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DONLIN GOLD PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT
PUBLIC MEETING

CROOKED CREEK, ALASKA

Taken January 21, 2016
Commencing at 6:18 p.m.

Volume I - Pages 1 - 58, inclusive

Taken at
Crooked Creek Tribal Council Office
Crooked Creek, Alaska

Reported by:
Mary A. Vavrik, RMR

Page 2

1 A-P-P-E-A-R-A-N-C-E-S

2 For U.S. Army Corps of Engineers:

3 Keith Gordon

4 Project Manager

5 For U.S. Bureau of Land Management:

6 Alan Bittner

7 Anchorage Field Office Manager

8 Bruce Seppi

9 Wildlife Biologist

10 For U.S. Environmental Protection Agency:

11 Mark Jen

12 Project Manager

13 For Alaska Department of Natural Resources:

14 Cathe Heroy

15 State Pipeline Coordinator's Office

16 For AECOM:

17 Taylor Brelsford

18 NEPA Advisor

19 Nancy Darigo

20 Physical Science Lead

21 David Every

22 Biological Science Lead

23 Donne Fleagle

24 Senior Rural Outreach Lead

25 Jon Isaacs

 Principal in Charge

 Joan Kluwe

 Social Science Lead

 Cecil Urlich

 Mining Engineer

Page 4

1 P-R-O-C-E-E-D-I-N-G-S

2 **MR. KEITH GORDON:** Good evening. Thank

3 you all for coming. My name is Keith Gordon. I'm a

4 project manager with the United States Army Corps of

5 Engineers Alaska District. I'm the Corps project manager

6 for the proposed Donlin project. We're here tonight to

7 give you a little information on how you can give us

8 substantive comments on the Draft Environmental Impact

9 Statement.

10 As I think you are aware, the Corps of Engineers is

11 the lead federal agency for the development of the

12 Environmental Impact Statement. We are neither a

13 proponent for the proposed project nor an opponent of it.

14 Our role is to do middle-of-the-road analyses of the

15 potential impacts of the project to give you information

16 on the effects the project might have, positive and

17 negative, and to give you an avenue to comment to us, and

18 then give the information to the various decisionmakers so

19 they can make more informed decisions regarding the

20 project as it's proposed.

21 As you are aware, the mine site is proposed to be

22 constructed in part on Calista and TKC lands, the pipeline

23 in part on CIRI lands. Donlin, as you are aware, is a

24 component of both Barrick and NOVAGOLD.

25 And a little bit about the agenda this evening. As I

Page 3

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2 Taken by:

3 Mary A. Vavrik, RMR

4

5 BE IT KNOWN that the aforementioned proceedings were taken

6 at the time and place duly noted on the title page, before

7 Mary A. Vavrik, Registered Merit Reporter and Notary

8 Public within and for the State of Alaska.

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Page 5

1 mentioned, the purpose of the evening is just to tell you

2 how you can comment to us so we can most effectively use

3 your comments in the analyses and make sure we are

4 providing you the information you need related to the

5 proposed project.

6 There will be a brief opening presentation where I'll

7 go through the process that we have gone through and where

8 we are at, a poster session comprised of these dozen

9 posters you see around the room after this brief

10 presentation so you all will have a chance to review the

11 posters and talk to the various folks that have come with

12 us. And they'll be introduced just before the poster

13 session to define potential impacts of the project and

14 give you a little bit more information.

15 Following that, we will reconvene. And Mary, our

16 court reporter, will take your comments that will be a

17 component of the analyses that we use to go from a draft

18 EIS to a final EIS, after which the Bureau of Land

19 Management will conduct an 810 ANILCA subsistence hearing.

20 And briefly Mr. Alan Bittner with BLM will give you an

21 idea of the intent of the ANILCA hearing.

22 **MR. ALAN BITTNER:** My name is Alan

23 Bittner, the Anchorage field manager for the Bureau of

24 Land Management, and we will be conducting ANILCA 810(a)

25 hearing. Bruce Seppi is with me, our subsistence

Page 6

1 biologist, and he wrote a subsistence analysis under
 2 ANILCA, and he will be presenting that independently. It
 3 will take about 15 minutes to present that, and then we
 4 will open up an official hearing and take your comments
 5 related to subsistence for a few minutes at the end of
 6 this meeting today. Thanks.

7 **MR. KEITH GORDON:** All right. Thank you,
 8 Alan. Moving on, we will very briefly take a look at the
 9 proposed project. Donlin is proposing, as you can see on
 10 the slide, the construction of a 2.2 square mile open pit
 11 gold mine depicted by No. 1 on the screen. No. 2 is the
 12 tailings storage facility, approximately a 3.5 square mile
 13 facility that would hold the crushed rock. In other
 14 words, all the ore that goes through the mill would be
 15 crushed, and anything remaining that is not gold goes into
 16 the tailings storage facility which is impounded behind
 17 this dam in this valley.

18 The third primary component of the mine site is the
 19 waste rock facility, another 3.5 square mile pile of rock,
 20 basically. That's the overburden, the stuff that doesn't
 21 have enough gold in it to be considered ore, stuff that
 22 has to be removed to get to the ore. That's where they
 23 are proposing to put it. And of course, there is the mill
 24 site and a variety of other facilities, stockpiles of
 25 organic material and soil that would be used in

Page 7

1 reclamation, et cetera.

2 The second primary component of the project is the
 3 transportation infrastructure related to it. This pink
 4 and red blob is the proposed mine site. Connected to that
 5 is a proposed 30-mile road that runs down to a new port
 6 that is proposed to be constructed at Jungjuk. This is
 7 where cargo and fuel would be barged to operate the
 8 facility. There is also a 5,000-foot airstrip proposed to
 9 service the facility. And the facility is expected to use
 10 approximately 40 million gallons of diesel fuel a year to
 11 power the mining equipment.

12 There would also be an expansion of an existing port
 13 facility at Bethel based on what they are currently
 14 proposing.

15 The third primary component is actually the fuel
 16 supply to the mine site itself. What they are proposing
 17 to do is build a 315-mile long, 14-inch diameter steel
 18 buried pipeline running from the western side of Cook
 19 Inlet through the Alaska Range over to the mine site as
 20 the primary fuel supply. We will talk about potential
 21 alternatives to that fuel supply, the pipeline route,
 22 et cetera, in a few minutes.

23 One of the other things we are going to talk about is
 24 alternatives to their proposed project and ways the
 25 proposed project might be mitigated; in other words,

Page 8

1 methods by which we might limit impacts of what they are
 2 proposing.

3 What you can see on this screen are half a dozen gold
 4 stars. Those half a dozen gold stars represent areas
 5 where the pipeline might cross one of the six major
 6 salmon-bearing rivers in the area. What Donlin is
 7 proposing to do to mitigate those impacts is to actually
 8 horizontally directionally drill underneath the river
 9 instead of trenching through it. And that's depicted on
 10 one of the photos over here, one of the posters. And you
 11 can get a little more information on that in a few minutes
 12 during the poster session.

13 The project, if constructed, would be constructed in
 14 three phases. The first phase is construction, taking
 15 approximately three to four years; operations and
 16 maintenance, approximately 27 and a half years. Closure
 17 does not start at the last day mining is done. Closure
 18 actually starts before mining is finished. When they have
 19 facilities that they have used to the extent they need to
 20 use them and they don't have a further use for them, they
 21 begin reclamation. So some of the reclamation begins
 22 early in the project life. Some of it doesn't happen
 23 until near the end. And some of it doesn't actually
 24 happen until mining does cease.

25 After closure, there would be monitoring and water

Page 9

1 treatment. There is monitoring that will actually take
 2 place from the time -- actually before the project was
 3 even initiated. As soon as they knew they could begin the
 4 project, they start doing some formal monitoring that
 5 would go on for the life of the project and substantially
 6 after the life of the project.

7 Very briefly, this is just a process slide for the
 8 process that we are going through. Because the project
 9 was expected to have potentially significant human and
 10 environmental impacts, the Army Corps of Engineers in 2012
 11 put a Notice of Intent in the Federal Register indicating
 12 that by NEPA regulations we needed to prepare an
 13 Environmental Impact Statement, which we did.

14 After that you all participated in some of the
 15 scoping meetings that took place between December of 2012
 16 and March of 2013. Since then we have generated a Draft
 17 Environmental Impact Statement. That impact statement is
 18 available through your tribal offices or through our
 19 website. It is here in the community and it's available
 20 for you all to review. And that's what we are asking for
 21 your comment on.

22 Obviously, the step of the process we are at tonight,
 23 we are here to listen to you to hear your comments and
 24 give you any additional information we can so you can
 25 continue to review and comment on the project.

Page 10

1 Once we reach the end of the comment period on April
 2 30, 2016, we will then move into preparation of the Final
 3 Environmental Impact Statement. That will include
 4 reviewing all the comments, determining if there is
 5 additional data gaps that we need to fill, if there is
 6 additional alternatives we need to look at or look at
 7 again, combine in different ways, if there is additional
 8 studies that need to be done, additional field work,
 9 et cetera.

10 After the Final Environmental Impact Statement is
 11 generated and produced and available for you all to
 12 review, the various federal agencies that need to issue
 13 Records of Decisions would generate their Record of
 14 Decision. That simply documents what an individual
 15 federal agency decides to do in relation to the project
 16 and makes that information available to the public. And
 17 then individual agencies, if they were permitting the
 18 project, would issue their permits for the project that's
 19 proposed, some alternative to the project, or indicating
 20 that the project could not be permitted.

21 The whole point of this is the draft EIS is draft.
 22 The analyses is draft. The conclusions in it are draft,
 23 et cetera. No final decisions have been reached in
 24 relation to the proposed project.

25 What you can see on the screen is a depiction of the

Page 11

1 primary focus of Chapter 1 of the document. Chapter 1 of
 2 the document leans heavily toward defining the overall
 3 purpose and need for the project. The Corps of Engineers,
 4 it is our responsibility, based on our regulations in
 5 relation to NEPA, to define the purpose for the project,
 6 which you can see on the screen.

7 I point this out because in the Draft Environmental
 8 Impact Statement that went out, we have half a sentence
 9 added to the last of this paragraph which notes that we
 10 are considering individual entities' economic concerns
 11 very specifically in relation to this analyses. We can't
 12 actually do that. That was intended to be removed. It
 13 didn't get removed before the document went out.

14 The economics of this project are extremely
 15 important. They are important to you all. They are
 16 important to the region. They are important to the State,
 17 et cetera. They are important to Donlin. They are
 18 important to their shareholders. We are aware that there
 19 is an economic component of our analysis, but because we
 20 are neither a proponent for the project nor an opponent of
 21 the project, because we have to do a middle-of-the-road
 22 public interest review, we can't weight any individual
 23 entity's economics so heavily that it takes our analyses
 24 in a direction that isn't considered a middle-of-the-road
 25 analysis.

Page 12

1 The alternatives process, once we fill the data gaps,
 2 once we develop the baseline information and have looked
 3 at what an applicant is proposing -- in this case
 4 Donlin -- we then start looking at development of
 5 alternatives to the project. The whole purpose for
 6 developing alternatives is to figure out ways the project
 7 might be constructed, but with less impact.

8 We have over 300 options that could have been
 9 combined into alternatives. What we currently have are
 10 seven alternatives that were carried forward for detailed
 11 analysis in the Draft Environmental Impact Statement.

12 Very briefly, because we will talk about them again
 13 in a minute, the no-action alternative is required by
 14 NEPA. That is the alternative we compare the proposed
 15 action and all the other alternatives against. The no
 16 action is we don't do anything. So we compare all the
 17 alternatives to the baseline condition, what currently
 18 exists out here, so our analyses considers the environment
 19 as it currently exists before anything is done.

20 Alternative 2 we already discussed. That's Donlin's
 21 proposed alternative. Alternative 3A, the LNG-powered
 22 haul truck alternative is exactly what it sounds like.
 23 The haul trucks at the mine site would be powered by
 24 liquid natural gas instead of diesel; therefore, there
 25 would be less diesel needing to be barged to the mine

Page 13

1 site, less diesel burned at the mine site. So less impact
 2 from barging, less impact from burning diesel.

3 Diesel pipeline alternative just means instead of a
 4 natural gas pipeline supplying power to the project,
 5 diesel would be supplied to the project and the project
 6 would primarily operate off of diesel. Therefore, more
 7 diesel consumption, more diesel burned, but it's not
 8 barged. It's run through a pipeline. So it modifies the
 9 impacts over what Donlin has proposed.

10 Birch Tree Crossing port alternative just means
 11 instead of building a port at Jungjuk, as Donlin is
 12 proposing, it's built about 69 river miles downstream at
 13 Birch Tree Crossing, therefore eliminating the vast
 14 majority of all barging past Birch Tree Crossing,
 15 therefore eliminating five points on the river where there
 16 seems to be a potential for stranding of barges.

17 So Alternatives 3A, 3B and 4 are all designed to
 18 limit impacts primarily relating to barging or diesel
 19 consumption.

20 Alternative 5A is the dry stack alternative. That's
 21 an alternative that modifies how the tailings are dealt
 22 with. And Alternative 6A was the Dalzell Gorge pipeline
 23 route alternative. We looked at a number of potential
 24 pipeline route options to minimize impacts, and the
 25 Dalzell Gorge route is the one that survived.

Page 14

1 As I mentioned, Alternative 1 is a no-action
2 alternative and is what we are using as a baseline to
3 compare the other alternatives against. We already talked
4 about Alternative 2. So briefly Alternative 3A, the LNG
5 haul truck alternative, is primarily a method by which we
6 can reduce impacts from barging diesel, as well as
7 consumption of diesel.
8 And if I'm going through these kind of fast, we have
9 all of these available for you, not only on our website,
10 but we have a hard copy back here. So if I'm going a
11 little bit too fast through these, you will have all of
12 these available so you can look at and ask us any comments
13 this evening or later.
14 Alternative 3B, the diesel pipeline alternative,
15 again, the mine site operates off of diesel, but we
16 eliminate the vast majority of all barging related to fuel
17 during the operations phase.
18 Alternative 4, Birch Tree Crossing port, again, we
19 are reducing the impacts of barging quite substantially.
20 It's important to note under Alternative 4 that this does
21 not reduce the number of barge trips on the Kuskokwim
22 River. It reduces where they go. In other words, they go
23 from Bethel to Birch Tree Crossing. There is very little
24 barging above Birch Tree Crossing as a result of that
25 alternative. This is just a depiction of Alternative 4,

Page 15

1 the proposed mine site, the proposed road to the proposed
2 Jungjuk port versus the route all the way down to Birch
3 Tree Crossing. So we are a good bit south of Aniak on the
4 river at that alternative, were it to be selected.
5 Alternative 5A, the dry stack tailings methodology,
6 currently the tailings, the ground up rock that's left
7 over after the ore is processed, as you saw, it is placed
8 in that valley. Well, this alternative means that the
9 water that's in that -- those tailings is primarily
10 removed before they are put in the valley. And I'll show
11 you a depiction in a minute what that might mean.
12 Placing tailings in this methodology -- this
13 methodology has a little more impact in relation to dust.
14 You saw the original slide of what Donlin is proposing
15 where this area is largely filled with tailings? Well, in
16 this case tailings are stacked to a much higher level;
17 therefore, during the operations phase, there is potential
18 for more wind erosion and more dust related to it, and
19 there is an operating pond downstream of it. But this
20 alternative also has benefits when compared to Donlin's
21 alternatives.
22 So the whole point of running through all these
23 alternatives is to talk about -- give you an idea that we
24 are weighing and balancing various options in an effort to
25 limit impacts to the proposed project. And we would like

Page 16

1 your input on whether or not we weighed and balanced
2 enough and how we have done it.
3 Alternative 6A is the Dalzell Gorge pipeline route.
4 This alternative route is approximately two miles shorter.
5 So as a tradeoff, we have -- the purple route is the
6 Dalzell Gorge route. The gold route is Donlin's proposed
7 route. Tradeoffs here are the pipeline is shorter if we
8 went through Dalzell Gorge, but we're also going through
9 an area that has less human impact currently than Donlin's
10 proposed route. So again, more tradeoffs in one
11 alternative versus another.
12 There are approximately -- not approximately. There
13 are 26 resource issues that are considered primary issues
14 to analyze in the EIS. And we need to know if there is
15 any others that we have missed. But when we are -- by way
16 of giving you an example of what we have looked at when we
17 talk about barge traffic, barge traffic, to our
18 understanding, would impact 14 of these primary resource
19 issues, and these are the 14 that it impacts.
20 So to give you an example, some of the analyses that
21 was done -- but before we go to that, on this slide, this
22 is just a depiction of barge traffic and a little bit of
23 information on barging that currently exists versus
24 barging that might happen if Donlin's proposed project
25 went forward. The burnt gold on the bottom of this slide

Page 17

1 is a depiction of existing barging as it currently occurs.
2 So as we understand it -- and this is broken out into
3 the construction phase of the project versus the
4 operations phase of the project. As we understand it,
5 between Bethel -- from Bethel upstream, there are
6 approximately 68 barge trips that take place annually.
7 That does not mean 68 barges come all the way up to
8 Crooked Creek. It just means there is 68 barges that
9 leave Bethel, and those barges typically consist of a tug
10 pushing a single barge. So the gold is what currently
11 exists, the burnt gold or orange or whatever.
12 During construction under any of the alternatives
13 being considered, the barge traffic, there is the same
14 increase in quantity over what -- in relation to any other
15 alternative. If we look at the operational phase of the
16 project as it's proposed in the alternatives we looked at,
17 Alternatives 2, 4, 5A and 6 all have the same amount of
18 barge traffic related to them. Alternative 3A, the LNG
19 truck alternative, because there is less diesel needed,
20 therefore, there is less barging because there is less
21 diesel to barge.
22 Alternative 3B, the diesel pipeline, the diesel is
23 going through the pipeline. So effectively, the only
24 thing you have during operations is cargo being barged up
25 the river. Alternative 4, one of the things to keep in

Page 18

1 mind here is that while the number of trips are the same
2 in relation to the Birch Tree Crossing alternative versus
3 what Donlin is proposing, if we go with the Birch Tree
4 Crossing alternative, as I mentioned, there is very little
5 barging above Birch Tree Crossing.
6 A very quick look at what we did by way of the
7 analyses in relation to barges, in relation to fish. As
8 you are aware, a barge going by can change fish behavior.
9 It can impact fish habitat. It can cause injury or
10 mortality to fish. The draft analyses and the draft
11 conclusions at this mine -- and they are draft --
12 indicates that Alternative 2 might have a moderate impact
13 on fish with a greater impact in shallow areas or narrow
14 segments of the river.
15 And as we have already discussed, Alternatives 3A and
16 3B, because they have less barging, have less impact on
17 fish, fish habitat, et cetera. The same thing applies to
18 subsistence, recreation, et cetera. And again,
19 Alternative 4, the impacts are the same, but the impacts
20 are the same south of Birch Tree Crossing.
21 This gives you a little bit of the same breakdown of
22 analyses.
23 Okay. That was Chapters 1, 2, and 3 of the
24 proposed -- of the draft EIS. Chapters 4 and 5, the last
25 two chapters that have really substantial information you

Page 19

1 might want to review. Chapter 4 is cumulative impacts.
2 Cumulative impacts are a combination of past, present and
3 reasonably foreseeable future actions that might affect
4 the area in which you live. So we are looking at all the
5 past activities that have taken place, what's currently
6 going on and what we think will happen in the future and
7 combining that and making a forecast of what we think the
8 project's effects might be in the future. And we need
9 your input as to whether or not we have adequately
10 captured it and adequately analyzed it.
11 Mitigation, as I mentioned, is a way of limiting,
12 minimizing, reducing potential impacts of projects, and
13 Chapter 5 is a substantial list of mitigated measures that
14 have been considered, whether it was in the design of the
15 project Donlin did, the alternatives that have been looked
16 at, and the analyses that has been done.
17 Momentarily we will move into the poster session.
18 And the poster session will take about as long as you all
19 want to take. We are here to give you a chance to look at
20 this information and get comments back from you. You can
21 see of the 12 posters on the slide, they are project
22 components posters. The three of those are the ones that
23 give you the layout of the mine, what's proposed and how
24 it would operate. And then there is nine posters on the
25 primary resource issues that were considered in the

Page 20

1 analysis thus far.
2 The whole point of this evening is this slide,
3 basically. We need substantive comments from you all to
4 know whether we have adequately defined the baseline
5 condition as it exists out here, whether we have done an
6 adequate analyses to date and adequately characterized the
7 potential impacts of the project. So what we need from
8 you all is substantive comments that we can use when we
9 review what we have done to date and tell us whether we
10 are on track or not.
11 A substantive comment -- if somebody tells me they
12 don't like the project or they do like the project, well,
13 that's good, but I can't really use that in the analysis
14 related to the EIS because NEPA is not a voting process.
15 What we are looking for are comments that tell us whether
16 we are adequately analyzing the project and the effects on
17 the people and the natural resources in a region.
18 So therefore, if someone tells me I don't like the
19 project because you have incorrectly characterized the
20 impacts to this fish species and how important it is to us
21 in relation to subsistence and sharing, that's something
22 we can go back and look at, the baseline information we
23 had, the socioeconomics we did to determine how things are
24 utilized, the subsistence information, et cetera. So the
25 more specific you all can be with your comments in

Page 21

1 relation to what we have produced thus far, the better off
2 we will be by being able to respond effectively to your
3 comments and get you what you need.
4 Commenting on the draft EIS, this is just avenues by
5 which you can get me information. And again, this
6 information is available on the table out front in a
7 couple of forms. You can submit written comments. You
8 can mail comments to me at this address, or fax comments
9 to that number. Of course, the website is another
10 mechanism by which you can comment.
11 Obviously, you all are attending the second meeting.
12 These are the remaining meetings for the Draft
13 Environmental Impact Statement. And you are welcome to
14 attend as many of these meetings as you want. If you have
15 comments you want to make here, others can make the same
16 comments later. We need to know what's important to you
17 all and how are we doing so far in relation to disclosing
18 potential impacts of the project in our analyses.
19 Again, this is a little more information on how you
20 can get additional information on the project. You can
21 see our website up here. It's got the Draft Environmental
22 Impact Statement on it under the EIS documents tab and
23 then the various newsletters, background documents. My
24 contact information is at the bottom of the screen. And
25 if you have matters you specifically want to address,

Page 22

1 Ms. Amanda Andraschko, our tribal liaison, her information
2 is there, as well.
3 That's about it for the slide presentation. Unless
4 you all have any comments or questions you want to make at
5 this point in time, we will move into the poster session.
6 And then when that's done after you take a look at the
7 posters, we will come back. Mary will take your comments
8 on the draft EIS, and then we will do the ANILCA 810
9 hearing. And as I mentioned earlier, the comment period
10 is open until April 30. So you don't have to comment
11 right now.
12 **MR. JON ISAACS:** My name is Jon Isaacs.
13 I'm from Anchorage, and I work on the AECOM team. I'm a
14 senior manager.
15 **MR. KEITH GORDON:** Jon will run us through
16 an introduction of everybody who is here. I'm sorry. I
17 forgot to do that.
18 **MR. JON ISAACS:** We think it's important
19 that you know who is here tonight and who can help answer
20 questions and who you are talking to. So again, my name
21 is a Jon Isaacs. I'm from Anchorage. This is my first
22 time in Crooked Creek. Although I've flown over Crooked
23 Creek, it's nice to be on the ground. I'll be answering
24 some of the questions about the description of the
25 proposed project.

Page 23

1 Maybe Taylor next.
2 **MR. TAYLOR BRELSFORD:** Good evening,
3 everyone, and thank you so much for joining us. I'll
4 stand at the first two posters. I'm Taylor Brelsford. I
5 used to live in Sleetmute and worked for in KNA in Aniak
6 years ago. So I'll be there to answer questions or talk
7 with you about spill risk and hazardous chemicals.
8 I think this takes us to Cecil.
9 **MR. CECIL URLICH:** Hi. I'm Cecil Urlich,
10 and I'm a dam engineer, and I'm with AECOM. And I'm going
11 to be responsible for the tailings dam and the tailings
12 dam poster here by the middle window, and that's where
13 I'll be standing.
14 **MS. NANCY DARIGO:** I'm Nancy Darigo. I'm
15 the lead for all the physical science work that's been
16 done in the EIS, and I'll be standing over here around the
17 water flow and air emissions and water discharges poster.
18 **MS. JOAN KLUWE:** Good evening. My name is
19 Joan Kluwe, and I am the social environment task lead, and
20 I'll be standing on the other side of the room over by the
21 socioeconomics and subsistence.
22 **MR. DAVID EVERY:** Good evening. I'm David
23 Every, and I'm the biological lead. I'm also from AECOM,
24 but all the way from Seattle. This is also my first time
25 in Crooked Creek, so enjoyed the walk around town today.

Page 24

1 I'll be at the posters over here dealing with fisheries,
2 fishing, and barge traffic, one of the issues of concern.
3 Thank you.
4 **MR. JON ISAACS:** And we also have some
5 agencies with us tonight who are participating on the EIS
6 called cooperating agencies. We have, maybe starting in
7 the back of the room, Cathe and Mark, and then we will
8 move to the Bureau of Land Management.
9 **MS. CATHE HEROY:** Hi. Thank you for
10 having me. This is also my first trip to Crooked Creek.
11 My name is Cathe Heroy. I'm here representing the State
12 of Alaska, Department of Natural Resources, although
13 specifically I work in the State Pipeline Coordinator's
14 Office. So I'll probably hang out over near the pipeline
15 area.
16 **MR. MARK JEN:** Good evening. My name is
17 Mark Jen. I'm with the Environmental Protection Agency
18 based in Anchorage. And actually, this is my second time
19 here in Crooked Creek. I was here several years ago for
20 the scoping component. I appreciate you welcoming me back
21 to your beautiful community. And I just enjoy talking and
22 hearing from you. Thank you.
23 **MR. ALAN BITTNER:** Once again, Alan
24 Bittner, the field manager for the Anchorage field office
25 of BLM.

Page 25

1 **MR. BRUCE SEPPI:** Good evening. I'm Bruce
2 Seppi with the Bureau of Land Management, and I'll be
3 giving the 810 subsistence impacts talk here tonight after
4 AECOM gets done.
5 **MR. JON ISAACS:** We also have some
6 representatives of Donlin Mine here tonight, if we could
7 have you guys introduce yourself.
8 **MR. TAYLOR BRELSFORD:** Jon, Donne.
9 **MR. JON ISAACS:** Donne Fleagle. Thank
10 you.
11 **MS. DONNE FLEAGLE:** Hi. I work for AECOM.
12 I'm the senior specialist for rural community engagement,
13 and I've been out here quite a bit. Nice to see you all.
14 Always wonderful to come to Crooked Creek. Thank you.
15 **MR. RON RIMELMAN:** Ron Rimelman. I'm the
16 environmental lead for NOVAGOLD. As Jon said, we are 50
17 percent owners of the Donlin Gold Project.
18 **MR. ENRIQ FERNANDEZ:** I'm Enriq Fernandez.
19 I'm with Donlin Gold, and I'm the senior environmental
20 coordinator for Donlin Gold.
21 **MS. SUE GAMACHE:** And last, but not least,
22 I'm Sue Gamache, and I work for Donlin Gold in community
23 relations, and I have been out here lots of times. I know
24 most everybody in the room.
25 **MR. JON ISAACS:** So thank you. That's the

1 team here tonight. We also have Mary Vavrik, our court
2 reporter. I think with that, let's go to some of the
3 posters and we can see what questions you have and tell
4 you some aspects about the project and the analysis.

5 (Off the record.)

6 **MR. KEITH GORDON:** Okay. For tonight's
7 meeting, we are here to hear the comments you have now and
8 to let you know that you have these various avenues to
9 kick comments in to us, at least until April 30th. So I
10 think they passed out a series of numbers to you folks.
11 We will start by going through the folks who have a number
12 in numerical order, but you do not have to have a number
13 to make a comment. And when we have gone through the
14 numbers, it's open to anybody, and we will just go from
15 there.

16 Enric, I think you have comment No. 1, or it was
17 turned back in?

18 **MR. ENRIC FERNANDEZ:** Hi. My name is
19 Enric Fernandez. I'm with Donlin Gold. I'm the senior
20 environmental coordinator. Many of you know me as the owl
21 man because of the occasional work that I did at
22 the schoolhouse. I'm glad to see that the Corps of
23 Engineers has chosen Crooked Creek for one of the first
24 meetings to discuss the draft EIS. Crooked Creek is
25 Donlin Gold's closest neighbor, and we have a long history

1 You know, I actually was able to go through a program
2 that Donlin Gold sponsored, and it really helped me out,
3 and I just really hope that they continue to sponsor
4 events held by KSD and that our next -- not only just this
5 generation, my generation and the generation before me,
6 but the next one, as well, like my son Jeremy and a few of
7 the other new additions that were welcomed this year and
8 last will be able to become more informed and more
9 educated through Donlin Gold and their opportunities that
10 they have been able to give to our region. And I'm very
11 thankful for that.

12 And I also really hope that Donlin Gold is -- I know
13 that I will be looking at 3.22 of the EIS, or the draft
14 EIS, for the socioeconomics concerning the negative
15 effects that it could possibly have on our community.
16 And, you know, I just hope that they are as prepared as
17 hopefully our community will be if this goes through and
18 that it is an open mine.

19 So thank you.

20 **MR. KEITH GORDON:** We will open it up to
21 anybody who would like to comment about anything related
22 to the project. Please just let us know.

23 **MR. TIM ZAUKAR:** Tim Zaukar, Crooked
24 Creek. And I had a question about the -- like what if
25 there was a mill failure, and what would be the response

1 together that goes back to the early exploration days at
2 the project site.

3 Through the years we have shared our plans with
4 Crooked Creek and have listened to their feedback. Our
5 project is better because of Crooked Creek involvement.

6 On behalf of Stan Foo and the entire Donlin Gold
7 team, I want to thank the people of Crooked Creek for
8 their participation and partnership over the years and
9 look forward to them continuing to tell us and the
10 permitting agencies their thoughts about the Donlin Gold
11 Project.

12 **MR. KEITH GORDON:** I should have mentioned
13 that because Mary is documenting things, please state your
14 name at the outset, and then just don't speak as fast as I
15 do, and it will work out fine.

16 **MS. ALISON ZAUKAR:** Okay. So you guys all
17 know me. I'm Ali Zaukar, and I'm a resident here of
18 Crooked Creek, and I just -- my hopes and aspirations for
19 this project is -- Donlin Gold is obviously going through
20 the permitting stages -- is that they will continue to be
21 involved with our educational system here in not only
22 Crooked Creek, but the KSD region, Kuspuk School District.
23 And I'm very grateful for their involvement in education
24 and that they strive for it just as much as I would like
25 our community to be focused on education.

1 to that, like if there was an explosion or something at
2 the mill?

3 **MR. KEITH GORDON:** Can you address generic
4 safety plans, Enric, as far as operations? What sort
5 of -- the question was: What happens if there is an
6 explosion or a fire at the mill? Will the mine have its
7 own emergency response teams and, if so, what kind of
8 teams are we talking about?

9 **MR. ENRIC FERNANDEZ:** Yeah, the mine will
10 have emergency response plans. Right now the plans are
11 obviously not developed yet because it requires
12 engineering design, but before the mine is in operation
13 there will be, you know, emergency response plans and
14 there will be personnel trained with the knowledge to
15 respond to such incidents and, obviously, you know,
16 equipment to respond to such incidents.

17 **MR. TIM ZAUKAR:** Like if there was a spill
18 during an explosion or --

19 **MR. ENRIQ FERNANDEZ:** That's right.

20 Any --

21 **MR. TIM ZAUKAR:** Cyanide, mercury?

22 **MR. ENRIC FERNANDEZ:** During the planning
23 of the mine, there is emergency response plans for
24 facilities for spill response, and there is requirements
25 from the State of Alaska for all discharge prevention and

Page 30

1 contingency plans for response for, you know, like
2 cleaning up the spills. Those plans, they require you to
3 be able to show and prove that you can actually respond to
4 a spill in a reasonable, you know, time frame.
5 **MR. TIM ZAUKAR:** And if there was, like,
6 something that happened, you know, like a spill or
7 something, would there be, like, some kind of way to
8 prevent this from affecting us down here?
9 **MR. ENRIC FERNANDEZ:** For things like
10 fuel, you know, and other chemicals that may be at the
11 mine, there is requirements for spill prevention measures.
12 So some of those are engineering measures like secondary
13 containment. Other measures may be standard best
14 management practices, so how you do things. Okay. So
15 yes, the answer is those things, they are measured for
16 spills, and these things are documented in plans.
17 **MR. KEITH GORDON:** So the Environmental
18 Impact Statement, the analyses to date contains a list of
19 potential mechanisms by which something may happen, a
20 spill or some other accident, and how those things might
21 be addressed, but it's in a draft form at this stage.
22 **MR. RON RIMELMAN:** I'll also just add, if
23 a spill does occur, the State has very specific
24 requirements about having to report those in a very
25 specific time frame. It's not something you can hide or

Page 31

1 whatever. The law requires you to report that and
2 depending on the size of the spill how quickly you have to
3 respond to it and that aspect of it, so it's something
4 that there's a lot of scrutiny to make sure that if
5 something like that happened, we would have to notify the
6 community and the State that it was happening.
7 **MR. TIM ZAUKAR:** Like on the news we hear
8 about this contaminated water, you know, somewhere down --
9 I can't remember, but I know it's -- and they can't do
10 anything for them down there. I forget where it was.
11 **MR. JON ISAACS:** Michigan.
12 **UNIDENTIFIED MALE SPEAKER:** As far as the
13 tailing pond broke.
14 **MR. TIM ZAUKAR:** No. It's just -- I can't
15 remember how the water got contaminated.
16 **UNIDENTIFIED FEMALE SPEAKER:** It's a
17 quarry.
18 **MS. CATHE HEROY:** That one is Colorado.
19 **MR. TIM ZAUKAR:** And they have a hard time
20 getting their water back to get water quality. So I was
21 wondering about that.
22 **MR. KEITH GORDON:** The Draft Environmental
23 Impact Statement has done some level of analyses in
24 relation to various potential spill issues, how those
25 might be addressed and the effects they may have. So

Page 32

1 please, as you see the document and look at it, let us
2 know any other comments you have related to whether or not
3 we have adequately characterized it or not and if there is
4 anything else you want to know.
5 **MR. TIM ZAUKAR:** When I looked over the
6 documents, it seems like there would be an answer to the
7 question. It just goes on to the next -- the next
8 scenario.
9 **MR. KEITH GORDON:** Yeah, the document --
10 in relation to the various spills the document
11 characterizes, we have to come up with some scenario that
12 might be reasonably probable for some type of accident or
13 spill. So when you are looking at what is reasonably
14 probable, you are saying, well, okay, we expect that
15 somebody is going to spill five gallons of diesel fuel at
16 some point in time filling a piece of equipment. That
17 just happens.
18 Do we expect one of these large multimillion gallon
19 tanks to fail? No. The way they are designed, there
20 isn't an expectation they would fail. What do you do in
21 the event of an earthquake? Well, then you look at the
22 probability of earthquakes and whether or not those could
23 have an effect.
24 And so within NEPA we look at a range of what is
25 reasonable. And very large scale events, huge

Page 33

1 earthquakes, that sort of thing that cause a huge amount
2 of damage, they don't happen within the realm of reason.
3 The earthquake that's been modeled for the Donlin
4 project, I believe, is a 7.8. And as you all are aware,
5 in Alaska that's a pretty substantial earthquake, and they
6 are also extremely rare. I don't remember if there is a
7 5,000- or 10,000-year interval, but it's highly unlikely
8 for that to happen.
9 So that's how we do the various development of
10 scenarios and analyses of potential impacts from spills or
11 other types of potentially substantial impacts.
12 **MR. JON ISAACS:** As an example, we took a
13 look at the tailings dam failure risk analyses. There was
14 concern about the Mount Polley dam, could that happen
15 here. A workshop was held to look at what were some of
16 the potential failure factors and the risk of the tailings
17 dam failing. We did look at that. We looked at what the
18 construction methods were, some of the differences, and we
19 have described that in the EIS. So we knew that was a
20 concern, and we took a very hard look at what that
21 potential risk is.
22 And what we are trying to do in our analysis is
23 listen to the concerns we have heard, take a very careful,
24 thorough look at the analysis, and then come up with a
25 conclusion as to what we think the probability is and what

Page 34

1 the likely impact is.

2 **MR. DAVID JOHN:** I believe there is a

3 fault line up there going through the mine.

4 **MR. KEITH GORDON:** So somebody correct me

5 if I'm wrong. In relation to the pipeline, there are two

6 fault lines. What do we have by way of fault lines in

7 relation to the mine site itself?

8 **MS. NANCY DARIGO:** I was saying earlier

9 today, I think the closest active fault to the mine site

10 about is ten miles way. It's called the Nixon Fork fault,

11 and that's on the north side of it. And that may be the

12 one that they used to model the impact of ground shaking

13 on the mine and the tailings dam.

14 **MR. DAVID JOHN:** It's got to be coming

15 down from Nixon Fork down this way. And I know it's close

16 to the proposed mine site.

17 **MS. NANCY DARIGO:** Yes, yeah.

18 **MR. DAVID JOHN:** My concern is if they

19 have an earthquake, that stretch of material you have on

20 there, would it be enough to withstand the impact without

21 getting it contaminated? I know they took all kinds of

22 precautions to put it there, but there is no actual

23 guarantee that it's going to work.

24 **MS. NANCY DARIGO:** The EIS does have an

25 analysis -- it summarizes an analysis of what would happen

Page 35

1 to the tailings dam in an earthquake, and that's

2 summarized on one of these posters here. I think the

3 conclusions of this is that the tailings dam would settle

4 a little bit, like a few feet, and it would shift a little

5 bit downstream, but it would not lose containment because

6 they have what they call freeboard. It's like the water

7 level is designed to be kept below a certain level, so you

8 account for that. But there is an analysis in the DEIS

9 that looks at that, and that would be in Chapter 3.3.

10 **MR. DAVID JOHN:** I'm pretty sure you guys

11 have an overflow valve in case the tailings pond gets too

12 much?

13 **MS. NANCY DARIGO:** Do you want to

14 address --

15 **MR. CECIL URLICH:** What?

16 **MS. NANCY DARIGO:** Overflow valve, water

17 management for the dam, water management features.

18 **MR. CECIL URLICH:** The water management

19 for the tailings dam is built into the design of the dam

20 so that the dam is much higher than the tailings. And

21 that space difference between the dam -- between the

22 tailings and the top of the dam has to be enough space for

23 the probable maximum flood, plus waves that might be

24 generated by the wind if the wind is blowing towards the

25 dam, across the tailings towards the dam. It has to also

Page 36

1 on top of that have enough space if the wind pushes the

2 water up towards the dam that extra high, plus, on top of

3 all that, there has to be a certain amount of freeboard.

4 So there is plenty of space built in during the

5 operations for the maximum possible anticipated

6 combinations of water that could come in there. Then at

7 the end of the life of the mine, the tailings would have a

8 spillway at the back. And the idea of the spillway is not

9 that it be used, but by dam safety regulations, every dam

10 has to have a spillway. So at the closure when the mine

11 is finished, there would be a spillway, and that spillway

12 would be -- would be high enough so that you would never

13 see water, but it's still there.

14 **MR. DAVID JOHN:** How are you guys going to

15 keep the animals out of there when you are going to be

16 working on that mine? Are you going to have a fence

17 around the mine site? How are you going to keep the game

18 out?

19 **MR. JON ISAACS:** I'll ask Dave Every to

20 perhaps answer that question about wildlife management.

21 **MR. DAVE EVERY:** One of the things that is

22 important is that there is a space around the edge of the

23 tailings pond so that there is some distance that a

24 critter has to go before it would get to the water. And I

25 don't know what the specific plan is, but there would have

Page 37

1 to be a wildlife management plan to address how they would

2 deal with those kinds of situations.

3 **MR. DAVID JOHN:** I'm thinking about those

4 birds. Aren't they going to go in there and drink water?

5 They wouldn't know if it's contaminated or not.

6 **MR. DAVE EVERY:** True. They could land

7 there and drink. And we have done an ecological risk

8 assessment to assess what the likelihood is that they are

9 going to be contaminated enough to bother anybody or to

10 die. And they would be there such a limited amount of

11 time because the tailings pond won't grow any worms or

12 plants or that sort of thing that would be food for the

13 birds. So if there is no food, they may rest there, but

14 they're not going to stick around very long.

15 So if all they are doing is drinking a little water,

16 then that's not enough to come anywhere close to killing

17 them, the worst concentrations we could come up with from

18 the water management information. And they also would not

19 be there long enough to be contaminated themselves to

20 where eating them would be a problem. So that's our

21 analysis.

22 **MR. DAVID JOHN:** You are saying they are

23 going to operate for 27-plus years, and if we eat them

24 ducks that long, we are going to die.

25 **MR. DAVE EVERY:** An individual duck,

Page 38

1 though, is only going to be able to be there a very short
2 time.
3 **MR. DAVID JOHN:** We don't know for sure
4 that.
5 **MR. DAVE EVERY:** We don't know for sure
6 how long they will stay.
7 **MR. JON ISAACS:** This is a good example of
8 a concern, and it may be something that we want to look at
9 in revising the document to look at what sort of
10 mitigation plan, like a wildlife hazing plan, what might
11 be some things that Donlin considers to try to keep
12 animals out of there. Do we have adequate analysis at
13 this point in time? Should we go back and look at it?
14 Should we look at what are other options to keep animals
15 out? So this is a good example of raising a concern.
16 **MR. DAVID JOHN:** Because once we get that
17 land contaminated, we are going to lose our game. We are
18 going to lose our fish. We are going to lose everything.
19 We would end up with nothing. We are going to be left
20 holding the bag.
21 **MR. KEITH GORDON:** One of the expectations
22 is that, if constructed, wildlife, birds, to a degree, are
23 not expected to be found to any substantial degree in the
24 proximity of the mine just because of the industrial
25 activity that kind of goes on 24/7. Yeah, birds will come

Page 39

1 in and they will land because they get used to activity.
2 You see it around here. But there is not an expectation
3 that there is going to be a lot of wildlife around that
4 area.
5 And then in relation to the fish, then we are down to
6 water quality and making sure that if the project is
7 permitted, that the water goes where it's supposed to go,
8 stays where it's supposed to stay, and if it is released,
9 it's treated appropriately before it's released.
10 So any comments you all have regarding water quality
11 or other issues related to the mine safety and its
12 environmental impacts we are more than happy to hear.
13 **MR. DAVID JOHN:** Because when I was
14 working for Enric's company, I did some wildlife tracking
15 in the wintertime with a helicopter, and in the summertime
16 we did environmental routes. And there is a lot of fish
17 that's spawning up here. There is all kinds of fish. I
18 think there is over ten fish that spawn up that way. And
19 that's my concern about how our -- you know, getting
20 contaminated. But we don't want things to get
21 contaminated. We are going to lose everything. That's my
22 concern.
23 Not for my own. These young ones that are coming up
24 behind us, what are they going to have? If we make the
25 wrong decisions, it will fall on them. We will be gone,

Page 40

1 but it will fall on them. They will be using it.
2 **MR. PAUL ALEXIE:** My concerns -- my name
3 is Paul Alexie. First one is subsistence. We use the cat
4 trail not only to subsist; we use it to go get wood. And
5 they say if it becomes a mine, there is like -- like
6 five square -- or 25 square miles that will be -- we
7 wouldn't be able to go up where we usually get wood. How
8 would it -- how would we be able to do that? Because most
9 of us here, we use wood. We burn wood instead of diesel.
10 We are having to go further and further up the creek just
11 for wood. And we will just have cold winters. Some days
12 we have cold winters.
13 Right now where Donlin sits, there was an old cat
14 trail. We used that to go to Iditarod and to Flat. The
15 cat trail goes right alongside Donlin right outside of the
16 hillside where the airport sits now. So if we go, we have
17 to call back there first. And we are so used to using
18 that road, how would we go up? You know, how would we go
19 past it? That cat trail was there before Donlin was. But
20 they used to mine up in Flat. That was the old mail
21 route. We have to get wood up that way. We are having to
22 go further and further up.
23 And as for subsistence, like David said, he had a
24 comment on the birds. You know, is there going to be like
25 fence around it like on the tailings dam? Is there going

Page 41

1 to be a fence around it so the moose wouldn't go in there,
2 or the caribou and, you know, all the other -- like
3 beaver? He's going to think that's his new dam. You
4 know, it's -- he's just going to go back over. He doesn't
5 have to work. He's just going to have to bring food in
6 there. Is there a way that it's going to be, like, closed
7 off?
8 **MR. KEITH GORDON:** Yeah, we can look back
9 at the document and see if we have analyzed the effects
10 you are talking about, the socioeconomic effects to you
11 all of having to find another source for fuel and the
12 wildlife impacts. We can certainly go back and look at
13 the document and see if we have adequately addressed
14 those.
15 **MR. PAUL ALEXIE:** And Tim had a big point
16 about the spill. It's not only for subsistence; it's for
17 fisheries because most of us, we subsist fish. And if we
18 lose our fish, like Ali was saying, we will leave these
19 kids with nothing. In 27 years, they will be big as us
20 and old. I think what he was trying to say is that, you
21 know, like you guys say, the state of our technology --
22 and David said it's not guaranteed, you know.
23 Like one of them dams broke, the tailing dams, and
24 one of them rivers turned orange. And up in Donlin, I
25 worked at [indiscernible], and when we come across hot

Page 42

1 rock, we have to put our clothes on, you know. We have to
2 be fully dressed to cut arsenic. And in that spill
3 response in that arctic conditions, it's just going to go.
4 There will be just like a blood trail like when we bleed.
5 And the pipeline, wouldn't it be cheaper just to have
6 two pipelines, one for diesel and one for natural gas?
7 But it would eliminate the barge traffic.
8 **MR. KEITH GORDON:** Yeah. That's something
9 that has been proposed that we need to look at is -- what
10 was looked at is a natural gas pipeline or a diesel
11 pipeline. It's been proposed that we look at an
12 alternative that includes both pipelines, a natural gas
13 and a diesel line.
14 **MR. PAUL ALEXIE:** Yeah. And the
15 transportation infrastructure, that road, how wide is it
16 going to be? Rumor has it it's going to be like 50 feet
17 wide or -- you know, coming from the barge area, you know,
18 they have got to use big trucks. Bigger than this room
19 the dump truck is going to be. How are you guys going
20 to -- because the permafrost is melting more and more.
21 You know, climate change, it's getting warmer and warmer.
22 They already know it. How would it be guaranteed that the
23 tailing dams don't collapse?
24 And David had a point because when we were drilling
25 back at Donlin, we come on the -- they call it the Donut

Page 43

1 Hole, and they lost like 20-something -- maybe 20 feet of
2 casing. And the casing is like eight inches. And they
3 could never get it back. So David's concern was, you
4 know, like you guys said, it comes from way up there at
5 Nixon Fork. Nixon Fork is way up in McGrath. That's like
6 250 miles. That's like from here to Bethel. And the
7 permafrost is melting, too.
8 What I'm trying to say is, is it guaranteed the
9 tailings pond wouldn't fail?
10 **MR. JON ISAACS:** In terms of the design of
11 the tailings pond, there has been a lot of engineering
12 that's been put into the design of the tailings pond. The
13 State of Alaska will also have a final say in permitting
14 it and deciding if the engineering is adequate.
15 So that's one thing they will look at. They will
16 look at the site conditions. Is there permafrost? Is
17 there instability under the dam site? What is the seismic
18 risk? They will look at that. They will also take a look
19 at the construction to make sure that tailings do not flow
20 through and erode the tailings dam.
21 There has been a lot of looking at what happened at
22 Mount Polley and, in fact, Cecil has been involved in
23 looking at Mount Polley, and there is some very, very
24 different dam construction in terms of what's being
25 proposed for this dam compared to what happened in Mount

Page 44

1 Polley. I think the dam proposed here is the same one
2 that's been used at Red Dog for 20, 30 years.
3 **MR. CECIL URLICH:** 25 years, yeah. There
4 are different ways of billing a tailings dam, essentially
5 three different ways. There is the most -- there is the
6 best way, and then there is kind of a middle way, and then
7 there is a kind of a not so -- the least way.
8 And the dams that have failed, the one in British
9 Columbia was built by this method called centerline
10 construction. The one that failed in Brazil was built by
11 upstream construction. The one that Donlin plans to build
12 is going to be this yellow, what's called downstream
13 construction. It's the most sturdy kind of dam you can
14 ever build.
15 The dam in British Columbia that failed was built on
16 soil, and in that soil there was a layer of clay they
17 didn't -- that they didn't really understand very well.
18 That layer acted like a slip plane, just like a grease,
19 and it took off. The dam at Donlin is going to be built
20 on rock.
21 **MR. PAUL ALEXIE:** Bedrock.
22 **MR. CECIL URLICH:** Bedrock, yeah. So
23 there is a big difference in the way that the foundation
24 of the dam is going to be built. And then the dam that
25 failed in British Columbia, the independent panel that

Page 45

1 reviewed that problem and why it happened, they concluded,
2 number one, that there was this layer of clay under the
3 dam that failed. But they also discovered that the dam
4 was not actually built in the right shape that it was
5 designed to be built. And that panel concluded that that
6 dam would not have failed if a slope of this here was done
7 in the way it was designed. Now, I can -- my experience
8 with the State of Alaska dam regulators is that there is
9 no way on earth that any dam at a mine site in Alaska
10 would ever be allowed to be built that wasn't built
11 exactly the way the design required.
12 **MR. PAUL ALEXIE:** Does EPA have pretty
13 strict water flow, like discharge, chemical discharge?
14 You know, there is cyanide and -- I mean, not cyanide.
15 There is mercury on the rocks. There is mercury and
16 realgar.
17 **MR. CECIL URLICH:** Whatever is in the
18 water. If the water comes out, it gets captured. And
19 there is all kinds of instruments downstream of the dam to
20 tell us if the groundwater is changing. So if the
21 groundwater is changing, then we know there is something
22 going on. So meanwhile, there is also a catch, what's
23 called a seepage collection system. And any water that
24 mine leaks out of this is pumped -- either it's pumped
25 back into the tailings or it's pumped out into the water

Page 46

1 treatment pond where it's treated or it's sent to the mill
2 so it can be reused as part of the milling. So all that
3 is kind of incorporated in the design.
4 **MR. PAUL ALEXIE:** When I worked at Donlin,
5 they did some kind of test. They put all the core
6 cutting -- we stacked core. They had it on, like, you
7 know, on a tank, you know, the thing that holds -- like if
8 you had a spill, the containment. They had all the
9 rocks -- like what he was saying, they had all the rocks
10 on there. They did some kind of study. So after we got
11 done cutting the core, they put all the different types of
12 rocks on there. It was by the airfield, you know, where
13 the helicopters land at Donlin. There was -- they put
14 core there, and they just left it there. Were they
15 studying the impact that would have?
16 **MS. NANCY DARIGO:** I think I know -- I
17 think you are talking about barrel tests.
18 **MR. PAUL ALEXIE:** Not barrel tests.
19 **MS. NANCY DARIGO:** Not barrel tests?
20 **MR. PAUL ALEXIE:** Nope. It's just like,
21 you know, when they drill, they get the core out of it.
22 We cut the core in half. We send half of it to prep lab,
23 and -- like certain rocks, you know.
24 **MS. NANCY DARIGO:** I think what you are
25 talking about is they want natural rainwater to percolate

Page 47

1 through the rock over time. And then they captured it
2 underneath.
3 **MR. PAUL ALEXIE:** That's what I'm talking
4 about.
5 **MS. NANCY DARIGO:** And they test that over
6 time. Those tests, I believe, are still going on. It's a
7 very long-term test. They want that to go on for years.
8 So what that tells you is how this rock in both the
9 tailings dam and the waste rock pile will change, or how
10 the water coming out of the bottom will change over time.
11 And that's used to predict things like how they treat the
12 water at the treatment plant and that sort of thing.
13 So yeah, I think that's what you are talking about,
14 and those are still going on.
15 **MR. CECIL URLICH:** And what rock to use in
16 the tailings dam and what rock not to use because you
17 don't want to use rock that's going to generate acid.
18 **MR. PAUL ALEXIE:** And then another thing
19 about the water flow, right where the pit is, the proposed
20 pit, right where -- here is Donlin Creek. Donlin camp is
21 here on the American Creek. There is a creek that goes
22 through it. They talk about -- they burden that creek,
23 American Creek --
24 **MS. NANCY DARIGO:** Right. Well, the waste
25 rock facility and a couple of contact water dams and the

Page 48

1 pit would all be in the American Creek watershed. So
2 there would be a diversion of water either to these ponds
3 to use in the milling process, or there would also be a
4 whole series of -- and there would also be a whole series
5 of diversion channels to keep it out of there if that's
6 what -- if that's what Donlin's water management plan says
7 to do.
8 So you are correct. There would be a blockage of
9 that watershed, and there would be a lot less water coming
10 out of American Creek to Crooked Creek.
11 **MR. PAUL ALEXIE:** Not only American Creek.
12 It's Anaconda, too.
13 **MS. NANCY DARIGO:** Yes, exactly.
14 **MR. PAUL ALEXIE:** And Crevice.
15 **MS. NANCY DARIGO:** Crevice less so.
16 **MR. PAUL ALEXIE:** But still you see it
17 when you go to Crevice. That's where the permafrost
18 melts.
19 **MS. NANCY DARIGO:** Yeah. The permafrost
20 is definitely down low in the areas of those valleys.
21 **MR. PAUL ALEXIE:** And for the water to
22 start -- you know, they talk about using cyanide. Is that
23 water going to be treated before it gets released?
24 **MS. NANCY DARIGO:** So there is two issues.
25 Cyanide, I believe, is completely used up in the milling

Page 49

1 process, so there would not be any of those byproducts
2 that end up needing to be treated in the water. But the
3 water -- any water that's not used in the mine process --
4 they are taking water out of the system to use it, and
5 it's quite a bit. But there is a small percentage that
6 they would want to discharge to Crooked Creek, and they
7 have a water treatment plant to do that. And that would
8 take all those constituents out, yes, at least to levels
9 that are below --
10 **MR. PAUL ALEXIE:** EPA standards?
11 **MS. NANCY DARIGO:** Right.
12 **MR. KEITH GORDON:** In other words, it's
13 safe to release into a creek or back into the river.
14 **MR. PAUL ALEXIE:** Yeah, but still that
15 American Creek is right there where the proposed pit is.
16 **MR. KEITH GORDON:** Right. There are
17 impacts of this project, if it were constructed, that
18 can't be mitigated. There is nine miles of stream that --
19 almost ten miles of stream that just doesn't exist
20 anymore. There are changes to hydrology in the area of
21 the mine site that would just exist. So there are
22 potential impacts of the project if it's permitted that
23 that's just -- that's the result of permitting the
24 project.
25 **MR. PAUL ALEXIE:** What about right in

Page 50

1 Anaconda -- I mean, in American Creek? Maybe 100 feet
2 inside American Creek there is a place called Donut Hole.
3 That's what I was talking about a while ago where they
4 lose the casing. What are they going to do for that, the
5 Donut Hole?
6 **MR. KEITH GORDON:** We can look back at the
7 document and see if we have adequately analyzed that. We
8 can't address every question you all have tonight. What
9 we're trying to do is get your comments on the EIS. And
10 one of the specific things that will be looked at is if
11 they have adequately addressed in relation to the Donut
12 Hole permafrost issues in that area and what might happen
13 if the mine were constructed.
14 **MR. PAUL ALEXIE:** And as for the power,
15 they talk about 50 generators back there. How many
16 megawatts again was it?
17 **MR. KEITH GORDON:** 200-and-some kilowatts.
18 **MR. PAUL ALEXIE:** Just to run the mine.
19 **MR. KEITH GORDON:** Yeah, just to run the
20 mine. What is it, the size of the City of Fairbanks or
21 Juneau? It's the equivalent of the power supply for
22 Fairbanks, I believe.
23 **MR. PAUL ALEXIE:** Yeah, one of the cities
24 it was. What about for transportation, like if -- let's
25 say the fuel truck that's coming from the port, like Tim

Page 51

1 was saying, spill response, will they have like all
2 around -- like we have power plants around here. They
3 have a spill kit. Will they be carrying it?
4 **MR. KEITH GORDON:** They would be required
5 to meet all state and federal requirements for that type
6 of operation. So I would expect the same sort of thing
7 you see them using on the North Slope in the oil fields is
8 the same thing these folks would largely be expected to
9 use. Now, it's not a guarantee it's exactly the same.
10 It's a different type of operation. But I believe the
11 same standards would largely apply. So at a minimum, they
12 would have to meet state and federal requirements.
13 **MR. PAUL ALEXIE:** And in that one you did,
14 your slide, 50 years after the mine closes, will they
15 still be treating the water?
16 **MR. KEITH GORDON:** Yes. The expectation
17 for water treatment is effectively in perpetuity. The
18 mine itself is expected to take 50 to 55 years to fill up
19 to its maximum level. And there is going to be water over
20 the life of that tailings facility, which is basically in
21 perpetuity, that will come through there and have to
22 report back to the mine or be treated before it can be
23 released. Water in the mine would either evaporate out or
24 have to be treated before it can be released. So the
25 expectation is, if constructed, after the mine life is

Page 52

1 over, and obviously during the mine life, water treatment
2 goes on forever, basically.
3 **MR. PAUL ALEXIE:** Even the tailings
4 pond -- I mean the tailings dam?
5 **MR. KEITH GORDON:** The tailings are
6 expected to consolidate over time, but we are talking
7 many, many decades. So there would be water that goes to
8 some degree through that facility as long as it exists,
9 and that water needs to be treated, if necessary, before
10 it could be released. So if over 150 years we got to a
11 point where the tailings were not reactive enough to be
12 denigrating water quality, therefore it didn't have to be
13 treated, then they could just run it straight out the dam
14 and it could go down through the valley like it used to.
15 If it doesn't meet that standard, then unless regulatory
16 requirements change, it has to be treated before it can be
17 released.
18 **MR. JON ISAACS:** And the State does
19 require a closure plan reclamation plan that has a bond
20 requirement and financial guarantee to fund that.
21 **MR. PAUL ALEXIE:** All the mining has to
22 have reclaim. What about the water flow? They talk about
23 putting it through pipe. Like behind Donlin camp itself,
24 they talk about diverting American Creek to Anaconda. Is
25 that the way that's going to go?

Page 53

1 **MR. KEITH GORDON:** All this is draft. The
2 analyses is draft. Donlin is proposing what they are
3 proposing in the document. AECOM has gone through and
4 done draft analyses of the effect and drawn draft
5 conclusions. So what we are interested in is your
6 comments on what they are proposing and whether or not it
7 should happen the way they propose it or another way or
8 not at all.
9 **MS. NANCY DARIGO:** There would be -- there
10 would be things like underdrains under these big
11 facilities like the water -- like the tailings storage
12 facility in American and Anaconda Creek to divert water
13 underneath that would accumulate, and there could also
14 be -- there will also be piping to move water from the
15 tailings pond back to the milling process. And wherever
16 they need to move water between watersheds, there could be
17 pipeline.
18 **MR. PAUL ALEXIE:** I'm talking about
19 American Creek itself.
20 **MR. NICK JOHN:** On American Creek and
21 Anaconda, the way they are going to be diverted, they are
22 either going to have a culvert, an aluminum culvert or
23 cemented, water within just like a ditch. They are going
24 to divert -- the same amount of water that's coming out of
25 American Creek, they are going to have the same amount of

Page 54

1 water going into Anaconda Creek. But the same amount of
 2 water coming out of Anaconda Creek before American Creek
 3 was going to Anaconda is going to be the same as what's
 4 going to be -- how many gallons going into Crooked Creek
 5 along with American Creek and Anaconda, same amount of
 6 water is going to be going into that watershed.
 7 American Creek ain't going to be spilling right into
 8 the dam, from what I'm -- that's what I'm getting. It
 9 ain't going to be going straight to the dam. That dam is
 10 going to fill up, no problem, in about 24 hours. So they
 11 are going to divert this in a big pit. But on this big
 12 pit that you can see from space, you are going to have
 13 little creeks, you know, coming -- like artesian coming
 14 out of the mountain going to Anaconda.
 15 That's going to be -- it will contaminate it, but not
 16 to an effect to where moose will glow in the dark, you
 17 know. It will be -- it will be the same. A little bit
 18 might contaminate by the cement with the culverts, you
 19 know.
 20 It's going to be monitored 24/7. Okay? My question
 21 was with the pipeline, nobody in this area has ever seen
 22 how they done a vertical hole, drill vertical holes. Take
 23 some of these shareholders, you know, anybody, you know,
 24 and show them this is the way we do it. Bring kids and
 25 show them this is the way we are going to drill this hole

Page 55

1 underneath this river. And these are the safety
 2 precautions we are taking.
 3 Because when you hear mining accidents down in the
 4 states, Canada, Australia, they did not have this. They
 5 did not have it. They did not have BLM. They did not
 6 have state. They did not have Donlin Gold. They did not
 7 have shareholders coming together. They just went out
 8 making money. Now, all of these infrastructures caved in
 9 on them.
 10 Now you got citizens saying that, oh, this mine
 11 polluted the community here. Well, you know, where was
 12 the community when the mine was being built? There was no
 13 feedback. This is what is going to make this mine safe.
 14 All your input, all my input, you know, we are going to --
 15 everybody is saying they are going to do their part.
 16 It's not like what is down the line and what's in
 17 back of us. It's what we are doing now that's going to
 18 lead into the future. Yeah, it may have a lot of
 19 negative. It may have a lot of positive. But I'm not
 20 either way, negative or positive. Just like --
 21 Now, I have been around the mining industry
 22 since '96. And I have been to many places. And I have
 23 been down to Idaho. And people in Thompson Mine go, yeah,
 24 we heard about Donlin Creek. We heard about Red Dog. But
 25 we like Donlin Creek because what they are doing with the

Page 56

1 community because they never did have it like in places in
 2 Idaho where there is only 26 people population. But it
 3 was only like 12 miles away from the mine. They didn't
 4 have this -- they said they are going to go out there and
 5 make a mine, but they didn't have no input because there
 6 was only 26 people population.
 7 But this guarantees what we put into the mine is what
 8 we are going to take out. How the communities have put
 9 into this, these meetings, it's almost like policing but,
 10 you know -- I don't know. I haven't -- you know, I've
 11 seen it, you know. I've heard it. And I like it. It's a
 12 positive. It's a positive attitude about this, the way
 13 everybody speaks their mind regardless of, you know, they
 14 don't like it, they like it. But if they say they don't
 15 like it and not -- like you said, and walk away, what are
 16 you going to do, you know?
 17 I like it because, you know, it just brings the
 18 economy back to the communities. But we lose some of
 19 our -- what we enjoy, hunting, fishing. But it's called
 20 sacrifice. How much are you willing to sacrifice to have
 21 your descendents have a better living than you do? You
 22 know, it's not -- not about me. It's about what's coming
 23 after me is what they are saying, you know.
 24 If you could take people and show them how you drill
 25 a hole underneath that river, it will be -- expectations

Page 57

1 will be fabulous. It will just -- I've seen it. I've
 2 done it. And it's -- to me it's like first grade thinking
 3 because I never did get to think like first grade, you
 4 know. Like I'm always thinking like an adult. But it's
 5 just like it's so small to a bigger infrastructure,
 6 drilling that -- drilling that hole underneath the river.
 7 **MR. KEITH GORDON:** We can take that
 8 comment back and suggest to Donlin that they may consider
 9 that and other avenues to introduce residents in the
 10 Kuskokwim River region to how they might do work so there
 11 is a better understanding of the effects it might have.
 12 **MR. NICK JOHN:** Not only as employees, but
 13 taking somebody like a fifth grader, bring them out there
 14 for two months out of a summer vacation showing them how
 15 it's done, you know, where your feedback is more -- I
 16 don't want to say negative or positive but, you know, they
 17 got hands on where it's going, where it's coming from.
 18 **MR. JON ISAACS:** So Paul and Nick, I'm
 19 wondering if I could make a suggestion. BLM would like to
 20 give a presentation. They are required to take a look at
 21 the potential for significant restrictions on subsistence
 22 uses under some of their regulations. It might be a good
 23 time for you guys to kind of give your presentation and
 24 see if we have any other comments, if you guys don't mind.
 25 (Proceedings adjourned at 8:17 a.m.)

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REPORTER'S CERTIFICATE

I, MARY A. VAVRIK, RMR, Notary Public in and for
the State of Alaska do hereby certify:

That the foregoing proceedings were taken before
me at the time and place herein set forth; that the
proceedings were reported stenographically by me and later
transcribed under my direction by computer transcription;
that the foregoing is a true record of the proceedings
taken at that time; and that I am not a party to nor have
I any interest in the outcome of the action herein
contained.

IN WITNESS WHEREOF, I have hereunto subscribed
my hand and affixed my seal this ____ day of
_____ 2016.

MARY A. VAVRIK,
Registered Merit Reporter
Notary Public for Alaska

My Commission Expires: November 5, 2016

[adjourned (1) 57:25	10:19;12:13,14,20, 21,21,22;13:3,10,20, 20,21,22,23;14:1,2,4,4, 5,14,14,18,20,25,25; 15:4,5,8,20;16:3,4,11; 17:15,18,19,22,25; 18:2,4,12,19;42:12	anymore (1) 49:20	away (2) 56:3,15
[indiscernible] (1) 41:25	adult (1) 57:4 AECOM (6) 22:13;23:10,23;25:4, 11;53:3	alternatives (19) 7:21,24;10:6;12:1,5, 6,9,10,15,17;13:17; 14:3;15:21,23;17:12, 16,17;18:15;19:15	applicant (1) 12:3 applies (1) 18:17	B
A	affect (1) 19:3	Although (2) 22:22;24:12	apply (1) 51:11	back (26) 14:10;19:20;20:22; 22:7;24:7,20;26:17; 27:1;31:20;36:8;38:13; 40:17;41:4,8,12;42:25; 43:3;45:25;49:13;50:6, 15;51:22;53:15;55:17; 56:18;57:8
able (8) 21:2;28:1,8,10;30:3; 38:1;40:7,8	affecting (1) 30:8	aluminum (1) 53:22	appreciate (1) 24:20	background (1) 21:23
above (2) 14:24;18:5	again (11) 10:7;12:12;14:15,18; 16:10;18:18;21:5,19; 22:20;24:23;50:16	Always (2) 25:14;57:4	appropriately (1) 39:9	bag (1) 38:20
accident (2) 30:20;32:12	agencies (5) 10:12,17;24:5,6; 27:10	Amanda (1) 22:1	approximately (8) 6:12;7:10;8:15,16; 16:4,12,12;17:6	balanced (1) 16:1
accidents (1) 55:3	agency (3) 4:11;10:15;24:17	American (16) 47:21,23;48:1,10,11; 49:15;50:1,2;52:24; 53:12,19,20,25;54:2,5, 7	April (3) 10:1;22:10;26:9	balancing (1) 15:24
account (1) 35:8	agenda (1) 4:25	amount (8) 17:17;33:1;36:3; 37:10;53:24,25;54:1,5	arctic (1) 42:3	barge (13) 14:21;16:17,17,22; 17:6,10,13,18,21;18:8; 24:2;42:7,17
accumulate (1) 53:13	ago (3) 23:6;24:19;50:3	Anaconda (10) 48:12;50:1;52:24; 53:12,21,54:1,2,3,5,14	area (10) 8:6;15:15;16:9;19:4; 24:15;39:4;42:17; 49:20;50:12;54:21	barged (4) 7:7;12:25;13:8; 17:24
acid (1) 47:17	ain't (2) 54:7,9	analyses (20) 4:14;5:3,17;10:22; 11:11,23;12:18;16:20; 18:7,10,22;19:16;20:6; 21:18;30:18;31:23; 33:10,13;53:2,4	areas (3) 8:4;18:13;48:20	barges (5) 13:16;17:7,8,9;18:7
across (2) 35:25;41:25	air (1) 23:17	analysis (14) 6:1;11:19,25;12:11; 20:1,13;26:4;33:22,24; 34:25,25;35:8;37:21; 38:12	Army (2) 4:4;9:10	barging (13) 13:2,14,18;14:6,16, 19,24;16:23,24;17:1, 20;18:5,16
acted (1) 44:18	airfield (1) 46:12	analyze (1) 16:14	around (13) 5:9;23:16,25;36:17, 22;37:14;39:2,3;40:25; 41:1;51:2,2;55:21	barrel (3) 46:17,18,19
action (2) 12:15,16	airport (1) 40:16	analyzed (3) 19:10;41:9;50:7	arsenic (1) 42:2	Barrick (1) 4:24
actions (1) 19:3	airstrip (1) 7:8	analyzing (1) 20:16	artesian (1) 54:13	based (3) 7:13;11:4;24:18
active (1) 34:9	Alan (6) 5:20,22,22;6:8; 24:23,23	Anchorage (5) 5:23;22:13,21;24:18, 24	aspect (1) 31:3	baseline (5) 12:2,17;14:2;20:4,22
activities (1) 19:5	Alaska (8) 4:5;7:19;24:12; 29:25;33:5;43:13;45:8, 9	analysis (14) 6:1;11:19,25;12:11; 20:1,13;26:4;33:22,24; 34:25,25;35:8;37:21; 38:12	aspects (1) 26:4	basically (4) 6:20;20:3;51:20; 52:2
activity (2) 38:25;39:1	ALEXIE (25) 40:2,3;41:15;42:14; 44:21;45:12;46:4,18, 20;47:3,18;48:11,14, 16,21;49:10,14,25; 50:14,18,23;51:13; 52:3,21;53:18	analyze (1) 16:14	aspirations (1) 27:18	beautiful (1) 24:21
actual (1) 34:22	Ali (2) 27:17;41:18	analyze (1) 16:14	assessment (1) 37:8	beaver (1) 41:3
actually (11) 7:15;8:7,18,23;9:1,2; 11:12;24:18;28:1;30:3; 45:4	ALISON (1) 27:16	Andraschko (1) 22:1	assess (1) 37:8	become (1) 28:8
add (1) 30:22	allowed (1) 45:10	Aniak (2) 15:3;23:5	attend (1) 21:14	becomes (1) 40:5
added (1) 11:9	almost (2) 49:19;56:9	ANILCA (5) 5:19,21,24;6:2;22:8	attending (1) 21:11	Bedrock (2) 44:21,22
additional (6) 9:24;10:5,6,7,8; 21:20	along (1) 54:5	animals (3) 36:15;38:12,14	attitude (1) 56:12	begin (2) 8:21;9:3
additions (1) 28:7	alongside (1) 40:15	annually (1) 17:6	avenue (1) 4:17	begins (1) 8:21
address (6) 21:8,25;29:3;35:14; 37:1;50:8	alternative (42)	anticipated (1) 36:5	avenues (3) 21:4;26:8;57:9	behalf (1) 27:6
addressed (4) 30:21;31:25;41:13; 50:11			aware (6) 4:10,21,23;11:18; 18:8;33:4	behavior (1) 18:8
adequate (3) 20:6;38:12;43:14				
adequately (9) 19:9,10;20:4,6,16; 32:3;41:13;50:7,11				

<p>behind (3) 6:16;39:24;52:23</p> <p>below (2) 35:7;49:9</p> <p>benefits (1) 15:20</p> <p>best (2) 30:13;44:6</p> <p>Bethel (6) 7:13;14:23;17:5,5,9; 43:6</p> <p>better (4) 21:1;27:5;56:21; 57:11</p> <p>big (7) 41:15,19;42:18; 44:23;53:10;54:11,11</p> <p>Bigger (2) 42:18;57:5</p> <p>billing (1) 44:4</p> <p>biological (1) 23:23</p> <p>biologist (1) 6:1</p> <p>Birch (11) 13:10,13,14;14:18, 23,24;15:2;18:2,3,5,20</p> <p>birds (5) 37:4,13;38:22,25; 40:24</p> <p>bit (11) 4:25;5:14;14:11; 15:3;16:22;18:21; 25:13;35:4,5;49:5; 54:17</p> <p>Bittner (5) 5:20,22,23;24:23,24</p> <p>bleed (1) 42:4</p> <p>BLM (4) 5:20;24:25;55:5; 57:19</p> <p>blob (1) 7:4</p> <p>blockage (1) 48:8</p> <p>blood (1) 42:4</p> <p>blowing (1) 35:24</p> <p>bond (1) 52:19</p> <p>both (3) 4:24;42:12;47:8</p> <p>bother (1) 37:9</p> <p>bottom (3) 16:25;21:24;47:10</p> <p>Brazil (1) 44:10</p> <p>breakdown (1) 18:21</p>	<p>BRELSFORD (3) 23:2,4;25:8</p> <p>brief (2) 5:6,9</p> <p>briefly (5) 5:20;6:8;9:7;12:12; 14:4</p> <p>bring (3) 41:5;54:24;57:13</p> <p>brings (1) 56:17</p> <p>British (3) 44:8,15,25</p> <p>broke (2) 31:13;41:23</p> <p>broken (1) 17:2</p> <p>Bruce (3) 5:25;25:1,1</p> <p>build (3) 7:17;44:11,14</p> <p>building (1) 13:11</p> <p>built (13) 13:12;35:19;36:4; 44:9,10,15,19,24;45:4, 5,10,10;55:12</p> <p>burden (1) 47:22</p> <p>Bureau (4) 5:18,23;24:8;25:2</p> <p>buried (1) 7:18</p> <p>burn (1) 40:9</p> <p>burned (2) 13:1,7</p> <p>burning (1) 13:2</p> <p>burnt (2) 16:25;17:11</p> <p>byproducts (1) 49:1</p>	<p>46:2;50:6;51:22,24; 52:16;54:12;57:7</p> <p>Canada (1) 55:4</p> <p>captured (3) 19:10;45:18;47:1</p> <p>careful (1) 33:23</p> <p>cargo (2) 7:7;17:24</p> <p>caribou (1) 41:2</p> <p>carried (1) 12:10</p> <p>carrying (1) 51:3</p> <p>case (3) 12:3;15:16;35:11</p> <p>casing (3) 43:2,2;50:4</p> <p>cat (4) 40:3,13,15,19</p> <p>catch (1) 45:22</p> <p>Cathe (4) 24:7,9,11;31:18</p> <p>cause (2) 18:9;33:1</p> <p>caved (1) 55:8</p> <p>cease (1) 8:24</p> <p>Cecil (10) 23:8,9,9;35:15,18; 43:22;44:3,22;45:17; 47:15</p> <p>cement (1) 54:18</p> <p>cemented (1) 53:23</p> <p>centerline (1) 44:9</p> <p>certain (3) 35:7;36:3;46:23</p> <p>certainly (1) 41:12</p> <p>cetera (8) 7:1,22;10:9,23; 11:17;18:17,18;20:24</p> <p>chance (2) 5:10;19:19</p> <p>change (5) 18:8;42:21;47:9,10; 52:16</p> <p>changes (1) 49:20</p> <p>changing (2) 45:20,21</p> <p>channels (1) 48:5</p> <p>Chapter (5) 11:1,1;19:1,13;35:9</p> <p>Chapters (3)</p>	<p>18:23,24,25</p> <p>characterized (3) 20:6,19;32:3</p> <p>characterizes (1) 32:11</p> <p>cheaper (1) 42:5</p> <p>chemical (1) 45:13</p> <p>chemicals (2) 23:7;30:10</p> <p>chosen (1) 26:23</p> <p>CIRI (1) 4:23</p> <p>cities (1) 50:23</p> <p>citizens (1) 55:10</p> <p>City (1) 50:20</p> <p>clay (2) 44:16;45:2</p> <p>cleaning (1) 30:2</p> <p>climate (1) 42:21</p> <p>close (2) 34:15;37:16</p> <p>closed (1) 41:6</p> <p>closes (1) 51:14</p> <p>closest (2) 26:25;34:9</p> <p>Closure (5) 8:16,17,25;36:10; 52:19</p> <p>clothes (1) 42:1</p> <p>cold (2) 40:11,12</p> <p>collapse (1) 42:23</p> <p>collection (1) 45:23</p> <p>Colorado (1) 31:18</p> <p>Columbia (3) 44:9,15,25</p> <p>combination (1) 19:2</p> <p>combinations (1) 36:6</p> <p>combine (1) 10:7</p> <p>combined (1) 12:9</p> <p>combining (1) 19:7</p> <p>coming (14) 4:3;34:14;39:23; 42:17;47:10;48:9;</p>	<p>50:25;53:24;54:2,13, 13;55:7;56:22;57:17</p> <p>comment (14) 4:17;5:2;9:21,25; 10:1;20:11;21:10;22:9, 10;26:13,16;28:21; 40:24;57:8</p> <p>Commenting (1) 21:4</p> <p>comments (27) 4:8;5:3,16;6:4;9:23; 10:4;14:12;19:20;20:3, 8,15,25;21:3,7,8,8,15, 16;22:4,7;26:7,9;32:2; 39:10;50:9;53:6;57:24</p> <p>communities (2) 56:8,18</p> <p>community (11) 9:19;24:21;25:12,22; 27:25;28:15,17;31:6; 55:11,12;56:1</p> <p>company (1) 39:14</p> <p>compare (3) 12:14,16;14:3</p> <p>compared (2) 15:20;43:25</p> <p>completely (1) 48:25</p> <p>component (7) 4:24;5:17;6:18;7:2, 15;11:19;24:20</p> <p>components (1) 19:22</p> <p>comprised (1) 5:8</p> <p>concentrations (1) 37:17</p> <p>concern (9) 24:2;33:14,20;34:18; 38:8,15;39:19,22;43:3</p> <p>concerning (1) 28:14</p> <p>concerns (3) 11:10;33:23;40:2</p> <p>concluded (2) 45:1,5</p> <p>conclusion (1) 33:25</p> <p>conclusions (4) 10:22;18:11;35:3; 53:5</p> <p>condition (2) 12:17;20:5</p> <p>conditions (2) 42:3;43:16</p> <p>conduct (1) 5:19</p> <p>conducting (1) 5:24</p> <p>Connected (1) 7:4</p> <p>consider (1)</p>
	C			
	<p>Calista (1) 4:22</p> <p>call (3) 35:6;40:17;42:25</p> <p>called (7) 24:6;34:10;44:9,12; 45:23;50:2;56:19</p> <p>camp (2) 47:20;52:23</p> <p>can (43) 4:7,19;5:2,2;6:9;8:3, 11;9:24,24;10:25;11:6; 14:6,12;18:8,9,9; 19:20;20:8,22,25;21:5, 7,8,10,15,20,20;22:19; 26:3;29:3;30:3,25; 41:8,12;44:13;45:7;</p>			

<p>57:8 considered (6) 6:21;11:24;16:13; 17:13;19:14,25 considering (1) 11:10 considers (2) 12:18;38:11 consist (1) 17:9 consolidate (1) 52:6 constituents (1) 49:8 constructed (9) 4:22;7:6;8:13,13; 12:7;38:22;49:17; 50:13;51:25 construction (10) 6:10;8:14;17:3,12; 33:18;43:19,24;44:10, 11,13 consumption (3) 13:7,19;14:7 contact (2) 21:24;47:25 containment (3) 30:13;35:5;46:8 contains (1) 30:18 contaminate (2) 54:15,18 contaminated (9) 31:8,15;34:21;37:5, 9,19;38:17;39:20,21 contingency (1) 30:1 continue (3) 9:25;27:20;28:3 continuing (1) 27:9 Cook (1) 7:18 cooperating (1) 24:6 coordinator (2) 25:20;26:20 Coordinator's (1) 24:13 copy (1) 14:10 core (6) 46:5,6,11,14,21,22 Corps (6) 4:4,5,10;9:10;11:3; 26:22 couple (2) 21:7;47:25 course (2) 6:23;21:9 court (2) 5:16;26:1 Creek (43)</p>	<p>17:8;22:22,23;23:25; 24:10,19;25:14;26:23, 24;27:4,5,7,18,22; 28:24;40:10;47:20,21, 21,22,23;48:1,10,10, 11;49:6,13,15;50:1,2; 52:24;53:12,19,20,25; 54:1,2,2,4,5,7;55:24,25 creeks (1) 54:13 Crevice (3) 48:14,15,17 critter (1) 36:24 Crooked (18) 17:8;22:22,22;23:25; 24:10,19;25:14;26:23, 24;27:4,5,7,18,22; 28:23;48:10;49:6;54:4 cross (1) 8:5 Crossing (11) 13:10,13,14;14:18, 23,24;15:3;18:2,4,5,20 crushed (2) 6:13,15 culvert (2) 53:22,22 culverts (1) 54:18 cumulative (2) 19:1,2 currently (10) 7:13;12:9,17,19; 15:6;16:9,23;17:1,10; 19:5 cut (2) 42:2;46:22 cutting (2) 46:6,11 Cyanide (5) 29:21;45:14,14; 48:22,25</p>	<p>DARIGO (18) 23:14,14;34:8,17,24; 35:13,16;46:16,19,24; 47:5,24;48:13,15,19, 24;49:11;53:9 dark (1) 54:16 data (2) 10:5;12:1 date (3) 20:6,9;30:18 Dave (5) 36:19,21;37:6,25; 38:5 David (15) 23:22,22;34:2,14,18; 35:10;36:14;37:3,22; 38:3,16;39:13;40:23; 41:22;42:24 David's (1) 43:3 day (1) 8:17 days (2) 27:1;40:11 deal (1) 37:2 dealing (1) 24:1 dealt (1) 13:21 decades (1) 52:7 December (1) 9:15 decides (1) 10:15 deciding (1) 43:14 Decision (1) 10:14 decisionmakers (1) 4:18 decisions (4) 4:19;10:13,23;39:25 define (2) 5:13;11:5 defined (1) 20:4 defining (1) 11:2 definitely (1) 48:20 degree (3) 38:22,23;52:8 DEIS (1) 35:8 denigrating (1) 52:12 Department (1) 24:12 depending (1) 31:2</p>	<p>depicted (2) 6:11;8:9 depiction (5) 10:25;14:25;15:11; 16:22;17:1 descendents (1) 56:21 described (1) 33:19 description (1) 22:24 design (7) 19:14;29:12;35:19; 43:10,12;45:11;46:3 designed (5) 13:17;32:19;35:7; 45:5,7 detailed (1) 12:10 determine (1) 20:23 determining (1) 10:4 develop (1) 12:2 developed (1) 29:11 developing (1) 12:6 development (3) 4:11;12:4;33:9 diameter (1) 7:17 die (2) 37:10,24 diesel (24) 7:10;12:24,25;13:1, 2,3,5,6,7,7,18;14:6,7, 14,15;17:19,21,22,22; 32:15;40:9;42:6,10,13 difference (2) 35:21;44:23 differences (1) 33:18 different (6) 10:7;43:24;44:4,5; 46:11;51:10 direction (1) 11:24 directionally (1) 8:8 discharge (4) 29:25;45:13,13;49:6 discharges (1) 23:17 disclosing (1) 21:17 discovered (1) 45:3 discuss (1) 26:24 discussed (2) 12:20;18:15</p>	<p>distance (1) 36:23 District (2) 4:5;27:22 ditch (1) 53:23 diversion (2) 48:2,5 divert (3) 53:12,24;54:11 diverted (1) 53:21 diverting (1) 52:24 document (11) 11:1,2,13;32:1,9,10; 38:9;41:9,13;50:7;53:3 documented (1) 30:16 documenting (1) 27:13 documents (4) 10:14;21:22,23;32:6 Dog (2) 44:2;55:24 done (19) 8:17;10:8;12:19; 16:2,21;19:16;20:5,9; 22:6;23:16;25:4;31:23; 37:7;45:6;46:11;53:4; 54:22;57:2,15 Donlin (43) 4:6,23;6:9;8:6; 11:17;12:4;13:9,11; 15:14;18:3;19:15;25:6, 17,19,20,22;26:19,25; 27:6,10,19;28:2,9,12; 33:3;38:11;40:13,15, 19;41:24;42:25;44:11, 19;46:4,13;47:20,20; 52:23;53:2;55:6,24,25; 57:8 Donlin's (6) 12:20;15:20;16:6,9, 24;48:6 Donne (3) 25:8,9,11 Donut (4) 42:25;50:2,5,11 down (13) 7:5;15:2;30:8;31:8, 10;34:15,15;39:5; 48:20;52:14;55:3,16, 23 downstream (5) 13:12;15:19;35:5; 44:12;45:19 dozen (3) 5:8;8:3,4 Draft (25) 4:8;5:17;9:16;10:21, 21,22,22;11:7;12:11; 18:10,10,11,24;21:4,</p>
--	--	--	--	--

12,21;22:8;26:24; 28:13;30:21;31:22; 53:1,2,4,4	27:21	entire (1) 27:6	expect (3) 32:14,18;51:6	feedback (3) 27:4;55:13;57:15
drawn (1) 53:4	effect (3) 32:23;53:4;54:16	entities' (1) 11:10	expectation (4) 32:20;39:2;51:16,25	feet (4) 35:4;42:16;43:1; 50:1
dressed (1) 42:2	effectively (4) 5:2;17:23;21:2; 51:17	entity's (1) 11:23	expectations (2) 38:21;56:25	FEMALE (1) 31:16
drill (5) 8:8;46:21;54:22,25; 56:24	effects (8) 4:16;19:8;20:16; 28:15;31:25;41:9,10; 57:11	Environmental (1) 4:8	expected (6) 7:9;9:9;38:23;51:8, 18;52:6	fence (3) 36:16;40:25;41:1
drilling (3) 42:24;57:6,6	effort (1) 15:24	environment (2) 12:18;23:19	experience (1) 45:7	FERNANDEZ (8) 25:18,18;26:18,19; 29:9,19,22;30:9
drink (2) 37:4,7	eight (1) 43:2	Environmental (18) 4:12;9:10,13,17; 10:3,10;11:7;12:11; 21:13,21;24:17;25:16, 19;26:20;30:17;31:22; 39:12,16	exploration (1) 27:1	few (5) 6:5;7:22;8:11;28:6; 35:4
drinking (1) 37:15	EIS (17) 5:18,18;10:21;16:14; 18:24;20:14;21:4,22; 22:8;23:16;24:5;26:24; 28:13,14;33:19;34:24; 50:9	EPA (2) 45:12;49:10	explosion (3) 29:1,6,18	field (4) 5:23;10:8;24:24,24
dry (2) 13:20;15:5	either (5) 45:24;48:2;51:23; 53:22;55:20	equipment (3) 7:11;29:16;32:16	extent (1) 8:19	fields (1) 51:7
duck (1) 37:25	eliminate (2) 14:16;42:7	equivalent (1) 50:21	extra (1) 36:2	fifth (1) 57:13
ducks (1) 37:24	eliminating (2) 13:13,15	erode (1) 43:20	extremely (2) 11:14;33:6	figure (1) 12:6
dump (1) 42:19	else (1) 32:4	erosion (1) 15:18	F	fill (4) 10:5;12:1;51:18; 54:10
during (9) 8:12;14:17;15:17; 17:12,24;29:18,22; 36:4;52:1	emergency (4) 29:7,10,13,23	essentially (1) 44:4	fabulous (1) 57:1	filled (1) 15:15
dust (2) 15:13,18	emissions (1) 23:17	et (8) 7:1,22;10:9,23; 11:17;18:17,18;20:24	facilities (4) 6:24;8:19;29:24; 53:11	filling (1) 32:16
E	employees (1) 57:12	evaporate (1) 51:23	facility (12) 6:12,13,16,19;7:8,9, 9,13;47:25;51:20;52:8; 53:12	final (5) 5:18;10:2,10,23; 43:13
earlier (2) 22:9;34:8	end (6) 6:5;8:23;10:1;36:7; 38:19;49:2	even (2) 9:3;52:3	fact (1) 43:22	financial (1) 52:20
early (2) 8:22;27:1	engagement (1) 25:12	evening (10) 4:2,25;5:1,14;13; 20:2;23:2,18,22;24:16; 25:1	factors (1) 33:16	find (1) 41:11
earth (1) 45:9	engineer (1) 23:10	event (1) 32:21	fail (3) 32:19,20;43:9	fine (1) 27:15
earthquake (5) 32:21;33:3,5;34:19; 35:1	engineering (4) 29:12;30:12;43:11, 14	events (2) 28:4;32:25	failed (6) 44:8,10,15,25;45:3,6	finished (2) 8:18;36:11
earthquakes (2) 32:22;33:1	Engineers (5) 4:5,10;9:10;11:3; 26:23	everybody (4) 22:16;25:24;55:15; 56:13	failing (1) 33:17	fire (1) 29:6
eat (1) 37:23	enjoy (2) 24:21;56:19	everyone (1) 23:3	failure (3) 28:25;33:13,16	first (10) 8:14;22:21;23:4,24; 24:10;26:23;40:3,17; 57:2,3
eating (1) 37:20	enjoyed (1) 23:25	exactly (4) 12:22;45:11;48:13; 51:9	Fairbanks (2) 50:20,22	fish (15) 18:7,8,9,10,13,17,17; 20:20;38:18;39:5,16, 17,18;41:17,18
ecological (1) 37:7	enough (10) 6:21;16:2;34:20; 35:22;36:1,12;37:9,16, 19;52:11	example (5) 16:16,20;33:12;38:7, 15	fall (2) 39:25;40:1	fisheries (2) 24:1;41:17
economic (2) 11:10,19	Enric (7) 26:16,18,19;29:4,9, 22;30:9	exist (2) 49:19,21	far (5) 20:1;21:1,17;29:4; 31:12	fishing (2) 24:2;56:19
economics (2) 11:14,23	Enric's (1) 39:14	existing (2) 7:12;17:1	fault (5) 34:3,6,6,9,10	five (3) 13:15;32:15;40:6
economy (1) 56:18	ENRIQ (3) 25:18,18;29:19	exists (6) 12:18,19;16:23; 17:11;20:5;52:8	fax (1) 21:8	Flat (2) 40:14,20
edge (1) 36:22		expansion (1) 7:12	features (1) 35:17	Fleagle (2) 25:9,11
educated (1) 28:9			federal (6) 4:11;9:11;10:12,15; 51:5,12	flood (1) 35:23
education (2) 27:23,25				
educational (1)				

<p>flow (5) 23:17;43:19;45:13; 47:19;52:22</p> <p>flown (1) 22:22</p> <p>focus (1) 11:1</p> <p>focused (1) 27:25</p> <p>folks (4) 5:11;26:10,11;51:8</p> <p>Following (1) 5:15</p> <p>Foo (1) 27:6</p> <p>food (3) 37:12,13;41:5</p> <p>forecast (1) 19:7</p> <p>foreseeable (1) 19:3</p> <p>forever (1) 52:2</p> <p>forget (1) 31:10</p> <p>forgot (1) 22:17</p> <p>Fork (4) 34:10,15;43:5,5</p> <p>form (1) 30:21</p> <p>formal (1) 9:4</p> <p>forms (1) 21:7</p> <p>forward (3) 12:10;16:25;27:9</p> <p>found (1) 38:23</p> <p>foundation (1) 44:23</p> <p>four (1) 8:15</p> <p>frame (2) 30:4,25</p> <p>freeboard (2) 35:6;36:3</p> <p>front (1) 21:6</p> <p>fuel (10) 7:7,10,15,20,21; 14:16;30:10;32:15; 41:11;50:25</p> <p>fully (1) 42:2</p> <p>fund (1) 52:20</p> <p>further (5) 8:20;40:10,10,22,22</p> <p>future (4) 19:3,6,8;55:18</p>	<p style="text-align: center;">G</p> <p>gallon (1) 32:18</p> <p>gallons (3) 7:10;32:15;54:4</p> <p>GAMACHE (2) 25:21,22</p> <p>game (2) 36:17;38:17</p> <p>gaps (2) 10:5;12:1</p> <p>gas (5) 12:24;13:4;42:6,10, 12</p> <p>generate (2) 10:13;47:17</p> <p>generated (3) 9:16;10:11;35:24</p> <p>generation (3) 28:5,5,5</p> <p>generators (1) 50:15</p> <p>generic (1) 29:3</p> <p>gets (4) 25:4;35:11;45:18; 48:23</p> <p>gives (1) 18:21</p> <p>giving (2) 16:16;25:3</p> <p>glad (1) 26:22</p> <p>glow (1) 54:16</p> <p>goes (11) 6:14,15;27:1;28:17; 32:7;38:25;39:7;40:15; 47:21;52:2,7</p> <p>gold (21) 6:11,15,21;8:3,4; 16:6,25;17:10,11; 25:17,19,20,22;26:19; 27:6,10,19;28:2,9,12; 55:6</p> <p>Gold's (1) 26:25</p> <p>Good (11) 4:2;15:3;20:13;23:2, 18,22;24:16;25:1;38:7, 15;57:22</p> <p>GORDON (25) 4:2,3;6:7;22:15; 26:6;27:12;28:20;29:3; 30:17;31:22;32:9;34:4; 38:21;41:8;42:8;49:12, 16;50:6,17,19;51:4,16; 52:5,53:1;57:7</p> <p>Gorge (5) 13:22,25;16:3,6,8</p> <p>grade (2)</p>	<p>57:2,3</p> <p>grader (1) 57:13</p> <p>grateful (1) 27:23</p> <p>grease (1) 44:18</p> <p>greater (1) 18:13</p> <p>ground (3) 15:6;22:23;34:12</p> <p>groundwater (2) 45:20,21</p> <p>grow (1) 37:11</p> <p>guarantee (3) 34:23;51:9;52:20</p> <p>guaranteed (3) 41:22;42:22;43:8</p> <p>guarantees (1) 56:7</p> <p>guys (9) 25:7;27:16;35:10; 36:14;41:21;42:19; 43:4;57:23,24</p> <p style="text-align: center;">H</p> <p>habitat (2) 18:9,17</p> <p>half (6) 8:3,4,16;11:8;46:22, 22</p> <p>hands (1) 57:17</p> <p>hang (1) 24:14</p> <p>happen (11) 8:22,24;16:24;19:6; 30:19;33:2,8,14;34:25; 50:12;53:7</p> <p>happened (5) 30:6;31:5;43:21,25; 45:1</p> <p>happening (1) 31:6</p> <p>happens (2) 29:5;32:17</p> <p>happy (1) 39:12</p> <p>hard (3) 14:10;31:19;33:20</p> <p>haul (3) 12:22,23;14:5</p> <p>hazardous (1) 23:7</p> <p>hazing (1) 38:10</p> <p>hear (5) 9:23;26:7;31:7; 39:12;55:3</p> <p>heard (4) 33:23;55:24,24;</p>	<p>56:11</p> <p>hearing (6) 5:19,21,25;6:4;22:9; 24:22</p> <p>heavily (2) 11:2,23</p> <p>held (2) 28:4;33:15</p> <p>helicopter (1) 39:15</p> <p>helicopters (1) 46:13</p> <p>help (1) 22:19</p> <p>helped (1) 28:2</p> <p>HEROY (3) 24:9,11;31:18</p> <p>Hi (4) 23:9;24:9;25:11; 26:18</p> <p>hide (1) 30:25</p> <p>high (2) 36:2,12</p> <p>higher (2) 15:16;35:20</p> <p>highly (1) 33:7</p> <p>hillside (1) 40:16</p> <p>history (1) 26:25</p> <p>hold (1) 6:13</p> <p>holding (1) 38:20</p> <p>holds (1) 46:7</p> <p>Hole (8) 43:1;50:2,5,12; 54:22,25;56:25;57:6</p> <p>holes (1) 54:22</p> <p>hope (3) 28:3,12,16</p> <p>hopefully (1) 28:17</p> <p>hopes (1) 27:18</p> <p>horizontally (1) 8:8</p> <p>hot (1) 41:25</p> <p>hours (1) 54:10</p> <p>huge (2) 32:25;33:1</p> <p>human (2) 9:9;16:9</p> <p>hunting (1) 56:19</p> <p>hydrology (1)</p>	<p>49:20</p> <p style="text-align: center;">I</p> <p>Idaho (2) 55:23;56:2</p> <p>idea (3) 5:21;15:23;36:8</p> <p>Iditarod (1) 40:14</p> <p>Impact (27) 4:8,12;9:13,17,17; 10:3,10;11:8;12:7,11; 13:1,2;15:13;16:9,18; 18:9,12,13,16;21:13, 22;30:18;31:23;34:1, 12,20;46:15</p> <p>impacts (27) 4:15;5:13;8:1,7; 9:10;13:9,18,24;14:6, 19;15:25;16:19;18:19, 19;19:1,2,12;20:7,20; 21:18;25:3;33:10,11; 39:12;41:12;49:17,22</p> <p>important (11) 11:15,15,16,16,17, 18;14:20;20:20;21:16; 22:18;36:22</p> <p>impounded (1) 6:16</p> <p>inches (1) 43:2</p> <p>incidents (2) 29:15,16</p> <p>include (1) 10:3</p> <p>includes (1) 42:12</p> <p>incorporated (1) 46:3</p> <p>incorrectly (1) 20:19</p> <p>increase (1) 17:14</p> <p>independent (1) 44:25</p> <p>independently (1) 6:2</p> <p>indicates (1) 18:12</p> <p>indicating (2) 9:11;10:19</p> <p>individual (5) 10:14,17;11:10,22; 37:25</p> <p>industrial (1) 38:24</p> <p>industry (1) 55:21</p> <p>information (21) 4:7,15,18;5:4,14; 8:11;9:24;10:16;12:2; 16:23;18:25;19:20;</p>
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<p>20:22,24;21:5,6,19,20, 24:22:1;37:18 informed (2) 4:19;28:8 infrastructure (3) 7:3;42:15;57:5 infrastructures (1) 55:8 initiated (1) 9:3 injury (1) 18:9 Inlet (1) 7:19 input (5) 16:1;19:9;55:14,14; 56:5 inside (1) 50:2 instability (1) 43:17 instead (5) 8:9;12:24;13:3,11; 40:9 instruments (1) 45:19 intended (1) 11:12 intent (2) 5:21;9:11 interest (1) 11:22 interested (1) 53:5 interval (1) 33:7 into (19) 6:15;10:2;12:9;17:2; 19:17;22:5;35:19; 43:12;45:25,25;49:13, 13;54:1,4,6,7;55:18; 56:7,9 introduce (2) 25:7;57:9 introduced (1) 5:12 introduction (1) 22:16 involved (2) 27:21;43:22 involvement (2) 27:5,23 ISAACS (15) 22:12,12,18,21;24:4; 25:5,9,25;31:11;33:12; 36:19;38:7;43:10; 52:18;57:18 issue (2) 10:12,18 issues (9) 16:13,13,19;19:25; 24:2;31:24;39:11; 48:24;50:12</p>	<p style="text-align: center;">J</p> <p>JEN (2) 24:16,17 Jeremy (1) 28:6 JOAN (2) 23:18,19 JOHN (12) 34:2,14,18;35:10; 36:14;37:3,22;38:3,16; 39:13;53:20;57:12 joining (1) 23:3 JON (18) 22:12,12,15,18,21; 24:4;25:5,8,9,16,25; 31:11;33:12;36:19; 38:7;43:10;52:18; 57:18 Juneau (1) 50:21 Jungjuk (3) 7:6;13:11;15:2</p> <p style="text-align: center;">K</p> <p>keep (6) 17:25;36:15,17; 38:11,14;48:5 KEITH (25) 4:2,3;6:7;22:15; 26:6;27:12;28:20;29:3; 30:17;31:22;32:9;34:4; 38:21;41:8;42:8;49:12, 16;50:6,17,19;51:4,16; 52:5;53:1;57:7 kept (1) 35:7 kick (1) 26:9 kids (2) 41:19;54:24 killing (1) 37:16 kilowatts (1) 50:17 kind (11) 14:8;29:7;30:7; 38:25;44:6,7,13;46:3,5, 10;57:23 kinds (4) 34:21;37:2;39:17; 45:19 kit (1) 51:3 KLUWE (2) 23:18,19 KNA (1) 23:5 knew (2) 9:3;33:19</p>	<p>knowledge (1) 29:14 KSD (2) 27:22;28:4 Kuskokwim (2) 14:21;57:10 Kuspuk (1) 27:22</p> <p style="text-align: center;">L</p> <p>lab (1) 46:22 Land (8) 5:18,24;24:8;25:2; 37:6;38:17;39:1;46:13 lands (2) 4:22,23 large (2) 32:18,25 largely (3) 15:15;51:8,11 last (5) 8:17;11:9;18:24; 25:21;28:8 later (2) 14:13;21:16 law (1) 31:1 layer (3) 44:16,18;45:2 layout (1) 19:23 lead (6) 4:11;23:15,19,23; 25:16;55:18 leaks (1) 45:24 leans (1) 11:2 least (4) 25:21;26:9;44:7; 49:8 leave (2) 17:9;41:18 left (3) 15:6;38:19;46:14 less (13) 12:7,25;13:1,1,2; 16:9;17:19,20,20; 18:16,16;48:9,15 level (5) 15:16;31:23;35:7,7; 51:19 levels (1) 49:8 liaison (1) 22:1 life (7) 8:22;9:5,6;36:7; 51:20,25;52:1 likelihood (1) 37:8</p>	<p>likely (1) 34:1 limit (3) 8:1;13:18;15:25 limited (1) 37:10 limiting (1) 19:11 line (3) 34:3;42:13;55:16 lines (2) 34:6,6 liquid (1) 12:24 list (2) 19:13;30:18 listen (2) 9:23;33:23 listened (1) 27:4 little (16) 4:7,25;5:14;8:11; 14:11,23;15:13;16:22; 18:4,21;21:19;35:4,4; 37:15;54:13,17 live (2) 19:4;23:5 living (1) 56:21 LNG (2) 14:4;17:18 LNG-powered (1) 12:21 long (8) 7:17;19:18;26:25; 37:14,19,24;38:6;52:8 long-term (1) 47:7 look (32) 6:8;10:6,6;14:12; 17:15;18:6;19:19; 20:22;22:6;27:9;32:1, 21,24;33:13,15,17,20, 24;38:8,9,13,14;41:8, 12;42:9,11;43:15,16, 18,18;50:6;57:20 looked (9) 12:2;13:23;16:16; 17:16;19:15;32:5; 33:17;42:10;50:10 looking (7) 12:4;19:4;20:15; 28:13;32:13;43:21,23 looks (1) 35:9 lose (8) 35:5;38:17,18,18; 39:21;41:18;50:4; 56:18 lost (1) 43:1 lot (8) 31:4;39:3,16;43:11,</p>	<p>21;48:9;55:18,19 lots (1) 25:23 low (1) 48:20</p> <p style="text-align: center;">M</p> <p>mail (2) 21:8;40:20 maintenance (1) 8:16 major (1) 8:5 majority (2) 13:14;14:16 makes (1) 10:16 making (3) 19:7;39:6;55:8 MALE (1) 31:12 man (1) 26:21 Management (12) 5:19,24;24:8;25:2; 30:14;35:17,17,18; 36:20;37:1,18;48:6 manager (5) 4:4,5;5:23;22:14; 24:24 many (7) 21:14;26:20;50:15; 52:7,7;54:4;55:22 March (1) 9:16 Mark (3) 24:7,16,17 Mary (4) 5:15;22:7;26:1; 27:13 material (2) 6:25;34:19 matters (1) 21:25 maximum (3) 35:23;36:5;51:19 may (10) 30:10,13,19;31:25; 34:11;37:13;38:8; 55:18,19;57:8 Maybe (4) 23:1;24:6;43:1;50:1 McGrath (1) 43:5 mean (5) 15:11;17:7;45:14; 50:1;52:4 means (4) 13:3,10;15:8;17:8 meanwhile (1) 45:22 measured (1)</p>
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<p>30:15 measures (4) 19:13;30:11,12,13 mechanism (1) 21:10 mechanisms (1) 30:19 meet (3) 51:5,12;52:15 meeting (3) 6:6;21:11;26:7 meetings (5) 9:15;21:12,14;26:24; 56:9 megawatts (1) 50:16 melting (2) 42:20;43:7 melts (1) 48:18 mentioned (6) 5:1;14:1;18:4;19:11; 22:9;27:12 mercury (3) 29:21;45:15,15 method (2) 14:5;44:9 methodology (3) 15:5,12,13 methods (2) 8:1;33:18 Michigan (1) 31:11 middle (2) 23:12;44:6 middle-of-the-road (3) 4:14;11:21,24 might (21) 4:16;7:25;8:1,5; 12:7;15:11;16:24; 18:12;19:1,3,8;30:20; 31:25;32:12,35;23; 38:10;50:12;54:18; 57:10,11,22 mile (3) 6:10,12,19 miles (8) 13:12;16:4;34:10; 40:6;43:6;49:18,19; 56:3 mill (6) 6:14,23;28:25;29:2, 6;46:1 milling (4) 46:2;48:3,25;53:15 million (1) 7:10 mind (3) 18:1;56:13;57:24 mine (53) 4:21;6:11,18;7:4,16, 19;12:23,25;13:1; 14:15;15:1;18:11;</p>	<p>19:23;25:6;28:18;29:6, 9,12,23;30:11;34:3,7,9, 13,16;36:7,10,16,17; 38:24;39:11;40:5,20; 45:9,24;49:3,21;50:13, 18,20;51:14,18,22,23, 25;52:1;55:10,12,13, 23;56:3,5,7 minimize (1) 13:24 minimizing (1) 19:12 minimum (1) 51:11 mining (7) 7:11;8:17,18,24; 52:21;55:3,21 minute (2) 12:13;15:11 minutes (4) 6:3,5;7:22;8:11 missed (1) 16:15 mitigate (1) 8:7 mitigated (3) 7:25;19:13;49:18 Mitigation (2) 19:11;38:10 model (1) 34:12 modeled (1) 33:3 moderate (1) 18:12 modifies (2) 13:8,21 Momentarily (1) 19:17 money (1) 55:8 monitored (1) 54:20 monitoring (3) 8:25;9:1,4 months (1) 57:14 moose (2) 41:1;54:16 more (17) 4:19;5:14;8:11;13:6, 7;15:13,18,18;16:10; 20:25;21:19;28:8,8; 39:12;42:20,20;57:15 mortality (1) 18:10 most (6) 5:2;25:24;40:8; 41:17;44:5,13 Mount (4) 33:14;43:22,23,25 mountain (1) 54:14</p>	<p>move (6) 10:2;19:17;22:5; 24:8;53:14,16 Moving (1) 6:8 much (6) 15:16;23:3;27:24; 35:12,20;56:20 multimillion (1) 32:18</p> <p style="text-align: center;">N</p> <p>name (10) 4:3;5:22;22:12,20; 23:18;24:11,16;26:18; 27:14;40:2 NANCY (18) 23:14,14;34:8,17,24; 35:13,16;46:16,19,24; 47:5,24;48:13,15,19, 24;49:11;53:9 narrow (1) 18:13 natural (8) 12:24;13:4;20:17; 24:12;42:6,10,12; 46:25 near (2) 8:23;24:14 necessary (1) 52:9 need (15) 5:4;8:19;10:5,6,8,12; 11:3;16:14;19:8;20:3, 7;21:3,16;42:9;53:16 needed (2) 9:12;17:19 needing (2) 12:25;49:2 needs (1) 52:9 negative (5) 4:17;28:14;55:19,20; 57:16 neighbor (1) 26:25 neither (2) 4:12;11:20 NEPA (5) 9:12;11:5;12:14; 20:14;32:24 new (3) 7:5;28:7;41:3 news (1) 31:7 newsletters (1) 21:23 next (5) 23:1;28:4,6;32:7,7 nice (2) 22:23;25:13 NICK (3)</p>	<p>53:20;57:12,18 nine (2) 19:24;49:18 Nixon (4) 34:10,15;43:5,5 no-action (2) 12:13;14:1 nobody (1) 54:21 Nope (1) 46:20 nor (2) 4:13;11:20 north (2) 34:11;51:7 note (1) 14:20 notes (1) 11:9 Notice (1) 9:11 notify (1) 31:5 NOVAGOLD (2) 4:24;25:16 number (7) 13:23;14:21;18:1; 21:9;26:11,12;45:2 numbers (2) 26:10,14 numerical (1) 26:12</p> <p style="text-align: center;">O</p> <p>Obviously (6) 9:22;21:11;27:19; 29:11,15;52:1 occasional (1) 26:21 occur (1) 30:23 occurs (1) 17:1 off (6) 13:6;14:15;21:1; 26:5;41:7;44:19 Office (2) 24:14,24 offices (1) 9:18 official (1) 6:4 oil (1) 51:7 old (3) 40:13,20;41:20 Once (5) 10:1;12:1,2;24:23; 38:16 One (30) 7:23;8:5,10,10; 13:25;16:10;17:25;</p>	<p>24:2;26:23;28:6;31:18; 32:18;34:12;35:2; 36:21;38:21;40:3; 41:23,24;42:6,6;43:15; 44:1,8,10,11;45:2; 50:10,23;51:13 ones (2) 19:22;39:23 only (12) 14:9;17:23;27:21; 28:4;38:1;40:4;41:16; 48:11;56:2,3,6;57:12 open (6) 6:4,10;22:10;26:14; 28:18,20 opening (1) 5:6 operate (4) 7:7;13:6;19:24; 37:23 operates (1) 14:15 operating (1) 15:19 operation (3) 29:12;51:6,10 operational (1) 17:15 operations (7) 8:15;14:17;15:17; 17:4,24;29:4;36:5 opponent (2) 4:13;11:20 opportunities (1) 28:9 options (4) 12:8;13:24;15:24; 38:14 orange (2) 17:11;41:24 order (1) 26:12 ore (4) 6:14,21,22;15:7 organic (1) 6:25 original (1) 15:14 others (2) 16:15;21:15 out (37) 11:7,8,13;12:6,18; 17:2;20:5;21:6;24:14; 25:13,23;26:10;27:15; 28:2;36:15,18;38:12, 15;45:18,24,25;46:21; 47:10;48:5,10;49:4,8; 51:23;52:13;53:24; 54:2,14;55:7;56:4,8; 57:13,14 outset (1) 27:14 outside (1)</p>
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<p>40:15 over (22) 7:19;8:10;12:8;13:9; 15:7;17:14;22:22; 23:16,20;24:1,14;27:8; 32:5;39:18;41:4;47:1, 5,10;51:19;52:1,6,10 overall (1) 11:2 overburden (1) 6:20 overflow (2) 35:11,16 owl (1) 26:20 own (2) 29:7;39:23 owners (1) 25:17</p>	<p>permits (1) 10:18 permitted (3) 10:20;39:7;49:22 permitting (5) 10:17;27:10,20; 43:13;49:23 perpetuity (2) 51:17,21 personnel (1) 29:14 phase (5) 8:14;15:17;17:3,4,15 phases (1) 8:14 photos (1) 8:10 phrase (1) 14:17 physical (1) 23:15 piece (1) 32:16 pile (2) 6:19;47:9 pink (1) 7:3 pipe (1) 52:23 pipeline (22) 4:22;7:18,21;8:5; 13:3,4,8,22,24;14:14; 16:3,7;17:22,23;24:13, 14;34:5;42:5,10,11; 53:17;54:21 pipelines (2) 42:6,12 pipng (1) 53:14 pit (7) 6:10;47:19,20;48:1; 49:15;54:11,12 place (5) 9:2,15;17:6;19:5; 50:2 placed (1) 15:7 places (2) 55:22;56:1 Placing (1) 15:12 plan (7) 36:25;37:1;38:10,10; 48:6;52:19,19 plane (1) 44:18 planning (1) 29:22 plans (10) 27:3;29:4,10,10,13, 23;30:1,2,16;44:11 plant (2) 47:12;49:7</p>	<p>plants (2) 37:12;51:2 please (3) 27:13;28:22;32:1 plenty (1) 36:4 plus (2) 35:23;36:2 point (10) 10:21;11:7;15:22; 20:2;22:5;32:16;38:13; 41:15;42:24;52:11 points (1) 13:15 policing (1) 56:9 Polley (4) 33:14;43:22,23;44:1 polluted (1) 55:11 pond (11) 15:19;31:13;35:11; 36:23;37:11;43:9,11, 12;46:1;52:4;53:15 ponds (1) 48:2 population (2) 56:2,6 port (7) 7:5,12;13:10,11; 14:18;15:2;50:25 positive (6) 4:16;55:19,20;56:12, 12;57:16 possible (1) 36:5 possibly (1) 28:15 poster (8) 5:8,12;8:12;19:17, 18;22:5;23:12,17 posters (11) 5:9,11;8:10;19:21, 22,24;22:7;23:4;24:1; 26:3;35:2 potential (16) 4:15;5:13;7:20; 13:16,23;15:17;19:12; 20:7;21:18;30:19; 31:24;33:10,16,21; 49:22;57:21 potentially (2) 9:9;33:11 power (5) 7:11;13:4;50:14,21; 51:2 powered (1) 12:23 practices (1) 30:14 precautions (2) 34:22;55:2 predict (1)</p>	<p>47:11 prep (1) 46:22 preparation (1) 10:2 prepare (1) 9:12 prepared (1) 28:16 present (2) 6:3;19:2 presentation (5) 5:6,10;22:3;57:20,23 presenting (1) 6:2 pretty (3) 33:5;35:10;45:12 prevent (1) 30:8 prevention (2) 29:25;30:11 primarily (4) 13:6,18;14:5;15:9 primary (8) 6:18;7:2,15,20;11:1; 16:13,18;19:25 probability (2) 32:22;33:25 probable (3) 32:12,14;35:23 probably (1) 24:14 problem (3) 37:20;45:1;54:10 Proceedings (1) 57:25 P-R-O-C-E-E-D-I-N-G-S (1) 4:1 process (10) 5:7;9:7,8,22;12:1; 20:14;48:3;49:1,3; 53:15 processed (1) 15:7 produced (2) 10:11;21:1 program (1) 28:1 project (64) 4:4,5,6,13,15,16,20; 5:5,13;6:9;7:2,24,25; 8:13,22;9:2,4,5,6,8,25; 10:15,18,18,19,20,24; 11:3,5,14,20,21;12:5,6; 13:4,5,5;15:25;16:24; 17:3,4,16;19:15,21; 20:7,12,12,16,19; 21:18,20;22:25;25:17; 26:4;27:2,5,11,19; 28:22;33:4;39:6;49:17, 22,24 projects (1) 19:12</p>	<p>project's (1) 19:8 proponent (2) 4:13;11:20 propose (1) 53:7 proposed (35) 4:6,13,20,21;5:5;6:9; 7:4,5,6,8,24,25;10:19, 24;12:14,21;13:9;15:1, 1,1,25;16:6,10,24; 17:16;18:24;19:23; 22:25;34:16;42:9,11; 43:25;44:1;47:19; 49:15 proposing (13) 6:9,23;7:14,16;8:2,7; 12:3;13:12;15:14;18:3; 53:2,3,6 Protection (1) 24:17 prove (1) 30:3 providing (1) 5:4 proximity (1) 38:24 public (2) 10:16;11:22 pumped (3) 45:24,24,25 purple (1) 16:5 purpose (4) 5:1;11:3,5;12:5 pushes (1) 36:1 pushing (1) 17:10 put (11) 6:23;9:11;15:10; 34:22;42:1;43:12;46:5, 11,13;56:7,8 putting (1) 52:23</p>
P				
<p>panel (2) 44:25;45:5 paragraph (1) 11:9 part (4) 4:22,23;46:2;55:15 participated (1) 9:14 participating (1) 24:5 participation (1) 27:8 partnership (1) 27:8 passed (1) 26:10 past (4) 13:14;19:2,5;40:19 PAUL (26) 40:2,3;41:15;42:14; 44:21;45:12;46:4,18, 20;47:3,18;48:11,14, 16,21;49:10,14,25; 50:14,18,23;51:13; 52:3,21;53:18;57:18 people (6) 20:17;27:7;55:23; 56:2,6,24 percent (1) 25:17 percentage (1) 49:5 percolate (1) 46:25 perhaps (1) 36:20 period (2) 10:1;22:9 permafrost (6) 42:20;43:7,16;48:17, 19;50:12</p>	<p>permits (1) 10:18 permitted (3) 10:20;39:7;49:22 permitting (5) 10:17;27:10,20; 43:13;49:23 perpetuity (2) 51:17,21 personnel (1) 29:14 phase (5) 8:14;15:17;17:3,4,15 phases (1) 8:14 photos (1) 8:10 phrase (1) 14:17 physical (1) 23:15 piece (1) 32:16 pile (2) 6:19;47:9 pink (1) 7:3 pipe (1) 52:23 pipeline (22) 4:22;7:18,21;8:5; 13:3,4,8,22,24;14:14; 16:3,7;17:22,23;24:13, 14;34:5;42:5,10,11; 53:17;54:21 pipelines (2) 42:6,12 pipng (1) 53:14 pit (7) 6:10;47:19,20;48:1; 49:15;54:11,12 place (5) 9:2,15;17:6;19:5; 50:2 placed (1) 15:7 places (2) 55:22;56:1 Placing (1) 15:12 plan (7) 36:25;37:1;38:10,10; 48:6;52:19,19 plane (1) 44:18 planning (1) 29:22 plans (10) 27:3;29:4,10,10,13, 23;30:1,2,16;44:11 plant (2) 47:12;49:7</p>	<p>plants (2) 37:12;51:2 please (3) 27:13;28:22;32:1 plenty (1) 36:4 plus (2) 35:23;36:2 point (10) 10:21;11:7;15:22; 20:2;22:5;32:16;38:13; 41:15;42:24;52:11 points (1) 13:15 policing (1) 56:9 Polley (4) 33:14;43:22,23;44:1 polluted (1) 55:11 pond (11) 15:19;31:13;35:11; 36:23;37:11;43:9,11, 12;46:1;52:4;53:15 ponds (1) 48:2 population (2) 56:2,6 port (7) 7:5,12;13:10,11; 14:18;15:2;50:25 positive (6) 4:16;55:19,20;56:12, 12;57:16 possible (1) 36:5 possibly (1) 28:15 poster (8) 5:8,12;8:12;19:17, 18;22:5;23:12,17 posters (11) 5:9,11;8:10;19:21, 22,24;22:7;23:4;24:1; 26:3;35:2 potential (16) 4:15;5:13;7:20; 13:16,23;15:17;19:12; 20:7;21:18;30:19; 31:24;33:10,16,21; 49:22;57:21 potentially (2) 9:9;33:11 power (5) 7:11;13:4;50:14,21; 51:2 powered (1) 12:23 practices (1) 30:14 precautions (2) 34:22;55:2 predict (1)</p>	<p>47:11 prep (1) 46:22 preparation (1) 10:2 prepare (1) 9:12 prepared (1) 28:16 present (2) 6:3;19:2 presentation (5) 5:6,10;22:3;57:20,23 presenting (1) 6:2 pretty (3) 33:5;35:10;45:12 prevent (1) 30:8 prevention (2) 29:25;30:11 primarily (4) 13:6,18;14:5;15:9 primary (8) 6:18;7:2,15,20;11:1; 16:13,18;19:25 probability (2) 32:22;33:25 probable (3) 32:12,14;35:23 probably (1) 24:14 problem (3) 37:20;45:1;54:10 Proceedings (1) 57:25 P-R-O-C-E-E-D-I-N-G-S (1) 4:1 process (10) 5:7;9:7,8,22;12:1; 20:14;48:3;49:1,3; 53:15 processed (1) 15:7 produced (2) 10:11;21:1 program (1) 28:1 project (64) 4:4,5,6,13,15,16,20; 5:5,13;6:9;7:2,24,25; 8:13,22;9:2,4,5,6,8,25; 10:15,18,18,19,20,24; 11:3,5,14,20,21;12:5,6; 13:4,5,5;15:25;16:24; 17:3,4,16;19:15,21; 20:7,12,12,16,19; 21:18,20;22:25;25:17; 26:4;27:2,5,11,19; 28:22;33:4;39:6;49:17, 22,24 projects (1) 19:12</p>	<p>project's (1) 19:8 proponent (2) 4:13;11:20 propose (1) 53:7 proposed (35) 4:6,13,20,21;5:5;6:9; 7:4,5,6,8,24,25;10:19, 24;12:14,21;13:9;15:1, 1,1,25;16:6,10,24; 17:16;18:24;19:23; 22:25;34:16;42:9,11; 43:25;44:1;47:19; 49:15 proposing (13) 6:9,23;7:14,16;8:2,7; 12:3;13:12;15:14;18:3; 53:2,3,6 Protection (1) 24:17 prove (1) 30:3 providing (1) 5:4 proximity (1) 38:24 public (2) 10:16;11:22 pumped (3) 45:24,24,25 purple (1) 16:5 purpose (4) 5:1;11:3,5;12:5 pushes (1) 36:1 pushing (1) 17:10 put (11) 6:23;9:11;15:10; 34:22;42:1;43:12;46:5, 11,13;56:7,8 putting (1) 52:23</p>
Q				
<p>quality (4) 31:20;39:6,10;52:12 quantity (1) 17:14 quarry (1) 31:17 quick (1) 18:6 quickly (1) 31:2 quite (3) 14:19;25:13;49:5</p>				
R				

<p>rainwater (1) 46:25</p> <p>raising (1) 38:15</p> <p>Range (2) 7:19;32:24</p> <p>rare (1) 33:6</p> <p>reach (1) 10:1</p> <p>reached (1) 10:23</p> <p>reactive (1) 52:11</p> <p>realgar (1) 45:16</p> <p>really (6) 18:25;20:13;28:2,3, 12;44:17</p> <p>realm (1) 33:2</p> <p>reason (1) 33:2</p> <p>reasonable (2) 30:4;32:25</p> <p>reasonably (3) 19:3;32:12,13</p> <p>reclaim (1) 52:22</p> <p>reclamation (4) 7:1;8:21,21;52:19</p> <p>reconvene (1) 5:15</p> <p>Record (2) 10:13;26:5</p> <p>Records (1) 10:13</p> <p>recreation (1) 18:18</p> <p>red (3) 7:4;44:2;55:24</p> <p>reduce (2) 14:6,21</p> <p>reduces (1) 14:22</p> <p>reducing (2) 14:19;19:12</p> <p>regarding (2) 4:19;39:10</p> <p>regardless (1) 56:13</p> <p>region (5) 11:16;20:17;27:22; 28:10;57:10</p> <p>Register (1) 9:11</p> <p>regulations (4) 9:12;11:4;36:9; 57:22</p> <p>regulators (1) 45:8</p> <p>regulatory (1) 52:15</p>	<p>related (10) 5:4;6:5;7:3;14:16; 15:18;17:18;20:14; 28:21;32:2;39:11</p> <p>relating (1) 13:18</p> <p>relation (18) 10:15,24;11:5,11; 15:13;17:14;18:2,7,7; 20:21;21:1,17;31:24; 32:10;34:5,7;39:5; 50:11</p> <p>relations (1) 25:23</p> <p>release (1) 49:13</p> <p>released (7) 39:8,9;48:23;51:23, 24;52:10,17</p> <p>remaining (2) 6:15;21:12</p> <p>remember (3) 31:9,15;33:6</p> <p>removed (4) 6:22;11:12,13;15:10</p> <p>report (3) 30:24;31:1;51:22</p> <p>reporter (2) 5:16;26:2</p> <p>represent (1) 8:4</p> <p>representatives (1) 25:6</p> <p>representing (1) 24:11</p> <p>require (2) 30:2;52:19</p> <p>required (4) 12:13;45:11;51:4; 57:20</p> <p>requirement (1) 52:20</p> <p>requirements (6) 29:24;30:11,24;51:5, 12;52:16</p> <p>requires (2) 29:11;31:1</p> <p>resident (1) 27:17</p> <p>residents (1) 57:9</p> <p>resource (3) 16:13,18;19:25</p> <p>resources (2) 20:17;24:12</p> <p>respond (5) 21:2;29:15,16;30:3; 31:3</p> <p>response (9) 28:25;29:7,10,13,23, 24;30:1;42:3;51:1</p> <p>responsibility (1) 11:4</p>	<p>responsible (1) 23:11</p> <p>rest (1) 37:13</p> <p>restrictions (1) 57:21</p> <p>result (2) 14:24;49:23</p> <p>reused (1) 46:2</p> <p>review (7) 5:10;9:20,25;10:12; 11:22;19:1;20:9</p> <p>reviewed (1) 45:1</p> <p>reviewing (1) 10:4</p> <p>revising (1) 38:9</p> <p>right (16) 6:7;22:11;29:10,19; 40:13,15,15;45:4; 47:19,20,24;49:11,15, 16,25;54:7</p> <p>RIMELMAN (3) 25:15,15;30:22</p> <p>risk (6) 23:7;33:13,16,21; 37:7;43:18</p> <p>river (12) 8:8;13:12,15;14:22; 15:4;17:25;18:14; 49:13;55:1;56:25;57:6, 10</p> <p>rivers (2) 8:6;41:24</p> <p>road (4) 7:5;15:1;40:18; 42:15</p> <p>rock (13) 6:13,19,19;15:6; 42:1;44:20;47:1,8,9,15, 16,17,25</p> <p>rocks (5) 45:15;46:9,9,12,23</p> <p>role (1) 4:14</p> <p>RON (3) 25:15,15;30:22</p> <p>room (5) 5:9;23:20;24:7; 25:24;42:18</p> <p>route (13) 7:21;13:23,24,25; 15:2;16:3,4,5,6,6,7,10; 40:21</p> <p>routes (1) 39:16</p> <p>Rumor (1) 42:16</p> <p>run (5) 13:8;22:15;50:18,19; 52:13</p>	<p>running (2) 7:18;15:22</p> <p>runs (1) 7:5</p> <p>rural (1) 25:12</p>	<p>15:4</p> <p>send (1) 46:22</p> <p>senior (4) 22:14;25:12,19; 26:19</p> <p>sent (1) 46:1</p> <p>sentence (1) 11:8</p> <p>Seppi (3) 5:25;25:1,2</p> <p>series (3) 26:10;48:4,4</p> <p>service (1) 7:9</p> <p>session (6) 5:8,13;8:12;19:17, 18;22:5</p> <p>settle (1) 35:3</p> <p>seven (1) 12:10</p> <p>several (1) 24:19</p> <p>shaking (1) 34:12</p> <p>shallow (1) 18:13</p> <p>shape (1) 45:4</p> <p>shared (1) 27:3</p> <p>shareholders (3) 11:18;54:23;55:7</p> <p>sharing (1) 20:21</p> <p>shift (1) 35:4</p> <p>short (1) 38:1</p> <p>shorter (2) 16:4,7</p> <p>show (5) 15:10;30:3;54:24,25; 56:24</p> <p>showing (1) 57:14</p> <p>side (3) 7:18;23:20;34:11</p> <p>significant (2) 9:9;57:21</p> <p>simply (1) 10:14</p> <p>single (1) 17:10</p> <p>site (20) 4:21;6:18,24;7:4,16, 19;12:23;13:1,1;14:15; 15:1;27:2;34:7,9,16; 36:17;43:16,17;45:9; 49:21</p> <p>sits (2)</p>
--	---	---	---	---

40:13,16 situations (1) 37:2 six (1) 8:5 size (2) 31:2;50:20 Sleetmute (1) 23:5 slide (9) 6:10;9:7;15:14; 16:21,25;19:21;20:2; 22:3;51:14 slip (1) 44:18 slope (2) 45:6;51:7 small (2) 49:5;57:5 social (1) 23:19 socioeconomic (1) 41:10 socioeconomics (3) 20:23;23:21;28:14 soil (3) 6:25;44:16,16 somebody (4) 20:11;32:15;34:4; 57:13 someone (1) 20:18 somewhere (1) 31:8 son (1) 28:6 soon (1) 9:3 sorry (1) 22:16 sort (6) 29:4;33:1;37:12; 38:9;47:12;51:6 sounds (1) 12:22 source (1) 41:11 south (2) 15:3;18:20 space (6) 35:21,22;36:1,4,22; 54:12 spawn (1) 39:18 spawning (1) 39:17 speak (1) 27:14 SPEAKER (2) 31:12,16 speaks (1) 56:13 specialist (1)	25:12 species (1) 20:20 specific (5) 20:25;30:23,25; 36:25;50:10 specifically (2) 11:11;21:25 specifically (1) 24:13 spill (17) 23:7;29:17,24;30:4, 6,11,20,23;31:2,24; 32:13,15;41:16;42:2; 46:8;51:1,3 spilling (1) 54:7 spills (4) 30:2,16;32:10;33:10 spillway (5) 36:8,8,10,11,11 sponsor (1) 28:3 sponsored (1) 28:2 square (5) 6:10,12,19;40:6,6 stack (2) 13:20;15:5 stacked (2) 15:16;46:6 stage (1) 30:21 stages (1) 27:20 Stan (1) 27:6 stand (1) 23:4 standard (2) 30:13;52:15 standards (2) 49:10;51:11 standing (3) 23:13,16,20 stars (2) 8:4,4 start (5) 8:17;9:4;12:4;26:11; 48:22 starting (1) 24:6 starts (1) 8:18 State (14) 11:16;24:11,13; 27:13;29:25;30:23; 31:6;41:21;43:13;45:8; 51:5,12;52:18;55:6 Statement (13) 4:9,12;9:13,17,17; 10:3,10;11:8;12:11; 21:13,22;30:18;31:23	States (2) 4:4;55:4 stay (2) 38:6;39:8 stays (1) 39:8 steel (1) 7:17 step (1) 9:22 stick (1) 37:14 still (6) 36:13;47:6,14;48:16; 49:14;51:15 stockpiles (1) 6:24 storage (3) 6:12,16;53:11 straight (2) 52:13;54:9 stranding (1) 13:16 stream (2) 49:18,19 stretch (1) 34:19 strict (1) 45:13 strive (1) 27:24 studies (1) 10:8 study (1) 46:10 studying (1) 46:15 stuff (2) 6:20,21 sturdy (1) 44:13 submit (1) 21:7 subsist (2) 40:4;41:17 subsistence (13) 5:19,25;6:1,5;18:18; 20:21,24;23:21;25:3; 40:3,23;41:16;57:21 substantial (5) 18:25;19:13;33:5,11; 38:23 substantially (2) 9:5;14:19 substantive (4) 4:8;20:3,8,11 SUE (2) 25:21,22 suggest (1) 57:8 suggestion (1) 57:19 summarized (1)	35:2 summarizes (1) 34:25 summer (1) 57:14 summertime (1) 39:15 supplied (1) 13:5 supply (4) 7:16,20,21;50:21 supplying (1) 13:4 supposed (2) 39:7,8 sure (7) 5:3;31:4;35:10;38:3, 5;39:6;43:19 survived (1) 13:25 system (3) 27:21;45:23;49:4	technology (1) 41:21 tells (3) 20:11,18;47:8 ten (3) 34:10;39:18;49:19 terms (2) 43:10,24 test (3) 46:5;47:5,7 tests (4) 46:17,18,19;47:6 thankful (1) 28:11 Thanks (1) 6:6 therefore (8) 12:24;13:6,13,15; 15:17;17:20;20:18; 52:12 thinking (3) 37:3;57:2,4 third (2) 6:18;7:15 Thompson (1) 55:23 thorough (1) 33:24 though (1) 38:1 thoughts (1) 27:10 three (4) 8:14,15;19:22;44:5 thus (2) 20:1;21:1 TIM (11) 28:23,23;29:17,21; 30:5;31:7,14,19;32:5; 41:15;50:25 times (1) 25:23 TKC (1) 4:22 today (3) 6:6;23:25;34:9 together (2) 27:1;55:7 tonight (8) 4:6;9:22;22:19;24:5; 25:3,6;26:1;50:8 tonight's (1) 26:6 took (5) 9:15;33:12,20;34:21; 44:19 top (3) 35:22;36:1,2 toward (1) 11:2 towards (3) 35:24,25;36:2 town (1)
T				
			tab (1) 21:22 table (1) 21:6 tailing (3) 31:13;41:23;42:23 tailings (41) 6:12,16;13:21;15:5, 6,9,12,15,16;23:11,11; 33:13,16;34:13;35:1,3, 11,19,20,22,25;36:7, 23;37:11;40:25;43:9, 11,12,19,20;44:4; 45:25;47:9,16;51:20; 52:3,4,5,11;53:11,15 talk (13) 5:11;7:20,23;12:12; 15:23;16:17;23:6;25:3; 47:22;48:22;50:15; 52:22,24 talked (1) 14:3 talking (11) 22:20;24:21;29:8; 41:10;46:17,25;47:3, 13;50:3;52:6;53:18 tank (1) 46:7 tanks (1) 32:19 task (1) 23:19 Taylor (4) 23:1,2,4;25:8 team (3) 22:13;26:1;27:7 teams (2) 29:7,8	

23:25 track (1) 20:10 tracking (1) 39:14 tradeoff (1) 16:5 Tradeoffs (2) 16:7,10 traffic (7) 16:17,17,22;17:13, 18:24;2:42:7 trail (5) 40:4,14,15,19;42:4 trained (1) 29:14 transportation (3) 7:3;42:15;50:24 treat (1) 47:11 treated (9) 39:9;46:1;48:23; 49:2;51:22,24;52:9,13, 16 treating (1) 51:15 treatment (6) 9:1;46:1;47:12;49:7; 51:17;52:1 Tree (11) 13:10,13,14;14:18, 23,24;15:3,18;2,3,5,20 trenching (1) 8:9 tribal (2) 9:18;22:1 trip (1) 24:10 trips (3) 14:21;17:6;18:1 truck (5) 12:22;14:5;17:19; 42:19;50:25 trucks (2) 12:23;42:18 True (1) 37:6 try (1) 38:11 trying (4) 33:22;41:20;43:8; 50:9 tug (1) 17:9 turned (2) 26:17;41:24 two (7) 16:4;18:25;23:4; 34:5;42:6;48:24;57:14 type (3) 32:12;51:5,10 types (2) 33:11;46:11	typically (1) 17:9 U under (8) 6:1;14:20;17:12; 21:22;43:17;45:2; 53:10;57:22 underdrains (1) 53:10 underneath (6) 8:8;47:2;53:13;55:1; 56:25;57:6 UNIDENTIFIED (2) 31:12,16 United (1) 4:4 Unless (2) 22:3;52:15 unlikely (1) 33:7 up (29) 6:4;15:6;17:7,24; 21:21;28:20;30:2; 32:11;33:24;34:3;36:2; 37:17;38:19;39:17,18, 23;40:7,10,18,20,21, 22;41:24;43:4,5;48:25; 49:2;51:18;54:10 upstream (2) 17:5;44:11 URLICH (8) 23:9,9;35:15,18; 44:3,22;45:17;47:15 use (17) 5:2,17;7:9;8:20,20; 20:8,13;40:3,4,9; 42:18;47:15,16,17; 48:3;49:4;51:9 used (14) 6:25;8:19;23:5; 34:12;36:9;39:1;40:14, 17,20;44:2;47:11; 48:25;49:3;52:14 uses (1) 57:22 using (5) 14:2;40:1,17;48:22; 51:7 usually (1) 40:7 utilized (1) 20:24 V vacation (1) 57:14 valley (4) 6:17;15:8,10;52:14 valleys (1) 48:20	valve (2) 35:11,16 variety (1) 6:24 various (9) 4:18;5:11;10:12; 15:24;21:23;26:8; 31:24;32:10;33:9 vast (2) 13:13;14:16 Vavrik (1) 26:1 versus (5) 15:2;16:11,23;17:3; 18:2 vertical (2) 54:22,22 voting (1) 20:14 W walk (2) 23:25;56:15 warmer (2) 42:21,21 waste (3) 6:19;47:9,24 water (59) 8:25;15:9;23:17,17; 31:8,15,20,20;35:6,16, 17,18;36:2,6,13,24; 37:4,15,18;39:6,7,10; 45:13,18,18,23,25; 47:10,12,19,25;48:2,6, 9,21,23;49:2,3,3,4,7; 51:15,17,19,23;52:1,7, 9,12,22;53:11,12,14, 16,23,24;54:1,2,6 watershed (3) 48:1,9;54:6 watersheds (1) 53:16 waves (1) 35:23 way (31) 15:2;16:15;17:7; 18:6;19:11;23:24;30:7; 32:19;34:6,10,15; 39:18;40:21;41:6;43:4, 5;44:6,6,7,23;45:7,9, 11;52:25;53:7,7,21; 54:24,25;55:20;56:12 ways (5) 7:24;10:7;12:6;44:4, 5 website (4) 9:19;14:9;21:9,21 weighed (1) 16:1 weighing (1) 15:24 weight (1)	11:22 welcome (1) 21:13 welcomed (1) 28:7 welcoming (1) 24:20 western (1) 7:18 what's (9) 19:5,23;21:16;43:24; 44:12;45:22;54:3; 55:16;56:22 wherever (1) 53:15 whole (6) 10:21;12:5;15:22; 20:2;48:4,4 wide (2) 42:15,17 wildlife (7) 36:20;37:1;38:10,22; 39:3,14;41:12 willing (1) 56:20 wind (4) 15:18;35:24,24;36:1 window (1) 23:12 winters (2) 40:11,12 wintertime (1) 39:15 within (3) 32:24;33:2;53:23 without (1) 34:20 withstand (1) 34:20 wonderful (1) 25:14 wondering (2) 31:21;57:19 wood (6) 40:4,7,9,9,11,21 words (4) 6:14;7:25;14:22; 49:12 work (11) 10:8;22:13;23:15; 24:13;25:11,22;26:21; 27:15;34:23;41:5; 57:10 worked (3) 23:5;41:25;46:4 working (2) 36:16;39:14 workshop (1) 33:15 worms (1) 37:11 worst (1) 37:17	written (1) 21:7 wrong (2) 34:5;39:25 wrote (1) 6:1 Y year (2) 7:10;28:7 years (14) 8:15,16;23:6;24:19; 27:3,8;37:23;41:19; 44:2,3;47:7;51:14,18; 52:10 yellow (1) 44:12 young (1) 39:23 Z ZAUKAR (11) 27:16,17;28:23,23; 29:17,21;30:5;31:7,14, 19;32:5 1 1 (6) 6:11;11:1,1;14:1; 18:23;26:16 10,000-year (1) 33:7 100 (1) 50:1 12 (2) 19:21;56:3 14 (2) 16:18,19 14-inch (1) 7:17 15 (1) 6:3 150 (1) 52:10 2 2 (6) 6:11;12:20;14:4; 17:17;18:12,23 2.2 (1) 6:10 20 (2) 43:1;44:2 200-and-some (1) 50:17 2012 (2) 9:10,15 2013 (1) 9:16
--	---	--	---	--

<p>2016 (1) 10:2 20-something (1) 43:1 24 (1) 54:10 24/7 (2) 38:25;54:20 25 (2) 40:6;44:3 250 (1) 43:6 26 (3) 16:13;56:2,6 27 (2) 8:16;41:19 27-plus (1) 37:23</p>	<p>50 (5) 25:16;42:16;50:15; 51:14,18 55 (1) 51:18 5A (3) 13:20;15:5;17:17</p>			
3	6			
<p>3 (1) 18:23 3.22 (1) 28:13 3.3 (1) 35:9 3.5 (2) 6:12,19 30 (3) 10:2;22:10;44:2 300 (1) 12:8 30-mile (1) 7:5 30th (1) 26:9 315-mile (1) 7:17 3A (5) 12:21;13:17;14:4; 17:18;18:15 3B (4) 13:17;14:14;17:22; 18:16</p>	<p>7.8 (1) 33:4</p>			
	8			
	<p>8:17 (1) 57:25 810 (3) 5:19;22:8;25:3 810a (1) 5:24</p>			
4	9			
<p>4 (9) 13:17;14:18,20,25; 17:17,25;18:19,24; 19:1 40 (1) 7:10</p>	<p>96 (1) 55:22</p>			
5				
<p>5 (2) 18:24;19:13 5,000- (1) 33:7 5,000-foot (1) 7:8</p>				