) going  
20 straight into Deadhorse Pump 1 (indiscernible - away from  
21 mic)?

22 ELLEN LYONS: I'm going to let --

23 PATRICK CONWAY: Yeah, sure. This is Patrick with  
24 Armstrong. Just a clarifying question for you, running a  
25 pipeline straight all the way back to Pump 1?

1 MR. CLEVELAND: Yeah, instead of going into Kuparuk  
2 (indiscernible - away from mic) going out there eventually  
3 (indiscernible - away from mic) everywhere else up there that  
4 we, you know (indiscernible - away from mic).

5 PATRICK CONWAY: Sure.

6 MR. CLEVELAND: -- and then running a line straight  
7 out there. I'm curious of what the economic consideration of  
8 that versus going into Kuparuk?

9 PATRICK CONWAY: I got to tell you, we haven't  
10 looked at that, specifically, because, at this time, we don't  
11 necessarily see a need. Where we would see declining  
12 throughput coming out of some of the existing more legacy  
13 fields, sales oil is -- we don't see that necessarily  
14 increasing in the Kuparuk pipeline during the life of the  
15 project right now.

16 MR. CLEVELAND: (Indiscernible - away from mic)  
17 you're overloading that system (indiscernible - away from  
18 mic).

19 PATRICK CONWAY: That's correct. That's correct.

20 MR. CLEVELAND: (Indiscernible - away from mic).

21 ELLEN LYONS: Thank you.

22 JOY HUNTINGTON: We're going to try to go off this  
23 one mic, because the other one wasn't connected to our  
24 recording system, so we're going to jump around with this one.  
25 Do you have any further statements, questions? Just when I'm

1 about to close it, then about five more people get excited to  
2 go.

3 UNIDENTIFIED SPEAKER: Jesse?

4 (General laughter).

5 JOY HUNTINGTON: I think this row up here is going  
6 to throw out a few more right when I'm about to quit. Well,  
7 if we're -- oh --

8 MARYELLEN TUTTELL: They can also talk to you  
9 directly, right, if they want to record something?

10 COURT REPORTER: Yeah.

11 JOY HUNTINGTON: Yeah, so if you would like to  
12 record something directly without the big audience, and just  
13 have it formally taken into account as official input, you are  
14 welcome to come up and record something directly with Marci.  
15 And, of course, we'll be available for questions, any  
16 statements as we close?

17 ELLEN LYONS: Okay, one last chance here? I thought  
18 I saw a hand over there, but maybe I'm wrong. So I really  
19 just want to thank everyone for coming out and expressing  
20 interest in the Nanushuk project. Your input is a vital part  
21 of our process and our permit decision process. So just thank  
22 you very much, and I hope you guys have a great evening.

23 (Comment made directly to court reporter)

24 LOA CAROL HUBBARD: My name is Loa Carol Hubbard  
25 and --

1 COURT REPORTER: Can you spell your first name?

2 LOA CAROL HUBBARD: -- L-o-a Hubbard, and I'm an  
3 Allstate agent here in Fairbanks. And as a small business  
4 owner, I just want to express my support for the project. I  
5 think it's important to get Alaskans back to work, and I think  
6 that the local people and the Native population need more  
7 jobs, and this is the perfect way for us have more jobs and to  
8 have more revenue in Alaska.

9 COURT REPORTER: Thank you.

10 (Off record)

11 (End of Proceedings)

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TRANSCRIBER'S CERTIFICATE

I, Marci Lynch, hereby certify that the foregoing pages numbered 1 through 50 are a true, accurate, and complete transcript of the Nanushuk Project Draft EIS Meeting held in Fairbanks, Alaska, October 3, 2017, transcribed by me from a copy of the electronic sound recording to the best of my knowledge and ability.

October 18, 2017

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