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STATE OF MAINE

BOARD OF ENVIRONMENTAL PROTECTION

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**IN RE: APPLICATIONS BY STATE OF MAINE
BUREAU OF GENERAL SERVICES FOR
PROPOSED EXPANSION OF THE JUNIPER
RIDGE LANDFILL**

* * * * *

October 18, 2016

Cross Insurance Center
Bangor, Maine

CHAIRMAN: JAMES PARKER

BOARD MEMBERS:

- Alvin Ahlers
- Kathleen Chase
- Mark Draper
- Thomas Dobbins
- Thomas Eastler
- Jonathan Mapes

OTHERS PRESENT AT PANEL TABLE:

- Mary Sauer, Assistant Attorney General
- Cynthia Bertocci, BEP Executive Analyst
- Ruth Ann Burke, BEP Administrative Assistant

DEPARTMENT STAFF MEMBERS PRESENT:

- | | |
|---------------|----------------------|
| Kathy Tarbuck | Victoria Eleftheriou |
| David Burns | Steve Farrar |
| Richard Behr | James Beyer |
| Lynn Caron | |

1 (This hearing was held before the Board of Environmental
2 Protection, Cross Insurance Center, Bangor, Maine, on
3 October 18, 2016, beginning at 9:00 a.m.)

4 * * * * *

5 CHAIRMAN PARKER: Good morning. I now
6 call to order this hearing of the Board of
7 Environmental Protection on the Applications by
8 the State of Maine Bureau of General Services for
9 a 9.35 million cubic yard expansion of the Juniper
10 Ridge Landfill in Old Town and Alton. The Bureau
11 of General Services has filed the following
12 applications: Maine Hazardous Waste, Septage and
13 Solid Waste Management Act and Solid Waste
14 Management and Recycling Law application number
15 S-020700-WD-BI-N, and Natural Resources Protection
16 Act application number L-024251-TG-C-N.

17 My name is James Parker. I'm the Chair of
18 the Board of Environmental Protection and I am the
19 presiding officer for this hearing. Other Board
20 members here today are, I'll start way over to my
21 left, okay, is Tom Eastler from Farmington, next
22 to Tom is Kathy Chase from Wells, next to Kathy is
23 Jonathan Mapes from Springvale, to my immediate
24 right just two over is Alvin Ahlers from Yarmouth,
25 Tom Dobbins from Scarborough and Mark Draper from

1 Caribou. I actually reside in Veazie. Here with
2 the Board we have Mary Sauer. She's the assistant
3 attorney general and counsel to the Board. She's
4 to my right. To my left is Cindy Bertocci. She's
5 the Board's executive analyst. Way over to the
6 left we have Ruth Ann Burke. She's the Board's
7 administrative assistant and to the right of us we
8 have the DEP staff which consists of Richard Behr,
9 Steve Farrar, Kathy Tarbuck, Victoria Eleftheriou,
10 if I pronounced that right, David Burns, Jim Beyer
11 and Lynn Caron. The hearing is being recorded and
12 transcribed by Joanne Alley from the firm of Alley
13 & Morrisette Reporting.

14 This hearing is being held by the Board
15 pursuant to the Maine Administrative Procedures
16 Act, Title 5, Sections 9051-9064, Department of
17 Environmental Protection statutes Title 38 MRSA
18 Sections 341-D(2) and 1310-S(2), and the
19 Department's Chapter 3 Rules Governing the Conduct
20 of Licensing Hearings.

21 Notice of the hearing was published in the
22 Bangor Daily News on September 17th and October
23 8th, 2016, notice was also sent to the parties,
24 all persons owning property abutting the landfill
25 site, affected municipalities, area legislators

1 and all persons on the Department's interested
2 persons list for this project.

3 During the hearing, the Board will receive
4 evidence from the applicant, Bureau of General
5 Services, and from the applicant's landfill
6 operator, NEWSME Landfill Operations, and
7 intervenors City of Old Town and Edward Spencer.
8 Other intervenors in this proceeding who may also
9 participate in cross examination are area resident
10 Dana Snowman and abutting property owner SSR, LLC,
11 represented by Chip Laite.

12 The sworn testimonies of the parties was
13 pre-filed in advance of the hearing. The
14 testimony is part of the record and the Board
15 members have received copies. A copy of the
16 pre-filed testimony and the application are
17 available at the hearing today for inspection.
18 Any person wanting to inspect the file should
19 speak to Kathy Tarbuck during a break in the
20 hearing. The pre-filed testimony and application
21 are also available on the Department's website.

22 Today's hearing will begin with testimony
23 from the applicant this morning, followed by cross
24 examination of the applicant's witnesses this
25 afternoon. The Board will hear testimony from Dr.

1 Stephen Coghlan, a witness for intervenor Edward
2 Spencer, this afternoon. He has conflicts so
3 we've moved him into the afternoon. Testimony by
4 Edward Spencer and the City of Old Town are
5 currently scheduled for tomorrow morning.

6 The Board will hear testimony from the
7 general public this evening at 6:00 p.m. If
8 public testimony is not concluded this evening,
9 the Board will hear additional public testimony
10 tomorrow at 1:00.

11 Please note that Members of the Board,
12 counsel to the Board and DEP staff may ask
13 clarifying questions of persons testifying at any
14 time, although the Board and the staff will
15 generally hold their questions until completion of
16 the cross examination, and I encourage the Board
17 members to do so because, if not, we can get into
18 long drawn out conversations before we get the
19 testimony.

20 If there are any members of the public
21 here today who would like to ask a question of a
22 witness, you must submit your question to me in
23 writing. Paper is available at the water station
24 for this purpose. That's up back on the left side
25 of the building from here. Please leave your

1 questions on the table and staff will collect them
2 periodically. I will review the questions, make a
3 determination as to their relevance and ask the
4 questions as time permits.

5 At the conclusion of the hearing, no
6 further evidence or testimony will be allowed into
7 the record except for matters specifically
8 identified by the Board. These matters will be
9 identified before the close of the hearing. At
10 this time I ask the witnesses for the parties to
11 stand and be sworn in, all the parties, please.
12 Raise your right hand. Do you affirm that the
13 testimony you're about to give is the whole truth
14 and nothing but the truth?

15 **(WITNESSES RESPOND IN AFFIRMATIVE)**

16 CHAIRMAN PARKER: Thank you. Are there
17 any questions about the procedure before we begin?

18 At this time I'll ask the staff to enter
19 the application into the file -- into the record
20 for the hearing. Kathy?

21 MS. TARBUCK: Good morning, Board Chair,
22 Board Members and all attendees. My name is Kathy
23 Tarbuck and in my role as Department project
24 manager for the Juniper Ridge Proposed Expansion
25 Application, I'm entering the Department's file in

1 this matter into the record. The file documents
2 that I've brought to the proceeding are located
3 here at the side table in the front portion of the
4 room. Thanks.

5 CHAIRMAN PARKER: Thank you. For a little
6 additional information, we plan to break at noon
7 for lunch and at 5:00 for dinner. So we'll have a
8 productive day hopefully, and the first witness
9 will be -- the first presentation will actually be
10 by the applicant.

11 MR. DOYLE: Good morning, Mr. Chairman and
12 Members of the Board, and welcome to this public
13 hearing on this important state infrastructure
14 project, the Juniper Ridge Landfill Expansion.
15 I'm Tom Doyle of Pierce, Atwood, and with my
16 partner, Brian Rayback, we represent NEWSME
17 Landfill Operations, the operator of the Juniper
18 Ridge Landfill and co-applicant with the Bureau of
19 General Services for this landfill expansion.
20 Assistant Attorney General Bill Laubenstein is
21 here as well representing the Bureau of General
22 Services. We're going to introduce each of our
23 witnesses before each testifies but before doing
24 that, I wanted to let you know that we have other
25 experts who have worked on this application and

1 are present today but whose topics have not been
2 in controversy either in agency comments or in
3 pre-filed testimony. They are -- and I'll just
4 ask them to raise their hands -- Tom Gorrill of
5 Gorrill Palmer on traffic, Rob O'Neill, Epsilon
6 Associates on noise, Mark Johnson, SMRT, visual
7 analysis, Eric Steinhauser, Sanborn, Head and
8 Associates, landfill gas, and Jake Reilly,
9 Stantec, on fisheries.

10 I wanted the Board to know that they are
11 here to respond to questions if you have any such
12 questions, and other than that, I'm going to turn
13 this over to Bill Laubenstein to introduce our
14 first witness. Thank you.

15 MR. LAUBENSTEIN: Good morning, Chairman
16 Parker. It's a pleasure to be here this morning
17 and have the opportunity to introduce the first
18 witness for the applicant. Our first witness is
19 Mike Barden. He's the manager of state-owned
20 landfills, he's had this position since 2012.
21 Mike has had a number of positions, both in the
22 private sector and the public sector. He's served
23 as the senior energy planner in the Governor's
24 office, he's served as a grant administrator for
25 Efficiency Maine Trust and for the Maine Public

1 Utilities Commission. He was a director of
2 environmental affairs for Maine Pulp and Paper
3 Association and most significantly, he was
4 division director of Solid Waste Licensing and
5 Enforcement with the Maine Department of
6 Environmental Protection. Mike has a bachelor of
7 science degree in chemistry and microbiology and a
8 master's degree -- a master of science degree in
9 natural resource planning. If you're interested
10 in his resume, it's BGS and NEWSME Exhibit #1.

11 So it's a pleasure to introduce Mike
12 Barden. Mike?

13 MR. BARDEN: Good morning, Chairman
14 Parker, Board Members. You have my direct
15 testimony so I'm just going to give you a quick
16 summary of that.

17 So this all is sort of background
18 information. It started with the state ownership
19 of landfills in 1989 when the Legislature
20 essentially banned new commercial landfills. So
21 as a result of that legislation, the state has
22 since acquired three landfills. One of them is
23 located in East Millinocket, that's the Dolby
24 Landfill. It's basically going through closure
25 now. It was primarily accepting waste from the

1 Great Northern Paper Mills in East Millinocket and
2 Millinocket. There's another landfill that the
3 state acquired from Lincoln Pulp & Paper in the
4 mid nineties. That is a permitted site but it's
5 undeveloped. It's located off the interstate --
6 off the Lincoln interstate in unorganized
7 territory and the subject of the expansion
8 application today is the Juniper Ridge Landfill
9 that was acquired from Georgia-Pacific in 2004
10 pursuant to a Legislative Resolve, Chapter 93.
11 That Resolve stipulated that the state -- at that
12 time the ownership resided with the State Planning
13 Office -- stipulated that the state would go out
14 to a competitive bidding process to get a contract
15 operator and the state did that. In 2004 -- they
16 acquired the facility from Georgia-Pacific in 2004
17 and then did a request for proposals for
18 competitive bids. That was awarded to Casella
19 Waste Systems. The Resolve also required that the
20 -- that the -- that operations of the landfill be
21 revenue neutral to the state. So essentially the
22 state did not incur any general fund money to
23 purchase the facility, and also when the state
24 negotiated the operating services agreement with
25 Casella in 2004, that agreement is in the record,

1 it's a duration of a 30-year contract. Casella
2 was given the exclusive rights to operate that
3 landfill, to collect all revenues from that
4 landfill, the revenues -- the tipping fees at the
5 landfill are actually capped pursuant to the
6 operating services agreement. They're adjusted
7 each year by the Consumer Price Index.

8 The statute also requires a state-owned
9 landfill to provide host community benefits to the
10 communities that are actually within the
11 boundaries of the municipality. So in this case
12 it's the City of Old Town and they -- Casella has
13 also negotiated an agreement with Alton because
14 approximately a few miles of the access road is
15 within Alton municipal boundaries, so they have
16 agreements with both of those facilities -- both
17 of those communities. So from 2004 through June
18 2016 of this year, the -- Casella has actually
19 paid approximately 13 million dollars in host
20 community benefits to the City of Old Town and
21 approximately one million dollars to Alton for
22 hosting this site.

23 Just in terms of what's taken place since
24 the State Planning Office took over the facility
25 in 2004 pursuant to the Resolve, the State

1 Planning Office was actually eliminated in 2011.
2 Those responsibilities, including oversight of the
3 landfill, was transferred to the division -- the
4 Department of Administrative and Financial
5 Services, the Bureau of General Services within
6 that agency, they actually have ownership of the
7 site now, and the position of managing these three
8 state landfills resides with the Department of
9 Economic and Community Development, and we've
10 included an Exhibit 2 in the record on an MOU
11 between the two agencies.

12 Now, in terms of the operations at JRL,
13 and my oversight primarily at JRL is to ensure
14 that they're in compliance with the Operating
15 Services Agreement. DEP takes care of the
16 regulatory issues, we take care of the contract
17 issues, and Jeremy Labbe has provided in his
18 direct testimony and his rebuttal testimony the --
19 the extent of the recordkeeping that Casella does
20 to ensure that no out-of-state wastes are coming
21 into the landfill. They provide me with monthly
22 reports that include, among other things, a
23 summary of the month's hauling to the landfill.
24 So they basically categorize it by the waste
25 hauler, the tonnage, the generator who generated

1 the waste, the county that it came from and then
2 they have a unique profile manifest number with
3 that. So I have reviewed -- I receive these
4 monthly reports, I collate all these, I send them
5 out to the Juniper Ridge Advisory Committee on a
6 monthly basis, I also provide these reports to the
7 City of Old Town and the Town of Alton, I also do
8 compliance inspections at the facility several
9 times during the course of the year so I review
10 the records, I do randomly select manifests that
11 they have in their recordkeeping system, both
12 electronically and paper copies, I spend some time
13 at the scale house observing haulers when they
14 come in and how they're ticketed and the manifests
15 are handled by the scale house operator.

16 The -- there was also a public benefit
17 determination, as we're all aware of, that was
18 issued in 2012, something like that, indicating
19 that this capacity is needed. In reality, the
20 Juniper Ridge Landfill will be out of capacity in
21 2019. If all of the waste were diverted and this
22 expansion is not approved, the waste would have to
23 go somewhere. Approximately 700,000 tons would
24 have to be diverted to another landfill within the
25 state or out of state too. There's really only

1 one commercial landfill left in the state that is
2 permitted to take the same kind of waste right now
3 as Casella is taking at Juniper Ridge Landfill.
4 By my calculations, if all of this tonnage was
5 diverted to that one particular landfill, that
6 landfill would be out of capacity in 2020 or 2021.
7 That would be the timeframe.

8 I thank you and if you have any questions,
9 I'd be happy to answer them.

10 CHAIRMAN PARKER: Board members, any
11 questions? Mr. Barden, I have one question. It's
12 a question that's going to come up later in the
13 hearing so we might as well at least broach it now
14 and look into it. Under the state's hierarchy of
15 solid waste disposal, the state has a set of
16 priorities of how the waste is disposed,
17 landfilling being the latter of several things
18 that occur before that. The question has been
19 raised by a few people, and it's going to be
20 discussed I'm sure later on, that some of the
21 diversion of waste to the landfill now is not
22 consistent with the hierarchy. Are you
23 comfortable on behalf of the state that the state
24 is following its own rules with regard to the
25 solid waste hierarchy?

1 MR. BARDEN: Yeah, I think Toni King is
2 going to address that through her direct
3 testimony, which I think she's coming up next, but
4 yes, we're comfortable. Primarily the wastes that
5 are going into Juniper Ridge Landfill are special
6 wastes and they really have no other outlet for
7 recycling. They've been recycled. The sludges
8 would either have to be land applied and that's
9 primarily a decision of each municipality or
10 industrial facility in the case if it's coming
11 from an industrial facility. Ashes are a big part
12 of the waste stream that's come there, there's no
13 feasible alternative for that. Contaminated spill
14 material, there's no feasible alternative for
15 that. They take very limited municipal solid
16 waste that's unprocessed. In this expansion
17 application they're going to be taking no
18 unprocessed municipal solid waste other than that
19 they use for the soft layer when they develop new
20 cells as a result of an incinerator being down and
21 they have to bypass that waste. It has to go
22 somewhere, so yes, I'm comfortable.

23 CHAIRMAN PARKER: Okay. In followup
24 again, another question I'm sure is going to come
25 up and I'm just trying to get some of this out of

1 the way early, as far as the soft layer, the soft
2 waste coming in, okay, in the application as I see
3 it presented, they're looking for a 9 point I
4 think 5 million cubic yard expansion which
5 probably is a decent number, I'm not arguing with
6 that, but how much of that volume that's being
7 expanded is being occupied by the soft waste, some
8 of which could be incinerated or further reduced
9 before it goes there? Is that part -- in other
10 words, the 9.5 million cubic yards we're looking
11 for -- and this is something that was raised by
12 the previous commissioner that there's no real
13 feel for that number because there's a finite
14 amount of space being approved. Is it being used
15 wisely or is it being used conveniently? I think
16 that's the question I had.

17 MR. BARDEN: Okay. It's a small
18 percentage and I think either -- Jeremy Labbe can
19 probably address, you know, sort of what that
20 percentage is.

21 CHAIRMAN PARKER: Yeah, I'd really like to
22 see what the percentage is so we can get a feel
23 for that.

24 MR. BARDEN: Yup, yup.

25 CHAIRMAN PARKER: Okay. Any further

1 questions?

2 MS. BERTOCCI: Jim, we have one question
3 from a member of the public.

4 CHAIRMAN PARKER: I have a question from
5 the public. I'll read it and you can respond to
6 it because they're questioning I guess on the
7 dates. This is a clarification on the purchase
8 RFP. It says that you stated that the RFP was
9 issued after the state acquisition in 2004. It
10 was actually issued in July of 2003, six months
11 before the purchase contract. Is this correct or
12 not or is this --

13 MR. BARDEN: I'm not aware of that date.

14 CHAIRMAN PARKER: Okay, it should be
15 clarified. We've got it somewhere. I'm just
16 raising the question that someone raised.

17 MR. BARDEN: Yeah, I'm not sure exactly
18 the date of when the Resolve became effective.
19 The state wouldn't have been able to acquire it
20 until that Resolve was effective which is --

21 CHAIRMAN PARKER: I think the basic
22 question, was the RFP issued after the state owned
23 it or before the state owned it?

24 MR. BARDEN: It was -- it was issued
25 probably after the state owned it.

1 CHAIRMAN PARKER: Okay. We can clarify
2 that or you can actually clarify it and let us
3 know. Are there questions from the Board, any
4 further questions? Okay, be available this
5 afternoon, we'll hear more questions. Tom?

6 MR. DOYLE: Just one clarification, the
7 public benefit determination was for 9.35 million
8 cubic yards.

9 CHAIRMAN PARKER: Yeah, I didn't look at
10 the exact number. I had to turn my sheet over to
11 get to that.

12 MR. DOYLE: Okay. Our next witness is
13 Toni King who is the regional engineer for Casella
14 Waste System's Eastern Region. Toni's
15 responsibilities include oversight of consultants,
16 engineering design, permitting, compliance and
17 construction projects within the eastern region,
18 including the entire State of Maine. Toni earned
19 both a bachelor of science in environmental
20 engineering and an MBA from Norwich University.
21 She is also a licensed professional engineer in
22 Vermont and a certified manager of landfill
23 operations with Casella Waste Association of North
24 America. Toni's resume can be found at BGS/NEWSME
25 Exhibit #3. She will discuss consistency with the

1 Waste Management Hierarchy and compliance with the
2 recycling standard. Toni.

3 MS. KING: Thank you, Tom. Good morning.

4 CHAIRMAN PARKER: Good morning.

5 MS. KING: I'm here to tell you how we
6 meet the licensing standards set forth in the
7 hierarchy and the recycling rule and this is how
8 we do it. We're an integrated resource management
9 company with over 500 employees in the State of
10 Maine who work every day to provide cost effective
11 comprehensive solutions by actively promoting and
12 encouraging waste reduction measures and
13 maximizing waste diversion efforts prior to
14 landfilling.

15 This slide illustrates the new rule
16 requirements of the Maine solid Waste Management
17 Hierarchy. This is in Chapter 400, it's
18 relatively new and the one that says we'll do our
19 best to reduce waste generation and maximize waste
20 diversion and manage waste using an integrated
21 approach based upon the order of priority of
22 reduce, reuse, recycle, compost, incinerate and
23 finally landfill. This isn't the entire rule
24 because I can't fit it all on one slide so let me
25 just focus on the language I've highlighted in

1 blue. We need to provide evidence, including but
2 not limited to, a description of the reduction,
3 reuse, recycling, composting and/or processing
4 programs and efforts that the waste is or will be
5 subject to and that are sufficiently within the
6 control of the applicant to manage or facilitate
7 and for the purposes of this section, reducing,
8 reusing, recycling, composting and/or processing
9 waste to the maximum extent practicable prior to
10 disposal means handling the greatest amount of
11 waste possible through means as high on the solid
12 Waste Management Hierarchy as possible resulting
13 in maximizing waste diversion and minimizing the
14 amount of waste disposed without causing
15 unreasonable increases in facility operating costs
16 or unreasonable impacts on other aspects of the
17 facility's operation. Determination of the
18 maximum extent practicable includes consideration
19 of the availability and cost of technologies and
20 services, transportation and handling logistics
21 and overall costs that may be associated with
22 various waste handling methods.

23 This slide illustrates the rule
24 requirement of the recycling standard. It is also
25 in Chapter 400 but an older provision. Again,

1 let's focus on the highlighted portions of our
2 requirements for compliance. We need to provide
3 evidence that we're operating consistently with
4 state recycling programs; that is, that the
5 proposed solid waste disposal facility will only
6 accept solid waste that is subject to recycling
7 and source reduction programs, voluntary or
8 otherwise, at least as effective as those imposed
9 by provisions of state law and that we're in
10 compliance with the recycling provisions of the
11 state plan.

12 Within the Juniper Ridge Landfill
13 Expansion Application itself and during the course
14 of this hearing process you will hear about the
15 various programs we have in place to manage waste
16 using techniques higher on the hierarchy than
17 disposal. We actively promote and encourage waste
18 reduction measures and maximize waste diversion
19 efforts of our customers by assisting them in
20 taking advantage of opportunities to reduce, reuse
21 or recycle their waste using environmentally sound
22 material management methods including in some
23 cases disposal at Juniper Ridge Landfill; simply
24 put, the waste disposed at Juniper Ridge Landfill
25 is reduced to the maximum extent practicable,

1 diverted where appropriate and 90 percent has
2 already been processed or is a recycling residual
3 for which a landfill is the most appropriate end
4 of life solution.

5 You may have noticed in the hierarchy
6 standard a phrase that included, quote,
7 sufficiently within the control of the applicant
8 to manage or facilitate, end quote. A very small
9 quantity of waste is actually produced by
10 Casella's operations so we must rely on the
11 generators to reduce their waste to the maximum
12 extent practicable before it arrives at Juniper
13 Ridge.

14 You can see here the results of some of
15 our landfill diversion efforts. Starting with
16 recycling, Casella's zero source system allows
17 generators to commingle all recyclable materials
18 requiring no source separation. All sorting and
19 baling is performed at the materials recovery
20 facilities primarily by automated equipment. We
21 found the benefits of zero sort to include
22 increased ease and convenience, reduction in
23 disposal costs due to reduction in volume,
24 increase in range of materials that can be
25 recycled and faster, more efficient collection of

1 materials. In 2014 we invested in a new materials
2 recovery facility in Lewiston. The residuals from
3 this facility are directed to Maine incinerators
4 rather than being disposed at Juniper Ridge. In
5 2015 our Maine-based zero sort initiative grew to
6 include 62 municipalities and 3,480 businesses
7 resulting in over 28,000 tons of material recycled
8 through this program. We also broker a good deal
9 of fiber and collect or bale material for
10 recycling facilities at our Maine transfer
11 stations. We are by far the largest recycler in
12 the State of Maine. We direct some municipal
13 solid waste within our control to Maine
14 incinerators and some municipal solid waste within
15 our control to other Maine landfills.

16 We regularly take steps to comply with the
17 Waste Management Hierarchy; that is, reduce,
18 reuse, recycle, compost, incinerate and finally
19 landfill. In 2014, Casella facilities and
20 programs recycled, beneficially reused or
21 composted over 400,000 tons of waste materials
22 over a broad spectrum of waste types and at
23 numerous locations in Maine. We managed to do
24 even better in 2015. An apples to apples
25 comparison with the calendar year 2014 Maine DEP

1 waste generation disposal and capacity report
2 which does not include construction and demolition
3 debris or biosolids recycling reveals that Casella
4 municipal solid waste recycling initiatives
5 facilitated over 20 percent of all the municipal
6 solid waste recycling volume realized in the state
7 in 2014. By any measure, we've done our part to
8 support the hierarchy.

9 Now for the individual waste streams that
10 are disposed at Juniper Ridge Landfill.
11 Construction and demolition debris received at
12 Juniper Ridge comes from a number of sources in
13 Maine, including some that are owned and operated
14 by Casella companies. At these transfer stations,
15 materials such as clean wood and metal are sorted
16 and removed for recycling rather than disposal.
17 In addition, we divert some construction and
18 demolition debris within our control to processing
19 facilities for recycling as evidenced by our
20 agreement with ReEnergy Lewiston.

21 As noted previously, we also direct some
22 municipal solid waste within our control to the
23 Penobscot Energy Recovery Company incinerator
24 which reduces weight by approximately 62 percent
25 and volume up to 90 percent of waste requiring

1 landfill disposal. Juniper Ridge receives the
2 residuals from this process in the form of
3 front-end processing residue and ash. Front-end
4 processing residue from incinerators is
5 beneficially reused as soft layer installed at the
6 base of newly-constructed landfill cells to
7 protect the landfill liner. These waste reuse
8 opportunities avoid the utilization of virgin
9 materials in construction and operation and,
10 therefore, meet the hierarchy requirements.

11 There are numerous waste streams that
12 currently divide the ability to reduce, reuse,
13 recycle, compost or that do not allow for
14 incineration. This includes municipal solid waste
15 incinerator ash and multi-fuel boiler ash,
16 although some clean wood ashes can be and are land
17 applied. All the various ashes received at
18 Juniper Ridge play an important part in overall
19 landfill operations by providing another source of
20 material that can be used as daily cover and for
21 odor control. Construction and demolition debris
22 processing fines are received at Juniper Ridge
23 primarily from the ReEnergy Lewiston facility.
24 This material is a residue from processing
25 construction and demolition debris and those

1 facility types are obligated to recycle to the
2 maximum extent practicable but in no cases less
3 than 50 percent. The fines produced in addition
4 to short paper fiber and ashes are beneficially
5 reused at Juniper Ridge as grading, shaping and
6 cover material consistent with the hierarchy.
7 Similarly, oversize bulky waste is typically a
8 residual from a processing facility so has been
9 subject to recycling and defies further processing
10 or treatment requiring landfill disposal.

11 Municipal and industrial wastewater
12 treatment plant sludges and residuals are land
13 applied or composted to the maximum extent
14 practicable rather than landfilled. It should be
15 noted that the majority of these materials have
16 already been processed by the generators. Casella
17 Organics provides for direct land application of
18 nutrient-containing residuals and our Hawk Ridge
19 compost facility in Unity annually maximizes its
20 input of biosolids. Remaining materials either do
21 not meet regulatory requirements or are of
22 sufficient volume that landfilling is the
23 preferred option.

24 Contaminated soils, oil spill debris and
25 miscellaneous special waste are not typically

1 steady waste streams and don't usually allow for
2 incineration. The majority of these waste types
3 do not allow for additional management techniques
4 beyond landfilling. Maine incinerators are
5 required as a condition of their disposal facility
6 licenses to provide for bypass in the event that
7 the waste delivered to the incinerator is in
8 excess of its ability to accept, process and
9 combust that waste. The decision to bypass and
10 the disposal location is made by the generator.

11 The majority of the waste received at
12 Juniper Ridge has already been subject to
13 recycling and source reduction programs. There
14 are a variety of options employed for managing
15 Maine's solid waste. This table provides an
16 overview of the state plan management options and
17 a qualitative assessment of the comparative use of
18 the management options aside the major waste
19 streams that are taken at Juniper Ridge. Review
20 of the state plan rankings are the current
21 management methods for the waste streams accepted
22 at Juniper Ridge illustrates that nearly 90
23 percent of the materials by weight have a high or
24 medium ranking for landfill disposal, meaning
25 disposal is either the primary or a significant

1 material management method. Only 10 percent of
2 materials currently and proposed to be accepted at
3 Juniper Ridge have a high ranking for recycling,
4 being wastewater treatment plant sludges for which
5 recycling and beneficial use alternatives are
6 continually being utilized and explored by Casella
7 Organics as previously described. Again, by any
8 measure, the volume of the waste has been reduced
9 to the maximum practical extent by recycling and
10 source reduction prior to being landfilled and
11 compliance with the recycling provisions have been
12 met.

13 We have supplied ample evidence of the
14 descriptions of the reduction, reuse, recycling,
15 composting and/or processing programs and efforts
16 that the waste that finds its way to Juniper Ridge
17 is subject to and that are sufficiently within our
18 control. We have and continue to handle the
19 greatest amount of waste possible through means as
20 high on the Solid Waste Management Hierarchy as
21 possible resulting in maximizing waste diversion
22 and minimizing the amount of waste disposed at
23 Juniper Ridge. Thank you.

24 CHAIRMAN PARKER: I guess we'll hold
25 questions until you finish your testimony. Thank

1 you. We'll have questions later for you.

2 MR. DOYLE: Our next witness is John
3 Sevee. John is both a licensed professional
4 engineer and a certified geologist in the State of
5 Maine. He has over 45 years of experience in
6 areas of geotechnical engineering, hydrogeology
7 and groundwater engineering. John cofounded Sevee
8 & Maher Engineers, the engineering firm that
9 discovered the site -- this site as suitable for a
10 landfill and designed the Juniper Ridge Landfill
11 back in the early 1990s. His educational
12 background includes both a bachelor's and a
13 master's degree in civil engineering with an
14 emphasis in geotechnical engineering from the
15 University of Vermont and a bachelor's degree in
16 physics from the University of Southern Maine.
17 Over the years, John has been a licensed
18 professional engineer in 12 states. His resume is
19 BGS/NEWSME Exhibit #5. John will be discussing
20 hydrogeologic issues related to the Juniper Ridge
21 Landfill expansion site.

22 MR. SEVEE: Good morning. Thank you, Tom.
23 I'm going to describe the geologic and
24 hydrogeologic investigations that have been
25 conducted at the JRL site over the last 25 years.

1 Importantly, these investigations show that the
2 landfill site meets the DEP siting criteria as
3 given in the Maine solid waste management rules
4 and it also shows that the site can be monitored
5 in an effective way to protect the surrounding
6 groundwaters and surface waters.

7 I'll begin my presentation by describing
8 the investigations that have been conducted
9 focusing primarily on the expansion area, I'll
10 summarize the geology of the site and the
11 expansion area and then discuss briefly the
12 groundwater behavior beneath the site and I'll
13 wrap up by discussing the groundwater monitoring
14 program that is being proposed for the Landfill.

15 So we'll start but I think, first of all,
16 it may be useful just to simply state why we do
17 these subsurface investigations and there's three
18 principal objectives here. One is to determine
19 whether the site meets the DEP siting criteria;
20 another objective is to collect information on the
21 foundation materials in the soils and the rock so
22 that that information can be fed into engineering
23 design calculations and issues relative to the
24 design; and then finally, it's important to
25 understand the directions and rates of groundwater

1 movement and its behavior in both the soils and
2 the bedrock so that the site can be properly
3 monitored.

4 So with these particular criteria in mind,
5 I'm just going to quickly show this figure here
6 which I think is Exhibit 6 from my direct
7 testimony. This is a figure of the site. The
8 existing landfill is right here, the expansion is
9 located on the north side and the east side of
10 that existing landfill and I think you've all been
11 out there so you realize that this site is built
12 on a ridge that has sort of a ridge line or crest
13 line that runs north and south across the
14 property, so the land surface drops off to the
15 east and the land surface drops off to the west.
16 This figure also shows the explorations that have
17 been done over the last 25 years and it shows --
18 as well as it shows the investigations done within
19 the expansion area. There are approximately 200
20 explorations of different types shown on this
21 diagram. About one-quarter of those are located
22 within and adjacent to the expansion footprint.
23 The explorations that are shown on this diagram
24 include such things as test pits which are
25 excavations dug to examine the shallow soils and

1 get information on the depth of bedrock. There
2 are at least 90 test pits out here. There are at
3 least 80 soil borings, the soil borings allowing
4 us to get down deeper through the soils and into
5 the bedrock to examine the geology and
6 characterize the geology. The borings also
7 provide the ability to install groundwater
8 monitoring wells so that we can get information on
9 groundwater levels. There are 120 -- at least 120
10 groundwater monitoring wells shown in this
11 diagram. That information is used to evaluate the
12 directions and rates of groundwater movement
13 across the site and around the perimeters of the
14 proposed expansion. There are a minimum of seven
15 deep bedrock bore holes on the site where we went
16 down 200 feet into the bedrock and this was
17 basically to examine the deeper groundwater
18 characteristics in the bedrock. We've conducted
19 pump tests of the groundwater in the bedrock,
20 basically pumping water out of a well to see how
21 that -- how that pumping affects the nearby
22 groundwater levels and that provides information
23 on the interconnectivity of the fractures within
24 the bedrock. With -- with all of that
25 information, we've also supplemented it with some

1 geophysical investigations, geophysical
2 investigations such as electrical earth
3 resistivity, seismic refraction, down hole
4 geophysical logging and the nice thing about the
5 geophysical surveys is they're illustrated here,
6 for instance, in this earth resistivity line here.
7 It basically provides some continuity of
8 information between these discrete sample
9 locations represented by the bore holes and the
10 test pits.

11 During the field investigations, samples
12 of the rock and the soils are collected, they're
13 brought back into a geotechnical laboratory where
14 they are tested for information such as shear
15 strength, compressibility, permeability and so
16 forth.

17 One of the points that's useful to make
18 here is that we've utilized a corroborative
19 approach or a redundant approach in looking at
20 some critical parameters and by example, I'll give
21 the example of groundwater flow velocities. In
22 order to calculate groundwater flow velocities, we
23 measured the permeability of the soil and measured
24 the hydraulic gradients out in the formations.
25 The permeability of the soil is basically its

1 ability to transmit groundwater. So low
2 permeability means that there's a limited ability
3 to transmit groundwater, higher permeability means
4 it has a greater ability to transmit groundwater.
5 By combining these parameters, we're able to
6 calculate a groundwater velocity. Next we
7 actually went out and did a tracer test to measure
8 the groundwater velocity. We put a little bit of
9 salt in the groundwater and measured the rate at
10 which the salt moved through the groundwater
11 system and that provided a direct measurement of
12 the groundwater velocity, and then we corroborated
13 that information by measuring the groundwater age
14 and that basically provides an additional
15 constraint on what the groundwater velocities are.
16 By using this sort of redundant or corroborative
17 approach, you develop a greater degree of
18 confidence in estimating certain parameters and
19 the important ones you really want to be fairly
20 close on, and so this is a very useful approach
21 and it provides, like I say, a greater degree of
22 confidence in your conclusions and your
23 calculations.

24 All of this information has been reported
25 over the years. The latest information on the

1 expansion is provided in the application but the
2 application also includes all the historical
3 information as sort of reference data.

4 Let me now briefly describe the geology.
5 The soils below the ground surface out at this
6 site consist of a dense clay glacial till. The
7 till was laid down by ice during the last glacial
8 period and at least a mile of ice compacted this
9 till and gave it its density. The density is
10 important because it provides the stability of
11 this material. The clay nature of the till gives
12 it its relatively low permeability. That low
13 permeability is a desirable characteristic because
14 by having something that has a lower permeability,
15 if there were to be a leak or a spill of leachate
16 at the site, you want a soil that retards the
17 movement of that so you can get in there and clean
18 it up and deal with it as opposed to a higher
19 permeability which lets it move off relatively
20 quickly where you may not be able to control it.
21 So those are two important characteristics of the
22 site. In fact, the permeability characteristic is
23 a siting criteria. The permeability has to be
24 less than ten to the minus five centimeters per
25 second. In scientific jargon that's 0.00001

1 centimeters per second, and the permeability again
2 is a measure of the rate at which the groundwater
3 can move through the soil, and we meet that siting
4 criteria for this site. So the permeability meets
5 the DEP siting criteria.

6 The till overlies an ancient silicic
7 bedrock, silicic bedrock being sort of a
8 shaley-type bedrock. It tends to be a little
9 weathered near its surface underneath -- beneath
10 the till, but that weathering goes away and
11 disappears with depth and it becomes unweathered
12 with depth. Even though the -- even though the
13 bedrock is hard and competent and intact, by that
14 I mean not broken up, it does contain fractures,
15 and the investigations that have been conducted
16 out at the site show that there are -- that most
17 of these fractures are nearly vertical. They're
18 oriented more or less in a vertical plane, not
19 precisely but more or less, and the investigations
20 show that these fractures tend to break down into
21 two principal groups. One grouping is oriented
22 more or less to the northeast and southwest, and
23 the other grouping is oriented almost at a right
24 angle to that first grouping; therefore, you have
25 a group of fractures that intersect more or less

1 at right angles and this intersection or this
2 interconnection is what allows the groundwater to
3 move through the bedrock. There are other
4 fractures that are present in the bedrock that are
5 at various other angles which add additionally to
6 this interconnectivity but those are fewer in
7 nature. The groundwater within the till does not
8 move through fractures. It moves through the
9 porous spaces between the soil grains of the till.

10 A significant portion of the
11 investigation, as I mentioned earlier, is focused
12 on understanding groundwater movement and that's
13 one of the ultimate objectives here. We want to
14 understand the directions and the rates of
15 groundwater movement so that this feeds into the
16 design of an appropriate monitoring system for the
17 groundwater. The directions of groundwater
18 movement within the glacial till is generally from
19 higher elevations to lower elevations. So
20 groundwater moves from the ridge area down to
21 lower-lying areas in the topography. In this
22 particular case because we're on a ridge, part of
23 the groundwater moves to the East and part of the
24 groundwater moves to the West through the glacial
25 till. Within the bedrock that underlies the tile,

1 the groundwater on a regional basis follows that
2 same general pattern. In other words, it goes
3 from the higher elevations down to lower
4 elevations, but locally within the bedrock this
5 fracture system that I mentioned a minute ago
6 actually can have a -- insert a control on that
7 behavior in such a way that it may not be exactly
8 downhill, it may be at a skew relative to the
9 downhill direction. Much of the investigations
10 that have been going on on this site since 2005
11 for this expansion have been focused on better
12 understanding of how the groundwater behaves and
13 what this interaction is between the topography
14 and the fracture system.

15 The groundwater velocities have been
16 estimated both in the till and the bedrock.
17 Groundwater in the -- in the till is generally in
18 the order of about one to ten feet per year. So
19 groundwater in the till moves from me to the
20 stenographer more or less in a period of about a
21 year, and that's due to its relatively low -- its
22 clay content -- its clay content and its
23 relatively low permeability. The groundwater in
24 the bedrock on the other hand moves this similar
25 distance one to ten feet per day, so it's moving

1 at a much higher rate, and the reason for that is
2 that it has to do with the relative permeabilities
3 of the till and the bedrock but also it has to do
4 with the porosity of the bedrock relative to the
5 till, porosity being basically the pore spaces
6 that the groundwater can move through and in the
7 bedrock, the pore spaces are very limited because
8 it's basically through these fractures and not
9 through all the pores in the soil.

10 In assisting us in interpreting the
11 behavior of the groundwater, we use
12 three-dimensional simulations, computer
13 simulations of the groundwater flow. These are
14 extremely useful because you can incorporate the
15 topography, you can incorporate the fracture
16 patterns and interconnectivity of the bedrock, the
17 thickness of the till and all these geologic
18 features and let the model generate what it
19 believes to be the groundwater flow patterns. One
20 of the -- the output of these simulations
21 basically confirm our general understanding that
22 groundwater moves downhill in both the bedrock and
23 the soils but one of the important features is
24 that it shows that groundwater migration away from
25 the site is limited, and it's limited by the

1 topography, and what happens is the groundwater
2 moves away from the higher elevations to the lower
3 elevations that surround the site and at these
4 lower elevations, the groundwater wants to move up
5 toward the ground surface. On the far sides of
6 these low areas are higher topographic elevations.
7 The groundwater table follows the topography in
8 those areas and basically creates sort of a
9 hydraulic barrier to further groundwater movement
10 away from those low-lying areas. So the model
11 sort of demonstrated that groundwater migration
12 away from the Landfill would be limited and that
13 was one of the important reasons that we selected
14 the site back in 1990 was because we looked at the
15 topography and judged that groundwater should
16 remain relatively local to the landfill and that's
17 good in terms of protecting regional groundwater
18 users.

19 As I mentioned a few minutes ago, much of
20 the recent work that we've been doing working with
21 the DEP staff on better understanding how the
22 groundwater behaves in the bedrock, and this has
23 really been focused on how do we properly monitor
24 the bedrock. The till is much more
25 straightforward in terms of monitoring, but the

1 bedrock is a little bit more complicated because
2 of the fracturing system.

3 One of the additional pieces of
4 information that has come out of these
5 investigations is that the groundwater within the
6 bedrock can be controlled. We know that because
7 we've run pump tests where we've drilled wells
8 into the bedrock and we've pumped the groundwater
9 out of those wells and we look to see what happens
10 to the groundwater levels surrounding where we're
11 pumping the water out of the aquifer, and
12 typically what you would expect is that the
13 groundwater would move toward this pumping well,
14 and we have shown through these pumping tests that
15 we can affect groundwater levels out as far as
16 2000 feet away from where the well is being
17 pumped. This is -- this is relevant because if in
18 the unlikely event there were to be a leak, you
19 could actually drill a well in the bedrock and
20 contain that leak by pumping the groundwater. In
21 fact, you could -- if you needed to, you could
22 actually put a string of wells around the
23 perimeter of the landfill even after it's been
24 fully developed and collect and contain all the
25 groundwater such that if there were something

1 leaking from the landfill it would never go beyond
2 that collection system. One of the nice things
3 about this collection system is that it would be
4 easy to implement, you can do it very quickly,
5 it's low tech, it's straightforward and like I
6 said, you can do it right away so if there is a
7 problem, you can capture it immediately.

8 One of the performance criteria for siting
9 a landfill is looking at travel times to sensitive
10 receptors. You want to -- in your monitoring
11 system, you want to have sufficient time that if
12 you detect a leakage or a spill that you can have
13 enough time to determine what's causing that
14 problem and address it through some remediation
15 scheme. The DEP has judged that six years' travel
16 time would be sufficient in order to do that, and
17 so you go through a calculation or an analysis to
18 determine what is the -- what is the rate of
19 travel from the landfill footprint to sensitive
20 receptors. Sensitive receptors are defined in the
21 rules and they are features such as groundwater
22 wells on adjacent properties, certain class
23 surface water bodies, sand and gravel aquifer
24 formations and similar types of things, and so the
25 analysis basically identifies these sensitive

1 receptors and then goes through a calculation to
2 determine the rate of travel to these sensitive
3 receptors from the landfill footprint. We
4 identified seven nearby sensitive receptors. A
5 couple of these are groundwater -- potential
6 groundwater wells, none exist directly in the
7 adjacent properties but we assume that someone --
8 a well could exist in the future. Some of them
9 are surface water bodies and then there's also
10 this sandy zone -- excuse me -- there's a sandy
11 zone that we identified off to the southeast --
12 outside the southeast footprint of the landfill.
13 This is a sandy inclusion within the glacial till,
14 and even though it's not part of a regional sand
15 and gravel aquifer, it's relatively isolated,
16 surrounded by low permeability soils, we felt it
17 was of sufficient size that a well could be
18 installed in that particular deposit and so we
19 kept it in as a sensitive receptor and we wanted
20 to know the travel time to that feature.

21 This is just simply a figure showing where
22 those sensitive receptors are. Here's the
23 property line right there and so we assumed a
24 water supply well at the closest point. There's a
25 property line on the west side, we assumed wells

1 at those two nearby corners. These are surface
2 water locations and then this is that sandy
3 inclusion zone within the glacial till.

4 So we went through the calculation and
5 Mike Booth, who is presenting next, will discuss
6 this analysis in a little bit more detail but
7 basically when we went through the calculation the
8 travel times were 6.2 to 68.2 years from the
9 landfill footprint to the sensitive receptors.
10 They -- those travel times include some offsets
11 associated with the design of the landfill and
12 Mike will talk a little bit more about that but
13 basically we meet the six-year criteria given by
14 the DEP rules. So what that means -- let me just
15 finish up by saying what that means is the
16 analysis says that we have sufficient time that if
17 we were to detect a leak at the liner base or at
18 the monitoring wells, that we would have time to
19 identify the leak, we would have time to figure
20 out where it's coming from and find out the
21 appropriate remedial action and implement that
22 remedial action before it gets to one of these
23 sensitive receptors.

24 The monitoring of the landfill will be
25 done through two systems. The primary monitoring

1 of the landfill itself is the liner leak detection
2 system. The liner leak detection system -- and
3 Mike will talk more about this -- is a sand layer
4 that's sandwiched between the primary and the
5 secondary liners of the landfill. It is a system
6 -- it's a sand layer that's monitored on a routine
7 basis to look to see if there's any leakage that's
8 coming through the primary liner system so you can
9 react quickly before any of that leakage would
10 make it through the secondary liner system.

11 The monitoring wells are sort of a
12 redundant feature in part on the perimeter of the
13 landfill but the monitoring wells also would
14 monitor leachate containment systems such as pipes
15 that run along the perimeter of the landfill
16 system.

17 The -- we've judged that because of the
18 nature and the level of understanding of both the
19 soil and the bedrock that we can effectively
20 install monitoring wells and we believe that we
21 know where to effectively install these monitoring
22 wells so that they act as an early warning system
23 so that if there is some sort of a change in
24 groundwater quality we can address it immediately
25 before it gets out into the regional groundwaters

1 or surface waters.

2 So quickly in summary, there's a
3 significant amount of information that's been
4 collected on this site over the last two and a
5 half decades. The -- the level of understanding
6 allows us to understand how the groundwater is
7 behaving so we can appropriately monitor the
8 groundwater so we can protect the surrounding
9 groundwater users or offsite groundwater and
10 surface waters and the investigation has shown
11 that there's a number of desirable characteristics
12 to the site, one being the relatively low
13 permeability of the till. It's a clay nature.
14 The till is also dense and stable. You want to
15 have a stable foundation under the landfill. The
16 -- the limited ability of groundwater to migrate
17 regionally is an important feature to the site.
18 So we believe the site can be effectively
19 monitored and is a good landfill site. Thank you
20 very much.

21 CHAIRMAN PARKER: Thank you, John.

22 MR. EASTLER: Can I make one comment about
23 that?

24 CHAIRMAN PARKER: Go ahead.

25 MR. EASTLER: First of all, I don't

1 normally do this. Bravo, fabulous presentation.
2 The geology is quite clear and quite
3 understandable. There was one place where it
4 might have been a little confusing when you talked
5 about the one-mile thick -- pardon me -- the
6 one-mile ice as opposed to saying the one-mile
7 thick ice because the compression came from the
8 tremendous height between one and two miles of ice
9 that was there some 13,000 years ago or whatever.
10 Very nicely done and, of course, what you've done
11 with the fracturing is also -- just fits right
12 into the Appalachian geology for the fractured
13 bedrock southwest and northeast and the glacial
14 characteristics with that very heavy ice pushing
15 over the land from northwest to southeast itself,
16 so southwest to northeast, northwest to southeast,
17 90-degree intersection, beautiful job, very well
18 explained on every bit of it. Thank you very
19 much.

20 MR. SEVEE: Thanks for correcting me too.

21 CHAIRMAN PARKER: Thank you, John.

22 MR. DOYLE: Before our next witness, I
23 just want to give the Board an update on where we
24 are. We've got six witnesses, you've heard from
25 three so far. We've been at this a little less

1 than an hour and I said we would take three hours
2 so we're well within our time.

3 CHAIRMAN PARKER: We appreciate that.

4 MR. DOYLE: And we're going to -- our next
5 witness actually has the longest testimony so just
6 relax and listen, but we are well ahead of
7 schedule here. So I think that's good.

8 Mike Booth is a licensed professional
9 engineer in the State of Maine and a senior
10 project manager at Sevee & Maher. Mike has over
11 35 years in environmental engineering experience.
12 His principal practice area is solid waste
13 management with a focus on landfill design and
14 operations. He has worked on Juniper Ridge for
15 over 20 years and has directed the design and
16 preparation of several of its permit applications.
17 Throughout his career, Mike has also been involved
18 in multiple engineering roles with many of the
19 state's landfills and is, therefore, very familiar
20 with landfill licensing standards and the
21 standards of practice for landfill design. He
22 earned a bachelor of science degree in civil
23 engineering from the University of Maine. His
24 resume is BGS/NEWSME Exhibit #9. Mike will
25 discuss landfill siting and design for the

1 expansion. Mike.

2 MR. BOOTH: Thank you, Tom. My
3 presentation this morning will focus on the
4 expansion design and the design process. I'll
5 describe how we designed the expansion to comply
6 both with the prohibitive and restrictive criteria
7 that are contained in the solid waste management
8 rules and the performance design standards of the
9 rules to protect the environment and the site
10 sensitive receptors. I'll also address the
11 alternatives to developing the expansion which is
12 part of the Natural Resource Protection Act permit
13 application for the two -- approximately two acres
14 of wetland impacts that are associated with this
15 expansion project.

16 In my testimony, I'll touch on the points
17 made in both my direct testimony and my rebuttal
18 testimony trying to respond to a number of
19 questions that are related to the design that were
20 raised by Mr. Spencer and Mr. Coghlan in their
21 direct testimony. I'll start with an overview of
22 the project, describe the site selection and the
23 alternatives analysis that was done, describe the
24 basis of the design, the expansion layout and
25 configuration, we'll get into a detailed

1 description of the various components of the
2 landfill and finally the construction activities.

3 This is an overview of the site and the
4 actual footprint as shown by John is about 54
5 acres situated right to the north of the existing
6 landfill facility, in addition to actual landfill
7 footprint -- the line of the landfill footprint
8 the total developed area is about 75 -- 74 acres.
9 That includes access roads, perimeter berms,
10 stormwater ponds, the relocated scale house and
11 administration building. The expansion is
12 designed for the same types of waste materials
13 that are currently taken to the Juniper Ridge
14 Landfill site and will be developed over the
15 10-to-12-year period in a series of six cells,
16 each constructed a year -- approximately a year
17 before it's needed, a year to six months before
18 it's needed.

19 The alternative analysis which is part of
20 the Natural Resource Protection Act permit
21 application we looked at four alternatives. One
22 was a no-build alternative where could this waste
23 be taken to another facility. That particular
24 standard and evaluation was actually -- typically
25 -- it was consistent with what was done with the

1 public benefit determination for this project
2 where it was a previous permitting part of this
3 project which a license was issued back in 2012
4 which found that the Juniper Ridge Landfill
5 Expansion was needed to provide long-term disposal
6 capacity for the State of Maine. If that Juniper
7 Ridge Landfill Expansion was not constructed, then
8 the waste that currently goes to that facility
9 would have to go to another facility and that
10 would shorten the life of those facilities.

11 The alternate site development is
12 another -- is another alternative we looked at and
13 originally we looked at alternative sites -- the
14 Juniper Ridge Landfill site was based on a very
15 extensive siting study that was done back in the
16 early nineties which actually identified 58 sites
17 around the Old Town area which had the suitable
18 soils for a landfill site based on the
19 requirements of the rules. From the 58 sites, the
20 further screening of those sites narrowed those
21 sites down to 18 sites. The sites that were
22 eliminated were eliminated because of either
23 wetland and surface waters surrounding use. From
24 those 18 sites, 10 sites were identified for
25 onsite investigation which the test pits were dug

1 and investigations of the actual soil conditions
2 on the site and based on those test pits, the
3 Juniper Ridge Landfill site was identified as the
4 best site for a landfill development in that area.
5 Important in the alternative -- looking at
6 alternative site developments is to remember that
7 if this facility was constructed on a different
8 piece of land, the amount of land that would be
9 needed to meet the 9.35 million cubic yards of
10 capacity, which is what this application is for,
11 would require additional capacity because as part
12 of this expansion we're using some of the existing
13 site infrastructure which would have to be built
14 on another site so it makes the site smaller.

15 The waste reduction and alternative waste
16 management methods, I think Toni did an excellent
17 job of going through those alternatives and why
18 the expansion as designed minimizes the amount of
19 waste that goes through the landfill.

20 Modify the proposed boundaries of the
21 landfill and boundary design, this is something
22 that Sevee & Maher and Stantec -- Bryan Emerson
23 will talk to this after my presentation -- looked
24 at how do we minimize the amount of wetland
25 impacts associates with this site. One of the

1 first things we looked at was the actual physical
2 layout of the facility, looking at two other
3 layouts of the facility on the Juniper Ridge site
4 that would provide the 9.35 million cubic yards of
5 disposal capacity. These particular sites
6 actually have some other advantages if we're not
7 considering wetlands and particularly this one, we
8 wouldn't have to relocate some of these scales and
9 some of the stormwater ponds; however, these both
10 result in greater wetland impacts than the current
11 design. The first -- the top one is about four
12 and a half acres and the bottom one is about three
13 and a half -- 3.4 acres, so these two alternatives
14 compared to the two -- about two acres of wetland
15 impacts that are associated with the layout that
16 we're proposing as part of this application.

17 The basis for design, this is probably one
18 of the most important of my slides. There's
19 really three -- when we design a landfill, there's
20 really three bases that we use to design a
21 landfill. The first is to design it to conform
22 with both the qualitative and quantitative
23 standards of the rules, and I'll go into that in a
24 little more detail further in my presentation.
25 The second is that we design a landfill based on

1 the actual site conditions. John went into the
2 amount of work that goes into actually defining
3 those conditions. We take that information as he
4 indicated and we identify and come up with a
5 specific design feature of the landfill that are
6 reflective of the actual site conditions. Now,
7 this will vary depending on the types of soils on
8 the site from site -- from landfill site to
9 landfill site.

10 And finally, we design landfills and the
11 expansion based on the experience of the
12 professionals who are responsible for the design
13 and the operations. This -- it's very important
14 in the design that we incorporate what's been
15 learned in the past in landfill design and
16 incorporate it in the new designs, and so the
17 design approach that we've used for this facility
18 is based on the experience of both Sevee & Maher
19 who's done landfill design, who has about 800
20 years of combined landfill design experience in
21 our office, as well as the other consultants who
22 have worked on the job who also have a great
23 amount of experience doing their type of
24 evaluation. The design and the approaches we've
25 used in this design are similar to what have been

1 standards which is requirements that a project
2 must meet. Now, the performance standards look at
3 actually kind of test driving the landfill design;
4 saying, all right, we know what the geology is, we
5 know what the design is, put those two things
6 together and calculate how long it would take --
7 the time of travel analysis which John talked
8 about, how long would it take -- if we did have a
9 problem with a leak, how long would it take for
10 that leak to get to a sensitive receptor. It also
11 has a standard looking at potential contaminant
12 releases and what -- if you did have a release,
13 what would be the impact to those sensitive
14 receptors. Now, those analyses are a due
15 diligence exercise. We take and make very
16 conservative assumptions on leakage rates and we
17 run through this analysis and we check them to
18 make sure we're not having an impact -- that the
19 design will not have an impact on the facility.
20 They are not predictions that we expect these
21 things to happen. They're -- the way we approach
22 a landfill design is we try to make very
23 conservative assumptions, run through the
24 analysis, if everything is fine and we meet the
25 criteria that we've established for that

1 particular part of the design, then we know we
2 have a solid system, and, you know, again, the
3 experience of doing this a number of times, we
4 know that the techniques that we do have proven
5 out with actual operating facilities.

6 The protection against groundwater impacts
7 is obvious. That standard is very important. In
8 the rules they talk to not siting a landfill on a
9 sand and gravel aquifer. At one point in time
10 that was not obviously something -- a lot of
11 landfills are located on sand and gravel aquifers
12 way back 20 or 30 years ago. Obviously that's not
13 what we want to do now.

14 Not locating the landfill on a fault line,
15 again, not a good idea, and those standards are
16 standards that we have to check the site to make
17 sure and this site meets those standards.

18 The ability to monitor a site is -- we
19 have to have a site that's monitorable such as
20 what John talked to and he went into detail on how
21 he monitored. One of the issues that -- that is
22 addressed in that standard is disturbing soils
23 within the area of the bedrock. We generally like
24 to not disturb soils that are closer than five
25 feet to the bedrock surface. This -- this is a

1 standard and in the landfill and the design of
2 this landfill we've done that so where we have to
3 -- if we have any soils that are within five feet
4 of the surface, all we're doing in establishing a
5 base grade is to strip off the organic materials
6 so we're on to minable soils. So we minimize that
7 impact of that five feet of the soils that are
8 over the bedrock surface.

9 This is a time of travel analysis and I
10 include this slide because the design that we've
11 picked, and I'll be talking about the liner system
12 in a minute, but the design that we've picked for
13 this facility, we used the time of travel analysis
14 to identify what are the appropriate components of
15 the liner design. It's one of our very important
16 parts of how we come up with a specific design --
17 liner system design for a facility and the layers
18 that we put into it.

19 Now, the rules have really three parts to
20 the -- this time of travel analysis. John
21 identified the first one which is a flow through
22 the onsite -- the native onsite soils and the
23 bedrock. The second -- the second component that
24 the rules identify for using this analysis is the
25 time of travel through any imported soils. The

1 rules say, you know, you can import soils onto the
2 site and you can account for that travel time
3 through that soil. It makes a lot of sense
4 because what we can do is we can import even
5 tighter soils than what we have onsite and utilize
6 that as a barrier to keep migration down to the
7 site.

8 The third component is, what John talked
9 to, is enhancing the liner design and the use of
10 offset credits which the rules prescribe very
11 specifically if you include certain components
12 into your landfill liner containment system
13 design, then you get offset credits. Because
14 you're able to detect a leak quicker, you have a
15 more robust liner system and the rules
16 prescribe -- there's a table in the rules which
17 identify those criteria. So we used all three of
18 those components in our time of travel analysis.
19 We actually selected design components based on
20 utilizing those materials deliberately because if
21 we can utilize designs that we're actually
22 installing and we can QA and QC the installation,
23 quality assurance, quality control, sorry for the
24 acronyms, we know that the thing has been put into
25 a certain standard as opposed to a geologic

1 system. You know, there is variability in any
2 geologic system. So we have a better idea when we
3 design the landfill and we install the particular
4 liner system that we know has been designed to a
5 certain standard, we can document that.

6 The contaminant transport analysis, what
7 we do is we say, all right, one of the analysis is
8 that the rules require us to do is we say, what if
9 there's no liner here, what would happen if we had
10 leachate just pouring -- we had no liner system
11 and the leachate would just make its way out the
12 bottom of the landfill, would it impact the
13 sensitive receptors around the site; and so one of
14 the analyses we do, we say, assume there's no
15 liner system there, assume that the water has to
16 travel down -- the leachate would travel down
17 through the soils that have been put in and that
18 are there and to the sensitive receptors and we
19 have to predict what those concentrations would be
20 at the six-year time period. Now, if we -- when
21 we do this analysis, we also look at two other --
22 we've looked at two other scenarios, we say what
23 if we have a leak in the liner, what if we have a
24 defect in the liner and that liner leaks at a
25 certain rate, what would we have for impact there.

1 We also look at what if we have a break in a
2 leachate force main and that leachate is allowed
3 to go into the environment for a period of time
4 and then travel down through the soils into
5 bedrock to the sensitive receptors. Those
6 analysis, we compare what the water quality would
7 look like at those sensitive receptors to the
8 various standards for both drinking water and
9 surface water and the criteria for establishing do
10 we meet that contaminant transport analysis is
11 that if there is not levels that -- that all the
12 drinking water standards are met at that six-year
13 travel time. That is a case for this facility and
14 it's related to the tightness and the types of
15 soils that are on this site as well as the design
16 of the facility.

17 This is a first -- this is kind of the
18 first picture of what we're actually designing.
19 Now, the expansion we've -- we've taken the
20 capacity and we've divided it up into cells built
21 approximately every two years. There's a total of
22 six cells, 11, 12, 13, 14, 15 -- 14, 15 and 16 and
23 what we've found is that constructing a landfill
24 cell every two years works fairly well because
25 it's a fairly extensive process to design and

1 actually to construct. We actually go through and
2 come up with a specific design for each of these
3 landfill cells, they submit it to the DEP, they
4 review it, they approve it, we have to go out and
5 mobilize construction equipment and then also
6 personnel to oversee the construction, testing of
7 the materials. So what we found is kind of a
8 two-year cycle is a good cycle to work on as far
9 as construction of cells, and we've laid these
10 cells out to handle about two years of landfill
11 capacity at the design rate of 700,000 cubic yards
12 per year.

13 One thing I would like to point out in the
14 cell, we establish these base grades -- these
15 lines are actually established with some intent
16 and basically it's to get all the -- all the water
17 that drains in the landfill to the perimeter of
18 the cell within the lined area of the cell such
19 that it's collected along the edges of the cell.
20 This kind of zigzag pattern here allows us to kind
21 of put pipes down the middle and allows the water
22 again to drain to the side of the cells where it's
23 collected in leachate collection sumps which I'll
24 talk about in a little more detail. It also
25 provides us the ability to keep all those pipes

1 clean. If there is leachate, it's always going to
2 migrate to the outside of the cell where it can be
3 addressed and picked up.

4 Also included on this, a couple other
5 features I want to point out is this red area here
6 is where the base of the landfill is located under
7 the water table on the site. This is actually an
8 area with some of the deepest soils onsite, and so
9 what we do is this red area, it's about 12 acres,
10 we have an underdrain system underneath it which
11 will drain the water, keep the water table down so
12 we construct the landfill liner on top of that.
13 The areas in blue, and I'll go into it when I talk
14 about the liners, are areas where we have less
15 than ten feet of soil between the base of the
16 landfill and the bedrock, and in those areas we've
17 chosen to use an enhanced liner system. That
18 gives us another year in the travel time analysis
19 and it provides a more robust design. Basically
20 we're putting two composite liner systems in those
21 areas.

22 This slide shows kind of the sequence of
23 development of the expansion cells. The first
24 year we would build cell 11 in 2018, and this
25 shows the leachate pipes. The next year we would

1 build this final cover over the existing portion
2 of the existing landfill. I know this question
3 came up during your site visit so what's laid out
4 in the application is one year build a cell, the
5 next year build a cover and have the cover kind of
6 follow the development of the cell until we get to
7 the end of the site and we have the whole site
8 covered. We use this approach because this also
9 plays into how we calculate what the leachate
10 generation rate is going to be at the site over
11 the life of the facility.

12 This -- this slide, and I should have put
13 grass on the top, I apologize for that, shows the
14 typical cover system that's put on the landfill.
15 There's a vegetative cover layer which is a foot
16 thick, there's a drainage sand layer, there's a
17 membrane liner similar but not the same to the
18 liners that we use -- the membrane liners we use
19 in the liner system, and below that is a compacted
20 clay layer that provides a base for this membrane
21 and below that is the waste. So this essentially
22 cuts off all infiltration into the waste when this
23 final cover is completed and constructed.

24 I'm going to spend some time talking about
25 the various landfill components. First is the

1 liner, then the leachate, leak detection system,
2 the leachate collection sump, the landfill
3 infrastructure, and the surface water management
4 and erosion control features.

5 I'm going to use -- I'm going to go over
6 here to talk by these big pictures because one of
7 the problems that's always difficult, and I'm glad
8 Jeremy was able to make these large scales, is
9 it's pretty hard to kind of go through and see
10 some of these layers in that small scale but this
11 is a true-scale picture of the liner components of
12 the system and I'll go through those very briefly,
13 and I have some pictures of some of the
14 construction of this activity. So the waste is up
15 here. We put a five-foot soft layer and to answer
16 Chairman Parker's question, the soft layer is
17 about five percent of the waste volume. We
18 calculated that as we were sitting there, and
19 that's put on top of here to kind of protect the
20 liner. The soft layer is actually made up of
21 waste materials that are taken to the landfill
22 anyway but they're materials that are precluded
23 from that, things like construction and demolition
24 debris, big pieces of materials that would
25 have waste that could get driven into the liner

1 and cause a problem. So that five feet is up
2 above here. The first layer is the leachate
3 collection layer. You put a foot of sand, this is
4 what we call a geocomposite drainage net. This is
5 a high capacity manufactured material that we put
6 over the membrane to collect all the water that
7 filters down through the sand and convey it to the
8 leachate collection pipes. Now, one of the
9 conservative parts of our design is the rules
10 allow us to have a 12-foot head to allow the
11 leachate to saturate this entire level. We
12 designed this landfill with this drainage net so
13 that the head on this liner -- the amount of
14 leachate head buildup under design conditions is
15 about a quarter of an inch. These -- these --
16 these couple layers here are a little bit larger.
17 They're not to scale but this layer is about a
18 quarter of an inch thick, it has tremendous
19 drainage capacity and we designed this to minimize
20 the head on that liner system.

21 Right underneath that liner system is a
22 geomembrane. We use a high-density polyethylene
23 material. The rules call for use of a 60-mil
24 liner. We use a liner that's -- it's proposed an
25 80-mil liner because it's a more robust system and

1 clay and we do that for a number of reasons. This
2 provides -- one of the important things in a liner
3 design is to provide robustness and thickness to
4 the design and this part is actually developed or
5 is shown to scale. This black line has nothing to
6 do with -- it has to do with how they printed off
7 this particular graphic, and so this is what we
8 call the primary liner system, these three layers
9 right here. This is the same system that's at the
10 Juniper Ridge Landfill right now, and it has
11 worked very well since it's been installed.

12 Below that we have the leak detection
13 layer which is again another foot of sand, we put
14 another high -- a high capacity drainage net on
15 the bottom and then under the -- which goes to the
16 leak detection pipes and then under that we use a
17 60-mil high-density polyethylene membrane liner.
18 Again, the rules call that we can use a 40-mil
19 liner, we've gone to a stronger more robust
20 system. The whole advantage of this system is
21 that obviously first it's to detect leaks. If
22 there is a leak, if something was to get down
23 through this, we would detect it in that pipe.
24 One of the questions that was raised in I believe
25 Mr. Spencer's testimony or comment was that, you

1 know, we -- the rules allow us a 30 day -- to
2 design a system such that it can detect a leak in
3 30 days. We actually -- the way we've laid this
4 system out and by using the types of system -- the
5 type of drainage composite we used here, we
6 actually have a three-day detection period. So
7 it's -- actually 30 days is what's in the rule,
8 we've put in a more robust system here to allow us
9 to detect the leaks at a quicker level, but for
10 anything to leak down through here, it has to get
11 down through this clay. This whole level really
12 would control the amount of leak that would
13 actually go into here and consequently would
14 control any liner -- any water that would be in
15 the leak detection layer and any head on the
16 secondary liner system. Below the 60-mil liner,
17 this is the imported clay layer. This is the one
18 foot of clay that we put down under the entire
19 base of the cell. This is a ten to the minus
20 seven centimeters per second clay. I'll give
21 you -- that's point one foot per year, that's the
22 permeability of this imported soil layer. We put
23 that down there for a number of reasons. One of
24 the reasons is also to provide a good stable base
25 to put this -- this secondary liner on to keep it

1 away from any rocks or anything that may be in the
2 soils down below it.

3 This -- this -- this is the augmented
4 system. The only difference in this system -- the
5 only -- this imported clay layer, this is also in
6 the existing Juniper Ridge Landfill. The only
7 difference is that that layer in the Juniper Ridge
8 Landfill there is not that leak detection layer.
9 It was an underdrain system that is tested. This
10 is the augmented liner system. Again, same
11 primary liner, same leak detection system but we
12 put -- in the secondary system we've put in a GCL
13 and another foot of clay to give us a secondary
14 composite system. So from here to here is our
15 liner system, the water would have to get down to
16 there and actually for the water to get into the
17 environment into the native soils, it would have
18 to travel all the way down through all these
19 layers down to this bottom here. The same here.
20 For water to get -- for a leak to develop here, it
21 would have to travel all the way down here to get
22 into the native soils down at the bottom.

23 One of the questions that came up -- I'll
24 address that a little bit later. These are some
25 slides showing the actual construction of a

1 landfill cell. This is -- this is grading the
2 base soils. You can kind of see when John talked
3 about the till nature of the soils. Unfortunately
4 when you had your site visit we weren't in
5 construction season. It's usually very helpful to
6 see how these cells are constructed to appreciate
7 how robust these systems are. This is the
8 imported clay layer. This is what the clay --
9 this is the installation of the clay that's placed
10 over the graded cells, this is it being spread,
11 and then it's compacted and it's kneaded together.
12 This is a picture of that imported clay. It's
13 also the same material that we use in the clay
14 layers of the liner system, and it shows how tight
15 these soils are. They're actually kneaded and
16 constructed so they're constructed in kind of a
17 very tight, tight soil once it's done. We
18 actually take samples of these soils as it's
19 constructed and we do testing of it to confirm
20 that it actually has the permeability that we
21 require, again that ten to the minus seven
22 centimeters per second, which is a point one foot
23 per year hydraulic conductivity.

24 This shows a secondary liner system and
25 leak detection system being installed. These

1 liner materials comes in sheets -- long sheets
2 about 18 feet wide, they're rolled out, they're
3 seamed together, I have a picture of that in my
4 next slide, and then the leak detection system is
5 constructed by first the pipes are installed and
6 then the sand is installed on top of them. You
7 can kind of see also the composite has been
8 installed and again, we put this composite on top
9 of this membrane to help protect the membrane.
10 That composite actually provides a physical
11 barrier to that membrane. So if there were any --
12 some designs don't include that, they just use a
13 fabric that doesn't have really any physical
14 separation. This is a physical -- a hard piece of
15 plastic which actually provides physical
16 separation, so it limits the potential for any
17 degradation or impact of construction of the liner
18 materials, the geomembrane materials. You can
19 also see this -- the way he's placing the sand, we
20 require them to keep their equipment a certain
21 number of feet off the bottom of the -- next to
22 these liner systems and so what they do is they
23 bring the sand in, they put it in and then they
24 back their way out so they're providing
25 protection. So this equipment is not causing

1 damage to the liner as it's being constructed.

2 This is a composite showing -- this is a
3 clay that's been prepared and compacted. On top
4 of that this is the GCL, again, it's a rolled
5 product that is rolled out, and then the
6 geomembrane is placed on top of it and this is a
7 seaming technique where the liners are seamed
8 together, they're actually what we call a dual
9 wedge weld, the weld is -- the wedge is -- the
10 liner -- the seam is actually two -- has two
11 places where it's joined and there's actually an
12 airspace in between. It's actually tested to make
13 sure that there is no -- that those two seams are
14 tight.

15 And this is just a composite showing a
16 geomembrane -- the GCL and then the compacted clay
17 liner. Again, this is a picture of the leachate
18 collection sand being installed. You can see the
19 geocomposite. This protects -- this is placed
20 right over the liner. The stone is placed on top
21 and you can see how they're using small equipment
22 to move the sand on top of the liner. We're very
23 fortunate in the State of Maine to have some
24 contractors who are very good at doing this work.
25 It's kind of finesse work, it's something where

1 you have to have people who know what they're
2 doing and appreciate it and we're fortunate enough
3 to have those types of contractors in the State of
4 Maine.

5 This is the completed cell. This is
6 actually -- this was the last cell we built out
7 there, cell 9, and this is actually the completed
8 cell. This is the intermediate cover that's
9 placed on the existing cells. I think you saw
10 this when you were out here. As this landfill is
11 filled, this cover is pushed back, it's cut back,
12 but we divert all the clean water up on top away
13 from the cell. As part of this project, and
14 Juniper Ridge is one of a few places in the entire
15 country, the number I have in my testimony is
16 about two percent of the geomembrane installations
17 that are done in the United States have what we
18 call a leak location -- a leak detect -- a leak
19 location survey done after the installation. What
20 this survey does is we bring a company in, they
21 actually put electrodes down below the plastic,
22 below the membrane, and then one on top and they
23 create a current. If there's a defect in the
24 liner, that current will connect and they'll pick
25 it up with their equipment. They can pick up

1 defects in liners that you can't see with the
2 human eye, and when we built this cell, I was out
3 there while they were doing this survey, it's
4 interesting, he's walking around six acres of
5 sand, he'll tell the contractors, dig this area
6 up, they'll shovel it off, they'll cut the
7 geocomposite, you'll look at it and say there's
8 nothing wrong with this liner, and they'll say
9 wait a minute and they'll pump on it and you'll
10 see a very small leak that you can't even see that
11 this system will detect. Again, only two percent
12 of the liners installed in the United States use
13 this technique as a common part of their QA/QC.

14 One of the items that came up in the -- in
15 the testimony and was a comment, do all liners
16 leak. Well, this has been this kind of the
17 conventional wisdom, everybody has heard this for
18 years and years and years. I don't agree with
19 that statement. When landfill liners -- when we
20 first started using HDB membrane liners, there
21 were issues associated with construction
22 techniques. People didn't know how to construct
23 them. There were items that the construction --
24 the types of materials don't have the quality
25 control that they do now. Those two issues and

1 the use of this survey is we can provide a liner
2 system that when we get done, we're very confident
3 that that landfill has been designed without any
4 defects in it. In addition, that statement does
5 not consider a couple other aspects. One of the
6 common causes of liner leakage that we have found
7 in the industry over the years is penetrations
8 through the liner. If you run a leachate pipe
9 outside of the cell, you put -- the old way of
10 doing it was to put a penetration through the
11 liner, basically cut a hole in the liner, run the
12 pipe through and then put a boot around that pipe.
13 Those have been notorious problems in landfills.
14 The DEP has recognized that and for a number of
15 years now, probably more than I can -- probably 15
16 years, we have gone to internal leachate sumps to
17 eliminate those sources of liner leaks because
18 those are what cause -- so, you know, what causes
19 liner leaks are construction-related damage which
20 we address through our QA/QC and this leak
21 location survey that we do that's not done on very
22 many sites in the State of Maine and we
23 eliminate -- we don't put penetrations into the
24 liner system.

25 This is a leachate collection line, and as

1 I indicated, these are showing the leachate pipes,
2 they're all running to the edge of the cells.
3 Internal -- this is all internally an all-lined
4 area, and what we do is we collect leachate in
5 individual leachate sumps, and because of the way
6 this site is graded, we have both temporary sumps
7 in the first two cells and then the last cell on
8 each site we have a permanent pump station. Now,
9 the permanent pump station is similar to what you
10 saw on your site visit a couple months ago. The
11 temporary -- the temporary pump stations are the
12 same concept. What we're doing is we're just
13 putting -- we put one pipe in, they're meant to --
14 once we close out -- once we've filled the cell
15 and moved on to the next cell, those pumps will be
16 pulled, the lines will be tied in and the pulp
17 station will go down to the next -- the leachate
18 will flow down to the next temporary station and
19 the pipes will actually stay in place to allow us
20 to clean those lines. Now, the layout of these
21 lines is such that we can continuously clean them
22 for the entire life of the facility plus the
23 post-closure period.

24 The leak detection system has a very
25 similar layout. The piping isn't quite as closely

1 spaced because we don't have as much water to deal
2 with, and once the water is collected in these
3 sumps, it's pumped through a force main and the
4 force main is double walled. There's a pipe
5 within a pipe and there's an annulus that we
6 collect and we measure the pressure in that to
7 make sure there's no leak in that first pipe -- in
8 that first main carrier pipe. That pipe all runs
9 along the edge of the landfill to the leachate
10 storage tank.

11 One of the items that came up in the
12 discussion -- in the direct testimony, I believe
13 it was by Mr. Spencer, was the capacity of using a
14 25-year/24-hour storm in our design. Now, we use
15 a 25-year/24-hour storm in our leachate design and
16 we also use it in our stormwater design. That's
17 per what's in the rules, but what we do is we say,
18 all right, we look at the layout of the facilities
19 and we say what's the largest area that we're
20 going to have that we could have water fall in the
21 cell, and cell 12 is the biggest cell, and we
22 designed a sump to take and be able to handle that
23 capacity in the sump until the pump can pump it
24 out because when we have a rain event, we have
25 much higher leachate generation rates than we

1 have, say, like this last week where we haven't
2 had rain for a period of time. The leachate
3 rates, if you look at them, they go up and down
4 depending on the weather patterns. So we design
5 those sumps to handle that 25-year/24-hour storm
6 event; however, we don't just say -- and when I
7 say design to handle, that it will not overflow
8 the embankments that we have capacity in here to
9 contain that leachate within the cell until it can
10 be pumped out. We don't say, all right, a 25-year
11 storm, we look at it to make sure we have free --
12 or extra space above the highest level that we
13 model to store additional water for those bigger
14 storms for all those conditions that could occur,
15 that, you know, we can anticipate and basically we
16 looked -- in my redirect on the testimony, we
17 looked at the sump size and basically for this
18 sump we have about three times the actual capacity
19 in the cell for what's needed in this
20 25-year/24-hour storm event. We know this
21 technique works, we've used it for a number of
22 years, we have actual experience in its
23 performance during actual storm events, in fact,
24 last year in September we had a storm that was
25 5.27 inches of water, a 25-year/24-hour storm in

1 this area, when this application was prepared it
2 was 4.8 inches. The leachate pumping rates at the
3 facility went from about 20,000 gallons a day up
4 to about 112,000 gallons a day. We were able to
5 contain all the leachate within this cell. These
6 pump stations are all hard wired. They're hard
7 wired into a system so Casella can see realtime
8 what's going on with the system. If there was to
9 be a failure of power, Casella has backup
10 generators which they could go and hook up and
11 pump out of these cells. In addition to that, the
12 leachate tank is sized and the rules require that
13 we provide extra storage capacity in the tank. As
14 part of the application, we go through a design
15 process that shows that we have backup storage
16 capacity in the tank in addition to the tank we
17 need for the wettest months.

18 This is actually a photograph of what you
19 didn't see on your visit that was under the waste.
20 This is actually the construction of one of these
21 sumps. Basically -- you probably saw the end of
22 these pipes when you looked in the building.
23 These pipes are riser pipes, they go down, they
24 sit on the bottom of the floor, we actually put a
25 one-inch thick high-density polyethylene piece of

1 four-by-eight sheath on the bottom to protect the
2 liner underneath it. We actually enhance the
3 liner under the individual sumps and then the
4 pumps are slid down into these pipes. Now, the
5 pumps are similar to what a water well pump would
6 look like, they're a long pump, they're just a
7 higher capacity, higher horsepower, so they're a
8 little bit bigger than your typical water well but
9 they're the same type of pumps. In that -- on top
10 of that we place -- that's the placement of the
11 stone that's placed in the sump and that
12 provides -- the water level that builds up, the
13 water flows into these holes in these pipes and
14 it's pumped out of the site to the leachate
15 storage tank.

16 Landfill gas infrastructure, the
17 expansion, as with the existing facility, uses two
18 ways to collect gas that's generated by this
19 facility. The first is horizontal trenches which
20 are installed as the waste is being placed in the
21 waste. They're installed at about a 40-foot
22 vertical interval and about a hundred-foot spacing
23 along -- horizontal spacing within the waste, and
24 as I said, those are -- once they get up to the
25 elevation where the pipe has been identified to be

1 installed, the pipes are installed as part of the
2 active operation of the facility. Once the
3 landfill has reached final grade, vertical gas
4 extraction wells are installed in through the
5 waste. These vertical extraction wells are the
6 primary long-term means of collecting gas from
7 this facility. They're actually laid out to
8 collect all the gas that's being generated by this
9 facility. The horizontal pipes, there's an
10 appreciation that water can -- what we call water
11 now can occur in these pipes. Basically because
12 these are inactive areas, as the waste settles,
13 these are six-inch pipes, they can actually end up
14 with sags and because the landfill gas is actually
15 quite wet, that water can condensate, the
16 condensate can drop out and block these pipes. So
17 these horizontal pipes are not intended to be long
18 term gas extraction. They're meant to operate
19 during the operational life of the facility and
20 typically they will keep drawing gas until, you
21 know, there's gas there to be obtained.

22 This shows the layout of the -- of the --
23 of the -- I'm sorry -- of the landfill gas wells.
24 Again, these wells have been laid out by Sanborn,
25 Head who does all the design gas work and are

1 experts in landfill gas construction and design,
2 and all this gas is collected by these wells. The
3 gas is conveyed to header pipes. There's one
4 header pipe -- a new header pipe that will be
5 installed on the east side and then there's a
6 header pipe here to an existing header pipe and
7 all the gas will generate -- will flow to the
8 onsite -- to the gas treatment facility and
9 ultimately to either the gas flare or in the
10 future some type of energy-type project.

11 The existing infrastructure has the
12 capacity to handle the amount of gas that's
13 projected to be generated from this expansion and
14 again, those projections are based on the
15 experience that has been gained from the Juniper
16 Ridge Landfill site and selection of parameters
17 that reflect what the actual gas generation needs
18 are.

19 Stormwater management and erosion control,
20 the expansion is designed based -- the erosion
21 control, the first part is there's long-term
22 erosion and there's also stormwater erosion
23 control measures that are implemented during
24 construction and operation. All those measures
25 that are designed -- this facility has been

1 designed in accordance with the Maine DEP Best
2 Management Practices for those activities. That
3 has to do with sizing ditches, riprap protection,
4 outlet protection, different criteria that's
5 typical of any type of civil engineering project
6 that is dealing with managing stormwater.

7 The stormwater management is water that's
8 collected off of -- this consists of clean runoff.
9 This is runoff that's collected off the cover
10 material, off the intermediate cover -- off the
11 intermediate cover and off the final covers. None
12 of this water comes in contact with the waste.
13 This is conveyed to one of eight stormwater
14 detention ponds. There's two down here, there's a
15 small one here, there's one here and there's one
16 up here that we're going to expand. Those ponds
17 are currently existing. We have three new
18 stormwater ponds, one pond is here, one pond here
19 and one pond here. Now, these ponds are designed
20 to limit what we call the post-development flow,
21 after we develop the site, to the stormwater flows
22 off the site prior to the landfill construction --
23 actually prior to even the existing landfill
24 construction, and so we go through a fairly
25 extensive analysis -- modeling analysis to size

1 these ponds to make sure that they -- that we can
2 draw the conclusion that the pre-development flows
3 and post-development flows from the site are the
4 same, and that information is reviewed by the DEP
5 and my understanding is they've concurred with our
6 design on that.

7 Each of these ponds has a structure in it,
8 an outlet structure which controls the rate that
9 the water is released, the actual discharge
10 location for all these ponds are onto surface
11 bodies -- are onto actually the ground surface and
12 we use something called a level spreader to spread
13 out that water so it flows over the ground surface
14 and it doesn't erode the soils. Those -- they
15 eventually drain to the low areas in the drainage
16 areas. Each pond is also sized to handle a
17 hundred year storm event. In a hundred year storm
18 event, the water would flow over -- we put
19 structures in there so the water would flow over
20 and out of the pond so it won't compromise the
21 integrity of the pond system.

22 One of the parts of the design is the
23 expansion -- is the settlement and stability
24 analysis and John talked about the strength of the
25 soils underneath the site. The DEP rules have

1 minimum requirements for the stability analysis
2 and basically this is looking at how much force is
3 -- it's kind of a balance that we look at will
4 this landfill fail because of the weight of the
5 facility and will it -- is there enough strength
6 in the soil underneath the landfill to hold it up.
7 The DEP requires a minimum long-term of 1.5 for
8 the factor of safety. So there's 150 percent of
9 the strength needed to hold this up. So 100
10 percent the weight of that landfill will be held
11 up by the weight of the soils. The DEP rules
12 require you to have 150 percent of that strength
13 and that's a typical way stability analyses are
14 done in any industry. You can see -- you can see
15 below the factors of safety, we look at the safety
16 in the waste, we look at in the liner along the
17 liner limits and also in the foundation soils, and
18 you can see we exceed those factors of safety for
19 all those conditions we evaluated.

20 We also look at landfill settlement, how
21 much it's going to settle based on the weight of
22 the waste that's placed on there. Our
23 calculations for this site are about point three
24 zero three to three feet. The -- that --
25 typically settlement is a bigger issue on a clay

1 site where you have more compressible soils and
2 stability is also a bigger issue. That's one
3 thing nice about working on these till soils,
4 they're very strong, they're not susceptible to a
5 lot of compression as a clay site would be.

6 One of the items that came up in the
7 testimony was the floodplain mapping and did the
8 facility -- what would happen if the floodplains
9 changed. The rules require us to look at the
10 latest FEMA flood maps and to make sure that our
11 facility is not located within the boundaries of
12 the facilities. This figure we put together after
13 that comment came out and these are kind of -- we
14 superimposed the floodplain -- hundred year
15 floodplain boundaries based on the FEMA maps to
16 the landfill facility and we looked at
17 elevationally what's the difference between the
18 lowest part of the landfill and these floodplain
19 elevations, and the difference on one side is 12
20 feet and the other is 32 feet between the lowest
21 area in the landfill and the highest elevation
22 that this floodplain falls over the existing
23 contour lines. Now, in reality what's going to
24 happen obviously in a flood, as John indicated,
25 there's a lot of low-lying areas around the

1 facility and so the flood would actually spread
2 out into these low-lying areas. So we felt that
3 that is really not a concern. The site, first of
4 all, meets what's in the requirements of the rules
5 but it's also located high on a ridge. So if that
6 area was to expand, it's very unlikely there would
7 be any impact of floodplain on this facility.

8 So here's my conclusions. Expansion will
9 be -- I'm sorry, we'll talk about construction.
10 The expansion is progressively constructed over
11 the life of the facility. This allows us to
12 incorporate new information as it comes along.
13 Probably the biggest one that this would apply to
14 would be stormwater numbers. If the stormwater --
15 if the 25-year/24-hour storm event changes over
16 time, which they do, we -- we go through that
17 calculation with each of the new expansion sites
18 and we would modify the design to reflect what the
19 current storm -- the current published storms are
20 for the design standards. We obviously did this
21 -- at some point when we do this application, we
22 have to look at what's available and then we
23 design around that, but as we build each cell, we
24 go back through the design and we make sure that
25 we're up to the current standards in the design.

1 Prior to construction, as I indicated before, all
2 the plans and specifications are prepared and
3 submitted to the DEP and reviewed and approved so
4 each of the landfill cells go through a detailed
5 set of designs. In the application we have the
6 detailed designs for cell 11. Those plans are a
7 construction ready set of plans that could go out
8 to a contractor and have them construct it.
9 During construction there's a very large quality
10 assurance/quality control program. We have
11 personnel onsite during construction to observe
12 the construction and to perform various
13 conformance testing on materials. Now, we test
14 the soils that are used in the construction, we
15 test the liner materials, we actually take samples
16 of the materials, cut the actual materials, send
17 them off to independent laboratories to make sure
18 the materials have the properties that we've
19 included in the specifications. Once that
20 information is required -- once all that stuff is
21 put together, all that information is submitted to
22 the DEP to review to demonstrate -- and they have
23 to give us approval on a final inspection to place
24 waste in the cell. So they'll go through all that
25 information that we compile which ends up being

1 about as thick as one of our -- probably a doc
2 about this big with all the different testing and
3 documentation that goes into constructing one of
4 these landfills. They go through that and they
5 provide an acceptance that we build the system in
6 accordance with our design prior to putting any
7 type of waste into the cell.

8 So my conclusions are the expansion design
9 meets or exceeds the relevant NRPA standards and
10 the standards of the solid waste management rules
11 including the Prohibitive and Siting Criteria and
12 the Performance Design Standards contained in
13 Chapter 400 and 401, which are the design-related
14 chapters. The design of the expansion is based on
15 the excellent site setting, the collective
16 experience of the professionals responsible for
17 its design and operations and experience obtained
18 from site operations. Thank you.

19 CHAIRMAN PARKER: Thank you, Mike. We're
20 going to take a five-minute break. We'll be back
21 at 11:05 or 11:06.

22 **(OFF RECORD)**

23 CHAIRMAN PARKER: Okay.

24 MR. DOYLE: Okay, our next witness is
25 Bryan Emerson. Bryan is a wetland scientist

1 certified by the Society of Wetland Scientists.
2 He's a graduate of the University of Vermont with
3 a bachelor of science degree in environmental
4 science and a minor in chemistry. He's employed
5 by Stantec Consulting where he's a project manager
6 and a wetland scientist. At Stantec, Bryan
7 manages and conducts a variety of natural resource
8 planning projects, including wetland delineations,
9 wetland functions and value assessments, wetland
10 mitigation planning and design, vernal pool
11 surveys, wildlife habitat assessments, wildlife
12 monitoring and invasive species management. He's
13 currently the wetland discipline lead for
14 Stantec's Topsham office. A copy of Bryan's
15 resume can be found at BGS/NEWSME Exhibit #21.
16 Bryan will discuss the natural resource surveys,
17 wetland delineation and vernal pool surveys,
18 mitigation of impacts and compensation issues
19 related to the project. Bryan.

20 MR. EMERSON: Thank you, Tom. Good
21 morning, Chairman, Members of the Board. As Tom
22 mentioned, I will be discussing the natural
23 resource surveys that Stantec performed as part of
24 this project, the surveys that are required by
25 both Maine DEP and the Army Corps of Engineers.

1 I'll discuss some of the efforts on avoidance and
2 minimization and then discuss the actual wetland
3 and vernal pool alterations that are proposed for
4 the project. I'll go into a little bit on the
5 compensatory mitigation plan that we designed and
6 then provide some information on Atlantic salmon
7 and Atlantic sturgeon and short-nosed sturgeon.

8 So as a start, again, the natural resource
9 surveys that were performed to meet the standards
10 of both the Natural Resources Protection Act and
11 the Clean Water Act for the Army Corps of
12 Engineers, Stantec began work on this expansion
13 back in 2004 and in 2008 when initial wetland
14 delineations were done on this site. We went back
15 out in 2014 and 2015 to verify those wetland
16 delineations. The delineations were performed
17 according to the Corps of Engineers' wetlands
18 delineations manual, which is also the methods
19 that are recommended by the Maine DEP, and these
20 wetlands needed to be verified because the wetland
21 delineation protocols changed, the Corps of
22 Engineers issued a regional supplement to the
23 wetland delineation manual so we had to go back
24 out and verify the wetland boundaries in
25 accordance with these new standards and protocols.

1 CHAIRMAN PARKER: Excuse me, Bryan?

2 MR. EMERSON: Yes?

3 CHAIRMAN PARKER: Can you slow down just a
4 little bit?

5 MR. EMERSON: Sure.

6 CHAIRMAN PARKER: I think our stenographer
7 would appreciate that.

8 MR. EMERSON: Sure, absolutely, sorry.
9 I'll discuss the results here. We identified
10 eight wetlands within the expansion area, either
11 wholly or partially within the expansion area.
12 They were primarily forested wetlands and none of
13 the wetlands were determined to be wetlands of
14 special significance, and just to be clear,
15 wetlands of special significance are a class of
16 wetlands that are a higher value wetlands.
17 They're defined in Chapter 310 of the NRPA saying
18 they're wetlands that are coastal wetlands,
19 peatlands, wetlands in floodplains or wetlands
20 with large emergent marsh areas or open water
21 areas and we did not have any of those in the
22 expansion area.

23 So this next slide shows the expansion
24 area. Again, here's the existing landfill and the
25 expansion area is outlined in red. These areas in

1 blue were the wetlands that we identified as part
2 of the wetland delineations that were conducted
3 within the expansion area there.

4 So next we performed vernal pool surveys
5 on the project. Vernal pool surveys were
6 conducted throughout not just the expansion area
7 but also the 780-acre parcel on which the entire
8 facility sits. Those surveys were performed
9 according to the Maine Association of Wetland
10 Scientists' vernal pool survey protocol. That's
11 the industry standard for vernal pool surveys here
12 and it's a method -- a protocol that's been
13 approved by both the Department of Inland
14 Fisheries and Wildlife and the DEP. As a result
15 of those surveys, we identified 14 vernal pools
16 within the expansion area itself, ten of those
17 were man-made vernal pools and I point that out
18 because Chapter 335 which defines vernal pools for
19 Maine DEP specifically states that vernal pools
20 need to be naturally occurring for them to meet
21 the definition of a vernal pool by DEP standards.
22 So ten of the pools that we identified provided
23 functioning habitat for vernal pool species but
24 didn't meet the DEP's definition of a vernal pool.
25 We did identify one significant vernal pool and

1 determined that these were relatively low
2 functioning wetlands is primarily because of the
3 lack of habitat diversity. Again, I mentioned
4 these were forested wetlands, which is the most
5 common wetland type we have in Maine, they're
6 relatively isolated, there are no surface water
7 connections to the larger wetland systems around,
8 there's, like I said, past historic disturbance,
9 they're relatively small and, again, there's no
10 streams located on the site which allow wetlands
11 to provide more functions as well.

12 So that summarizes the field surveys that
13 we did and assessments. I'll discuss a little bit
14 about avoidance and minimization efforts, and,
15 again, Mike Booth talked about the site selection
16 and alternatives analysis process. I'm going to
17 focus more on the steps that were taken once the
18 site was actually selected to avoid and minimize
19 impacts.

20 Mike discussed the multiple design
21 alternatives that were considered as part of the
22 project's design with 4.5, 3.4 wetland acres -- I
23 mean acres of wetland impacts. Sevee and Maher
24 and Stantec we worked sort of on an iterative
25 process back and forth to try to find a design

1 that would minimize impacts to the maximum extent
2 but also still meet the purpose of the project.
3 So we had lots of discussions back and forth.
4 We -- our field staff went back out and performed
5 extra delineations and field checks when they had
6 to modify the design to make sure we were
7 covering -- everything was covered and we had made
8 sure the wetland delineations were up to date. So
9 there was really a lot of back and forth and a
10 team effort there to identify natural resources to
11 avoid and minimize.

12 Once we decided on the layout and
13 minimization efforts, again, which Mike discussed,
14 trying to optimize the landfill footprint and
15 configure the landfill footprint to get the
16 greatest capacity, also locating some of the
17 accessory structures in upland areas, structures
18 like roads and stormwater ponds and scales and
19 those types of things outside -- located outside
20 of wetlands to, again, minimize impacts. One
21 example of that is that the roads for the project
22 on the perimeter are located on the perimeter
23 berms of the landfill, again, just to try to keep
24 it from expanding out and minimizing impacts as
25 best as we could.

1 So despite those efforts, there's still
2 some level of impacts proposed and I'll discuss
3 what those alterations are now. As Mike also
4 mentioned, we -- the project includes
5 approximately 2.04 acres of direct impacts to
6 forested wetlands. That includes impacts to five
7 separate wetlands that are either wholly or
8 partially being impacted. Only one wetland is
9 being completely filled and that's a very small
10 wetland that I'll point out in the next slide.
11 There's also a tenth of an acre of clearing of
12 wetlands associated with the project as well and
13 that's where we're clearing the overstory, the
14 canopy and trees, but there's no fill associated
15 with those impacts. They will remain as wetlands
16 but the community type will switch to an emergent
17 wetland or scrub/shrub type of a wetland.

18 And I'll show these here on this figure.
19 The wetlands being filled are right here in the
20 middle. It's primarily this one large wetland in
21 the middle and another decent size wetland here.
22 The one wetland being completely filled is this
23 small one right in the middle here. The wetlands
24 that are being cleared are located along the
25 electrical line on the east side here and that

1 clearing is -- that tenth of an acre is split
2 amongst two different wetlands, so a little bit on
3 this wetland and a little bit up in this wetland
4 here.

5 And, again, onto the vernal pools, again,
6 none of the vernal pools within the direct
7 expansion area meet the DEP's definition of a
8 vernal pool. There are proposed impacts to these
9 manmade and Corps jurisdictional pools but they
10 don't meet the criteria to be considered
11 significant vernal pools. We did have one
12 impact -- and that's -- that's direct impacts to
13 the pools themselves. We did have that one
14 significant vernal pool I mentioned which has
15 clearing within the 250-foot critical terrestrial
16 habitat. We're clearing approximately 5.5 percent
17 of that total habitat and the DEP allows impacts
18 within that 250-foot habitat to be approved under
19 the Permit By Rule standards provided that there's
20 no impacts to the depression -- the actual pool
21 itself and that you maintain 75 percent forested
22 cover around that pool, and this figure which is
23 my -- BGS/NEWSME Exhibit 32, shows the vernal pool
24 right there in the center and here's the clearing
25 impact within 250 feet. This black circle is the

1 250-foot circle. So clearly no impacts to the
2 pool and maintaining 75 percent of the habitat,
3 and that Permit by Rule was submitted in the
4 summer of 2015 and approved.

5 So because we do have impacts to the
6 project we're required to compensate for those
7 impacts, and so as you'll see, as I'll explain
8 more, we used preservation as the means to provide
9 compensation for these wetland impacts and Chapter
10 310 of the Wetlands and Waterbodies Protection
11 allows for the use of preservation as a form of
12 compensation. Among other options, preservation
13 is listed as -- you know, it's allowing
14 preservation of existing wetlands or adjacent
15 uplands with this site to be preserved to provide
16 significant wetland functions, and so that's -- to
17 make sure that was clear. Preservation is also an
18 acceptable form of compensation for the Corps of
19 Engineers as well.

20 And so as we set about designing or trying
21 to come up with a mitigation plan, we had to
22 consider both DEP's requirements and the Corps of
23 Engineers' requirements and their guidance and we
24 discussed this mitigation plan early on with both
25 agencies and discussed what our options were, we

1 met along through the process, had some
2 discussions to try to finalize a plan. When it
3 comes to preservation, DEP typically requires an
4 eight to one ratio for preservation and that's the
5 ratio of area protected to area impacted. The
6 Corps requires a higher ratio, 15 to one being
7 their ratio under their mitigation guidelines, and
8 again, we had to provide compensation for those
9 manmade vernal pools for the Army Corps of
10 Engineers. We didn't have to do it for DEP
11 because our only vernal pool impact was that
12 significant vernal pool that we covered with the
13 Permit By Rule but to meet the Corps standards we
14 had to do that, we had to compensate for those
15 manmade pools. So in essence, the plan was
16 designed to meet the Corps standards more because
17 the ratios are higher and we're required to
18 compensate for those vernal pools. By doing so,
19 we would also -- we were meeting the DEP's
20 requirements along the way.

21 So, again, as I said, 2.04 acres of
22 wetland impact is what we're proposing. At an
23 eight to one ratio, that's 16.3 acres of
24 preservation. That would be the minimum
25 requirement. Using a 15 to one ratio, the Corps

1 standard, that's about 31 acres of preservation as
2 a minimum. To compensate for those manmade vernal
3 pools, we had, again, six of those Corps
4 jurisdictional pools and the total habitat
5 surrounding those pools, the combined -- I'll show
6 a figure that will show this better -- the Corps
7 regulates 750 feet out from the pools. So we
8 combined the 750-foot habitat circles around these
9 pools and got a total acreage of 94 acres that we
10 needed to compensate for there. So if you take
11 the 94 acres for the Corps for the vernal pools
12 plus the 31 acres for the wetlands, that's about
13 125 acres is what we were looking for to provide
14 compensation for the Corps.

15 Again, this figure shows in that red
16 outlined circle is that 94 acres of 750-foot
17 habitat circle around all these vernal pools. So
18 we took all these pools, drew a 750-foot circle
19 and then kind of merged those buffers together
20 into one big habitat circle, and that's how we
21 landed on that 94 acre number.

22 So in the end, our final plan, we were
23 preserving -- proposing to preserve 266 acres of
24 preservation, and this is located north of the
25 expansion area on landfill property. The -- the

1 preservation area includes 57 acres of wetlands,
2 25 functioning vernal pools that were documented
3 during the vernal pool survey, three significant
4 vernal pools and an additional high-value wetland
5 habitat which I'll describe in a minute; and,
6 again, if we're trying to -- we were looking to
7 get 16.3 acres as a minimum for DEP so we're
8 providing more than 16 times more than what the
9 DEP would require for preservation; and, again,
10 with 125 acres required for the Corps, we're still
11 providing more than twice that.

12 This figure shows -- shows the
13 preservation area, again, a little tricky to see
14 but this is Exhibit #33 in my direct testimony.
15 It's this area outlined in orange here at the
16 north end of the property. This area -- this area
17 in purple here is a previous preservation area
18 that was protected. When the original landfill
19 was sited and permitted, this area was protected
20 by a deed restriction. We are encompassing that
21 preservation area as well. These red and white
22 circles are the vernal pools that we identified in
23 the project during a vernal pools survey in 2015
24 and these which are quite hard to see
25 unfortunately are the significant vernal pools,

1 these black circles here, are the three
2 significant vernal pools on the site.

3 So the preservation area, as I mentioned,
4 has a diverse mix of uplands and wetlands. It
5 provides some more high-value wetlands than the
6 expansion area itself does. There's areas of
7 peatland and emergent marsh, beaver flowages,
8 forested wetlands, scrub/shrubs and some
9 significant vernal pools. Many of those wetlands
10 meet those definitions in Chapter 310 of wetlands
11 of special significance, the peatlands being one,
12 the emergent marshes that are greater than 20,000
13 square feet in size meet that definition. The
14 wetlands on this site also provide significantly
15 higher functions and values than those being
16 impacted. So we have the value -- or the function
17 of wildlife habitat, which I mentioned before,
18 also the characteristics of these wetlands allow
19 them to provide more of these functions, sediment
20 toxicant retention, nutrient removal, flow water
21 alternations, etcetera. Those are -- as a result
22 of -- you know, they contain more deep soils, they
23 have a more diverse mix of vegetation, dense
24 emerging vegetation, some of these other
25 characteristics that allow them to perform these

1 functions.

2 I'll provide a couple pictures of the
3 preservation site just to give you a sense for
4 what it looks like. This is one of the peatland
5 areas in the north dominated by black spruce and
6 other -- and ericaceous shrubs, again, one of
7 these wetlands of special significance. This is
8 an emergent marsh taken in the spring during the
9 vernal pool survey so it hasn't greened up yet,
10 but one of those large areas. Here's a beaver
11 pond on the site, here's a separate, different
12 beaver pond. Again, just a diverse mix of
13 species -- or of habitats, excuse me, on the site.
14 This is one of the forested wetlands and this
15 actually was another vernal pool, not a
16 significant vernal pool, but this whole area
17 provided some breeding habitat for some species,
18 and then we had -- again, here's a couple examples
19 of the vernal pool -- significant vernal pools
20 that we had. Here's one of a significant vernal
21 pool and here's the next.

22 So, again, just to provide a little bit
23 more information on the preservation area, we
24 performed those vernal pool surveys in 2015,
25 identified 25 functioning vernal pools, three

1 significant vernal pools. We had an additional
2 eight more pools that were what we termed high
3 functioning, and these are -- these are pools that
4 meet the DEP's thresholds for egg masses. They --
5 you know, maybe they had 40 or more wood frog egg
6 masses in them but they were -- they were manmade
7 so they didn't meet that DEP definition of a
8 naturally-occurring feature but they were still
9 providing a lot of habitat. These egg mass counts
10 in the preservation area were significantly higher
11 than in the expansion area. This is a table
12 provided both in the compensation plan and in
13 Exhibit #41 which shows that the size of the
14 expansion area is 74 acres and we had, you know,
15 four wood frogs, 71 spotted salamanders, whereas
16 in the 266-acre preservation area we had close to
17 900 spotted salamanders, plus we also had blue
18 spotted salamanders present in the preservation
19 area as well, which, you know, is just providing
20 more diverse species mix within that preservation
21 area.

22 And to sum up a bit on the preservation
23 site, as I said, it surrounds 16 acres of land
24 that's already been preserved which adds on to
25 that 266 to make a total of about 282 acres in

1 total area. It contains approximately 209 acres
2 of developable uplands that could be -- you know,
3 that will be protected from any future development
4 or landfill expansion or timber harvesting.
5 That's one of the criteria for preservation sites
6 is not just to protect wetlands but to also
7 protect upland buffers around those wetlands that
8 could be developed. As I said, it exceeds DEP and
9 Corps requirements.

10 The preservation will be protected by a
11 deed restriction and the City of Old Town -- we've
12 reached an agreement with the City of Old Town.
13 They will be acting as the third-party
14 administrator to that deed restriction. The
15 language of that deed restriction has been
16 reviewed by DEP and reviewed by the Corps and
17 approved by both agencies and the City of Old Town
18 City Council voted to act as the administrator of
19 that deed restriction, providing third-party
20 oversight of this area to make sure there aren't
21 any problems that come about or disturbances to
22 the land in the long run, and we did -- as I said,
23 we discussed this process along the way. We met
24 with DEP early in the process, we met with the
25 Corps and we've received preliminary conceptual

1 approval at least on this plan prior to submitting
2 the application.

3 So finally I'll address some topics on
4 Atlantic salmon that came up -- which will be in
5 response to the testimony submitted by Mr. Coghlan
6 and Mr. Spencer. First and foremost, I think it's
7 worth pointing out that the application has been
8 sent to review by the Department of Marine
9 Resources and the Department of Inland Fisheries
10 and Wildlife and the DEP staff forwarded e-mails
11 on to us from the review from Oliver Cox who is
12 the director of Sea-Run Fisheries and Habitat with
13 the Department of Marine Resources, and his
14 statement was that none of the streams in the
15 project area are Atlantic salmon streams; and
16 additionally, John Perry from the Department of
17 Inland Fisheries and Wildlife reviewed the
18 application in October of 2015 and stated fishery
19 staff do not anticipate any adverse impacts on
20 fisheries resources associated with this landfill
21 expansion. So this is part of the review process.
22 Both DMR and IF&W have had a chance to comment on
23 the application and have provided these comments
24 in support of no impacts to fisheries.

25 These -- these comments are consistent

1 with comments that we received along the way early
2 in the process as we consulted and sent letters to
3 the agencies requesting information. We received
4 similar responses that they didn't expect impacts
5 to these species, and while I feel that's --
6 that's good justification, we provide a little
7 more information here on why we think our design
8 won't affect Atlantic salmon is that we have no
9 direct impacts to rivers, streams or brooks on the
10 property, so we have no stream impacts and no
11 stream crossings. In fact, the nearest stream we
12 have to the site is an unmapped intermittent
13 stream which is about 850 feet to the east of the
14 site, and I'll show a figure that shows this. The
15 closest perennial stream is 950 feet southwest and
16 that's a tributary of Pushaw Stream and then the
17 closest stream we have -- and then the next
18 closest is 2,300 feet to Judkins Brook and that
19 Judkins Brook is located within mapped critical
20 habitat for Atlantic salmon but we are 2,350 feet
21 away. So we have these large undisturbed buffers
22 to these stream resources.

23 This figure shows the closest stream over
24 here to the east. This is 800 feet from the
25 landfill cell to the -- this is unmapped. It

1 doesn't show up on a USGS map but we identified it
2 through aerial photo interpretation in our field
3 surveys. Again, here's the 950 feet to the
4 closest perennial stream and here's 2,300 feet to
5 Judkins Brook and it's worth pointing out that
6 this area, again -- the whole area is the
7 preservation area that's going to be permanently
8 protected providing additional buffering to
9 this -- to Judkins Stream which is the stream
10 within Atlantic salmon habitat.

11 So we also did a review of literature to
12 sort of further this buffer idea and we found that
13 there was a paper by Castell that reviewed 35
14 additional scientific studies, so it was a
15 literature review, and in that it recommended a
16 minimum of 49 to 98 feet for stream buffers,
17 reviewed a paper by Wilkinson in 2006 that
18 concluded in Maine to provide temperature
19 protection for streams a 75-foot buffer is
20 recommended and these temperature changes -- which
21 is important for a cold water species such as
22 salmon. Also in Maine policy, IF&W has
23 recommended for this project hundred-foot buffers
24 from any streams and has recommended generally as
25 part of their practice hundred-foot buffers for

1 brook trout streams. The DEP when it considers
2 adjacency to stream resources considers a 75-foot
3 area and then the Corps of Engineers when you're
4 talking about compensation for impacts considers
5 an area of 100 feet of streams. So consistently
6 we see this 75 to 100 foot as a buffer width we'd
7 like to see from streams for stream protection and
8 fish protection and, again, we have a minimum of
9 800 feet to the nearest stream.

10 And finally, Atlantic and short-nosed
11 sturgeon, the closest known range of either
12 species is in the mainstem of the Penobscot River.
13 Again, I say we don't have any impacts -- direct
14 impacts to any rivers, streams or brooks on the
15 property. The nearest stream is 800 feet away.
16 Once you hit any of those streams, depending on
17 which path you go to those closest streams, it's
18 six and a half to eight and a half miles to the
19 Stillwater River, another six to eight miles then
20 down to the Penobscot mainstem.

21 So we have these large, undisturbed
22 buffers to the stream resources and then we also
23 have, you know, more than 12 miles of river miles
24 upstream from the known range of these species.
25 So we're comfortable and the application I think

1 is accurate in concluding that we think it is
2 extremely unlikely that there would be any impacts
3 to these species from the project.

4 So in summary, the natural resource
5 surveys have been completed on the project as
6 required by the DEP. We took the required steps
7 to avoid and minimize impacts to the maximum
8 extent practicable. Where we couldn't avoid those
9 impacts we developed a robust compensation plan to
10 compensate for those impacts that couldn't be
11 avoided. Thank you very much.

12 CHAIRMAN PARKER: Thank you, Bryan.

13 MR. DOYLE: Our final witness this morning
14 is Jeremy Labbe. Jeremy is a licensed
15 professional engineer in the State of Maine and a
16 certified manager of landfill operations with the
17 Solid Waste Association of North America. He is
18 the environmental manager for NEWSME landfill
19 operations, the operator of Juniper Ridge. Among
20 his responsibilities as environmental manager are
21 oversight of landfill design, compliance and
22 operations. Jeremy is a cum laude graduate of the
23 University of Maine with a degree in civil
24 engineering, and has completed his coursework for
25 a master's degree in geotechnical engineering from

1 the University of Maine. A copy of Jeremy's
2 resume is BGS/NEWSME Exhibit #42. Jeremy will be
3 discussing operational issues relating to the
4 expansion. Jeremy.

5 MR. LABBE: Thank you, Tom. Good morning.
6 I'm the last one so you're all still awake. It's
7 good to see.

8 So NEWSME operates the Juniper Ridge
9 Landfill which is owned by the Bureau of General
10 Services. We have operated this facility since
11 2004. In the past three years the facility has
12 accepted just over 600,000 tons per year,
13 accounting for more than 50 percent of the solid
14 waste disposal needs in the State of Maine.
15 Juniper Ridge accepts material from over 250 Maine
16 cities and towns across the entire State of Maine
17 from Fort Kent to Kittery. As of the end of 2015,
18 there were just over three million cubic yards of
19 capacity left at the facility and this is about
20 three and a half years of capacity using what
21 we've seen in the last three years as a waste
22 acceptance rate. So in order for us to not have a
23 disruption in Maine waste management disposal
24 capacity, we would need to construct the first
25 cell of the expansion in 2018 in order to be

1 operational in 2019.

2 The expansion waste footprint which you
3 had an opportunity to visualize during your site
4 visit is roughly 54 acres, 9.35 million cubic
5 yards of capacity. This is 14 acres smaller than
6 the current licensed capacity at the facility.
7 This expansion will last roughly 10 to 12 years at
8 a conservative -- reasonably conservative waste
9 acceptance rate of 700,000 tons per year, which is
10 more than what we have seen over the last three
11 years but it's important to note that historically
12 we have seen volume rates coming in to Juniper
13 Ridge at 700,000 tons per year actually up through
14 2011.

15 The expansion will be a continuance of our
16 current site operations and, therefore, the
17 operation of procedures and practices are
18 anticipated to be consistent with current
19 practice. Our staff endeavors every day to
20 operate Juniper Ridge in a clean, efficient,
21 environmentally sound and safe manner.

22 With regard to traffic, the expansion will
23 be accommodated by the existing roadway network.
24 Gorrill Palmer Consulting, who is here this
25 morning, completed an in-depth traffic assessment

1 to determine the level of future usage, if it
2 would be accommodated by the existing
3 transportation network. This study, which was
4 completed in 2014, determined that using the
5 anticipated waste acceptance rates of 700,000 tons
6 per year, which is what we anticipated for the
7 expansion, that the peak --

8 CHAIRMAN PARKER: Slow down a little bit.

9 MR. LABBE: Sorry, I'll slow down, yes.
10 That the peak truck trips per hour would increase
11 only three from 2014 operations. Now, it's also
12 important to note that 2014 operations we accepted
13 again just over 600,000 tons per year.
14 Historically we have seen rates of 700,000 tons
15 per year making the increase from those years
16 essentially zero.

17 Gorrill Palmer also evaluated primary
18 intersections and found both the current and
19 expected levels of service to be an A, which means
20 very good with little control delay.

21 Sight distance was also evaluated and
22 determined to be twice the required sight distance
23 of more than 1,000 feet.

24 Additionally, we have worked with the City
25 of Old Town to strategically place signs

1 encouraging truckers to utilize I-95 instead of
2 Route 16 as well as a written policy for truckers
3 to use I-95 instead of Route 16 in an effort to
4 keep trucks on the interstate system.

5 Lastly, early on in our operation we
6 implemented an overweight truck policy. This
7 program and policy includes monthly reports to the
8 state, the city and the Landfill Advisory
9 Committee as well as a policy to penalize truckers
10 in an effort to keep truckers traveling on our
11 public roadways safe. To date, this has been a
12 very effective policy.

13 With regard to noise, the expansion will
14 not create unreasonable levels of noise and will
15 comply with the standards. Epsilon Associates
16 completed a detailed sound level assessment for
17 the expansion modeling 11 locations around the
18 site and you can see those locations. They're
19 kind of hard to see but they're in blue and you
20 can see them around the various areas of the site.
21 Based on this detailed assessment, we will
22 selectively operate our equipment from 6 a.m. to 7
23 a.m. when we are within 60 feet of the western
24 solid waste boundary. Now, no selective equipment
25 operation will be necessary from the hours of 7

1 a.m. to 7 p.m., which are daytime hours, or when
2 we are further than 60 feet from that western
3 solid waste boundary.

4 Additionally, as a proactive measure, we
5 have installed something called white sound backup
6 alarms on our equipment. This replaces the
7 traditional beeping backup alarms which I'm sure
8 you guys can hear at any construction site,
9 unfortunately, you don't know where the beeping is
10 coming from, you just know it's beeping somewhere
11 around you. The white noise backup alarms are
12 directional, allowing operators to know where the
13 equipment is coming from and where it is going and
14 also they're localized so the sound doesn't travel
15 like a traditional beeping alarm. These have been
16 very successful, our guys like them and they seem
17 to be very, very safe because when you hear them
18 coming towards you, you know it's coming from this
19 direction or this direction and you know whether
20 it's going away from you or coming towards you.

21 With regard to air quality, the techniques
22 we use to collect and control landfill gas will be
23 consistent with current practice. In 2014 we
24 received an air emission license that regulates
25 emissions from both the existing facility and from

1 the expansion. This license determined that the
2 air emissions from the Juniper Ridge would, one,
3 receive best practical treatment; two, not violate
4 applicable emission standards; and three, not
5 violate applicable health protective ambient air
6 quality standards in conjunction with emissions
7 from other nearby sources.

8 Landfill gas extracted from the expansion
9 will be treated to remove hydrogen sulfide in
10 accordance with our air license through our
11 existing Thiopaq facility which you had an
12 opportunity to see during our site visit, and then
13 either combusted in a flare or beneficially
14 utilized.

15 In addition to meeting ambient air quality
16 standards, managing odors and sources of potential
17 odor are priorities at the Juniper Ridge Landfill.
18 We have a very detailed odor complaint response
19 plan to manage landfill-related odors and minimize
20 odor generation. Our plan includes a complaint
21 line which is available 24 hours a day, seven days
22 a week, and you can see our complaint record form
23 which is my Exhibit 67. That is filled out for
24 every complaint they receive at the facility.
25 We've been very successful to date in managing

1 odors but we continue to strive each day to
2 improve our practices and prevent offsite odor
3 from occurring at all.

4 We employ many practices to monitor for
5 odors, including but not limited to, daily surveys
6 around the active landfill areas and periodic
7 surveys around the residences. We also have
8 continuous hydrogen sulfide monitoring at multiple
9 locations both on and offsite.

10 Now, there are three main types of odors
11 associated with landfill operations, and before I
12 get into them, I wanted to point out the chart of
13 our year over year odor complaints and you can see
14 from 2005 over through current we've done a great
15 job of reducing the amount of odor complaints
16 through our odor control practices.

17 So the three main sources of odor
18 associated with our operations are, first,
19 waste-related odors from the incoming material;
20 the second are leachate-related odors, and as Mr.
21 Booth discussed earlier, leachate is that water
22 that comes in contact with the waste; and the
23 third is landfill gas related odors. Each of
24 these three has specific practices associated with
25 their minimization. First, with regard to waste

1 odors, we require trucks delivering material to
2 Juniper Ridge to have proper tarps which are kept
3 on until scaled into the facility. Once in the
4 facility during warm months when the weather
5 allows, trucks that contain odiferous materials
6 then proceed through --

7 CHAIRMAN PARKER: Excuse me, slow down a
8 little bit.

9 MR. LABBE: Okay -- through a deodorizing
10 spray system. After this, trucks unload their
11 material into the active waste placement area
12 which is confined to as small an area as possible.
13 Now, noticeably odiferous loads are combined with
14 ash or other material to neutralize their odor.
15 Empty trucks then repeat the process through a
16 spray station to minimize their odors traveling on
17 the public roadways. We want to be good neighbors
18 and we want to make sure even the empty trucks are
19 not containing odors as they're driving down the
20 roadways. We then also use alternative daily
21 cover materials which are very important for our
22 odor minimization on top of the active placement
23 area when we are done placing waste. We use
24 typically alternative daily cover materials in
25 lieu of soil which helps conserve virgin soil

1 products. We use materials such as construction
2 and demolition debris, wood fines, incinerator
3 ashes, contaminated soils or other materials that
4 may become available to us.

5 Additionally we use deodorizing spray
6 systems around the landfill site which you had an
7 opportunity to see during your site visit as well
8 as direct application on the active waste face
9 which you also had an opportunity to see during
10 your site visit.

11 Second, with regard to leachate related
12 odors, we utilize a closed system with an
13 above-ground tank and secure tankers to transport
14 the leachate to an approved treatment facility.
15 We also constantly monitor these operations to
16 assure that they are operating properly,
17 minimizing the potential for odor generation and
18 as mentioned earlier, we have a constant
19 monitoring system that's actually a fiberoptic
20 network around the entire landfill that allows us
21 to monitor each pump station, allows us to monitor
22 the tank, allows us to monitor how things are
23 running, turn things on or off, and actually
24 troubleshoot them even remotely. I can do it from
25 this very room if I wanted to.

1 Third, with regard to landfill gas, our
2 landfill gas collection and treatment system is
3 our first and most important piece. Our system
4 has been designed to adequately handle landfill
5 gas generation from this expansion and it is
6 extremely robust. We install our gas station, as
7 Mr. Booth spoke earlier, in each cell as the cell
8 is being filled. We utilize both horizontal-type
9 gas collectors and final vertical gas collectors
10 once we have reached final waste grade. This
11 two-fold approach allows for early and continuous
12 gas collection. We monitor each collector.
13 There's 160 roughly that are currently monitored
14 in our program and we can individually adjust each
15 of these collectors based on their generation
16 rates, what we see for methane at those locations,
17 the gas flows, the temperatures and other measured
18 parameters. Now, our gas well field is also
19 subject to EPA's new source performance standards
20 which are very stringent standards for monitoring
21 and recordkeeping and they require follow-up
22 monitoring for certain wells and minimum monthly
23 required monitoring at all the locations that are
24 active.

25 Our treatment and conveyance system

1 contains realtime monitoring, the same as with our
2 leachate system, for many parameters which
3 includes vacuum to assure that we are collecting
4 continuously from the landfill. Should an issue
5 arise, our staff are automatically notified 24
6 hours a day. Additionally, our staff are trained
7 and certified to install this very infrastructure
8 meaning that we can respond quickly to any needs
9 that happen. Now, once the gas is effectively
10 treated in our Thiopaq system, it's collected from
11 the landfill and treated in our gas treatment
12 system to remove that hydrogen sulfide. We
13 currently combust it in a flare destroying the
14 odor-causing compounds all in accordance with our
15 air license.

16 A second measure that is very important to
17 odor control of gas is our cover system and
18 specifically our intermediate cover system. We
19 cover our side slopes with synthetic intermediate
20 cover material which is kind of like putting a
21 giant Ziploc bag over the waste and you guys had a
22 chance to visualize that during your site visit.
23 This is a very effective cover when compared to
24 traditional soil which can crack and is subject to
25 weathering and erosion. The plastic is very, very

1 effective. On top of both of these, we also
2 complete regular monitoring at the landfill
3 surface for multiple parameters, including methane
4 and hydrogen sulfide.

5 Lastly, as a proactive measure, we have
6 installed realtime monitoring of hydrogen sulfide
7 at multiple locations both onsite and offsite as I
8 discussed prior. These monitors operate around
9 the clock and the data is recorded. The system
10 also alarms and notifies our staff should a high
11 level, which is above 15 parts per billion, arise
12 at any of these monitors. As a further proactive
13 measure during this expansion process we have
14 worked cooperatively with the City of Old Town to
15 improve our monitoring. We have put in place
16 notification procedures for the city should a high
17 level of hydrogen sulfide be detected at any of
18 the four offsite monitors we have. Additionally,
19 should we receive an odor complaint, we will also
20 identify the hydrogen sulfide measurement at the
21 nearest offsite monitor at the time we receive the
22 complaint. This will all be indicated in the
23 monthly reports sent to the state, the city and
24 the Landfill Advisory Committee.

25 Lastly, the realtime data, the data from

1 each of those offsite monitors, will be provided
2 to the City for their evaluation should they want
3 to in addition to what we do currently for an
4 annual review and what the DEP does for a review.

5 I'll now transition to the waste that we
6 accept. We are a licensed nonhazardous waste
7 disposal facility that can take only in-state
8 waste. Our proposed future waste streams are
9 consistent with what we currently accept
10 demonstrating that the wastes will be compatible
11 with each other, with our liner system and with
12 our gas system. We primarily receive construction
13 and demolition debris, front end process residue,
14 incinerator ash, construction and demolition
15 debris, processing fines, oversize bulky wastes,
16 wastewater treatment plant sludges, municipal
17 solid wastes, contaminated soils and other special
18 wastes. We are permitted to receive various types
19 of special wastes, some of which I just mentioned.
20 These special wastes go through a detailed
21 approval process called a special waste
22 characterization program to assure that they are,
23 first, nonhazardous and they also meet the EPA,
24 the DEP and site specific permit requirements, and
25 you can see on the projector here the first page

1 of one of our profile forms that's required to be
2 filled out. It's the first step in the process of
3 a generator of special wastes.

4 Now, once a waste is determined to meet
5 the standards set forth in this program, our waste
6 inspection process is then triggered. Our staff
7 are extremely competent and diligent in making
8 sure material is properly identified,
9 characterized and labeled. Our waste inspection
10 is critical not only to environmental protection
11 but also to their safety. When a material arrived
12 at the Juniper Ridge scale house, operators can
13 inspect transportation documents and paperwork as
14 well as question drivers, if necessary, to assure
15 proper documentation and identification. Those
16 operators can also inspect the load visually if
17 they have any concerns. Once the waste passes the
18 scales, the operators observe the waste offloading
19 from the trucks to assure the material accepted at
20 the facility is properly identified and they're in
21 constant communication with the scales between the
22 operators and scales to make sure things are going
23 in accordance with what they're supposed to.

24 Our staff are also trained regularly on
25 unacceptable and acceptable materials, what to

1 look for and what to watch out for. Any load
2 identified as containing a potentially
3 unacceptable material is immediately notified to
4 the supervisor at the site, myself, as well as the
5 general manager. If any unacceptable materials
6 are identified, they are the responsibility of the
7 generator for proper and safe removal, handling,
8 transportation and disposal at an approved
9 facility for that material.

10 Our system operates with very detailed
11 reporting as well as Mr. Barden spoke earlier, in
12 fact, we maintain a manifest for each and every
13 load that comes across the scales at the facility
14 and that's got to be maintained for a minimum of
15 30 years post closure, so we have to maintain
16 those in a large file room, and on top of those
17 individual manifests -- and you can see a picture
18 here, it's Exhibit 47, it's hard to see here -- we
19 supply a monthly report, as Mr. Barden also spoke
20 of, to the city, the state and the local Advisory
21 Committee showing each and every load of material,
22 what the material was, who generated that
23 material, how much material was actually in that
24 load and other details, and that's supplied every
25 single month to the state, the city and the

1 head for a lunch break now and we'll resume at
2 1:00 for cross examination.

3 MR. DOYLE: Very good.

4 **(LUNCH RECESS)**

5 CHAIRMAN PARKER: We'll call the hearing
6 back to order. The first order of business now
7 will be cross examination of the BGS/NEWSME panel
8 and the first person scheduled for cross
9 examination is Mr. Spencer. Just please everybody
10 remember to speak slow enough because she's going
11 to get tired and we want her to stay with us
12 today.

13 MR. SPENCER: Is this thing working? Can
14 you hear me?

15 MS. BERTOCCI: Yes.

16 MR. SPENCER: My name is Ed Spencer. I'll
17 start with Michael Barden, Mr. Barden. What I'd
18 like to do is for Mr. Barden all these questions
19 will be based on quotes in his testimony. So if I
20 could, I'll -- I'll say the quote first and then
21 ask a question, if that's acceptable. Okay, here
22 we go, let's try it. Okay, on page 2, quote,
23 out-of-state wastes are defined as excluded wastes
24 and disposal at JRL is prohibited. The term of
25 the Operating Services Agreement is 30 years, end

1 quote. My question, is this 30-year contract
2 dependent on Casella obtaining enough license
3 capacity to last that long?

4 MR. BARDEN: No.

5 MR. SPENCER: In your opinion, what
6 happens if their expansion application is turned
7 down?

8 MR. BARDEN: Well, the contract would
9 still be in place, it's a 30-year contract, so
10 they would still be responsible for closure and
11 post-closure care. So it would run out of
12 capacity and post-closure closure care runs for 30
13 years.

14 CHAIRMAN PARKER: Hold the microphone up
15 so we can hear you.

16 MR. SPENCER: Okay, page 2, quote, I
17 provide the monthly activity reports to the JRL
18 Advisory Committee members, the City of Old Town
19 and Town of Alton and post these reports to the
20 DECD state-owned landfill web page, end quote. Do
21 you know who set up this system and format for
22 these reports, someone at the state or is this the
23 waste company's group of categories and way of
24 reporting it?

25 MR. BARDEN: Those monthly reports were

1 set up before I assumed this position in 2012 so I
2 can't answer that.

3 MR. SPENCER: Okay, page 3, quote, I
4 regularly review and consider all this information
5 and believe NEWSME to be in compliance with its
6 obligations under the OSA and its licenses, end
7 quote. Do you believe that NEWSME is in full
8 compliance with the terms and conditions of the
9 public benefit determination for this expansion?

10 MR. BARDEN: The public benefit
11 determination was issued before I came into this
12 position so I don't know if I can answer that
13 directly.

14 MR. SPENCER: Okay. The PBD recommended
15 in 2012 that the state and Casella amend the terms
16 of the OSA to consider changes in construction and
17 demolition debris waste streams, et cetera. Has
18 this happened?

19 MR. BARDEN: Not since the programs were
20 transferred over to the Bureau of General
21 Services, so I can't tell you what happened with
22 SPO before that.

23 MR. SPENCER: So are you working on that
24 at all?

25 MR. BARDEN: No, I think Ms. King has some

1 information in her rebuttal where she addressed
2 that. I can't speculate why the commissioner put
3 that in the license.

4 MR. SPENCER: Okay. The Operating
5 Services Agreement says, quote, the state shall
6 control the landfill, end quote. In your opinion,
7 does the state control the landfill?

8 MR. BARDEN: I'm not aware of that being
9 in the Operating Services Agreement so you'd have
10 to point out the exact page where that is.

11 MR. SPENCER: Okay.

12 MR. BARDEN: Section 2 of the OSA provided
13 exclusive use and operations of the landfill to
14 Casella so I'm not sure where that language that
15 you just quoted is.

16 MR. SPENCER: Okay. Can you think of an
17 example where Casella came to the state as owner
18 and asked for something that was rejected by the
19 state?

20 MR. BARDEN: "Came to the state as owner?"
21 They're not the owner. They're the operator.

22 MR. SPENCER: The state is owner.

23 MR. BARDEN: What was your question?

24 MR. SPENCER: My question was, can you
25 think of an example where Casella came to the

1 state; in other words, BGS, the state as owner,
2 and asked for something that was rejected by the
3 state; in other words, have they ever come and
4 asked for something that you or anybody else in
5 the state that you know of turned them down?

6 MR. BARDEN: Not since I came into this
7 position in 2012, so nothing has happened since
8 2012.

9 MR. SPENCER: Page 3, quote, during the
10 period from 2005 through June 2016, Old Town and
11 Alton have received payments from Casella totaling
12 12.9 million dollars and \$959,000 respectively,
13 end quote. Is this tip fees and annual impact
14 payments -- payments in lieu of taxes only or does
15 it include the amounts that Casella gives to some
16 of the surrounding residents to compensate for
17 their taxes?

18 MR. BARDEN: I believe that would just be
19 for the amount that's given to Old Town directly
20 and it doesn't include -- it probably does include
21 payment in lieu of taxes.

22 MR. SPENCER: Are you saying it does not
23 include?

24 MR. BARDEN: I think it does, yes.

25 MR. SPENCER: Include payment in lieu

1 of -- so payment in lieu of taxes goes to the town
2 but I'm talking about payments to abutters or the
3 surrounding --

4 MR. BARDEN: No, it doesn't include that.

5 MR. SPENCER: It does not, okay. Okay, on
6 page 4, you talk about additional state landfill
7 capacity being necessary in the next two years to
8 avoid disruption of the waste deliveries to JRL
9 and also mention that the Norridgewock commercial
10 landfill does not have capacity for these wastes
11 after 2021. Do you have a plan or ever considered
12 prioritizing certain wastes over others?

13 MR. BARDEN: Well, the state doesn't have
14 a specific plan, no. We have two other licensed
15 facilities, neither of which could accept this
16 waste.

17 MR. SPENCER: Okay. So in other words,
18 for example, would the front-end process residue
19 and ash from PERC be given priority over CDD from
20 processing facilities?

21 MR. BARDEN: We haven't gotten to that
22 point of discussions.

23 MR. SPENCER: Okay. Were -- were there
24 some -- you may not know this -- were there some
25 guaranteed tonnages for the Old Town Paper Mill or

1 maybe that's a moot point now that they're
2 defunct?

3 MR. BARDEN: Yeah, the OSA did have a
4 guaranteed tonnage that Casella had to provide for
5 capacity for the Old Town mill, correct.

6 MR. SPENCER: Well, I think that's it from
7 me for Mr. Barden.

8 CHAIRMAN PARKER: Okay, thank you. Next
9 will be the City of Old Town, Mr. Katsiaficas.

10 MR. KATSIAFICAS: Mr. Chair, Members of
11 the Board, the City has no questions for these
12 witnesses.

13 CHAIRMAN PARKER: Okay. Next would be Mr.
14 Snowman.

15 MR. SNOWMAN: Just one question. I was
16 going to ask -- I was going to ask Mr. Barden, are
17 you aware of any widespread confusion among the
18 citizens of Maine regarding the definition of
19 out-of-state garbage? Is that something that has
20 -- that you -- that you're aware of and consulted
21 others in your department or other people in the
22 -- you know what I'm saying.

23 MR. BARDEN: Well, the statute -- the
24 statute is what it is.

25 MR. SNOWMAN: Are you aware of any

1 widespread confusion amongst people, regular
2 citizens, who might want to try to find out what's
3 going on there?

4 MR. BARDEN: Nobody has contacted me
5 directly about that, no.

6 MR. SNOWMAN: Nobody has, and I guess also
7 you -- you -- that definition of out-of-state
8 garbage that you guys use, do you find that -- do
9 you find that honest?

10 MR. BARDEN: That's the statute.

11 MR. SNOWMAN: Well, I mean, it's the
12 statute, right, but I guess it -- I guess that's
13 about it for right now.

14 CHAIRMAN PARKER: Mr. Laite, do you have
15 any questions?

16 MR. LAITE: Yes, Chair Parker, thank you,
17 Members of the Board. Mr. Barden, a little
18 confusion among the questions I heard. How much
19 has been paid in solid waste fees to the State of
20 Maine since Juniper Ridge has been operating?

21 MR. BARDEN: That's, again, one of the
22 components of the monthly reports that I get from
23 Casella. They've paid approximately nine million
24 dollars in fees to the state for disposal there,
25 primarily for special wastes and construction and

1 demolition debris.

2 MR. LAITE: Now, are there any estimates
3 on how much will be paid through this expansion?

4 MR. BARDEN: Well, again, it's going to be
5 dependent on what the -- what the tonnage is of
6 the special waste and the construction and
7 demolition debris because that's what the state
8 collects special waste fees for.

9 MR. LAITE: Okay, thank you.

10 MR. BARDEN: So I would assume that it
11 would probably be very similar to what the
12 existing generation is.

13 MR. LAITE: Thank you.

14 CHAIRMAN PARKER: Okay, next we have
15 questions from the Board members or do you want to
16 have staff ask questions first? What do you
17 prefer? Board? Feel free.

18 MR. AHLERS: This question is directed to
19 Ms. King, and recognizing the fact that MSW is
20 imported from out of state and perhaps the other
21 materials, oil spill contaminated soil, oversize
22 bulky waste and construction and demolition
23 debris, how does Casella control the fact that
24 that material does not reach Juniper Ridge
25 Landfill?

1 MS. KING: I --

2 MR. DOYLE: Do you understand the
3 question?

4 MS. KING: I don't understand the
5 question. You started with an out-of-state waste
6 component and then you lost me.

7 MR. AHLERS: Well, there was a discussion
8 about bypass material coming into Juniper Ridge
9 Landfill which I'm assuming is municipal solid
10 waste and there was some discussion about
11 construction and demolition debris coming from
12 another facility and -- and much of this -- some
13 of this material is from out of state. How does
14 Casella prevent that from being disposed of at
15 Juniper Ridge Landfill because apparently it's not
16 in-state waste?

17 MS. KING: Juniper's landfill does not
18 accept any out-of-state waste. It only accepts
19 in-state waste. MSW bypass is a requirement of
20 each Maine incinerator to have a location
21 specified for landfilling of their MSW bypass in
22 case they're on an outage or receive too much
23 material to be able to process and incinerate.
24 Construction and demolition debris, straight C&D
25 debris that we landfill at Juniper Ridge comes

1 from contractors typically and transfer stations
2 in Maine only, Maine state waste only. We do take
3 the residuals from construction and demolition
4 debris processing facilities and there's a portion
5 of that material that's gone to the processing
6 facilities themselves before they recycle the
7 material that may or may not be from out of Maine,
8 but the definition of Maine state waste includes
9 residuals from processing facilities.

10 MR. AHLERS: Regardless of whether it's
11 in-state or out-of-state material?

12 MS. KING: After it's been processed, the
13 residuals are considered in-state waste.

14 MR. AHLERS: And for municipal solid
15 waste, you rely on your suppliers to provide you a
16 guarantee that that's not out-of-state waste, if
17 it's bypass?

18 MS. KING: We take bypass waste from
19 incinerators but we do not take any out-of-state
20 MSW.

21 MR. AHLERS: Well, bypass could be
22 out-of-state waste?

23 MS. KING: It's not. We don't accept
24 out-of-state bypass waste.

25 MR. AHLERS: And that's guaranteed by your

1 supplier?

2 MS. KING: Exactly. It's guaranteed by
3 the generators of the waste.

4 MR. AHLERS: All right, that's what I was
5 driving at.

6 MS. KING: I'm sorry, I didn't -- I didn't
7 understand the question.

8 MR. AHLERS: Thank you.

9 CHAIRMAN PARKER: Tom?

10 MR. DOBBINS: Can I get on here a minute?

11 CHAIRMAN PARKER: Well, I said Tom but I
12 meant this Tom. Wrong Tom. Sorry, Tom.

13 MR. EASTLER: Okay, you go ahead down
14 there. My hearing is not too good. I'll turn
15 this off until you're ready for me.

16 MR. DOBBINS: Just a question for Ms.
17 King. The table you had on Table 5.1 listed the
18 percentages of categories that you believe will be
19 coming in on the expansion. Does that equal to
20 what is the same numbers of what you're seeing
21 now, has been the history of what's gone on?

22 MS. KING: Let me just find our Table 5.1
23 here before I respond to that. So this was based
24 on -- remember that we have historically done
25 700,000 tons per year annual intake. We're

1 currently hovering just north of 600,000 tons per
2 year.

3 MR. DOBBINS: I'm not concerned about the
4 total tonnage. I'm concerned about the
5 percentages.

6 MS. KING: So -- so the percentages of the
7 material category that you see are based on what
8 we're seeing currently and extrapolated to that
9 700,000 limit, yes.

10 MR. DOBBINS: Okay, and the second
11 question I had is do you have any recourse -- does
12 the state allow you any recourse if you feel that
13 a contractor or a supplier is not meeting the best
14 practical recycling; so in other words, if you're
15 seeing XYZ disposer just constantly bringing in
16 material that you feel could be recycled, do you
17 have recourse?

18 MS. KING: I believe so. We could -- we
19 could request a different practice and we could
20 actually I think prohibit that material from
21 coming to the landfill again.

22 MR. DOBBINS: Yeah, that's what I was
23 wondering, if you could actually stop it, to force
24 them to recycle more.

25 MS. KING: Yeah.

1 MR. DOBBINS: Because it seems to be put
2 on them all the time and I didn't know whether you
3 had any recourse at all.

4 MS. KING: It is, right. So as the rules
5 are currently written, we only have control over
6 the facilities that we have control over. So it
7 -- that's a difficult to manage one but
8 absolutely, if we saw recyclable commodities
9 coming in from a load time after time, we would
10 sit down and speak with the generator and
11 potentially ban that material from the landfill.

12 MR. DOBBINS: So you have that authority?

13 MS. KING: We have that ability, yes.

14 MR. DOBBINS: Thank you.

15 CHAIRMAN PARKER: We'll go for another
16 Tom.

17 MR. EASTLER: Okay, yeah, I have a comment
18 for Jeremy and Brian and Tom and everybody else in
19 that group and to the DEP members, because this is
20 something that's bothered me for a long period of
21 time but really have not had much of a chance to
22 talk about it. I loved the discussion on noise,
23 but I'm more interested in metrics. There is no
24 metric that measures noise. It measures sound
25 pressure. The term noise is an inappropriate term

1 for us to be asking somebody to talk about and for
2 others to talk about it because what we're
3 concerned with is sound pressure. It is a metric.
4 There are machines that allow you to determine
5 what the level of sound is because noise is
6 defined as unwanted sound. Those who do not want
7 to hear any of it, it's noise. Those who love to
8 listen to it, whatever it might be, it's -- it's
9 good sound pressure. So I thought I'd throw that
10 metric and then the other metric I wanted to ask
11 about was with regard to odor. It's easy enough
12 with regard to measuring, say, hydrogen sulfide or
13 other issues like that, but the truck that goes by
14 that wasn't cleaned appropriately and it smells
15 and somebody goes out in the road and smells it or
16 maybe someone knows about the presence of a meter
17 to measure what gases are going, but is there a
18 mobile metric?

19 CHAIRMAN PARKER: Tom?

20 MR. EASTLER: Yeah?

21 CHAIRMAN PARKER: Excuse me, but that's in
22 the next panel.

23 MR. EASTLER: Well, then I don't have to
24 say it again, do I? Sorry about that.

25 CHAIRMAN PARKER: We don't have the

1 appropriate people at this panel.

2 MR. EASTLER: Just hopefully we'll change
3 it because it -- anyway, that's all I wanted to
4 do. I don't expect an answer to that but hope you
5 keep it in mind.

6 CHAIRMAN PARKER: Does anyone have a
7 question? Kathy?

8 MS. CHASE: I have a question. This is
9 for Toni, Ms. King. You had mentioned in your
10 testimony that 90 percent followed the process
11 that was in the landfill, followed down through
12 your list of reduce, recycle and all that. What's
13 the other 10 percent, could you clarify?

14 MS. KING: So the other 10 percent is
15 typically municipal and industrial wastewater
16 treatment plant sludges that have a potential to
17 be recycled and beneficially reused, a high
18 potential. So a low potential for landfilling as
19 far as the Maine Materials Management Strategies
20 go, we do take in a good deal of municipal
21 wastewater treatment plant sludge for landfill --

22 MS. CHASE: Even though they can reduce
23 it? I don't mean to interrupt you but they could
24 reduce it? It could be reduced?

25 MS. KING: It can't really be reduced so

1 it's the sludge mostly after -- after the
2 wastewater treatment plant process. So it's the
3 solids that fall out after that treatment process,
4 can't really be reduced much more unless you take
5 the liquid portion out of it but it can be --
6 sometimes it can be composted. It can be land
7 applied. So it can be recycled or beneficially
8 reused. The problem is that there are limited
9 land application sites in Maine that are
10 permitted. There are regulatory requirements that
11 restrict some of the industrial wastewater
12 treatment plants from being land applied and our
13 composting facility in Unity, the Hawk Ridge
14 Compost Facility is operating at a maximum annual
15 input now. They can't take anymore. So the
16 remainder is -- is landfilled.

17 MS. CHASE: Okay, thank you.

18 CHAIRMAN PARKER: I've got a couple
19 questions. I'll start with Ms. King. You said
20 that the mix for the waste in the future is going
21 to be very similar to what it is right now and
22 there's -- in the mix you've shown for the 600 or
23 700,000 tons you're getting now shows a definite
24 component of MSW coming into that facility and
25 based on that, and I want to make sure that I've

1 read your chart right, now I want to look to Mr.
2 Barden and what is the state doing to prevent MSW
3 from going to the landfill when it's not
4 consistent with the hierarchy of the state; it's a
5 convenient bypass, not necessarily one that should
6 be maybe allowed. As that component of the waste
7 takes space in the landfill, what's being done or
8 what does the state anticipate doing as we move
9 ahead to minimize the amount of MSW going into the
10 landfill?

11 MR. BARDEN: You mean in terms of -- the
12 only MSW that's going to be going into the
13 expansion is bypass. So are you getting at the
14 incinerator part of it?

15 CHAIRMAN PARKER: Well, in looking at
16 bypass, I know in the last couple years there's
17 been bypass from the southern Maine incinerator
18 because they closed it down.

19 MR. BARDEN: But that waste -- that MSW is
20 not coming into the expansion.

21 CHAIRMAN PARKER: Okay? Now, I'm not
22 sure -- I'm not sure if MSW is coming from other
23 facilities which have the volume reduction
24 capability. That's the question I'm asking
25 because it looks to me like there's an inherent

1 amount of MSW that's going into the landfill, and
2 if we continue that, we're using up space when we
3 should be doing something else to reduce that
4 volume.

5 MR. BARDEN: Well, recall when the -- when
6 the landfill got the MSW amendment a couple years
7 ago, it was for like 83,000 tons, something like
8 that, and that was the result of the Biddeford
9 incinerator closing, but the expansion application
10 is not proposing to take any of that waste, the
11 MSW that went to that incinerator. So the only
12 MSW that's coming into this expansion is bypass
13 properly from the PERC incinerator in Orrington or
14 Auburn. I don't think it would come from EcoMaine
15 but those are the only incinerators that are still
16 operating and I think Mr. Booth pointed out that
17 that total amount of MSW bypass is going to be
18 less than five percent of the total tonnage on an
19 annual basis.

20 CHAIRMAN PARKER: Now back to Ms. King, is
21 that reflected in your proposed numbers?

22 MS. KING: Yes.

23 CHAIRMAN PARKER: It is?

24 MS. KING: Yes.

25 CHAIRMAN PARKER: Okay, I want to make

1 sure. I've got another question for Mr. Barden.
2 You talk about this being revenue neutral from the
3 state's point of view; in other words, the state
4 is not trying to make money, they're trying to
5 cover their costs and they're trying to break
6 even, which I've got no issues with that, but
7 something we've talked about here this morning is
8 the potential of long-term contamination occurring
9 at the landfill and the engineers presented an
10 excellent way of how it can be dealt with, how it
11 can be treated, but 30 years from now your
12 operator is gone, no longer under contract. Is
13 the state doing anything to build a reserve or try
14 to build a reserve so that if they have no
15 operator under contract and it occurs, that the
16 state can deal with that? I can understand being
17 revenue neutral but sometimes it pays to be a
18 little revenue positive and have some cash on
19 hand.

20 MR. BARDEN: Yeah, that's a good question.
21 I mean, the state certainly hasn't taken -- that
22 I'm aware of we haven't requested the Legislature
23 put away a general fund allotment as an insurance
24 policy. I mean, Casella, as part of the contract,
25 they have an insurance policy of several million

1 dollars and they're going to be responsible for a
2 30-year closure period -- post-closure period. So
3 they will be -- they will be liable for any
4 offsite contamination that may happen at that
5 site.

6 CHAIRMAN PARKER: So under the contract,
7 they have a 30-year operation contract but then
8 they have a 30-year insurance contract beyond
9 that?

10 MR. BARDEN: Correct, correct.

11 CHAIRMAN PARKER: Okay. It makes a big
12 difference in how I look at it, okay, because 30
13 years is -- well, you're halfway through 30 years
14 already. It goes quick. Let's see if I have
15 anything else here. Now, getting back on the
16 construction and demolition debris, and I guess
17 this is sort of a joint question for you two
18 again. A lot of construction and demolition
19 debris I guess that was brought in from wherever
20 it was brought from, in-state, out-of-state or
21 whatever, was geared towards the facility is going
22 to recycle and process most of that. Is that
23 material still being processed? I know one of the
24 mills that used to burn it is no longer in
25 business so they're not taking any. Is that stuff

1 still being separated and processed and used or is
2 it being processed and diverted to the landfill?
3 Is there still an outlet for that construction and
4 demolition debris?

5 MS. KING: So the majority of the
6 construction and demolition debris recycling
7 that's taking place currently in Maine is done by
8 two different facilities, the ReEnergy Lewiston
9 facility and the ARC facility in Eliot, and they
10 do indeed pull recyclable materials out of the
11 construction and demolition stream and they create
12 a wood fuel chip and send it to boilers who will
13 burn it. I do have the -- their -- both of their
14 annual reports in my testimony and they have had
15 to change where they send things to occasionally,
16 but they list -- this is ReEnergy's that I'm
17 looking at right now -- they list their CDD wood
18 fuel chip as going in 2015 to SAPPI in Westbrook,
19 Lincoln Pulp & Paper and Kruger in -- is that --
20 Quebec, Canada.

21 CHAIRMAN PARKER: Okay. I guess my
22 concern is if that's how it's being handled,
23 that's fine, but of course Lincoln Pulp & Paper is
24 gone now too. I just want to make sure that
25 something is being done with it other than direct

1 into the landfill because, well, we have no place
2 else to go, we have to do something with it. I
3 think that's something the state should be very on
4 top of because a yard of space is worth so much
5 money and it costs so much to develop it so we
6 want to use that as preciously as we can up there.

7 MS. BERTOCCI: Okay, these are questions I
8 believe for Ms. King. Just a followup on the
9 Chairman's question, I'm looking at the ReEnergy
10 report, your Exhibit 49, and the third page, and I
11 just want to see if I understand this correctly.
12 It would appear that 108,000 tons of what they
13 accept for I guess CDD and clean lumber ends up as
14 fines, is that correct? It looks like the vast --
15 more than 50 percent of what comes into those
16 facilities ends up as CDD fines that then moves on
17 to Juniper Ridge?

18 MS. KING: And is beneficially reused as
19 alternate daily cover.

20 MS. BERTOCCI: As daily cover. My second
21 question has to do with your testimony on page 4
22 of your direct testimony regarding the public
23 benefit determination and the statement or
24 condition of the public benefit determination.

25 MS. KING: I've lost you. What page?

1 MS. BERTOCCI: I'm on page 4 of your
2 direct testimony.

3 MS. KING: Are you sure it's the direct
4 and not the rebuttal?

5 MS. BERTOCCI: Well, I could be in the
6 rebuttal. Let me see. I'm sorry, I guess it's in
7 rebuttal, yes, sorry, I apologize.

8 MS. KING: That's okay.

9 MS. BERTOCCI: So page 4 of your rebuttal,
10 the public benefit determination contains a
11 condition that requires a numerical limit on the
12 amount of oversize bulky waste that could be
13 accepted for disposal in the Juniper Ridge
14 Landfill expansion and you are arguing here
15 that -- I believe that there should be no limit
16 set in this permit for oversize bulky waste. Am I
17 correct in your understanding and what is your
18 reasoning?

19 MS. KING: You are correct in our
20 understanding. If you read the PBD carefully that
21 condition goes back to a findings of fact that is
22 tied to a conclusion that discusses the compliance
23 with the C&D processing facilities to meet the
24 recycling standards; that is, to recycle to the
25 maximum practicable extent or no less than 50

1 percent, and they do that. So it -- a careful
2 reading of the PBD indicates that there's no
3 reason to set a limit for OBW because the purpose
4 for setting a limit was to make sure that the C&D
5 processing facilities were recycling to the
6 maximum extent practicable and the way I read
7 their annual reports, and the DEP gets copies of
8 those annual reports every year, ReEnergy and ARC
9 have displayed that their recycling percentage is
10 a little bit less and a little bit more than 80
11 percent which is, I would have to say, to the
12 maximum extent practicable. Now -- now, another
13 thing to think about on a pretty arbitrary
14 limitation is this industry is incredibly dynamic.
15 We reported in this application which was just
16 over a year ago that the only oversize bulky waste
17 we received at Juniper Ridge came from ReEnergy
18 essentially. Well, in the last five and a half
19 months, PERC has changed their process and if
20 they're -- if we're on track for an analyzed
21 amount, they've begun to send us oversize bulky
22 waste because they've stopped stockpiling the
23 incidental oversize bulky waste they received in
24 the MSW loads and they used to grind that and
25 attempt to burn it themselves and they're now

1 shipping that to us and avoiding the grinding on
2 site. So they're on track to ship us probably
3 10,000 tons in the course of a year of oversize
4 bulky waste. Our understanding of this condition
5 in the public benefit determination was similar to
6 another condition which established a limit on
7 Maine Energy that there was an attempt to limit
8 the material that was going into Juniper Ridge and
9 to hopefully increase the recycling that happened
10 at facilities that were owned or operated by the
11 parent company of Juniper Ridge, being Casella.
12 Maine Energy was owned by Casella. It's since
13 been closed. KTI Biofuels, which was the
14 generator of the oversize bulky waste has been
15 sold to ReEnergy Lewiston. There's -- it's no
16 longer within our control. We do not own or
17 operate that facility. So to place a limit on
18 Juniper Ridge that would affect another commercial
19 entity that we have no control over at this point
20 I really think is limiting the business
21 opportunities and the economic growth in the State
22 of Maine; in addition to which, the sources of OBW
23 are now evolving and we can see that with the
24 change in processing technique of PERC. So you're
25 not just -- you're not just hurting Juniper Ridge

1 when you put a limit on the OBW that we can take.
2 Now you are stymying the -- the changes in
3 technology and the growth of two other facilities
4 that we don't have any control over.

5 MS. SAUER: Can I just follow up with two
6 questions?

7 MS. BERTOCCI: Yes.

8 MS. SAUER: Again, for Ms. King, just to
9 follow up to Cindy's question, I'm looking at the
10 -- and you don't need to look at it right now but
11 I'm looking at the public benefit determination
12 conclusion number one, and it seems that the
13 commissioner at that time, her conclusion that the
14 proposed expansion will provide a substantial
15 public benefit was conditioned, in fact, says
16 provided an annual limit on OBW is established,
17 you know, in the license. So given that the Board
18 respectfully may disagree with what I think is
19 inherent in your position that legally one can
20 dispose of and not include the OBW limit in the
21 license, assuming that the Board disagreed with
22 that, does Casella -- what would Casella
23 recommend? Because it's very possible that the
24 Department will impose a limit, so I think to the
25 extent that Casella wishes to have input as to

1 what that limit should be --

2 MS. KING: So, again, I would bring you
3 back to page 20 of the public benefit
4 determination and one of the commissioner's
5 findings which specifically says, "if and when a
6 license is issued for the construction and
7 operation of an expansion, the Department will
8 establish such a limit." I don't have any
9 argument with that, but "the limit will be based
10 upon the results of annual demonstrations required
11 that waste processing facilities that generate
12 residue requiring disposal will recycle or process
13 into fuel for combustion all waste accepted at the
14 facility to the maximum extent practicable, but in
15 no case at a rate less than 50 percent, submitted
16 by CDD processing facilities that sent OBW to
17 Juniper Ridge Landfill for disposal. Annually the
18 Department will re-evaluate and may modify this
19 limit." So I guess my point is that those
20 processing facilities have been achieving far more
21 than a 50 percent recycling rate, and there's a
22 potential when this was reviewed by the
23 commissioner that they were not recycling to the
24 maximum extent practicable, but they have been
25 doing that and that's what the basis of this

1 potential limit is. So what should a limit be?
2 And our argument is it shouldn't be anything
3 because if it's tied to those facilities'
4 recycling rates, they're meeting the recycling
5 requirement, that's one; and two, those facilities
6 are no longer owned or operated by Casella.

7 MS. SAUER: I certainly understand your
8 answer but I'll just give you one more
9 opportunity, if you don't want to take it, that's
10 fine, I'm fine with that, but if Casella wishes to
11 have input as to what that number should be, if
12 not, that's fine, and I would expect perhaps in
13 the post-hearing briefs that there may be legal
14 arguments made about whether or not that public
15 benefit determination condition can be done away
16 with, which I think is what you're recommending.
17 So we'll leave the legal issues to the
18 post-hearing briefs, but to the extent you want to
19 have input as to what the limit would be, this
20 would be your opportunity.

21 MS. KING: I would suggest no limit at
22 all.

23 CHAIRMAN PARKER: I have another question
24 and then I'll be back to you, Cindy, in a minute.
25 Mr. Barden, you've mentioned that the state's

1 revenue comes off special waste and construction
2 and demolition debris?

3 MR. BARDEN: Correct.

4 CHAIRMAN PARKER: That's where your fees
5 come in from?

6 MR. BARDEN: It's -- it's where the fees
7 go in and they go into the Solid Waste Management
8 Fund.

9 CHAIRMAN PARKER: Okay. Now the
10 construction and demolition debris which is being
11 diverted for daily cover, is the state charging a
12 fee for that?

13 MR. BARDEN: Well, the --

14 CHAIRMAN PARKER: Or is that using space
15 without a fee?

16 MR. BARDEN: I believe they are, yes. I
17 believe the alternative daily cover, those fines
18 that are used, I believe those are being charged
19 to the landfill at a rate of \$2 a ton just like
20 the other facility. So ReEnergy is probably
21 paying that tonnage because I'm sure Casella
22 passes that back onto the generator.

23 CHAIRMAN PARKER: I'm sure they pass it
24 back on but the state's revenue comes from that as
25 well so --

1 MR. BARDEN: Correct.

2 CHAIRMAN PARKER: -- there should be money
3 coming to the state from that material?

4 MR. BARDEN: And there is, yes.

5 CHAIRMAN PARKER: Okay, I just wanted to
6 make sure there is, and back to the little
7 discussion we just had about the OBW, I don't
8 think the state, and correct me if I'm wrong, I'm
9 looking at Barden again on this one because I
10 guess you're, quote, our owner, just because
11 somebody changes the operation of that facility,
12 does that mandate that the state has to allow
13 additional waste to come in for convenience or
14 should they go back and put the pressure on so
15 those wastes are not generated and brought to the
16 landfill; in other words, if Casella owned it, it
17 might be real easy to say you've got to do this
18 before you bring it, but you're not talking about
19 Casella bringing it, you're talking about other
20 people providing it and the state should be in
21 charge of that aspect of it. So if there's OBW
22 that's coming in in greater volume, then does that
23 have to be allowed?

24 MS. KING: Could I respond to that as
25 well, please?

1 MR. BARDEN: Well, let me just and then
2 Toni can. So I think I understand your question.
3 You're talking about at the processing facility,
4 so should the state require the processing
5 facilities to do some additional work to reduce
6 that, is that sort of what you're getting at?

7 CHAIRMAN PARKER: That's where I'm coming
8 from because I think what Ms. King just said was
9 that when Casella owned it, they could control it
10 and they took care of it. Now somebody else owns
11 it so they can't really tell them to do it, they
12 just accept it, and maybe I'm hearing you wrong,
13 but that's what I'm hearing you say.

14 MR. BARDEN: Well, I think, you know, that
15 gets back to whether those processing facilities
16 are meeting the recycling standard that's
17 applicable to them and that's really a DEP
18 enforcement issue. They -- according to their
19 annual reports, they are recycling, what they
20 process, they are achieving greater than a 50
21 percent recycling rate. So if they continue to
22 accept the same amount of waste they are now of
23 the construction debris and they process the same
24 amount, they're going to be generating the OBW
25 that's either going to go to Juniper Ridge or it's

1 going to go somewhere else.

2 CHAIRMAN PARKER: So our only mechanism
3 then as the Board, I guess you'd say, is to
4 physically put a limit on the OBW and then it has
5 to either be processed or not put in your
6 landfill?

7 MR. BARDEN: It would either not have to
8 be put into JRL but then it would go to another
9 landfill and use up capacity at that facility.

10 CHAIRMAN PARKER: Well, we're only talking
11 about a permit for JRL right now, okay?

12 MR. BARDEN: No, but it's not going to
13 disappear.

14 CHAIRMAN PARKER: I understand that or
15 maybe it will be processed.

16 MS. KING: So what we're talking about
17 here, OBW, oversize bulky waste, is a residual
18 from a recycling process facility, either PERC or
19 ReEnergy or a solid waste facility that's
20 attempting to meet the Maine Solid Waste Hierarchy
21 Rules by reducing, reusing, recycling, composting,
22 incinerating and finally landfilling. So placing
23 a limit on OBW is artificially penalizing
24 recycling facilities and isn't that what we want
25 to be doing is -- is encouraging recycling of this

1 waste? It makes absolutely no sense to me --

2 CHAIRMAN PARKER: Ultimately we want to
3 minimize the amount that goes in the landfill.
4 That's the goal. That's the ultimate goal.

5 MS. KING: Ultimately the goal of the
6 waste hierarchy is to move materials up the
7 hierarchy.

8 CHAIRMAN PARKER: That's right. The
9 landfill is the very last --

10 MS. KING: The landfill is the foundation
11 of the hierarchy, yes. So limiting a recycling
12 facility's generation of OBW will only serve to
13 potentially, you know, put C&D processing
14 facilities out of business. Why would they want
15 to continue to try to recycle construction and
16 demolition debris if their outlets are blocked and
17 the net result would be that we get more straight
18 construction and demolition debris not attempted
19 to be recycled, not processed, that requires a
20 home and the only home it has now are landfills.
21 So by -- by penalizing processing facilities,
22 you're actually creating more solid waste that
23 needs to be landfilled and reducing recycling.

24 CHAIRMAN PARKER: Well, we'll have to
25 debate that I guess. I appreciate your position.

1 Do you have questions, Cindy?

2 MS. BERTOCCI: Yes.

3 CHAIRMAN PARKER: Some questions from the
4 floor I think, right?

5 MS. BERTOCCI: Right. This is a question
6 from a member of the public for Ms. King and it
7 relates to processing facilities and the question
8 goes to the issue of wastewater treatment sludge
9 and residuals that may originate from out of state
10 are destined to a processing facility in Maine for
11 composting and the question is, how much of that
12 that perhaps is destined for composting -- for a
13 composting facility actually ends up being
14 diverted to Juniper Ridge Landfill if the
15 composting facility is unable to handle it; so it
16 goes to the relative volume of it coming in versus
17 the actual ability to compost it here or does it
18 end up being composted in Juniper Ridge?

19 MS. KING: So in 2014 Casella Organics
20 diverted a total of 44,256 tons of biosolids and
21 other material from landfill disposal and created
22 29,000 tons of compost. So 44,000 tons of
23 biosolids were composted in 2014 at Hawk Ridge.
24 I'm trying to find the land application. Okay,
25 2015, Casella Organics land applied 122,000 tons

1 -- 122,000 tons of biosolids and Hawk Ridge
2 compost facility took in 47,000 tons of biosolids
3 and -- okay, so the land application, just in case
4 you had any question, is a -- like a fertilizer on
5 a farm field. I'm sure you've seen that other
6 places and it's considered recycling by the State
7 of Maine. So while the compost facility produces
8 compost from biosolids, the land application --
9 land applies to for agricultural use and is
10 considered recycling, and then --

11 MS. BERTOCCI: So I think the question
12 goes to how much actually ends up being unable to
13 be used in those fashions and instead ends up at
14 the landfill.

15 MS. KING: So I just gave you the tonnages
16 of what our organics programs composted and land
17 applied, and in 2015 Juniper Ridge accepted 36,473
18 municipal wastewater treatment plant sludge tons,
19 so slightly less than what goes into Hawk Ridge
20 and a lot less than what we're able to land apply.

21 MS. BERTOCCI: Okay, thank you for that
22 question, and I have one other if I can continue.
23 In your rebuttal testimony you mentioned the Waste
24 Management Hierarchy and the application of it to
25 licenses, including recently the license issued

1 for Fiberight which you included in your exhibits,
2 and I guess I just wanted to know if you're aware
3 that the Fiberight application has been appealed?

4 MS. KING: I am.

5 MS. BERTOCCI: Okay. I just wanted to
6 note that's the case. Thank you.

7 MR. DOBBINS: Mr. Chairman? Toni, back to
8 you, in that chart again on the construction and
9 demolition debris, which is like 27.9 percent of
10 what goes in the landfill, I'm confused and it's
11 probably just me, but in the top heading, "is
12 material subject to recycling efforts by the
13 generator or otherwise prior to landfilling or is
14 its use in the landfill that's considered
15 recycling." What is it? Is it considered
16 recycling, is it considered subject to recycling?

17 MS. KING: So --

18 MR. DOBBINS: Am I missing something?

19 MS. KING: No, it's difficult to
20 understand. This came exactly from the state
21 plan, the -- the Waste Management and Disposal
22 Capacity Report, and what they were trying to
23 display was is the material a residual from a
24 processing facility, okay, so --

25 MR. DOBBINS: That's the next one down.

1 MS. KING: So the two -- there's two
2 separate things, construction and demolition
3 debris is not because it's straight construction
4 and demolition debris that you might find coming
5 off a job site, for instance, and construction and
6 demolition debris processing facility fines is
7 because it's gone through a processing facility
8 and that's one of the residuals. So is material a
9 residual from a processing facility, okay?

10 MR. DOBBINS: So there's no requirement to
11 recycle material from a joint site?

12 MS. KING: No, but one of the things that
13 we're really proud of when we're looking at
14 resource solutions is we've developed a lot of
15 relationships with general contractors in the
16 state, and we're finding now that instead of them
17 asking us for one roll off for their whole
18 project, they're actually asking us for a number
19 of roll offs and they source separate themselves,
20 they pull out the metals, for instance, and they
21 pull out the other materials and then -- and then
22 the incentive for them is that they can then get
23 the revenue for the metals, and we just -- we pull
24 the true construction and demolition waste for
25 either recycling or disposal, but -- so that's a

1 nice evolution I think. It used to be, you know,
2 they just threw everything they could into one
3 roll off at the job site and now we're seeing a
4 lot more source separation.

5 MR. DOBBINS: Thank you.

6 CHAIRMAN PARKER: Mark?

7 MR. DRAPER: This question is for Mr.
8 Barden only because you were the one who mentioned
9 it first but a number of presenters mentioned the
10 Juniper Ridge Landfill Advisory Committee and it's
11 probably in the material here somewhere but could
12 you take just a minute and describe what that is,
13 who's represented by it and how it functions?

14 MR. BARDEN: So if -- I've provided a
15 little bit of a footnote on page 2 of my testimony
16 with the Legislature basically. I think that came
17 in with the Resolve in 2003 where they basically
18 created this Advisory Committee, as a state-owned
19 landfill that it would be a citizen group, so you
20 can read that footnote, basically how that was
21 established and what the representation is. So
22 essentially it has representative -- citizen
23 representatives basically that are from the City
24 of Old Town, I think there's one from the
25 Penobscot Indian Nation, from Alton as well. So

1 those are individuals, I'm not sure exactly how
2 they're appointed, but it's a committee that's set
3 up to receive information on Juniper Ridge
4 Landfill as a sounding board for the rest of the
5 citizens. So that's what I mentioned that we give
6 them reports from the facility.

7 MR. DRAPER: Just to follow up, how often
8 does this committee meet, does it meet regularly,
9 is there an agenda, how does it function?

10 MR. BARDEN: Yeah, we pretty much rely on
11 them to decide if they want to hold a meeting.
12 Probably once a year maybe at the most that they
13 would meet. If there's anything in particular
14 that's happened at the landfill that they want to
15 be apprised of they would request a meeting,
16 sometimes DEP staff attends the meeting, sometimes
17 they don't.

18 CHAIRMAN PARKER: Board members?

19 MR. MAPES: One question. This is
20 probably for Toni. The leachate -- you talked
21 about it at the landfill itself, the leachate goes
22 to some holding tanks and then what?

23 MS. KING: That's probably a better
24 question for later but we currently have a
25 contract with the Old Town mill operator, they

1 have their own onsite wastewater treatment plant
2 and we dispose of our leachate there. We have a
3 backup contract with the City of Brewer and if
4 anything happens with the Old Town mill's
5 wastewater treatment plant, because it still is
6 operating and taking other commercial wastewater,
7 then we would go to Brewer. It's trucked from our
8 holding tank.

9 MR. MAPES: Thank you.

10 CHAIRMAN PARKER: Board members? You'll
11 have some redirect in just a moment, but do any of
12 the staff have questions?

13 MS. ELEFThERIOU: Mr. Barden, in your
14 direct testimony you noted that additional solid
15 waste landfill capacity will be needed within the
16 next two years to avoid serious disruption for the
17 in-state waste deliveries that are currently being
18 managed at JRL. Would you please tell us the
19 source for that two-year timeframe?

20 MR. BARDEN: Well, that's based on the
21 annual reports on capacity that's remaining at JRL
22 that they submit to the DEP. There is also
23 information, I believe, on capacity used in the
24 2014 materials, whatever that report was called,
25 plus I've also looked at the annual reports of the

1 Crossroads Landfill so I know how much they're
2 taking by their -- I don't think I've looked at
3 their 2015 report but their 2013 and 2014 reports
4 were approximately 300,000 tons. And they have a
5 density so I calculated -- you have to make
6 assumptions on capacity, it's not an exact
7 science, so you have to assume what's going to
8 happen in the future and that's not exact. So we
9 know what -- the capacity remaining at JRL, what
10 their existing waste volumes is and they will be
11 out of capacity without the expansion in 2019. So
12 that 600 to 700,000 tons is going to have to go
13 somewhere and that's -- it could go out of state.
14 Some of it could go out of state. That may be
15 cheaper for communities in southern Maine that are
16 bringing it up to JRL. Maybe it's cheaper for
17 them to take it to New Hampshire, but the vast
18 majority of that waste would go to Norridgewock
19 and if Norridgewock all of a sudden increases from
20 300,000 tons to 900,000 tons, they will be out of
21 capacity based on just some assumptions on
22 density. I don't know what they are going to get
23 for compaction but I gave them the benefit of the
24 doubt and said that they get a 90 percent
25 compaction rate. To my understanding, they have

1 not applied to the DEP for any expansion
2 applications. They haven't done a PBD, so that's
3 a five to seven year process. So if those wastes
4 from JRL were to be diverted beginning in 2019
5 they would be out of capacity in 2020 to 2021, and
6 they do not have an application for an expansion
7 so I'm not sure where the waste would go after
8 that.

9 MR. BURNS: Mr. Barden, I just want to get
10 clarification on something -- well, maybe it's Ms.
11 King, I don't know -- on table 5.1, the MSW bypass
12 and soft layer material that's in there, it's
13 listed as 25,000 tons, we've talked a lot about
14 that. I've understood that this table in the past
15 has been for design purposes and I've also heard I
16 think Mr. Barden say that the MSW bypass would be
17 very limited at this facility, so my question is,
18 is this a limit number or is this just a --

19 MS. KING: It's not a limit number. This
20 is -- this is based on current acceptance and
21 extrapolated to what we anticipate as about
22 700,000 tons a year annually moving forward at
23 Juniper Ridge but none of these are intended to be
24 a limit number.

25 MR. BURNS: Thank you.

1 CHAIRMAN PARKER: Anymore questions from
2 staff?

3 MS. ELEFThERIOU: Ms. King, in your
4 testimony you noted that there are currently --
5 there are not currently viable mechanisms for the
6 reuse, reduction and recycling of oversize bulky
7 waste that are within the control of BGS or
8 NEWSME. In general, are you aware of any
9 recycling outlets for OBW within Maine or New
10 England?

11 MS. KING: We have had limited experience
12 at some of our other facilities in New England
13 with mattress recycling, for instance, in the
14 oversize bulky waste category; however, our only
15 success with mattress recycling has been -- the
16 mattress recyclers look for three things
17 typically, the metal in the springs, the wood in
18 the frame and the fabric, and if you can find a
19 source separated the generation point for
20 mattresses, so like a residential drop off or
21 potentially a bulky waste pick up day and then you
22 can segregate the mattresses and bring them to a
23 recycler, it's successful; but the problem is by
24 the time they get to a landfill, they have
25 typically been picked up, transferred, brought to

1 a processing facility, screened, loaded again and
2 then dumped at the landfill and by that point,
3 according to the mattress recyclers we've
4 discussed this with, because they've looked at,
5 you know, both commodities with us at our landfill
6 facilities and our transfer facilities, this is in
7 Massachusetts, it -- they are too contaminated for
8 the fabric to be able to be recycled, the wood is
9 typically crushed by that point and not feasible
10 for removal and recycling of that, and then, you
11 know, if you can't get those two commodities,
12 they're not too keen on ripping it apart just to
13 get the metal. So we've tried but the -- the
14 outlets just currently are not there.

15 CHAIRMAN PARKER: Mr. Spencer, redirect
16 and remember, redirect stays with the discussion
17 we're having, not new --

18 MS. BERTOCCI: Excuse me, I think Mr.
19 Spencer didn't finish questioning Toni King
20 initially.

21 CHAIRMAN PARKER: I thought he did.

22 MR. SPENCER: Right, no, no, I think there
23 was a little misunderstanding. I thought I had 20
24 minutes but I thought we would go -- kind of do
25 what we just did and I would ask -- you know, try

1 to keep it to about half that time with Mr. Barden
2 and have the other ten minutes for Ms. King. So
3 maybe I surrendered the mike too soon but actually
4 the questions I was going to ask her are -- a lot
5 of them have been asked already by you people,
6 which is good, so I've only got one with a
7 follow-up.

8 CHAIRMAN PARKER: Go for it.

9 MR. SPENCER: All right, yes, sir. Wastes
10 coming into JRL from a processing facility, in
11 your opinion, what is the source of that waste?

12 MS. KING: The source is the generator or
13 the processing facility that produces the residues
14 and the material by-product.

15 MR. SPENCER: Are you familiar with the
16 term used by the EPA for the place where a
17 material -- a material becomes waste, what they
18 call the point of discard?

19 MS. KING: I'm only familiar with it from
20 your testimony.

21 MR. SPENCER: Okay. I think you said in
22 your testimony something about that that was for
23 -- that EPA only did that for materials that were
24 designed to be burnt. Well, I think one of the --
25 isn't one of the stated purposes of these

1 facilities to provide wood for fuel in Maine
2 boilers?

3 MS. KING: So if you look at my rebuttal
4 testimony, Mr. Spencer, the definition that you
5 cited from the EPA regulations is for nonhazardous
6 secondary materials to determine whether
7 nonhazardous secondary materials are solid wastes
8 when used as fuels or ingredients in combustion
9 units to determine which Clear Air Act emission
10 standards apply, and I -- I -- I could not link
11 that to this application or to the rules in Maine
12 on processing facilities.

13 MR. SPENCER: Okay. How does NEWSME
14 really know that these wastes brought to you by
15 what you call the generators, also known as
16 processing facilities, how do you and the state
17 know for certain that these wastes have been fully
18 reduced at their source and subjected to our
19 hierarchy practices if they are not within your
20 control?

21 MS. KING: They are not within our
22 control, but they -- those facilities are licensed
23 solid waste facilities and are required to show
24 compliance with the recycling rule which they have
25 done annually with no question from the DEP in

1 review of their annual reports.

2 MR. SPENCER: So in your opinion, is there
3 any way for the state to apply to fully ascertain,
4 aside from relying on the generators, that this
5 material at its source, which I mean the point
6 where it was thrown out for the first time, is
7 there any way for the state to verify that without
8 knowing, you know, town by town where it was
9 thrown out?

10 MS. KING: There's no reason to question.

11 MR. SPENCER: So you think there's no way
12 then to verify?

13 MS. KING: I didn't say that. There's
14 no -- there's no reason to attempt to verify it.
15 The processing facilities that we accept materials
16 from are complying with the Maine state rules for
17 solid waste facilities and Juniper Ridge Landfill
18 is doing the same.

19 MR. SPENCER: Okay.

20 CHAIRMAN PARKER: Tom, do you have
21 redirect?

22 MR. DOYLE: I just have one redirect
23 question for Toni. Toni, what is the rule and,
24 therefore, the requirement of Maine law that this
25 application is being processed under for in terms

1 of the Waste Management Hierarchy?

2 MS. KING: The Chapter 400 Waste
3 Management Hierarchy?

4 MR. DOYLE: Yes.

5 MS. KING: Yes, the Chapter 400 Waste
6 Management Hierarchy?

7 MR. DOYLE: Right.

8 MS. KING: That's the rule.

9 MR. DOYLE: And that's -- that's -- is
10 that the standard that you had up on the screen
11 this morning?

12 MS. KING: It is. It's one of the
13 standards. I had the recycling -- the recycling
14 standard and the Waste Management Hierarchy Rule.

15 MR. DOYLE: Right. So that's the rule
16 that this application is being processed under,
17 correct?

18 MS. KING: It's one of the rules, yeah,
19 yeah.

20 MR. DOYLE: Thank you.

21 CHAIRMAN PARKER: Anymore direct? If not,
22 a five-minute break or a ten-minute break. We'll
23 be back at -- actually we'll take a little longer.
24 We'll be back about 2:30. I'm sorry, no, take
25 about a ten-minute break and we'll be back.

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(OFF RECORD)

CHAIRMAN PARKER: Okay, we're going to start now with the second panel which is BGS/NEWSME and we have Mike Booth, John Sevee, Tom Doyle, Jeremy Labbe and Bryan Emerson at the table and the first questions will be Mr. Spencer.

MR. SPENCER: Thank you, Chair Parker. Okay, this is for Mr. Sevee. On page 6 the quote is, quote, the modeling indicated that groundwater emanating from the landfill site does not pass to groundwater users along Route 16, Route 43 or Stagecoach Road, end quote. There was a discrepancy on this between your analysis and that which CES did for the City of Old Town. How do you explain any difference of opinion on this or has that been resolved?

MR. SEVEE: That statement in the report is based on four lines of evidence. The first line of evidence had to do with reviewing aerial photogrammetry and so forth to look for any direct fractures that may be headed toward -- in the bedrock directed toward Routes 16 and 43. The second line of evidence was the data that was available from the site investigation itself that showed that groundwater follows the topography and

1 so the groundwater levels are higher in the hills
2 and at the ground surface in the low lying areas.
3 That creates a situation where higher topography
4 away from the site acts as a hydraulic barrier.
5 The third line of evidence has to do with
6 confirming that that situation exists in the
7 direction of -- particularly in the direction of
8 Route 43. We installed a well in that direction
9 and confirmed that the groundwater behaved in the
10 same fashion as it did on site and then the fourth
11 line of evidence was the modeling itself which
12 incorporated all the bedrock fractures and geology
13 that was available from the investigations. I
14 still continue to have that same opinion that the
15 groundwater does not migrate from the landfill
16 toward Route 43 or toward Route 16 other than to
17 get down to the lower areas on either side of the
18 landfill. It doesn't extend to those roadways.
19 On the other hand, I do agree with their
20 conclusion that -- the town -- the City's
21 conclusion that if there were to be a leak at the
22 landfill, it would make sense -- if somebody
23 wanted to have their water tested, it would make
24 sense for that testing to occur. That's been done
25 in the past when people have raised questions and

1 I don't see any reason why the landfill shouldn't
2 do that.

3 MR. SPENCER: Okay. Page 6, quote, at the
4 lower elevation surrounding the site groundwater
5 flow is generally upwards as the groundwater
6 attempts to discharge into surface waterbodies,
7 end quote. Does this mean that any contamination
8 of groundwater from a leak in the liner of the
9 landfill would end up in the surface waters?

10 MR. SEVEE: If the leak went that far, the
11 answer is yes, and that's the whole purpose of the
12 monitoring program is to make sure that that does
13 not occur.

14 MR. SPENCER: How does the term "generally
15 upwards" break down as a percentage of the overall
16 flows or is the case that all the groundwater
17 flows upwards in some areas and little or none of
18 the groundwater flows upwards in other areas?

19 MR. SEVEE: The amount of groundwater that
20 migrates laterally away from the east and the west
21 has to have someplace to go, and it can't go
22 downward so it has to go -- it has to discharge.
23 So all the groundwater that moves to the east ends
24 up in the surface waters on the east side and all
25 the groundwater that's moving to the west ends up

1 in the surface waters on the west side.

2 MR. SPENCER: In your estimation, what are
3 the chances that the single landfill liner under
4 the currently permitted landfill will leak over a
5 long period of time, say, 50 years or pick a
6 timeframe?

7 MR. SEVEE: That -- that landfill liner
8 has been in operation for 25 years, there's no
9 evidence that there's any leachate leakage through
10 the liner. We followed the quality control
11 procedures during the installation of that liner
12 to make sure that we didn't have any penetrations
13 and took care in terms of placing the waste and
14 operating on top of the liner. So I don't see any
15 reason why there should be any leakage from that
16 liner over the next 50 years.

17 MR. SPENCER: Is there an approximate
18 factor for adding a second liner, you know, how
19 much safer it is?

20 MR. SEVEE: Well, you can see from the --
21 the diagram over here to my right that the second
22 liner is basically a repeat of the first liner.
23 So it has a redundancy and it's a way of improving
24 the safety. I can't put it in terms of percentage
25 or anything like that but it's basically

1 rebuilding the upper liner.

2 MR. SPENCER: Okay. Page 6, quote, this
3 particular feature that the groundwater passing
4 from beneath the landfill site remains local was a
5 key feature in selecting this site as a potential
6 landfill site, end quote. My question, you also
7 say on the same page that, quote, thus, in the
8 unlikely event of a leak from the landfill, in
9 addition to the natural protection, groundwater
10 could be collected, end quote. Has anyone ever
11 done this successfully, pumped contaminated water
12 from beneath a leaking landfill to keep it from
13 spreading?

14 MR. SEVEE: Yes. I was involved in a
15 landfill in Gratiot County, Michigan. It was a
16 landfill placed out in the middle of a field and
17 it was built specifically to contain like a
18 million dead chickens and we installed wells --
19 pumping wells around the perimeter of that
20 landfill and effectively cut off any migration of
21 any leachate away from that landfill.

22 MR. SPENCER: What would be done with the
23 contaminated water? Would it be treated as
24 leachate?

25 MR. SEVEE: The water that would be

1 collected would have to be treated, correct.

2 MR. SPENCER: Okay. Page 8, quote, the
3 leak detection system will identify leachate
4 leakage through the primary liner system allowing
5 time to implement appropriate remedial measures,
6 end quote. Aside from pumping, what other
7 remedial measures could be used?

8 MR. SEVEE: It's a function of what is
9 causing the leakage. It may be possible that if
10 the leakage were occurring during early stages of
11 landfill operation, you could actually go in and
12 repair the -- the liner. It may be appropriate to
13 -- if the leakage is relatively shallow and only
14 in the till, it may be appropriate to use a
15 different technology than pumping wells. So it's
16 really a function of what you observe and you pick
17 the remedial strategy based on what you observe.

18 MR. SPENCER: Okay. Let's go to Mr.
19 Michael Booth. On page 5 of your testimony you
20 divide waste received at JRL into three groups.
21 The second one described as, quote, waste for
22 which there currently do not exist feasible
23 alternatives to recycle or reuse for the
24 communities served by the JRL, end quote. Where
25 are these communities located, inside Maine's

1 borders or outside Maine's borders?

2 MR. BOOTH: Since all the waste that's
3 taken to the Juniper Ridge Landfill is in-state
4 waste, it's waste that's generated within Maine's
5 borders.

6 MR. SPENCER: Page 5, quote, prior to
7 their arrival at JRL and consistent with the Waste
8 Management Hierarchy, many of these waste streams
9 will have been reduced, end quote. What about the
10 other wastes that have not been subjected to the
11 hierarchy, shouldn't they be reduced at the
12 source, recycled, et cetera?

13 MR. BOOTH: If you look at the standards,
14 maximum extent practicable, and the wastes that do
15 go to the landfill are recycled when there's
16 options available to recycle them. There are some
17 materials such as -- an example would be sandblast
18 grit that's taken to the facility that there are
19 no environmentally safe other uses for the
20 material other than to landfill.

21 MR. SPENCER: Page 8, quote, the site does
22 not overlie or lie adjacent to a mapped
23 significant sand and gravel aquifer, end quote.
24 How do you define "significant?" Is that a
25 scientific term or --

1 MR. BOOTH: It's a term -- that's probably
2 a better question for John. I believe it's a term
3 in the regulations, a significant sand and gravel
4 aquifer.

5 MR. SPENCER: Page 12, the expansion will
6 only accept in-state waste materials, end quote.
7 If something is discarded in Massachusetts and
8 brought to a processing facility in Maine, does
9 this become in-state waste?

10 MR. BOOTH: The definition of in-state
11 waste is in the statute and that's what we were
12 referring to in that quote.

13 MR. SPENCER: If something is discarded in
14 a community in Massachusetts that has no waste
15 reduction or recycling options and brought to a
16 processing facility in Maine, does this waste
17 comply with Maine's waste hierarchy?

18 MR. BOOTH: If it is -- can you repeat the
19 question, please?

20 MR. SPENCER: Okay. If something is
21 discarded in a community in Massachusetts that has
22 no waste reduction or recycling options and
23 brought to a processing facility in Maine, does
24 this waste comply with Maine's waste hierarchy?

25 MR. BOOTH: If that waste is processed in

1 the State of Maine, the answer is yes.

2 MR. SPENCER: Okay, on page 15, when you
3 describe the leachate collection system and the
4 perforated HDPE piping, what is the crushing limit
5 of this pipe.

6 MR. BOOTH: I can't give an exact crushing
7 limit but in the DEP application there was an
8 analysis of all of the strengths of the pipes and
9 all the pipe that's put into the landfill is
10 designed to withstand any of the overburden
11 pressures and that information is in Volume 3 of
12 the application, probably in Appendix D somewhere.
13 I'm not sure of the specific appendix number but I
14 can provide that to you if you wish.

15 MR. SPENCER: Thank you. What holds up
16 the vertical gas collection wells? Is it just the
17 random waste below it?

18 MR. BOOTH: The wells are actually -- I
19 didn't describe how they do that. The wells are
20 actually drilled with an auger drill and then the
21 pipe is placed down into that hole that's drilled
22 by the auger and then the annulus between the pipe
23 and the diameter of the auger, which I believe is
24 around three and a half feet, is backfilled with
25 crushed stone.

1 MR. SPENCER: So at the bottom, it's just
2 -- is it resting on crushed stone on the bottom
3 and then surrounded by crushed stone all the way
4 up?

5 MR. BOOTH: Well, the stone rests on top
6 of itself and then it -- it's drilled down into
7 the bottom of the -- about 15 feet higher than the
8 base of the landfill so it's sitting on the waste
9 material and then the stone -- the bottom stone is
10 put on there and the column is built up from
11 there.

12 MR. SPENCER: You described this morning
13 two seams joining the liners with the air space.
14 Would the air space become compressed and pop?

15 MR. BOOTH: No, it's very -- very strong.

16 MR. SPENCER: How long do sump pumps last
17 and can they be replaced?

18 MR. BOOTH: Yes. They last anywhere from
19 two to ten years and they're actually designed --
20 all the sumps are designed so we can pull the
21 pumps out and they can be replaced very easily.

22 MR. SPENCER: Is there a velocity factor
23 due to slope used in stormwater calculations?

24 MR. BOOTH: I'm not sure what -- can you
25 repeat that question or explain that a little more

1 what you're asking me?

2 MR. SPENCER: Okay. My question is,
3 picture, you know, an area of land, you know, like
4 a landfill, and, you know, if it's pretty flat
5 like a table, the rain hits it, it runs off like
6 this, but if it's got steep sides, the water would
7 gather velocity as in like, you know, a hillside
8 situation. Is there a factor --

9 MR. BOOTH: Yeah, stormwater calculations
10 what you do is you kind of create a flow path from
11 the longest point to the shortest point and along
12 that flow path you go from first -- you come --
13 you come -- you go over land flow and then you get
14 into shallow concentrated flow and then you get
15 into sheet flow and those numbers are all
16 calculated. One of the factors that go into those
17 calculations in the velocity is the slope -- the
18 slope of the land it's flowing over.

19 MR. SPENCER: Okay, I've got questions for
20 Mr. Sevee and/or Mr. Booth. While reading JRL
21 annual reports, I noticed a common occurrence that
22 elevated parameters are detected and then these
23 abnormalities are attributed to construction
24 activity or stormwater. Are you familiar with
25 Chapter 401 C, Performance Standards and Siting

1 Criteria, one of which says, quote, disturbance of
2 soil material must not affect ability to monitor
3 water quality at the facility site, end quote?

4 MR. BOOTH: Yes, I am familiar with that
5 section of the rules and as I made in my
6 presentation this morning, there's one of the
7 criteria in the rules that addresses that by --
8 that we want to limit any disturbance of the soil
9 within five feet of the bedrock surface. That
10 said, looking at the water quality at the site and
11 then determining what's the cause for changes in
12 water quality and attributing it to construction
13 activities does not -- is not counter to that part
14 of the rules. When we look at the water quality
15 of the landfill site and evaluate what's going on,
16 we look at all possible scenarios and it doesn't
17 limit our ability to look at is this landfill
18 leachate; in fact, when we look at water quality
19 in the monitoring wells our first question is, is
20 this landfill leachate and we go through an
21 analysis to convince ourselves that it's not
22 landfill leachate; and if we convince ourselves
23 it's not landfill leachate, then we look at what
24 other -- what are the other causes of that and
25 that's how we come up with the other potential

1 causes of why the water quality was changed in a
2 particular monitoring well.

3 MR. SPENCER: Okay. This question comes
4 from my witness, Dr. Coghlan, and it involves the
5 statistical procedures for monitoring for
6 contamination. You conducted Mann-Kendall tests
7 to determine whether there were significant
8 differences in various water quality metrics that
9 would indicate groundwater contamination. Based
10 on the conservative level of Alpha you set at five
11 percent, it seems like your analysis was designed
12 to minimize the probability of making a Type 1
13 error; that is, minimizing the chance of including
14 a water quality effect existed when it really
15 didn't; however, this comes at the expense of
16 increasing the risk of making a type 2 error; that
17 is, failing to detect a significant effect on
18 water quality that truly exists. Could you
19 describe your power analysis so we can better
20 understand how likely you were to have made a type
21 2 error and how powerful was your test to detect a
22 real meaningful contamination effect?

23 MR. SEVEE: This is John Sevee. The
24 methods we used are the same methods that are used
25 by EPA and DEP in analyzing the data. These are

1 standardly accepted levels of uncertainty based on
2 balancing between those two error types and so
3 basically we're using accepted methods.

4 MR. SPENCER: Okay, Mr. Bryan Emerson, you
5 mentioned that your consultation regarding
6 Atlantic salmon consisted of two sentences
7 transmitted via e-mail. Did you engage in a
8 formal consultation with U.S. Fish and Wildlife
9 Service as may be required under the Federal
10 Endangered Species Act and if not, does this
11 e-mail exchange serve as an adequate replacement
12 for a formal ESA consultation review?

13 MR. EMERSON: We have not engaged in
14 formal consultation with U.S. Fish and Wildlife
15 Service regarding Atlantic salmon, as we
16 understand from our conversations with the Corps
17 that formal consultation will not be required.

18 MR. SPENCER: Has there been any analysis
19 done as part of this application of potential
20 impacts to fisheries associated with disposal of
21 JRL leachate into the Old Town mill's wastewater
22 treatment plant?

23 MR. EMERSON: We did not do any studies of
24 that, no.

25 MR. SPENCER: So I've got a -- I'll try to

1 be quick here. In your presentation this morning
2 you described the setbacks, you know, from the
3 streams, forested cover, like that. So if all the
4 setbacks are so good, why are parts of this area
5 identified as critical habitat for federally-
6 protected Atlantic salmon?

7 MR. EMERSON: Well, the critical habitat,
8 to my understanding, is mapped based on watershed
9 boundaries and that is -- and those boundaries are
10 as we've shown on the map overlap partially with
11 the expansion area.

12 MR. SPENCER: Okay. Mr. Jeremy Labbe, how
13 many landfills does Casella own or operate in
14 their territory from Pennsylvania through Maine?
15 Does 13 sound correct?

16 MR. DOYLE: Objection.

17 MR. SPENCER: Are there other --

18 MR. DOYLE: Objection.

19 CHAIRMAN PARKER: What's the reason for
20 the objection?

21 MR. DOYLE: Relevancy.

22 CHAIRMAN PARKER: Relevancy?

23 MR. DOYLE: We're licensing a landfill
24 expansion here in Maine.

25 CHAIRMAN PARKER: Your introduction on Mr.

1 Labbe said that he oversaw all the landfills in
2 the Northeast. You listed several towns.

3 MR. DOYLE: No, my introduction of Mr.
4 Labbe said he's the landfill environmental manager
5 for Juniper Ridge Landfill.

6 CHAIRMAN PARKER: Maybe the question
7 should be more appropriate to one of your other
8 witnesses then because one of them -- maybe it's
9 Ms. Hill that's been involved in several
10 landfills. I'll rule in favor of the objection
11 now but you may want to rephrase your question for
12 a different individual.

13 MR. SPENCER: Okay. A truck caught fire
14 en route to JRL in May of last year, 2015. It was
15 doused with thousands of gallons of water in
16 Newport, then reignited just before the JRL exit
17 where the firefighters could not extinguish the
18 fire with thousands of more gallons more put on it
19 so it was towed into the landfill. I heard from a
20 volunteer at the scene that there were fluorescent
21 light bulbs contained in the truck. Under current
22 regulations are these materials acceptable at JRL?

23 MR. LABBE: I'm familiar with what you're
24 talking about. I was actually onsite during the
25 time when we offloaded that hot load or those hot

1 loads. We have a designated hot load area for
2 receipt of any material that is considered hot and
3 that was one of them. Someone had put, we think,
4 a hot piece of material inside that load and there
5 were no fluorescent light bulbs in that load to my
6 knowledge. I had thoroughly looked through it as
7 our dozer was moving the material around so the
8 firefighters could douse the material, but the
9 second point of your question is CFLs and other
10 fluorescent lights are considered universal waste
11 and, therefore, are subject to the universal waste
12 requirements in the State of Maine.

13 MR. SPENCER: How many -- is it common to
14 reject a load? Can you give some idea of like --
15 go ahead.

16 MR. LABBE: Yeah, well, it's not unheard
17 of to reject a load. What you tend to see is --
18 I'll give you an example. TVs are a universal
19 waste. College kids don't understand that TVs are
20 a universal waste, usually that ends up being the
21 case. So a transfer station, if they don't happen
22 to pick up a TV that's incidentally thrown in a
23 roll off container, it can come onto our facility
24 and we've seen things like televisions come on in
25 a C&D load and what we'll tend to do is our

1 operators can actually -- that's a detail that
2 they look at, they'll detect a TV coming out,
3 assuming it's not in a thousand pieces, they'll
4 detect a TV coming in, we actually have spray cans
5 inside their equipment so they can spray paint
6 that TV and put it back on the load so they can
7 bring it back to the facility where they got it
8 from. If they're doing a different haul, some of
9 these trucks haul back different material, we
10 offer them the use of our Pine Tree Transfer
11 Station where we're licensed to accept that
12 material. The reason we spray it is we don't want
13 them to just leave it on the trailer and then it
14 comes back in again with the next load. We want
15 to make sure that they're handling it properly.
16 So that's an example of what we typically see but
17 we have rejected entire loads before if the
18 material is not as it's classified.

19 MR. SPENCER: Okay. Specifically, when an
20 odor complaint is received and you've gone through
21 your protocol, how is the determination made
22 whether or not the complaint is legitimate?

23 MR. LABBE: We don't determine if the
24 complaint is legitimate. What we determine is if
25 it's confirmed. So I don't ever want to argue the

1 legitimacy of someone being able to sense an odor
2 because everybody has got a different threshold
3 and some people are more sensitive to different
4 odors than others. So what we do is our
5 responders are trained to go out to that site, if
6 they requested it, we're not going to go visit a
7 neighbor if they don't want us there. If they do
8 want us at their facility, we'll go out, we'll
9 bring some of our instrumentation with us, we'll
10 also bring obviously that trained operator and
11 they'll be able to either confirm that it was
12 there or they weren't able to confirm that it was
13 there. So if the odor is there when they're
14 present, they'll describe that odor, they'll write
15 down what they smelled; if it's not there, they'll
16 say that there is no odor present at the time that
17 they responded to that.

18 MR. SPENCER: I don't think I followed up,
19 so how many loads get rejected like in a year?

20 MR. LABBE: I don't have that number.

21 MR. SPENCER: Are there regular tests for
22 gases besides hydrogen sulfide and methane?

23 MR. LABBE: Do you want to clarify --
24 well, I guess the answer is yes.

25 MR. SPENCER: So, I mean, as part of

1 the -- I understand for the Clean Air license the
2 testimony. Is that like a quarterly --

3 MR. LABBE: So what I mentioned in my
4 testimony, the EPA's new source performance
5 standards requires a minimum monthly sampling at
6 our gas collection locations and that's at any of
7 the active locations as part of that program.
8 We'll typically do it more often because we feel
9 every two weeks typically is a good indicator for
10 us and we can reserve the right to do it more
11 often. We also do monthly something called TRS
12 which is a total reduced sulfur. It's a
13 measurement that we use for detecting sulfur
14 compounds in our gas as part of our license and
15 that's something that we do at the treatment and
16 flare location.

17 MR. SPENCER: On your methane monitors,
18 would you notice a difference in the reading
19 whether or not you are over a covered or active
20 portion of the landfill, and could I come check
21 that out with you sometime?

22 MR. LABBE: Yeah, you could -- you
23 could -- we could show you how we do our quarterly
24 methane surface scans which are also part of the
25 EPA's program. That's done on intermediate cover

1 sections. Predominantly what we do on the open
2 sections is hydrogen sulfide monitoring with
3 something called a drone meter. The reason we
4 monitor for hydrogen sulfide in the open areas of
5 the landfill is that hydrogen sulfide is typically
6 produced by decomposing waste sooner than methane
7 and so that is the parameter we're going to check
8 first, and obviously since your operating area is
9 new waste, we want to make sure that we're going
10 to catch what we do first. So that's the sampling
11 we do in the open areas. The covered areas where
12 we're in that anaerobic, the absence of oxygen,
13 that environment where the methane is produced,
14 that's where we look for that methane.

15 MR. SPENCER: So in addition to the
16 methane on the covered and the hydrogen sulfide on
17 the uncovered, are there any other tests on the
18 landfill for any other gases?

19 MR. LABBE: Well, with part of our well
20 tuning we test for carbon dioxide, we test for
21 nitrogen, which is typically what they call a
22 balance gas, we test for oxygen, we test for
23 temperatures of the gas, we test the pressures of
24 the gas, the vacuum on each collector, we can test
25 hydrogen sulfide at each well location if we so

1 choose. We can test many parameters on the
2 landfill and we do typically. In fact, we're
3 required to do a lot of those by the EPA's
4 requirements and the DEP's requirements.

5 MR. SPENCER: Okay, I'm good. Thank you.

6 CHAIRMAN PARKER: City of Old Town, Mr.
7 Katsiaficas?

8 MR. KATSIAFICAS: No questions for the
9 witnesses.

10 CHAIRMAN PARKER: Mr. Snowman?

11 MR. SNOWMAN: Yes, just one question.
12 Jeremy, I was hoping that you could describe any
13 major similarities or major differences in the
14 sources and types of waste that went into the now
15 closed Pine Tree Landfill and the sources and
16 types of wastes that are currently going into JRL
17 or have gone into Juniper Ridge. Is it accurate
18 to say JRL provides capacity where PTL left off
19 largely?

20 MR. LABBE: It is accurate to say that JRL
21 provides an avenue for waste disposal for some of
22 the material -- or most of the in-state waste
23 materials that went into Pine Tree when it was
24 open and operating, predominantly things like
25 front end process residue from PERC, incinerator

1 ash from PERC, construction and demolition debris
2 produced locally from contractors or transfer
3 stations, special wastes like contaminated soils
4 from cleanup jobs around the State of Maine,
5 things like that.

6 MR. SNOWMAN: So were -- what were the
7 major differences would you say in the waste
8 stream?

9 MR. LABBE: Well, the one major difference
10 is Pine Tree being a commercial landfill could
11 accept out-of-state waste and Juniper Ridge as a
12 state-owned landfill accepts just in-state waste.

13 MR. SNOWMAN: Could you maybe provide us
14 with a specific customer or something like that
15 that you had to cut off from dumping into the --

16 MR. LABBE: Yeah, and I don't have a
17 specific customer I could provide to you as far as
18 someone we'd have to cut off.

19 MR. SNOWMAN: Because they were
20 bringing -- because that was -- I believe that was
21 characterized in the newspaper back in 2005 as
22 they admitted to 47 percent, at least I believe
23 was the term, out-of-state garbage was going into
24 -- was going to Pine Tree, so I was -- you know,
25 that seems like you'd have to cut off like half of

1 what -- half of what was going in there.

2 MR. LABBE: Yeah, I don't have that number
3 or the generators in front of me but the
4 out-of-state waste that was going into Pine Tree
5 needed to find -- once that closed needed to find
6 another home.

7 CHAIRMAN PARKER: Mr. Laite?

8 MR. LAITE: Yes, thank you. I had a
9 couple questions for Mr. Sevee but his explanation
10 of the natural soils was very good and what
11 happens with the leak detection that was very
12 thorough, thank you.

13 Mr. Booth, from a design standpoint, I
14 know you've done a number of these projects
15 throughout the state, what's one of the most
16 favorable attributes of the site at Juniper Ridge?

17 MR. BOOTH: From a designer's standpoint
18 probably the most favorable is the types of soils
19 that are onsite. They're very tight, as John
20 explained, they're very tight soils, they have a
21 good component of clay, they have a good component
22 of other size particles so they're very tight from
23 a hydraulic standpoint. They're also very easy to
24 work with, they're very easy to compact and to
25 place and they're not soft, so they're not like

1 working on a clay soil which is another typical
2 soil we work with on landfills which we have to be
3 more concerned with issues like settlement. It
4 makes the construction of the site -- of the
5 landfill system much easier.

6 MR. LAITE: Okay, great, thank you, and in
7 the containment system, you know, this is, it
8 looks like, pretty technical. How does it compare
9 to other systems throughout the state?

10 MR. BOOTH: This is probably one of the
11 most robust liner systems that I'm aware of in the
12 State of Maine, if not the most robust liner
13 system.

14 MR. LAITE: Thank you. One final question
15 for Mr. Emerson. I noticed that you discussed
16 being -- the acreage being two times the amount
17 required by the Army Corps of Engineers. Why?

18 MR. EMERSON: Why --

19 MR. LAITE: Why are you going two times
20 the amount of acreage into the preservation than
21 is required?

22 MR. EMERSON: Because we wanted to go
23 above just the minimum of what -- what was
24 required. We wanted to provide additional
25 compensation.

1 MR. LAITE: Thank you.

2 CHAIRMAN PARKER: Before we go to the
3 Board, I've got three questions -- three or four
4 questions from the floor. Mr. Emerson, you have
5 the -- you had the microphone so I'll start with
6 you.

7 MR. DOYLE: I just -- I want to know if I
8 need to object. I just want to make sure you're
9 ready.

10 CHAIRMAN PARKER: The first question is --
11 and I'm not sure who -- somebody out here wrote
12 it -- how many acres of wetlands set aside in the
13 original landfill application are being displaced
14 by this expansion application and how are they
15 accounted for; isn't the original acreage
16 conservation in the original application being
17 counted as -- as a double of -- I think the
18 question is, are you counting some of the original
19 land set aside for mitigation twice or is this
20 additional land above and beyond? I think that's
21 what the question is asking.

22 MR. EMERSON: Yup, no, I understand, I
23 understand that. There were two areas that were
24 protected as preservation as part of the original
25 landfill siting and you can see them on the

1 printout over there and I had it up there with the
2 areas outlined in purple. One of them is within
3 our proposed preservation area and there's another
4 area that's set down to the southwest of the
5 landfill. It's a large wetland area. Those two
6 areas were both protected by deed restriction.
7 The landfill expansion is not impacting those
8 areas that were protected previously and, in fact,
9 our preservation area encompasses one of those
10 areas to provide a larger area as a more
11 continuous block of protected land. So we have no
12 impacts to those areas that were previously set
13 aside.

14 CHAIRMAN PARKER: Okay, thank you. This
15 one is for Mr. Labbe. If hazardous wastes were
16 delivered without your knowledge, what would the
17 process be for its removal? You stated it would
18 be the responsibility of the generator. What
19 would this entail?

20 MR. LABBE: I guess it depends on the
21 source, the type and the amount. You know, if --
22 if it's a five gallon can of urethane paint
23 that's, you know, still wet or something like
24 that, that would be relatively simple. If it's a
25 full load of material, then we'd immediately

1 cordon off the area to make sure that people are
2 not walking around -- or not working around that
3 area. We'd initiate conversations with the
4 generator of that material, we'd call the DEP and
5 we'd collectively come up with the best case
6 scenario for how we manage this material.

7 I think to say there's a specific
8 procedure for all materials is a little difficult
9 because each material will have its own procedure
10 and we really want to have collectively the DEP's
11 input on what they feel would be the best way to
12 do it as well as where does it go once it comes
13 out of here because we don't want to just say
14 we'll get it out of here. We want to make sure
15 that it goes to the right location and we can
16 follow it and make sure it's handled properly.

17 CHAIRMAN PARKER: Okay, thank you. Mr.
18 Booth, you've got three questions. Pumping
19 groundwater from the site -- this is the
20 question -- I assume this is not using a simple
21 basement sump pump. How far on the landscape
22 involved will the influence of lowering the
23 groundwater be felt?

24 MR. BOOTH: As far as remediation is that
25 speaking about or --

1 CHAIRMAN PARKER: I assume. I don't know.
2 I'm only reading what I have here.

3 MR. BOOTH: I mean, the answer to that
4 would be --

5 CHAIRMAN PARKER: This is sort of a two
6 part; one, is it a simple sump pump; and number
7 two, how far away from the actual landfill will
8 the lowering of the groundwater be felt. I think
9 those are the questions.

10 MR. BOOTH: Would it be a simple sump
11 pump, no, it would probably be a simple
12 submersible pump similar to a well pump that you
13 put in your well and they can put down a hole and
14 pump out. That's probably what they'd use. There
15 are a number of other types of pumps that are
16 airlift pumps. It really would depend on the
17 application.

18 How far that would be felt would be
19 dependent on the design of the extraction system
20 and how it was spaced. If there was an issue
21 where we needed to pump groundwater, we'd do a
22 study and design an extraction system to identify
23 a particular area that we were trying to remove
24 the water from. So it would vary depending on
25 what the objective of -- what the specific system

1 they were trying to install is.

2 CHAIRMAN PARKER: Thank you. Question
3 two, is a complete cover system in place on any
4 portion of the existing landfill?

5 MR. BOOTH: No.

6 CHAIRMAN PARKER: Okay, and it says here,
7 Mr. Booth mentioned that the system employed would
8 detect a leak within three days of the liner being
9 compromised. This would require an underdrain
10 sampling of sites to be sampled daily and the
11 results available immediately. What is the
12 frequency of underdrain sampling and how long does
13 it take to get the results of such sampling? Is
14 this not then the minimum -- okay, is this not
15 then the minimum leak detection?

16 MR. BOOTH: The criteria I was referring
17 to is 30 days is how long it takes for water once
18 it would get down through the primary liner system
19 to get to the underdrain system and to travel to
20 the underdrain pumping area. So three days is the
21 travel time that it would take for that leak to
22 get down into the system and travel to the edge
23 where it would be pumped out. The pumping system
24 for the leak detection system is monitored
25 continuously for flow and is recorded on the

1 system, Jeremy has spoken. If we saw a large
2 increase in flow volumes, that would be something
3 that would become immediately -- you'd be
4 notified, that would initiate a number of other
5 steps to understand why that flow went up and that
6 would probably include sampling that well to see
7 if there was actually a change in the water
8 quality in that well or if the change in flow is
9 from some other activity.

10 There is a liner leakage plan in the
11 application which talks about initial
12 characterization of the flow and then, like I
13 said, the flow is continuously -- we look at it
14 on -- the underdrain, the kind of tables are
15 measured monthly and to get a handle. As time
16 goes on, we build a database of what typical water
17 quality in that underdrain would look like, so
18 once we have some data, if we saw something
19 change, we would know that there was something
20 going on that we had to react to.

21 CHAIRMAN PARKER: Okay, thank you. I have
22 no more questions from the floor. Questions from
23 the Board. Tom.

24 MR. EASTLER: What was that question --
25 well, I did it originally but then it was more

1 like a comment than a question with regard to the
2 terminology noise. That's really what I wanted
3 to -- we really ought to -- should be talking
4 about things that have defined terms and noise has
5 no metric and that's not good. Sound pressure is
6 perfectly good.

7 CHAIRMAN PARKER: Kathy.

8 MS. CHASE: Can I go? Thank you. I
9 believe this is for Mr. Booth. In your
10 description of the augmented lining system that
11 you're having, the first question is, the reason
12 why you're adding more to that is because the
13 technology is available and you've had more
14 information, not because there's an issue with any
15 of the first liners, right?

16 MR. BOOTH: That's correct. The reason
17 we're adding it is under the rules it described --
18 it spoke to offset credits and it described how
19 many offset credits you get for specific types of
20 liner design. You get two years of offset credits
21 for just incorporating the geomembrane liner in
22 the system, you get three years of offset credits
23 if you added a composite system, if you add in
24 that extra layer of clay and the GCL on top of
25 that. So in areas where we have shallow or the

1 bedrock is closer to the base grade of the
2 landfill, we thought it was prudent to go with
3 that heavier, thicker liner on the secondary liner
4 just to provide more redundancy in the system.

5 MS. CHASE: Okay, the second -- thank you.
6 The second question is, you said there's a series
7 of six I think --

8 MR. BOOTH: Cells.

9 MS. CHASE: -- cells that you're going to
10 be doing and each time if there's new technology
11 available, you would be applying that to that
12 cell. Is that on your own or is that a
13 requirement?

14 MR. BOOTH: I don't believe it's a
15 requirement but we typically try to keep up and
16 add new systems in a new -- whatever design, we
17 bring it up to the conventional standards. A
18 typical thing that happens in landfill designs are
19 the testing that's done on materials can change
20 from, you know, year to year or different ASTM
21 standards are promulgated or methodologies are
22 changed and then we update how we -- you know,
23 when we're looking at the liners and what we're
24 requiring for materials with unique properties, we
25 require them to meet the most current properties.

1 MS. CHASE: Thank you.

2 CHAIRMAN PARKER: John?

3 MR. MAPES: Which one of you talked about
4 truck weights?

5 MR. LABBE: Overweight trucks?

6 MR. MAPES: Yes. The state has rules about
7 truck weights. Why do you do truck weight
8 studies? What's the rationale behind it?

9 MR. LABBE: Well, it was a request from
10 the Advisory Committee to monitor truck weights,
11 and since we scale trucks in or out -- yeah, the
12 state has a 100,000 pound weight limit and they
13 usually allow two and a half percent, you know,
14 102,500. Our policy is trucks over 105 get
15 warned, trucks of 110, they're not allowed to come
16 back into the facility for a period of time
17 determined by the general manager but we wanted to
18 make sure that, you know, our contractors and
19 people delivering to us were for the most extent
20 handling the material acceptably. Sometimes it's
21 difficult when there's no scales at their facility
22 so that's what they take into account, but it's
23 been a very successful policy, the truckers don't
24 seem to mind the policy unless they're the ones
25 that happen to be subject to it, but overall I

1 think it's a good neighbor policy.

2 MR. MAPES: Thank you.

3 CHAIRMAN PARKER: Alvin.

4 MR. AHLERS: Mr. Sevee, you talked a
5 little bit about groundwater flow and that it was
6 impeded or at least stopped by the topography
7 beyond the landfill. What would you expect with
8 much higher than normal precipitation with that
9 groundwater and also would that -- would that
10 impact the flow in the bedrock?

11 MR. SEVEE: If you had higher
12 precipitation, you might get additional
13 groundwater depending on the time of year it was
14 coming in. So assuming that we do get some
15 additional recharge and it enters the groundwater
16 system, that would be entering the groundwater
17 system throughout that entire region and the
18 analysis that I referred to relative to this
19 hydraulic barrier effect would still be valid. So
20 the groundwater would still remain relatively
21 local to the landfill. The bedrock would
22 basically behave the same. If it had the capacity
23 to take more water given the elevations, it would
24 -- it would just accept that more water. If it
25 can't, the water table would rise to the surface

1 and the excess precipitation would run off.

2 MR. AHLERS: Mr. Booth, you had a little
3 discussion on remedial action if, in fact, there
4 was a leak there. Would you expect remedial
5 action, say, pump and treat to last forever for a
6 situation like -- like at Juniper Ridge?

7 MR. BOOTH: You know, any type of remedial
8 measure that would be installed would also be
9 installed with a set of monitoring -- either
10 monitoring wells or monitoring points and, you
11 know, we would be looking at as the -- as any type
12 of action was implemented what the effects were
13 and once we were convinced -- you know, once the
14 data shows that the problem had been corrected, we
15 would shut the system off. If -- you know, if
16 not, the system would continue to pump.

17 MR. AHLERS: And I guess -- I mean, I
18 always think of those systems lasting for a long
19 time just because you've got a continuous leak
20 existing.

21 MR. BOOTH: One of the things about -- you
22 know, if you look at the robustness of this liner
23 system, you know, the systems you're referring to
24 may be an old site that doesn't have a containment
25 system, you know, something that somebody put

1 waste -- you know, was dumped on the ground at a
2 factory or something like that and it wasn't
3 contained. I mean, that is a very extremely
4 robust liner system. Any type of leaks that did
5 occur would be a very small percentage. So, you
6 know, I don't think it's similar -- my sense is as
7 we're talking about this is uncontrolled sites
8 types of systems.

9 MR. AHLERS: You talked a little bit about
10 underdrains in the area that was below groundwater
11 level. Is that system designed with some
12 redundancy so that if you had failures with
13 pumping systems in another part of the system?

14 MR. BOOTH: That system could be used, you
15 know, to collect water that if it -- if it was
16 water quality below the liner system that needed
17 to be collected, that system could be -- we could
18 tie that system in and collect the water that came
19 out of it. That system is really in there to
20 facilitate construction. You know, once we have
21 the physical landfill liner down -- we need to
22 keep the water table down in the area of the
23 construction. Once that's constructed and then
24 the liner is put back on and the landfill is
25 developed, actually having upward pressures is

1 beneficial because it keeps water migrating down.
2 So that's the primary purpose for that underdrain.

3 MR. AHLERS: So that's a construction
4 issue, not a long-term --

5 MR. BOOTH: That's correct, but if -- you
6 know, part of that underdrain -- part of the
7 monitoring program is to monitor that underdrain
8 and to evaluate the water quality. If necessary,
9 we could collect that.

10 MR. AHLERS: You also talked about having
11 technical support supervision onsite during
12 construction. Is that at all times during
13 construction and would that person be a very
14 well-trained person that knows all the details of
15 landfill construction?

16 MR. BOOTH: Yes. The --

17 MR. AHLERS: You're not going to put a
18 rookie out there, are you?

19 MR. BOOTH: No. We -- you know, it is a
20 full-time person because there is a lot of
21 activity that's going on during the landfill
22 construction. He's also supported -- in a typical
23 construction job, he's supported by the people in
24 the office so if there is an issue, you know,
25 we're contacted immediately. One of the great

1 things about new technology is we can take
2 pictures and data can be transferred and we can,
3 you know, evaluate what's going on and address
4 issues as they come up. That person by the rules
5 is required to have certification in the
6 specific -- like liner installers, there's a
7 certain test that you have to pass or a certain
8 amount of experience that you have to pass in
9 order to oversee those constructions, so you do
10 know what you're looking at and they can make the
11 appropriate judgments, but if there's a big
12 judgment that needs to be made during
13 construction, they also bring in either myself or
14 the other design engineers involved in the
15 project.

16 MR. AHLERS: Mr. Emerson, you talked a
17 little bit about wetlands and vernal pools and
18 discarding some of them or at least reducing their
19 value because of diversity. Is that the only
20 reason why you would lower the value of one of
21 these and not, say, unique -- some unique species
22 or something?

23 MR. EMERSON: Are you speaking about
24 vernal pools or just wetlands in general?

25 MR. AHLERS: Well, I don't remember -- I

1 don't remember exactly the conversation, whether
2 it had to do with vernal pools or wetlands, but I
3 guess my question is, if it pertains to both,
4 fine, if it doesn't --

5 MR. EMERSON: Sure, yeah, okay, yeah, I
6 think I can answer it for both. In regards to
7 wetlands, when we provided -- in our function and
8 value assessment, one of the -- one of the
9 functions and values that we evaluate is whether
10 the wetlands provide habitat for an endangered
11 species or rare species of any kind. We didn't
12 find that in any of the wetlands being impacted as
13 part of the project. As part of our function and
14 value assessment, we also did a rare, threatened
15 and endangered species survey, field survey on the
16 ground, which confirmed those findings. So yes,
17 if we had found rare species in there, that would
18 change what we would consider the level of
19 function and the level of value of those wetlands.

20 In regards to vernal pools, you may be
21 referring to my reference to blue spotted
22 salamanders which we had seen in the preservation
23 area. Those -- those are species -- those are
24 less common species to find in vernal pools than
25 regular yellow spotted salamanders or wood frogs

1 which are the obligated vernal pool species. So
2 yes, the point being, we didn't see any of those
3 blue spotted salamanders in the expansion area
4 vernal pools, in the manmade vernal pools in the
5 expansion area. We saw them in the pools in the
6 preservation area. So that diversity of
7 habitat -- the diversity of species using the
8 vernal pools in the preservation area was greater
9 than in the expansion area.

10 MR. AHLERS: When you talked about
11 compensation for filling, I am assuming that that
12 is at least a minimum of replacing what is lost to
13 some other location that would be preserved --
14 preserved against construction of anything for the
15 future, is that -- is that --

16 MR. EMERSON: Yes, that's correct. The
17 preservation area has a -- that we've set aside at
18 266 acres has a deed restriction that's been
19 placed on it. That's been approved and looked at
20 by DEP staff, it was looked at by the Corps of
21 Engineers as well, and that prohibits development.
22 There's a number of stipulations in there in terms
23 of soil disturbance, timber harvesting is
24 prohibited within that preservation area, a number
25 of development things that would be prohibited.

1 MR. AHLERS: So there's sufficient land on
2 the property to enable you to do that?

3 MR. EMERSON: Yes. With that 266 acres,
4 one of the reasons why -- and this maybe addresses
5 the question that Mr. Laite had as well -- we
6 wanted to preserve an area that was large enough
7 that could be -- we considered to be an
8 ecologically sound unit in and of itself. If you
9 preserve a small, little, tiny area, it's not
10 going to provide the functions as a larger area.
11 This area provided -- had, you know, like I said,
12 well more than the minimum requirements but also a
13 diversity of habitat types and wetland types to
14 provide that level of protection.

15 MR. AHLERS: My next questions are for Mr.
16 Labbe. You talked about oversight of loads coming
17 in or rejected. Can you tell me what your
18 penalties are for -- I mean, you mentioned some
19 not letting them come back in. I mean, that seems
20 like a pretty -- pretty easy off type thing. Do
21 you have any stricter penalties? Do you audit
22 your upstream suppliers so that you know what
23 they've got coming in? Do they provide you with a
24 description of what they're supplying you?

25 MR. LABBE: Yeah, so when I was talking

1 about penalties, that was for the drivers with
2 overweight trucks, but with regard to waste
3 acceptance, the process we've got is in line with
4 the DEP/EPA requirements and it's very thorough.
5 So, say you're Joe Generator and you've got a site
6 where -- you've just acquired and it's got some
7 contaminated soils, if you contact one of our
8 sales guys or someone in the field or even a third
9 party and Juniper Ridge is one of the options, you
10 have to go through the waste characterization
11 program which initially starts with, well, who are
12 you, where is the material coming from, what are
13 the major -- like does it have any odor, can you
14 describe the material to me, what was the source
15 of contamination for that material, and based on
16 this profile form which I showed you the first
17 page, it's kind of like an interview process. We
18 evaluate that information and then we go back to
19 what we have called blanket permits which are
20 permits issued by the DEP that allow us to take in
21 certain materials like contaminated soils. We
22 say, okay, if you -- if your category is one of
23 those blanket permits, well, we have testing
24 requirements. So, okay, Joe Homeowner, you have
25 to go or industrial producer, you have to go and

1 test your -- test your soil for -- sorry -- for
2 these metals, these VOCs, volatile organics, these
3 semi volatile organics, whatever happens to be
4 required. Now, if it's a material that does not
5 fit in our blanket permits, then we have to apply
6 for a specific permit for that material with the
7 DEP and then we have a prescriptive testing that
8 needs to be developed for that material and you,
9 as the generator, for every load you bring to us
10 have to have a manifest. So once we have -- this
11 is kind of a long process, I apologize, once we
12 have that initial information, we'll put you in
13 our database system and when we have the testing
14 and we can approve the testing, I review it and
15 there's EPA and DEP limits on different
16 materials -- on different metals and volatiles and
17 semi volatiles, different compounds, assuming that
18 you're okay and you've been approved and you meet
19 those, we put that data into our database as well
20 and then we finalize that what we call a profile
21 and it pops out something called a profile number.
22 We take that information, put it in our scales
23 program. Only then can you start bringing us
24 material once the scales program has been
25 populated, and then we give you that profile

1 number as a distinct profile for your material.
2 You bring in a manifest -- for each load that
3 comes in you have to have -- identify everything
4 on that manifest that we require with the profile
5 number on it, give it to the scale attendant, the
6 scale attendant can inspect it and that's where we
7 go to the inspection process, we're inspecting
8 material, type you into the system and then you
9 can come in and bring your material. So that way
10 we can track exactly what you're bringing us based
11 on that profile number, how many loads, how many
12 tons for each load, what that material was, what
13 the dates you brought it in were, each manifest
14 that you give us is stapled to our manifest we
15 generate and put in a permanent file. So, you
16 know, there's a lot of questions about is this
17 material vetted, do you know where it comes from.
18 I just don't -- I don't think people understand
19 the process that needs to go through for materials
20 to come in, and that's really -- I know that's a
21 long answer but that's kind of the process.

22 MR. AHLERS: Have you ever had to tell an
23 upstream client to find another disposal site?

24 MR. LABBE: Yes, we have turned material
25 away. An example would be sandblast grit. Say

1 they're sandblasting an old bridge, lead paint is
2 an issue when you do sandblasting. They're
3 required to do a metals test. We've had instances
4 where they send us their analytical results and
5 their lead is above our requirements so we say
6 this is a hazardous material, we can't take this
7 material at our site, you need to find a home as a
8 hazardous waste site, which is out of the State of
9 Maine because there is no hazardous waste disposal
10 sites in the State of Maine, so it needs to go out
11 of state.

12 MR. AHLERS: Thank you.

13 CHAIRMAN PARKER: Tom.

14 MR. DOBBINS: This is a question for Mr.
15 Emerson. Back to the preservation site, you
16 mentioned 266 acres which is two times the Army
17 Corps requirement. Is that 266 acres -- because I
18 think this was what the person in the audience
19 wanted to know -- as an example, we'll just say it
20 was ten acres and two acres were that purple area.
21 Is that ten new acres you've got or is that eight
22 and two?

23 MR. EMERSON: Right, no, it is 266 new
24 acres.

25 MR. DOBBINS: New acres above --

1 MR. EMERSON: Yes, yes, exactly.
2 There's -- there's -- that purple area that we're
3 encompassing is 16 acres, so combined it's 282
4 total acres in that one continuous area.

5 MR. DOBBINS: Thank you.

6 CHAIRMAN PARKER: Any questions from the
7 staff?

8 MR. BEHR: Is this on? Okay. I have
9 questions for Mr. Sevee. Mr. Spencer's questions
10 have helped address some of those. Is it still
11 on? Okay. Let's start with the groundwater
12 divide that's located presumably southwest of the
13 facility and you discussed the lines of evidence,
14 there were four, and one of them has to do with
15 the modeling that's been completed, but I'm
16 wondering are there --

17 MR. EASTLER: Can't hear you. You'll need
18 to take your thumb off that little thing.

19 MR. BEHR: My thumb isn't on this thing.
20 How is this? Okay, loud and clear. For this
21 proposed application, you did submit new modeling
22 results. Did the application include additional
23 explorations that would help us feel more
24 comfortable in the existence of that groundwater
25 divide and could you elaborate on those

1 explorations?

2 MR. SEVEE: For the expansion, there were
3 no additional offsite investigations compared to
4 the earlier application of the original landfill,
5 but during the original landfill application, this
6 issue particularly of groundwater movement toward
7 Route 43 was a concern. James River at that
8 particular time went out and met with individuals
9 around the landfill and that was raised as a
10 concern. When we got the information for the
11 original landfill site and started understanding
12 how this groundwater would behave in that
13 low-lying wet area coming up to the ground
14 surface, we felt as though we didn't have any
15 information on the other side of that where this
16 hydraulic barrier would exist to confirm that that
17 same hydrogeology was on the other side, and so we
18 got permission to go onto the other side of the
19 creek and put in well 209 I think it is there and
20 that basically showed the same hydrogeologic
21 system; in other words, the groundwater was
22 following the ground surface, the pressure down
23 deep in the bedrock were similar to what it was in
24 the soil; in other words, we weren't getting a
25 draining effect, if you will. So that's the only

1 piece of information that we have on that side of
2 the creek in terms of an exploration.

3 MR. BEHR: If you were asked to collect or
4 complete additional explorations to define that
5 groundwater divide, what would you propose?

6 MR. SEVEE: To me, the most useful
7 location would be at the -- at the peak of the
8 topography in that direction, and you'd want to go
9 down deeper into the rock. You'd want to make
10 sure that the pressures in the rock are reflecting
11 those groundwater pressures and that is what
12 provides that hydraulic barrier.

13 MR. BEHR: Okay. Another question for
14 John. Related to the remote possibility that at
15 some time in the future if this expansion is
16 approved you have a leak and you've already
17 addressed -- spoken briefly about the remedial
18 techniques, but I'd like you to talk a little bit
19 about the timeframe for -- if there is a -- we
20 know there isn't but a typical leak that you would
21 have to -- that would require a pumping well, how
22 long would it take the facility to do the
23 groundwork once we know that there's some sort of
24 release to install or design and install and begin
25 operation of a remedial project like that?

1 MR. SEVEE: Okay, sampling at the site is
2 done every -- approximately every three months
3 except for the winter period. So if we detected
4 some change in the water quality, it may be -- and
5 there wasn't anything in the previous round, that
6 means that leak could have been going on for
7 approximately three months. Once we confirm that
8 piece of information with a subsequent analysis,
9 that may take another few months. At that point
10 we would need to sit down with the DEP and discuss
11 what we've observed and come up with what is the
12 -- what should we be looking at and what is the
13 potential source of that. That may take some
14 period of time. You'd probably end up doing some
15 sort of subsurface investigation and that may take
16 several months to do. It may take up to six to
17 eight months to do depending on the complexity and
18 so forth and how we're tracking it down. The
19 bedrock may take a little bit longer than
20 something occurring in the till, and then once you
21 have that information and come up with a remedial
22 approach, it wouldn't take very long to come up
23 with a remedial approach, assuming that we're all
24 on the same page, the DEP and the landfill
25 operator, and then you would implement it. If it

1 was pumping, that can be implemented -- I mean, it
2 takes a day to put in a groundwater extraction
3 well. The biggest part of the element would be
4 finding out how to pipe this system together and,
5 you know, is it a single well, is it multiple
6 wells and that sort of thing. Again, that may
7 take several months to complete. So those are the
8 various parts and so we're sort of talking about
9 timeframes of a year but realistically you'd
10 probably want to add a factor of safety of maybe
11 two on top of that, so you're talking about maybe
12 something in the order of one to two years
13 realistically to implement something. Sometimes
14 it can go a lot faster. If it's a simple problem,
15 I mean, you could be in there -- I've been
16 involved in some situations where we've identified
17 a problem and we're in and out in a matter of a
18 few months.

19 MR. BEHR: Thank you. The next question
20 has to do with the computer modeling that you've
21 done to simulate groundwater flow directions and
22 you've done a series of model simulations, one
23 includes predicting the flow under current
24 conditions, and if we're looking at the northern
25 part of the proposed expansion, the model's output

1 shows flow in a northerly direction in a portion
2 of that. Once the landfill, if the landfill is
3 approved, it's built out, the modeling that you
4 did demonstrates or predicts that groundwater flow
5 in the northern portion of the landfill is going
6 to flow in the opposite direction. So my
7 questions are, was that a surprise to you; and,
8 two, how does that alter the monitoring program
9 for the future?

10 MR. SEVEE: It wasn't a surprise in the --
11 from the perspective that when the landfill is
12 completely constructed, that whole ridge basically
13 is going to be covered with plastic and
14 precipitation recharge is going to be eliminated
15 from that ridge. So we knew that the groundwater
16 patterns were going to change. We sort of
17 anticipated before running the model that the
18 groundwater would probably move from the southeast
19 across the site more or less to the northwest.
20 That was our supposition, but the wonderful thing
21 about these computer simulations is that it gives
22 us a much better insight into what the groundwater
23 will probably do, and so that's -- you know, it's
24 just another great tool that we have today that we
25 didn't have years ago in order to design these

1 monitoring systems, and in terms of the monitoring
2 network, yes, it is important to know that because
3 we want to put the monitoring wells in the areas
4 where the groundwater is going to be moving from
5 underneath the landfill, irregardless of what the
6 source is, we want to be on that downgradient
7 area. So yes, that will be important.

8 Of course, we will also have groundwater
9 level measurements around the landfill and I
10 believe we may be doing something underneath the
11 liner as well to redefine that groundwater pattern
12 and that will also add into how we deal with the
13 monitoring wells at that point in the future.

14 MR. BEHR: Thank you. And the last
15 question has to do with current groundwater
16 quality in the vicinity of the landfill. Mr.
17 Spencer asked some questions about how the water
18 quality has changed and in annual reports
19 submitted by Casella you have noted that because
20 recharge has been reduced significantly by the
21 existing footprint that we are seeing water
22 quality changes that are not related to leachate
23 releases, and I ask how much -- that adds a level
24 of difficulty obviously to determining whether or
25 not changes that are observed in the water quality

1 are a result of leachate release or activities
2 associated with constructing and operating the
3 landfill. Are you certain that in the event the
4 expansion is approved that we will be able -- and
5 Casella will be collecting data that would enable
6 Casella and yourself and the State of Maine to
7 determine whether or not the landfill is operating
8 properly given that we're ultimately going to
9 change groundwater flow directions, we know that
10 based on your analysis that water quality changes
11 without any release of leachate to the
12 environment?

13 MR. SEVEE: We will have in the future --
14 assuming that the expansion is approved, we will
15 have information on the quality of the leachate
16 that's being generated by that expansion, and what
17 we would typically do would be to look at that
18 suite of compounds that's in the leachate and
19 evaluate which ones are the most mobile and look
20 at the groundwater chemistry in the monitoring
21 wells and decide, okay, are we seeing the same
22 compounds that are in the leachate outside in the
23 monitoring wells, and for instance, yes, there are
24 some changes in water quality at the existing
25 landfill, but the most prominent species --

1 chemical species in the leachate is chloride and
2 we don't see that increasing. So you basically
3 fingerprint the leachate and you compare that with
4 the fingerprint of the water quality and that to
5 me is what provides you with the confidence to say
6 that the landfill liner system is working properly
7 or improperly, and sometimes it's difficult to
8 tell and sometimes you need to take another step
9 and maybe test for some other compounds or
10 whatever to see if you can fingerprint it better,
11 but that's basically the method that I would use
12 and that's what gives me the confidence that we
13 would be able to detect a leak.

14 MR. BEHR: Thank you.

15 MR. FARRAR: All right, this question --
16 is it working? This question will be for Mike
17 Booth, if you can hear it. This question is for
18 Mike Booth. Mike, in your written testimony and
19 this morning you talked about the use of proposed
20 pressure transducers located at the bottom of each
21 cell to monitor the leachate level --

22 CHAIRMAN PARKER: Excuse me, speak a
23 little slower so --

24 MR. FARRAR: You talked about the pressure
25 transducers that will be in the bottom of each

1 cell to measure the leachate head buildup on each
2 of the cells and this morning you described an
3 acceptable upper limit of 12 feet. Would you like
4 to clarify that?

5 MR. BOOTH: Yeah, I misspoke. It was 12
6 it was -- it's 12 inches, sorry about that.

7 MR. FARRAR: Okay 12 inches.

8 MR. BOOTH: 12 inches is what's in the
9 regs. I did misspeak.

10 MR. FARRAR: Could you describe the
11 actions that would need to be implemented if the
12 12-inch maximum limit was exceeded?

13 MR. BOOTH: Probably the first action
14 would be to inspect and clean the leachate lines.
15 If they're not draining properly, then that would
16 be a reason for a leachate head to build up inside
17 the cell so the first thing to do would be to
18 inspect and also clean it. The technology that's
19 available now we can actually put a camera down
20 the lines and we use a large enough pipe so that
21 we can get that camera down and can actually get
22 cleaning equipment into the lines to clean.

23 MR. FARRAR: Also in your pre-filed
24 testimony you presented some figures for leachate
25 reduction rates that would be expected during the

1 operational period of the proposed expansion.
2 Were those figures you included in there just for
3 the expansion or did they include the existing
4 landfill.

5 MR. BOOTH: They were for the entire site
6 and that was -- in the slide which I showed the
7 progression of the development, what we did is we
8 looked at the entire landfill site and how much
9 leachate would be developed -- generated from each
10 of the individual areas depending on whether
11 they're open, closed or had intermediate cover and
12 then we sumped those all together because they
13 were all going into the same leachate storage
14 tank.

15 MR. FARRAR: Okay, and as the operations
16 go forward would Casella be monitoring whether or
17 not the leachate flows coincide with what those
18 predictions were?

19 MR. BOOTH: I would hope so.

20 MR. FARRAR: Okay, thank you. And just
21 for those that don't know, you described both 80
22 mil and 60 mil geomembrane liners in your liner
23 system. Could you put those in terms of inches?

24 MR. BOOTH: Yeah, a mil is one-thousandths
25 of an inch. So 80 mils is eighty-thousandths of

1 an inch, eighty one-thousandths inches. It's
2 about that thick (indicating) and 60 mils is sixty
3 one-thousandths of an inch.

4 MR. FARRAR: Thank you. The next question
5 is for Jeremy Labbe. You discussed the broadband
6 and backup alarms of Casella equipment at the
7 existing landfill. Could you describe a little
8 further how those work and --

9 CHAIRMAN PARKER: Excuse me, speak a
10 little slower and clearer so she can understand
11 you.

12 MR. FARRAR: Okay. Would you be able to
13 speak and describe a little bit further how those
14 alarms work and perhaps what their zone of
15 influence or maybe travel distance of the sound
16 waves might be?

17 MR. LABBE: Yeah, so I don't --
18 unfortunately I don't have the spec sheet for them
19 in front of me so I don't know the travel
20 distance, but they are a broadband sound alarm, so
21 it's -- and I might have to punt to our sound guy
22 who can explain sound pressures and how they
23 affect your ears but in laymen's terms, with a
24 typical beeping alarm, and if you guys have ever
25 been around a construction site or anything

1 backing up, you can hear it but you have no idea
2 where it's coming from. So most people are doing
3 this (gesturing) trying to figure out where the --
4 and you don't even know if it's coming towards
5 you. With these broadband alarms, you can
6 actually detect like someone speaking to you what
7 location around your head it's coming from, if
8 it's going away or coming towards you.
9 Additionally, like you said, because of the type
10 of sound that's coming out, it doesn't travel as
11 far. I don't have -- I don't have that distance
12 unfortunately. It's in the -- I'm sure it's in
13 the technical literature that comes with the
14 alarms. So they don't come stocked on equipment,
15 we have to install them aftermarket, so we've been
16 very, very, very happy with them. I would
17 encourage anybody who has the opportunity to use
18 them because they are phenomenal.

19 MR. FARRAR: Okay, without giving the
20 exact distance, you've been out on the site, how
21 far would you roughly say it would be?

22 MR. LABBE: Well, this is the cool part.
23 So say there's a bulldozer with its blade where
24 you guys are at like maybe ten feet away and it's
25 backing up that way, you can't hear the backup

1 alarm, maybe if you listen really closely you can
2 barely hear it, but if he's on the other side of
3 the cell and he's backing towards me and he's
4 facing me backing towards me, I can hear him clear
5 as day and that's the great thing about it. It's
6 not -- you know, it doesn't travel in a circular
7 fashion, and I'd say across the cell is really
8 clear. I mean, if you're -- I can't hear them
9 when I'm standing on the paved area, you know,
10 offsite, off the cell, I can't hear those guys
11 operating on the cell. So I guess on a clear day
12 if you're really listening and you're far away you
13 can detect it further.

14 MR. FARRAR: Thank you. In addition to
15 the four offsite hydrogen sulfide monitors you
16 talked about, you used two internally to the
17 landfill. Could you describe how you use those
18 further in the context of the overall odor control
19 program at the site?

20 MR. LABBE: Sure. So the four meters
21 were -- the locations were predetermined. We
22 worked with the DEP to figure out predominant wind
23 patterns and locations where we think those would
24 be most effective and those are off site at
25 residences or close to residences off the site.

1 The two onsite monitors we have we use for -- I
2 call them operational monitors so we can move them
3 from locations. Recently we've had them in two
4 locations that we think are predominant ones,
5 right on the south side and actually that's the
6 one I pointed out during our site visit, literally
7 right off the landfill. The other one is north of
8 the landfill closer to Route 16. So we can move
9 those and we really use them operationally to
10 gauge how we're doing onsite because really if we
11 can mitigate or manage the odor onsite we can help
12 with odor potential offsite.

13 MR. FARRAR: And you also discussed a
14 reporting limit for the hydrogen sulfide monitors
15 offsite of 15 parts per billion. Could you
16 discuss how you obtained that as the number to use
17 for the reporting purposes?

18 MR. LABBE: An iterative process, is that
19 enough detail? No, so 15 parts per billion, you
20 know, there was a lot of back and forth on
21 hydrogen sulfide measurement as a whole.
22 Depending on if you live in certain states, they
23 have certain, you know, different criteria they
24 look at and 15 parts per billion was not a chronic
25 level but a -- an acute level, thank you, so that

1 was a level we decided to go with for an alarm
2 setting for Maine.

3 MR. FARRAR: Okay, thank you. Could you
4 briefly describe the operational procedures that
5 Juniper Ridge Landfill takes to avoid potential
6 landfill fires?

7 MR. LABBE: Yeah, absolutely. Important
8 is cover, very important. Obviously as my safety
9 guy always likes to talk about, the fire triangle,
10 for those of you who -- you know, you need oxygen,
11 you need fuel, right, and an ignition source,
12 right, of some sort. Sorry, I can't remember my
13 triangle. So the biggest one, we can't change the
14 fuel, right? The fuel is the waste, it's there
15 and we try to eliminate any possible sources of
16 ignition. That's why we have a specific hot load
17 area that's not in an active waste placement area.
18 That's on a gravel pad in case we ever have a hot
19 load coming in and then the biggest thing that we
20 take out is oxygen, and that's -- the way we do
21 that is by our synthetic cover materials which
22 eliminate the potential for oxygen getting into
23 the waste, our extensive daily cover as well as
24 watching our gas collection system to make sure
25 we're not over pulling. We want to make sure that

1 we're pulling all the gas that's being generated
2 or as much as possible that's being generated but
3 we don't want to be pulling so much that we're
4 pulling air into the waste and creating
5 potentially an aerobic environment, kind of like
6 the wet hay bale I like to look at. We don't want
7 to create that environment. So that's why we
8 monitor our system very thoroughly.

9 MR. FARRAR: Okay, and I think you
10 answered this question already but you talked
11 about overweight trucks and penalties for the
12 truckers that bring them in.

13 MR. LABBE: Um-hum.

14 MR. FARRAR: I thought I heard you say
15 that the first time it's a warning, the second
16 time you're -- two strikes you're out, is that
17 accurate?

18 MR. LABBE: So the 105 is a three strike
19 policy, 105, right, and 110 is a one strike
20 policy.

21 MR. FARRAR: Okay, thank you.

22 MS. ELEFThERIOU: Mr. Labbe, in your
23 testimony you noted that JRL has a backup sulfur
24 removal system using Sulfa Treat media. Would you
25 please explain how the system is used in

1 conjunction with the Thiopaq sulfur removal
2 system?

3 MR. LABBE: So currently we maintain it as
4 a backup. It's on standby in case we need to.
5 Our air license requires our Thiopaq system to be
6 operational 95 percent of the time or at least a
7 treatment system, whether it's primary or
8 secondary, and we have not had to use our Sulfa
9 Treat system since we began operation of our
10 Thiopaq. We've been well over 95 percent up time
11 on our Thiopaq system since its commencement of
12 operation in 2015, which is quite exciting, but
13 the Sulfa Treat system is basic. It's iron oxide
14 pellets. Think of something the size of kitty
15 litter or maybe a little bigger. It's clay
16 material that's actually impregnated with iron
17 oxide on the surface. It's coated, I should say,
18 with iron oxide on the surface and you pass the
19 gas through it and the hydrogen sulfide reacts
20 with that iron material and pulls it out, but then
21 you have to take that sulfur laden material out
22 and you waste it away. Now, it's permanently
23 bound in there, it's not coming out as iron pyrite
24 but you actually have to put it in the landfill so
25 it's one of those things that it's not a

1 regenerable process and so it's very labor
2 intensive to change that out and it's costly and
3 it's not the best environmental solution. So we
4 keep it as a backup, but our primary solution is a
5 regenerable process that uses bacteria to create
6 elemental sulfur and that's the Thiopaq process.

7 MS. ELEFThERIOU: Thank you. Mr. Labbe,
8 Exhibit 45 of your direct testimony, that's the
9 odor complaint management and response plan, you
10 have a figure that illustrates odor-related
11 complaints from 2005 through June of 2016. In
12 general, the number of odor complaints seems to
13 have decreased since 2007; however, it appears
14 that odor-related complaints increased during 2015
15 when the Thiopaq sulfur removal system was
16 installed. Would you please explain this
17 increase?

18 MR. LABBE: Yeah, sure. So during
19 startup, if you've ever started up an industrial
20 facility, the startup is a process that takes time
21 to get things running smoothly. Additionally,
22 what you do inside the system is you actually
23 aerate the liquid where the bacteria live and they
24 actually need that oxygen just like you and I do,
25 and that oxygen comes out the top, the air comes

1 out the top, and it does have some sulfur odor to
2 it and so when we built the facility, we installed
3 an interim carbon system which was small and we
4 didn't feel was adequate to handle the amount of
5 -- it was something that really I put together and
6 I wasn't happy with it when I put it together, so
7 we actually went and put in a full-blown carbon
8 system that's much better that summer, and you can
9 see in 2016 it's all but eliminated those issues
10 and we're very happy with the process. We were
11 always happy with the process, and we think now
12 it's -- it's -- we've found what we needed to do
13 as far as the carbon system to be more adequate.

14 MS. ELEFThERIOU: Thank you. Again for
15 Mr. Labbe, in your direct testimony on page 15 you
16 noted that waste activity reports detailing each
17 and every load of waste material accepted at JRL
18 are submitted to the Maine DEP, the Bureau of
19 General Services, the Landfill Advisory Committee
20 and the City of Old Town on a monthly basis. For
21 the record, the Department no longer receives
22 these reports but has access to them
23 electronically via the DECB website.

24 MR. BEYER: This question is for Mr.
25 Emerson. In your testimony you described the

1 methodology -- the Highway Methodology for
2 determining wetland functions and values. Can you
3 just briefly describe what that entails and how
4 you go about looking at a wetland and determining
5 what functions and values it has?

6 MR. EMERSON: Sure, yes, I can. So the
7 Highway Methodology, as I mentioned, is a Corps of
8 Engineers methodology that assesses 13 different
9 functions and values and those range from wildlife
10 habitat, flood flow alteration, sediment
11 intoxicant retention, all the way down through.
12 Those are one of the functional things it assesses
13 and then the ones that are more values are visual
14 quality, aesthetics, endangered species habitat,
15 these types of things. So the Highway Methodology
16 is a qualitative assessment, it's not a
17 quantitative, you don't assign a number score to
18 it. It's meant to be a field-based survey
19 combined with a desktop level assessment. So you
20 do a review of available resources that you have,
21 whether that's, you know, state mapping resources
22 or aerial photographs, USGS maps, all these
23 various publicly-available sources and any other
24 mapping that you have to determine what the
25 functions are of these wetlands and then you do a

1 field visit, and the field visit is where I feel
2 like you really get the most out of it because you
3 can really see what the conditions are of the
4 wetlands. So you go out and you check what the
5 predominant community type is, is it a forested
6 wetland, is it a scrub/shrub, is it emergent, what
7 the habitat diversity is. You know, a wetland
8 that's strictly a forested wetland is going to
9 have lower functions than a wetland that's got a
10 variety of habitats, let's say, a mix of
11 scrub/shrub, shrubby plants versus emergent
12 grasses and a dense marsh area. You also assess
13 the surrounding landscape in terms of what's
14 there, how much development pressure is on these
15 wetlands, what are the -- what are the natural
16 systems and upland area like around these
17 wetlands. So there's a series of considerations
18 that are included as an appendix in the Highway
19 Methodology that you can walk through to assess
20 each wetland related to each function and the goal
21 of that is to determine, number one, whether or
22 not the wetland provides that function at all,
23 and, number two, if it provides that function,
24 does it provide it at a level to be considered a
25 principal function, meaning it provides it at a

1 high level and so it's a process you go through
2 for each wetland as you go out and we did it for
3 this project for the expansion area and then
4 within the preservation area as well, went out to
5 field visit each wetland and documented those --
6 those conditions and that's how we arrived at the
7 conclusions we have.

8 MR. BEYER: Thank you.

9 CHAIRMAN PARKER: Okay. Any further
10 questions? Any redirect?

11 MR. DOYLE: I have one redirect. Just one
12 question for Mr. Sevee. Mr. Behr asked you about
13 the time it would take to design a remediation
14 system if there were a leak and you discussed how
15 long it may take to -- for a leak to be detected
16 in a monitoring well. Given that this is a double
17 liner system, could you explain the role of the
18 leak detection system in detecting leaks before
19 they even get to a monitoring well?

20 MR. SEVEE: The function of the leak
21 detection system is basically to act as an early
22 warning system of leakage to the primary liner,
23 and as Mike testified a little while ago, we would
24 see that in a relatively short order of time
25 measured in days or weeks, and so it's basically

1 to have a jump on dealing with leakage to the
2 primary liner before it even gets out into the
3 groundwater environment beyond -- you know, either
4 underneath or beyond the landfill.

5 MR. DOYLE: That's it.

6 CHAIRMAN PARKER: Thank you. Okay, we're
7 running about ten minutes behind schedule right
8 now. Did you have any redirect?

9 MR. SPENCER: I've got a quick question --

10 CHAIRMAN PARKER: Recross.

11 MR. SPENCER: -- for Jeremy Labbe or
12 anyone for that matter. What is the low level,
13 the constant exposure limit for hydrogen sulfide?

14 MR. LABBE: There is no established low
15 level concentration limit for hydrogen sulfide.

16 MR. SPENCER: So the 15 parts per billion
17 as acute level, what's the duration -- what's the
18 -- you know, at what point could exposure to 15
19 parts per billion cause a health problem?

20 MR. LABBE: So, again, it depends on the
21 study you're talking about. There's no limits in
22 the State of Maine on hydrogen sulfide
23 concentrations. You want to be careful not to say
24 that there are. You know, in our established --
25 what we established voluntarily was based on what

1 we felt through research and papers and other
2 things would be an adequate level for safety.
3 Now, as far as the timeline, it depends on the
4 paper you talk to and I can't give you that
5 information off the top of my head.

6 MR. SPENCER: Okay, thanks.

7 CHAIRMAN PARKER: Are we all set? Okay,
8 right now we're running a little bit behind so
9 we're going to take -- I'm going to try to squeeze
10 out about ten minutes but then we're going to
11 start promptly because we want to get this
12 finished before we open our public session, so
13 4:00 on the button.

14 **(OFF RECORD)**

15 CHAIRMAN PARKER: We're now going to have
16 a presentation by Dr. Coghlan. He's here on
17 behalf of Mr. Spencer, and as I've cautioned
18 people, try to speak loud and slow because she's
19 been working a long day so far. Go ahead.

20 MR. SPENCER: I just want to briefly
21 introduce Dr. Stephen Coghlan and it's my great
22 privilege to have made his acquaintance. Thank
23 you.

24 MR. COGHLAN: Well, the feeling is mutual.
25 Is that on? Can everybody hear me?

1 MR. EASTLER: It's not on.

2 MR. COGHLAN: How about that?

3 CHAIRMAN PARKER: You've got it.

4 MR. COGHLAN: The feeling is mutual, Ed.
5 Thanks to the Board and to Cindy especially for
6 accommodating my teaching schedule. I think my
7 students probably would have preferred I cancel
8 class tomorrow but we'll do it this way. I also
9 wanted to say thanks to all the previous
10 presenters with their testimony written and also
11 the rebuttal of mine. Certainly I've learned
12 quite a bit since I've gotten into this, so I
13 appreciate that.

14 So Steve Coghlan, I'm an associate
15 professor of freshwater fisheries ecology at the
16 University of Maine. It's nice to see another
17 U-Maine graduate here. In general, my areas of
18 focus and what I teach courses in would be
19 freshwater fisheries ecology and management,
20 general ecology, ecological statistics and
21 biophysical economics. In general, I do research
22 on aquatic ecology --

23 CHAIRMAN PARKER: Slow down a little.

24 MR. COGHLAN: Sorry, in general I do
25 research on aquatic ecology. Much of my research

1 lately has focused on the ecological effects of
2 dam removal in the Penobscot River Watershed. I'm
3 also director for the Maine Chapter and network
4 speaker for the Center for the Advancement of the
5 Steady State Economy or CASSE -- see if this
6 works -- sorry, those were supposed to pop up one
7 at a time.

8 So the scope of my testimony today, I
9 think I'm here for two reasons. I'm not here to
10 be either an advocate for or a proponent against
11 the expansion. I'd like to be here as a
12 scientist, as an ecologist. I'd like to bring
13 some skepticism, I think that helps science out
14 quite a bit, to identify what I thought were
15 insufficiencies or gaps in the knowledge or gaps
16 in the information and I'd also like to bring
17 maybe a slightly different perspective than we've
18 heard so far and so I think that science really
19 progresses greatly by both of those things, some
20 skepticism and another perspective.

21 So I'm approaching this taking a systems
22 ecology view of how the landfill and its expansion
23 would relate to our natural economy and our
24 natural environment and our economy and my
25 testimony is based on my limited understanding of

1 natural processes and how they conform and they're
2 governed by and constrained by biophysical laws.
3 And so first and foremost I claim no expertise
4 regarding any legal or regulatory matters. I'll
5 do my best to just stick to what science that I'm
6 comfortable with. So the major points that I'm
7 going to go through from my pre-filed written
8 testimony would be first discussing some federally
9 protected fish, Atlantic salmon, Atlantic sturgeon
10 and short-nosed sturgeon, talk about sea-run
11 fishes in general in the Penobscot River, to tie
12 those both into the Penobscot River Restoration
13 Project, which I'll describe in some detail in the
14 context of improving or increasing ecological
15 integrity and also resilience of the entire
16 Penobscot River watershed, anthropogenic climate
17 change or global warming, and then wrap up with a
18 few final thoughts.

19 So Atlantic salmon are a species with a
20 very long, complex, complicated life history.
21 Spawning occurs in small streams or rivers in the
22 fall, adults build gravel nests, they deposit
23 their eggs, fertilize, they incubate over the
24 winter in the gravel, the young emerge in the
25 springtime, they establish and defend territories,

1 they intercept drifting invertebrates in cool,
2 swift rocky streams, depending on their growth
3 rate they might reside in the streams from one to
4 maybe three or four years before they undergo a
5 physiological transformation called
6 smoltification. They can tolerate sea water, they
7 go out to sea and they might come back one to two
8 years later depending on their growth rate and
9 unlike Pacific salmon, they're capable of spawning
10 multiple times.

11 And so we can summarize the physiology of
12 the salmon and some of the aspects of their
13 complex life history with a few important points.
14 So first of all, they need cold, clean water;
15 second, they need free-flowing rivers that allow
16 them access to a wide variety of habitats,
17 anywhere from very small headwater streams for
18 nursery and spawning, all the way out to the open
19 ocean and they also need a landscape or a river
20 scape that contains intact and functioning
21 wetlands and forests and some of the more recent
22 research shows that they actually benefit greatly
23 from having some co-evolved native species with
24 them such as river herrings.

25 So historically the Penobscot River wasn't

1 really a salmon river. It contained 11 species of
2 sea-run fish but by far the most abundant were
3 alewife. It was really an alewife or a river
4 herring river that had some salmon in it. Some
5 estimates of historic abundance were as high as 20
6 million alewife that were produced per year or
7 were spawned per year, three to five million
8 American shad, maybe upwards to around 75 to
9 100,000 Atlantic salmon and a whole bunch of other
10 species, too, two species of sturgeon, sea
11 lamprey, American eel, striped bass, tomcod,
12 brook trout and so on; and of course the original
13 fisheries were harvested sustainably by Native
14 Americans, of course the definition of
15 sustainable, they didn't consume the resources
16 faster than could be replenished annually by
17 nature and they didn't produce more waste than
18 could be detoxified or assimilated by nature. And
19 of course salmon and many other of these
20 species --

21 MR. RAYBACK: Mr. Chairman, I apologize
22 for objecting. Maybe Dr. Coghlan doesn't know the
23 rule but this is all new material that was not in
24 his slides or in his material that was pre-filed.
25 This is the third slide that we hadn't -- with

1 material that we haven't seen before.

2 MR. COGHLAN: Can I respond? All of these
3 references were actually in the original material.
4 The actual pictures aren't.

5 CHAIRMAN PARKER: The rules are that if
6 you're going to use a slide for part of your
7 testimony it has to be provided to the other
8 parties involved. So try to stay with the slides
9 that are actually in your testimony or be just a
10 very quick summary.

11 MR. COGHLAN: Okay, sure. Very briefly,
12 fisheries declined for a variety of reasons,
13 damming, pollution, deforestation, wetland
14 destruction, overfishing and urbanization.

15 THE REPORTER: Excuse me, you have to slow
16 down.

17 CHAIRMAN PARKER: Not that quick.

18 MR. COGHLAN: Okay. Damming, pollution,
19 deforestation, wetland destruction, overfishing
20 and urbanization, which were described in the
21 sources that I referenced in my original
22 testimony.

23 Salmon are on the brink of extinction in
24 the United States and --

25 MR. RAYBACK: Mr. Chairman, this map, for

1 example --

2 CHAIRMAN PARKER: Was this in your
3 testimony?

4 MR. COGHLAN: This was referenced to by
5 the website from NOAA and the National Marine
6 Fisheries Service.

7 CHAIRMAN PARKER: No, not references and
8 not web sites. It has to be in your testimony.

9 MR. COGHLAN: Okay. So to summarize --

10 CHAIRMAN PARKER: How many more slides do
11 you have?

12 MR. COGHLAN: About 30 slides.

13 CHAIRMAN PARKER: Were they included in
14 your testimony in your presentation?

15 MR. COGHLAN: The references were but the
16 images were not.

17 CHAIRMAN PARKER: Okay, well, the images
18 we're not going to allow.

19 MR. COGHLAN: Okay. So the important
20 parts of this --

21 CHAIRMAN PARKER: Ones sort of like that,
22 yes, because that's general but not the other
23 pictorial ones because they haven't been provided
24 to everyone.

25 MR. COGHLAN: Sure. So to summarize, the

1 importance of the Penobscot River to Atlantic
2 salmon, first of all, Maine harbors the last
3 remaining wild population of Atlantic salmon in
4 the U.S., the Penobscot River is home to the
5 largest river-specific stock and of course all
6 stocks but also the Penobscot River are on the
7 brink of extinction, and of all Maine rivers, the
8 Penobscot River contains the most and highest
9 quality habitat for all freshwater life stages,
10 and as we heard in previous testimony, the
11 federally-designated critical habitat for Atlantic
12 salmon extends throughout the Penobscot River
13 watershed and portions of the JRL property are
14 located within that critical habitat. So I will
15 not show that.

16 Aside from the actual property, some of
17 the property occurring on federally-protected
18 critical habitat, there's also critical habitat
19 located downstream in the mainstem and so we heard
20 testimony earlier in the written testimony that
21 leachate that is processed at one of those two
22 treatment plants, either the Old Town mill -- the
23 Old Town plant or the Brewer wastewater treatment
24 plant, the effluent would be discharged directly
25 into the Penobscot River mainstem so that's also

1 critical habitat for Atlantic salmon and it's also
2 critical habitat or proposed critical habitat for
3 the protected fish.

4 And so one of my first criticisms of the
5 application is the language conveys confidence,
6 and in my opinion some overconfidence, of
7 non-impact to fish and their habitats. So, for
8 example, one quote is Volume 5, page 8, "this
9 activity will not unreasonably harm any
10 significant wildlife habitat, freshwater wetland
11 plant habitat, threatened or endangered plant
12 habitat, aquatic or adjacent upland habitat,
13 travel corridor, freshwater, estuarine or marine
14 fisheries or other aquatic life." Another
15 example, these watersheds, that is, containing
16 critical habitat, will not be affected by the
17 expansion, and another one, a portion of the
18 expansion area occurs within the broad area
19 designated as critical habitat for Atlantic
20 salmon, *salmo salar*, listed under the Endangered
21 Species Act, ESA but the onsite wetlands do not
22 contain any streams that would provide Atlantic
23 salmon habitat. We've already heard this
24 testimony in a few places.

25 There's another case about the habitat

1 where the application seems to misidentify some
2 professional opinion. A quote here which is from
3 Volume 1, page 1453, based on a review of the
4 SWPPP, prepared by the prior owner/operator of the
5 JRL, parenthetically best judgment, criteria D of
6 addendum A of the MSGP, there is no reason to
7 believe that there would be adverse impacts to
8 endangered species due to stormwater discharge at
9 the site. A letter requesting a review and
10 confirmation of no impacts on listed or eligible
11 species or critical habitat was requested from the
12 Maine Department of Inland Fisheries and Wildlife,
13 a copy of the response is included in attachment
14 12, and if you look at attachment 12, that's
15 actually a letter from the assistant regional
16 wildlife biologist, Allen Starr. It doesn't
17 contain any sort of confirmation that Atlantic
18 salmon would not be affected and it doesn't even
19 reference Atlantic salmon or their critical
20 habitat. It references essential bird habitat.

21 So it seems that the conclusions in the
22 application of nonimpact are based on the premise
23 that because Atlantic salmon don't live in the
24 streams that are actually flowing through JRL
25 property they cannot be impacted. So I have a few

1 criticisms for this. Well, first, it ignores a
2 lot of fundamental biophysical principles. I've
3 mentioned the four laws of ecology in my
4 testimony, viewing the watershed and the ecosystem
5 as a series of interconnections, what happens in
6 one part of a watershed or an ecosystem can affect
7 other components in other places. It doesn't
8 address the downstream leachate effluent, it
9 considers impact as a binary outcome. There's a
10 dichotomy between impact versus nonimpact and in
11 reality, impacts can range anywhere from nothing
12 to trivial up to very severe. And of course any
13 time we, as people or society, assigns some risk,
14 that's influenced by subjective values that, in
15 this case, with regard to risk to and our
16 perceived value of salmon and their habitat. If
17 we happen to hold salmon in high regard and value
18 them, maybe we're less tolerant of risk; if we
19 happen to not value salmon quite as much, maybe
20 we're more tolerant of risk; and of course it
21 assumes that there's no catastrophic failure of
22 technology and no unanticipated weather events
23 that could contaminate surface water or
24 groundwater and eventually into the Penobscot
25 River.

1 And then a point that Ed Spencer had
2 talked about earlier, there was actually no formal
3 ESA review conducted in coordination with the U.S.
4 Fish and Wildlife Service, and then there's a
5 statement from the pre-filed rebuttal testimony to
6 my testimony that said it is also noteworthy that
7 Atlantic salmon are not a state listed threatened
8 or endangered species as defined in the Maine
9 Endangered Species Act or Maine's Marine
10 Endangered Species Act. On the basis of this
11 information alone, I believe the statements made
12 in the application are contrary to my testimony,
13 Mr. Coghlan's testimony, sorry, reasonable. Well,
14 the decision to list species under the federal ESA
15 is based on science, the preponderance of
16 evidence. The decision not to list species under
17 state ESAs often are based on nonscientific
18 criteria.

19 MR. RAYBACK: Mr. Chairman, this is more
20 material that is not in his pre-filed written
21 testimony. There's not a discussion in the
22 pre-filed testimony about the federal ESA and how
23 species are listed.

24 MR. COGHLAN: I'm responding to rebuttal
25 testimony.

1 MR. RAYBACK: There is also not a -- well,
2 our presentations are not allowed to respond to
3 the oral testimony; they're supposed to respond --
4 be summaries of our written testimony.

5 CHAIRMAN PARKER: Stay with your pre-filed
6 testimony.

7 MR. COGHLAN: So I think that we should
8 also consider downstream effects on other
9 protected fish. So also included in the
10 application was a letter from the U.S. Department
11 of the Interior, U.S. Fish and Wildlife Service,
12 Volume 1, page 600, states that species on this
13 list should be considered in an effects analysis
14 for your project and could include species that
15 exist in another geographic area; for example,
16 certain fish may appear on the species list
17 because a project could affect downstream species.
18 Well, there weren't any other protected fish that
19 were considered on the list that was submitted and
20 there was also no mention of downstream impacts of
21 leachate effluent, and I won't show the next
22 slides but they show distribution maps of those
23 two other species which we've already talked
24 about. So another federally-listed species listed
25 as threatened is the Atlantic sturgeon and the

1 Gulf of Maine distinct population segment is
2 protected under the Federal Endangered Species Act
3 and they occur in the mainstem river which would
4 be in very close proximity to where leachate from
5 the Brewer treatment plant would be released and
6 then there's also short-nosed sturgeon which are
7 listed under the Federal Endangered Species Act
8 range wide, not just in the Penobscot River, and
9 they occur in similar habitat.

10 Please ignore the next two slides. So
11 with the leachate effluent, Volume 3, page 55
12 states that with the anticipated slight increase
13 in leachate flows as a result of the expansion,
14 that is, 48,000 average and 57,500 peak month,
15 slightly more leachate will need to be hauled from
16 the site. Well, if you do the math, that's an
17 increase in the average leachate hauled from
18 40,000 up to 48,000 and the effluent released then
19 would also be up by 20 percent. We could
20 certainly argue about how much is "slight." I
21 probably wouldn't consider that slight.

22 We also know that the leachate contains or
23 could contain chemicals of known toxicity to
24 Atlantic salmon, other fish and other life forms.
25 Arsenic, lead and PCBs are just three of the

1 biggies and certainly effects could be lethal,
2 outright death but there could also be a lot of --

3 MR. RAYBACK: Objection, Mr. Chairman.
4 This material is not in the pre-filed direct
5 testimony. Sorry to keep interrupting but we
6 worked very hard to keep our witnesses on task.
7 If I'm wrong about this, I apologize but I don't
8 recall seeing this material.

9 MR. COGHLAN: I mentioned the toxicity in
10 general or specifically of paper sludge effluent
11 and referenced the Clean Water Act.

12 CHAIRMAN PARKER: I'd say your reference
13 to Brewer and your 20 percent is allowable.

14 MR. COGHLAN: Okay.

15 MR. RAYBACK: That's certainly in there
16 but the specific heavy metals, these constituents
17 I don't believe are discussed.

18 MR. COGHLAN: Sure. I'd also mention that
19 Atlantic sturgeon are in the mainstem river which
20 is close to the proximity and there are many
21 unknowns when we're trying to think about effects
22 of this -- potential effects of this leachate. We
23 don't know what the concentration and the volumes
24 of those toxins are, we don't know how long they
25 reside in the river, we don't know what the

1 exposure time to fish would be, we don't know
2 other chemicals constituents, we don't know how
3 those chemical constituents interact with each
4 other, and there's no guarantee that simply
5 conforming to some effluent permitting --

6 MR. RAYBACK: Mr. Chairman, I'm sorry,
7 it's more of the same.

8 CHAIRMAN PARKER: I'm going to ask the
9 witness to reference his information.

10 MR. COGHLAN: Sure. Could I get my
11 testimony up here so I make sure I have it in
12 front of me?

13 CHAIRMAN PARKER: Get your testimony up
14 here and reference it.

15 MR. COGHLAN: Thank you, sure.

16 CHAIRMAN PARKER: Some of what you're
17 saying is in there and some isn't.

18 MR. COGHLAN: Which shows my ignorance of
19 matters. I was proceeding as a scientist trying
20 to convey information and I apologize. So I have
21 this in front of me.

22 CHAIRMAN PARKER: The rules are that
23 anyone who wants to cross examine you has to have
24 had in their hand the testimony.

25 MR. COGHLAN: Absolutely. So the

1 Penobscot River Restoration Project is a
2 nationally-recognized, holistic ecologically-based
3 attempt to restore declining or nearly extinct
4 native fish through the removal of two mainstem
5 dams and also improve fish passage at several
6 other dams. Before the Penobscot River
7 Restoration Project came online a few years ago
8 most sea-run fish were relegated to the lower
9 reaches and with the removal of these dams and the
10 improved fish passage, now fish have more --
11 better access to most of their historic spawning
12 and rearing habitat.

13 And so I'm trying to think about the JRL
14 expansion in context of rehabilitating and
15 restoring some of this original river habitat, and
16 so some of the current research which I have been
17 participating in for about ten years and have
18 referenced in my testimony here shows some
19 immediate effects of dam removals that happen to
20 be unfolding right before our eyes. We see
21 increased abundance of alewife, blueback herring,
22 American shad throughout the river. We see
23 reproduction of these species, some of them for
24 the first time in hundreds of years upstream, we
25 see recolonization of newly-accessible habitat

1 downstream with three species of importance and we
2 see shifts in river resident communities.

3 So the questions that I have posed that
4 are directly in this testimony are, first, should
5 we consider potential effects on alewife
6 populations who have returned this year to Pushaw
7 Stream and Pushaw Lake in the hundreds of
8 thousands to spawn and likely will return in the
9 millions? Should we consider potential effects on
10 fish-eating birds that are drawn to both Pushaw
11 and the mainstem Penobscot by alewife and sea
12 lamprey runs that are in close proximity to
13 high-quality nesting habitat around the periphery
14 of Juniper Ridge property? Should we view
15 wetlands and vernal pools to be destroyed as parts
16 of an interconnected watershed beginning to
17 recover after centuries of over exploitation? Is
18 it counterproductive to increase pollution load in
19 one part of the watershed while trying to decrease
20 pollution in much of the rest? Is it contrary to
21 the stated goals and objectives of the PRRP to
22 expand the landfill? Well, I would and I have
23 answered yes to all those questions. Digging a
24 larger hole and dumping more trash in a landfill
25 located in such close proximity to the Penobscot

1 River and also releasing more leachate effluent
2 downstream directly into the river does run
3 contrary to watershed-wide efforts to restore a
4 river with a long history of misuse and abuse.

5 And now I want to go to my last major
6 point, is the Juniper Ridge Landfill expansion in
7 the context of anthropogenic climate change, ACC,
8 also known as global warming? And I stated pretty
9 bluntly that a glaring and inexcusable omission
10 throughout the entirety of this application is the
11 failure to consider and -- acknowledge and
12 consider anthropogenic climate change specifically
13 in performance of expanded JRL facilities and
14 generally in longer term waste management
15 planning, and I won't speak about the latter
16 because that was redacted from the earlier
17 testimony.

18 And I'm basing the information that I had
19 presented on the state of the climate science
20 based on references that I gave in the testimony
21 here so, for example, a few papers written by Dr.
22 James Hanson, who is a professor at Columbia
23 University and who is also the former director of
24 the NASA Goddard Institute for Space -- Goddard
25 Space Institute, sorry, I don't have the name

1 quite off the tip of my tongue, and I do work -- I
2 have colleagues at the University of Maine who
3 work in the Climate Change Institute. I stay
4 abreast on the current literature because I do
5 teach this topic in my classes and I try to be
6 conversant. So I'm not a climatologist but I hope
7 to convey at least what I understand to be the
8 state of the climate.

9 So the summary that I have of climate
10 change that is relevant to this expansion, first
11 of all, the signal of warming has been discernible
12 from the noise and variability since 1988 when Dr.
13 Hanson gave his first testimony in front of
14 Congress. The observed warming, the actual data
15 we've seen, plus other changes in the climate
16 system have generally occurred faster than earlier
17 models have predicted. Just the basic physics,
18 warming makes the atmosphere able -- capable of
19 holding more water and also evaporates more water
20 which would lead to more extreme precipitation
21 events. Global warming has disrupted oceanic and
22 atmospheric circulation which leads to
23 predictability, more instability and many climate
24 scientists warn that we are approaching or already
25 have exceeded a tipping point into runaway climate

1 change.

2 The next slide I'll show -- I will not
3 show because it does show actual data that I
4 didn't include as a figure that Maine's
5 precipitation has actually increased significantly
6 over the last 70 to 80 years and it also shows --

7 MR. RAYBACK: Mr. Chairman, if we're not
8 going to show the slide because it's not in his
9 testimony, he shouldn't be testifying about it.

10 CHAIRMAN PARKER: I think he's in context
11 with his testimony right now in the paragraph --
12 the center of page 11.

13 MR. RAYBACK: He just said that he was not
14 going to -- I'm sorry, I apologize for
15 interrupting you -- he just said, and I know
16 you're trying to look through the testimony like I
17 am, he just said that he's not going to show us
18 the next slide because it contains his own data,
19 and then I believe he started to tell us what the
20 data was.

21 MR. COGHLAN: It doesn't contain my own
22 data.

23 MR. RAYBACK: I apologize, if he could
24 show us where it is in his testimony, that would
25 be ideal.

1 MR. COGHLAN: I reference increasing
2 precipitation and increasing frequency of extreme
3 precipitation events. There was then rebuttal
4 testimony that said I did not provide any data in
5 support of that. I was under the assumption that
6 the applicant would have the burden of proof to
7 actually do the research so I have directed you to
8 or the applicant to places where you can actually
9 see the data.

10 MR. RAYBACK: We -- we can't use the oral
11 testimony here today to respond. It's not a sur
12 reply to the rebuttal testimony.

13 CHAIRMAN PARKER: Mr. Coghlan, I'd suggest
14 you stick to page 11 of your pre-filed testimony
15 and don't wander far beyond that.

16 MR. COGHLAN: Absolutely. So nationwide
17 extreme probability of once rare extreme
18 precipitation events have increased. What once
19 were considered a very low probability event, for
20 example, a once in 500 year flood which would be
21 expected to occur zero point or zero --

22 CHAIRMAN PARKER: Can you show me where
23 that is in your testimony?

24 MR. COGHLAN: Sure.

25 MR. SPENCER: Bottom of page 11.

1 CHAIRMAN PARKER: I think maybe I found
2 it, okay.

3 MR. COGHLAN: And also part of the
4 reference to Dr. Hanson.

5 CHAIRMAN PARKER: Page 11?

6 MR. COGHLAN: The top of page Hanson (sic)
7 where I reference Dr. Hanson's paper and also his
8 video and also the bottom where I talk --

9 CHAIRMAN PARKER: I found that, that's on
10 page 11. Okay, continue.

11 MR. COGHLAN: Sure. So a storm event, for
12 example, that used to under the old climate regime
13 that would have a probability of occurring, say,
14 0.2 percent of the time, this is once in a
15 500-year storm, the probability of those storms
16 has actually increased.

17 And I will not talk about that. Any
18 prediction of future landfill performance in
19 withstanding extreme rainfall events and flooding
20 should consider shifts in the magnitude and the
21 frequency of storms and flood risks that are
22 associated with the rapidly changing unpredictable
23 climate, and as I noted, the application out of
24 thousands of pages does not actually address or
25 account for the effects of global warming.

1 And we've already reviewed this earlier,
2 but for example, Volume 1 states that, as shown on
3 the site surrounding maps, etcetera, etcetera, the
4 expansion is not located in a 100-year floodplain,
5 etcetera, goes on to reference a 25-year storm
6 event, and this type of conclusion is troubling
7 because it is based on the assumption that future
8 precipitation and runoff events and the flood
9 risks are the same as those that we've experienced
10 in the past but all evidence suggests that the
11 future is likely to be more extreme than the
12 present.

13 We've already discussed this. That just
14 shows the map with the floodplain delineation on
15 it and I've just highlighted the lower section
16 that says it was based upon --

17 MR. RAYBACK: Mr. Chairman, this is not in
18 his testimony.

19 MR. COGHLAN: It's your map.

20 MR. RAYBACK: I understand it's our map.

21 CHAIRMAN PARKER: Take off the exhibit.
22 His testimony is almost verbatim to what he's
23 saying. The exhibit may not have been included,
24 so take off the exhibit and continue with your
25 testimony.

1 MR. COGHLAN: I'm sorry, I was referring
2 to an exhibit that was in the application.

3 CHAIRMAN PARKER: Was it in the
4 application? Continue.

5 MR. COGHLAN: Sure, and if you notice,
6 down at the bottom right-hand side it does say
7 that that map is based upon a FEMA Old Town quad
8 from April 1978 and that's a full decade earlier
9 than Dr. Hanson's first testimony about the signal
10 of warming being obvious.

11 So I would argue that assessing the risk
12 of flooding in the 2020s and beyond based upon
13 floodplains delineated from 40-plus years earlier
14 that have not been adjusted for global warming is
15 misleading and risky.

16 So I pose the question, shouldn't we
17 consider the possibility that the increased
18 likelihood of extreme flooding in the near future
19 makes this floodplain delineation obsolete and the
20 future floodplain might actually encroach
21 upgradient and threaten the integrity of any
22 containment structures nearby. If the frequency
23 and magnitude of storms increase, shouldn't we
24 anticipate for more extreme events with greater
25 frequency such as what once would be considered

1 we'll open it up to some cross examination by the
2 applicant.

3 MR. RAYBACK: Thank you. Dr. Coghlan, on
4 page 5 of your testimony, you say that the liquid
5 leachate from JRL that goes to either the Old Town
6 or City of Brewer wastewater treatment plants is
7 discharged directly into the Penobscot River. I
8 noticed a couple of times today that you changed
9 the phrasing of that to say the effluent is
10 discharged directly.

11 MR. COGHLAN: The effluent, yes.

12 MR. RAYBACK: Is that correct?

13 MR. COGHLAN: After being processed. As
14 far as I know, it's not discharged directly, yes.
15 I apologize.

16 MR. RAYBACK: Okay, thank you. That's a
17 distinction that matters legally?

18 MR. COGHLAN: Absolutely, absolutely.

19 MR. RAYBACK: Thank you. All right, you
20 also take issue in your pre-filed written
21 testimony with the characterization by the
22 applicants that the increase in leachate from the
23 expanded landfill to be treated is slight,
24 correct?

25 MR. COGHLAN: We could argue about the

1 definition. I would consider it more than slight.

2 MR. RAYBACK: In fact, you pointed out
3 and, in fact, you had a slide on it that said it's
4 going to be 8,000 gallons per day more on average,
5 give or take, right?

6 MR. COGHLAN: That's what I got from the
7 application.

8 MR RAYBACK: Okay. So could I show you,
9 please, the -- I want to show you a treatment
10 plant license and I'll walk you through it. You
11 don't have to be an expert on legal and
12 regulatory --

13 CHAIRMAN PARKER: Excuse me, was that in
14 your testimony?

15 MR. RAYBACK: It's cross examination, sir,
16 it doesn't have to be in the testimony. We can
17 impeach with evidence that we have available. The
18 Board can also take judicial notice of a DEP
19 order.

20 CHAIRMAN PARKER: What's the relevance of
21 it?

22 MR. RAYBACK: I'm going to try to compare
23 the increase in landfill leachate to the total
24 permitted flow through the Old Town treatment
25 plant to put that number which he believes is

1 significant into context.

2 CHAIRMAN PARKER: I guess we'll listen to
3 it.

4 MR. RAYBACK: Okay, thank you. And I'll
5 talk you through --

6 MR. COGHLAN: Please.

7 MR. RAYBACK: -- what I'm looking at. All
8 right, on page 5 of that license, and this is the
9 license for the -- I'm sorry, let's start right at
10 the top there just so that the Board hears this
11 information. This is a Maine Pollutant Discharge
12 Elimination System Permit and Waste Discharge
13 License Renewal, correct? Do you see that in the
14 top right of the caption?

15 MR. COGHLAN: Yes.

16 MR. RAYBACK: It's for Red Shield
17 Acquisition, LLC, in Old Town, Maine?

18 MR. COGHLAN: Yes.

19 MR. RAYBACK: So if you would look with
20 me, please, at page 5 of the license, there's a
21 table here that I outlined in blue for you. Do
22 you see in the left-hand column there are a number
23 of parameters, one is -- the first one is flow?

24 MR. COGHLAN: Um-hum, yes.

25 MR. RAYBACK: And the monthly average for

1 flow, could you read that, please?

2 MR. COGHLAN: 24.4, is that million
3 gallons per day?

4 MR. RAYBACK: Yes, it is, yes, MGD is
5 million gallons per day. So let's compare, and
6 this is, Mr. Chairman, what I wanted to do here,
7 is the increase in flow from the expansion -- this
8 is the increase in leachate from the expansion
9 which we said was 8,000 gallons per day on average
10 to the permitted flow for this treatment plant,
11 which is 24.4 million gallons per day, so I can't
12 do that math in my head, Dr. Coghlan, maybe you
13 can, but would you agree with me that the increase
14 in flow is less than, say, one percent of the
15 total permitted flow?

16 MR. SPENCER: I object. Can you hear me?
17 Unless you want to compare the leachate numbers
18 with the current flows, I think it's irrelevant to
19 compare them to the total flow of a functioning
20 paper mill which is not functioning.

21 MR. RAYBACK: Mr. Chairman, the relevance,
22 in my view, is that the infrastructure exists to
23 handle 24.4 million gallons.

24 CHAIRMAN PARKER: I think I'll sustain Mr.
25 Spencer's position because the plant now does not

1 discharge. There's not a 24 million gallon a day
2 discharge. There is a 24 million gallon a day
3 license and if you want to present us with what
4 kind of numbers come out for an actual discharge
5 now, then I think that would be relevant.

6 MR. RAYBACK: We'll move on, thank you.
7 All right, Dr. Coghlan, let's turn to the
8 preservation package that the application proposes
9 to compensate for impacts to wetlands and vernal
10 pools.

11 MR. COGHLAN: Sure. Can you reference --

12 MR. RAYBACK: It's not in that license.
13 We're done with that license.

14 MR. COGHLAN: Oh, okay, sure.

15 MR. RAYBACK: We're done with that
16 license. On page 15 of your testimony you state
17 that although preserving this landscape that is
18 proposed for preservation certainly promotes the
19 integrity and resilience of the Penobscot
20 watershed, you don't agree that compensation
21 equals preservation, correct?

22 MR. COGHLAN: Well, it's not -- the two
23 definitions aren't equal. That's my opinion.

24 MR. RAYBACK: Is it -- so it's fair to say
25 that you think preservation should not be an

1 acceptable means of compensation?

2 MR. COGHLAN: I think preservation is
3 better than nothing.

4 MR. RAYBACK: You are aware, aren't you,
5 that preservation is explicitly recognized as a
6 valid form of compensation under the DEP's rules?

7 MR. COGHLAN: I am. That was clear in the
8 rebuttal testimony, absolutely.

9 MR. RAYBACK: When you wrote your
10 testimony, were you aware of that?

11 MR. COGHLAN: Of the -- sorry -- the
12 statute regarding that preservation is equivalent
13 to compensation?

14 MR. RAYBACK: No, that preservation is
15 allowed as a form of compensation.

16 MR. COGHLAN: Oh, no, no, I'm sorry, you
17 are absolutely correct, yes. I did mention it in
18 here and the rebuttal did correct me. It's my
19 opinion which obviously does not conform to the
20 statutes, absolutely.

21 MR. RAYBACK: Okay. So when you said
22 that, when you said preservation doesn't equal
23 compensation, I recognize that's your view.

24 MR. COGHLAN: Sure, yeah.

25 MR. RAYBACK: But you weren't talking

1 about whether it complied with compensation rules
2 that the DEP has?

3 MR. COGHLAN: No, absolutely not,
4 absolutely not.

5 MR. RAYBACK: Okay, thank you. Nothing
6 further, Mr. Chair, thank you.

7 CHAIRMAN PARKER: What's that?

8 MR. RAYBACK: Nothing further, Mr. Chair,
9 thank you.

10 CHAIRMAN PARKER: Thank you and thank you
11 for speaking slowly so she could stay with us. Is
12 there any cross examination from the City of Old
13 Town?

14 MR. KATSIAFICAS: The City has no
15 questions for this witness.

16 CHAIRMAN PARKER: Mr. Snowman?

17 MR. SNOWMAN: No.

18 CHAIRMAN PARKER: Mr. Laite?

19 MR. LAITE: No.

20 CHAIRMAN PARKER: Any members of the
21 Board? Members of the staff? Well, thank you for
22 your testimony.

23 MR. COGHLAN: Thank you.

24 CHAIRMAN PARKER: We're going to, I
25 believe, adjourn now. We'll reconvene at 6:00 and

EVENING SESSION**6:00 P.M.**

1
2
3 CHAIRMAN PARKER: Good evening. We've got
4 a long evening ahead of us so I want to get things
5 started a little bit. There are sign-up lists up
6 there and those that want either support or oppose
7 or neither for nor against, sign up on the sheets
8 and we'll gather them. I call this session of the
9 Board of Environmental Protection hearing on the
10 application of the Maine State Bureau of General
11 Services for a 9.35 million cubic yard expansion
12 of the Juniper Ridge Landfill in Old Town and
13 Alton. My name is Jim Parker, I'm from Veazie.
14 I'm chair of the Board and I'm the presiding
15 officer for this hearing. Other members of the
16 Board this evening are Tom Eastler, who's to the
17 left, beside him is Kathy -- he's from Farmington,
18 Kathy Chase from Wells, Jonathan Mapes from
19 Springvale, to my right is Alvin Ahlers from
20 Yarmouth, Tom Dobbins from Scarborough and Mark
21 Draper from Caribou. The Board -- right now we
22 have Mary Sauer, the assistant attorney general,
23 here beside me, she's counsel to the Board. To my
24 left is Cindy Bertocci. She's the Board's
25 executive analyst, and to the far left over there

1 is Ruth Ann Burke. She's the Board's
2 administrative assistant. We have DEP staff with
3 us tonight which we have Rich Behr, Steve Farrar,
4 Kathy Tarbuck, Victoria Eleftheriou, Dave Burns,
5 Jim Beyer -- Jim's not in his chair right now but
6 I think he's going to be here -- and Lynn Caron.
7 This hearing is being recorded by Joanne Alley.
8 She's from Alley & Morrisette Reporting, and I'll
9 caution you now and I'll caution you during your
10 presentation to speak clearly and slowly because
11 she has a very difficult job of trying to put this
12 down as a stenographer.

13 This hearing is being held by the Board
14 pursuant to the Maine Administrative Procedures
15 Act, Title 5, Sections 9051-9064, Department of
16 Environmental Protection statutes Title 38 MRSA
17 Sections 341-D(2) and 1310-S(2), and the
18 Department's Chapter 3 Rules Governing the Conduct
19 of Licensing Hearings.

20 Notice of the hearing was published in the
21 Bangor Daily News on September 17th and October
22 8th, 2016, notice was also sent to the parties,
23 all persons owning property abutting the landfill
24 site, affected municipalities, area legislators
25 and all persons on the Department's interested

1 persons list for this project.

2 Earlier today the Board heard testimony
3 from the applicant, State of Maine Bureau of
4 General Services and the applicant's landfill
5 operator, NEWSME, which operates the landfill.
6 The Board also heard testimony from Dr. Stephen
7 Coghlan, a witness for intervenor Edward Spencer.
8 Tomorrow morning we reconvene at 8:30 and the
9 Board will hear testimony from Mr. Spencer and the
10 City of Old Town. A copy of the pre-filed
11 testimony of these witnesses and the application
12 file are available here at the hearing for
13 inspection. Any person wanting to inspect the
14 file should speak to the DEP project manager Kathy
15 Tarbuck. The pre-filed testimony and application
16 files are also available online at the
17 Department's website.

18 The Bureau of General Services has filed
19 the application for a Solid Waste and Natural
20 Resources Protection Act permits for the proposed
21 expansion. The Board's consideration of the
22 project is limited to the licensing criteria for
23 the proposed expansion. A list of the relevant
24 licensing criteria can be found on the table by
25 the water station, that's up where you're signing

1 in if you want to speak, at the back of the room.
2 Relevant criteria include but are not limited to
3 the following matters: landfill siting, design
4 and operation, stormwater management, leachate
5 management, potential impacts to air and water
6 quality, water quality monitoring, noise, impacts
7 to protected natural resources, including
8 wetlands, and compliance with the State Solid
9 Waste Management Hierarchy. Please focus your
10 testimony on matters that the Board has the
11 authority to address in this licensing procedure.

12 For those who want to testify, there are
13 sign-up sheets which I just mentioned on the table
14 at the back of the room. There are separate
15 sheets for those in favor, those opposed and those
16 who really are not opposed or in favor, just want
17 to speak. If you haven't signed up, please do so.
18 I'll call on those who have signed up to testify.
19 When your name is called, please come to the
20 podium and identify yourself by name, place of
21 residence and affiliation. In order to move
22 things along, when I call the first person up, I
23 am going to also mention the name for the second
24 person so they can hopefully come along fairly
25 quickly so everybody has a good opportunity to

1 speak. Depending on the number of persons, and
2 there's quite a few here tonight, I want to give
3 everybody as much time as I can so at the start of
4 the hearing I'm going to limit people to a
5 five-minute presentation, okay? Something that
6 will help with the testimony so more people can
7 get their testimony heard if they want. If
8 someone has either come up and said exactly what
9 you want to say or something very similar to what
10 you want to say, paraphrasing, we're going to take
11 down your name and your record and position and
12 try to move things as quickly as you can. Again,
13 I'm going to keep people on the subject so we
14 don't get wandering too far off.

15 With that said, I'm going to have Kathy
16 Tarbuck from the DEP give you a brief overview of
17 what this licensing procedure is addressing.

18 MS. TARBUCK: Good evening. So my name is
19 Kathy Tarbuck, as mentioned, and I work at the
20 Maine DEP in the Bureau of Remediation and Waste
21 Management. One of my roles is project manager
22 for the Juniper Ridge Landfill expansion
23 application. I will give a very brief general
24 overview of the facility and the proposed
25 expansion application for informational purposes.

1 I will not be delving into the specifics of the
2 application and I only have four slides other than
3 this one and they're all also on the back over
4 there so if you have trouble seeing this or you
5 want to see it in a little bit more detail, feel
6 free to look at them over there.

7 So the solid waste landfill is located on
8 a 780-acre parcel in Old Town and Alton. The
9 state acquired the facility in 2004. NEWSME
10 Landfill Operations, LLC, operates the landfill
11 for the state under the terms of an Operating
12 Service Agreement which was signed in 2004 between
13 Casella Waste Systems, Inc., and the State of
14 Maine acting now through the Bureau of General
15 Services.

16 The existing permitted solid waste
17 footprint of the landfill is approximately 68
18 acres which you can see on this slide. This
19 portion here, 68 acres. A public benefit
20 determination was issued in January of 2012 for a
21 9.35 million cubic yard landfill expansion. As a
22 result of the public benefit determination the
23 applicant submitted Natural Resources Protection
24 Act and solid waste applications which were
25 accepted for processing in August of 2015. The

1 Board took jurisdiction of the applications in
2 September of 2015. The proposed expansion with an
3 approximately 54-acre footprint is denoted by the
4 outlined area on this slide. I don't know if you
5 can see it, but here it is here. So that's 54
6 acres. The expansion proposal also includes 20
7 acres of infrastructure, including roads, scales,
8 buildings and sedimentation ponds.

9 In general, landfill sites are developed
10 in distinct areas of the facility in a phased
11 manner. These areas are denoted as cells and I
12 just want to mention that the orientation of the
13 other map north was up and this map north is
14 actually kind of to my left. Note that this
15 diagram -- this diagram is in a different
16 orientation. Cells 1 through 10 are currently
17 permitted, cell 9 was constructed in 2015 and cell
18 10 is not yet constructed. So here are cells 1
19 through 10. Cells 11 through 16 are proposed in
20 the expansion application and, again, here's the
21 proposal. The specific technical details for each
22 cell are submitted for approval for initial
23 construction, operation and closure.

24 This slide shows the area of the 2014/2015
25 wetland survey for the proposed expansion. The

1 black line shows the proposed expansion area and
2 the red line shows the area of the most recent
3 survey. So here's the expansion area and then the
4 red line which includes that, so up here and also
5 in the corner, was the wetland survey. The blue
6 denotes the 2014/2015 delineated wetlands right
7 here, as you can see, and the pink circles denote
8 the vernal pools and the significant vernal pools
9 and these are much harder to see, but, again,
10 they're throughout here and you can see it a
11 little bit clearer if you want to check out the
12 diagrams in the back.

13 This last slide shows the proposed
14 266-acre preservation parcel hashed out in the
15 orange/red, which is up here, as part of the
16 wetland compensation plan. The proposed
17 compensation plan was submitted as part of the
18 Natural Resources Protection Act application to
19 compensate for the wetland and vernal pool buffer
20 impacts associated with the proposed landfill
21 expansion, and that concludes the very brief
22 overview and thanks.

23 CHAIRMAN PARKER: Someone has left a
24 recorder on the shelf up here which is off. If
25 they want to record it, they can come take it and

1 take it back to their seat and record it if they
2 choose to. Anybody recognize it? Put it on the
3 table, that's where the people are going to speak.

4 As I said, I'm going to try to move this
5 along fairly quickly tonight. I'm going to
6 hopefully try to keep everybody within a
7 five-minute time period. So try to be concise and
8 to the point. We have so far somewhere around 45
9 people, and there may be some more that have
10 signed up, so we have a pretty big group that
11 wants to speak tonight. I want them all to have
12 their opportunity to speak. If for some reason
13 the meeting just drags on too long and it gets to
14 where it's becoming less productive and we close
15 the meeting tonight, those who haven't spoken and
16 have signed up on the sheets, we'll have a public
17 comment session available -- time tomorrow again
18 at 1:00 in the afternoon. So hopefully we'll all
19 make it tonight, but if you don't, there will be
20 additional time issued for tomorrow.

21 I'm going to start and as I say, we have
22 those opposed and those in support. I'm going to
23 start with some of the support testimony. As I
24 said, I'm going to call the first name and the
25 second name and then I'll call them so hopefully

1 we can keep coming up so that we don't have to
2 spend a lot of time for people to get out of their
3 chairs and move through the crowd or whatever.

4 The first person to speak is Rich Geisser
5 and the second person to speak would be Tracy
6 Flagg.

7 MR. GEISSER: Are we good to go?

8 CHAIRMAN PARKER: Go for it. The floor is
9 yours.

10 MR. GEISSER: Well, first off, thank you,
11 thank the Board members for the opportunity to
12 come and speak on behalf or support of the
13 expansion. My name is Rich Geisser, I'm a
14 division manager for ReEnergy. Actually ReEnergy
15 is a company that has both a recycling division
16 which I manage for the company which has four C&D
17 recycling facilities, one in Maine, Lewiston,
18 Maine, two in southern New Hampshire and one in
19 Massachusetts. We acquired the company from
20 Casella, the former KTI Biofuels Company a little
21 over three years ago in August of 2013. We've
22 developed a very strong relationship with or
23 partnership with the City of Lewiston, working
24 with the City of Lewiston. We pay them a fair
25 amount of money in taxes, we provide them free

1 disposal for the right to locate our facility in
2 their city and we also lease the property from the
3 City of Lewiston. All totaled, their benefit by
4 having us there operating our facility in the City
5 of Lewiston is close to 300,000.

6 Today we employ between 30 and 40 people
7 at our site, mostly local folks that live and
8 reside in the Lewiston area. The reason the
9 difference between 30 and 40 is C&D -- the
10 generation of C&D can be somewhat seasonal, and so
11 at the high points we're closer to 40, where
12 normal operation we're closer to 30.

13 Since we acquired the site in 2013, given
14 that we have other facilities that are part of our
15 system, we've actually redirected some of the
16 material that had been coming into the facility so
17 we've seen a shrinkage of out-of-state waste
18 coming to our facility of about seven percent. In
19 addition to that, ReEnergy is very committed to
20 recycling, zero waste disposal and through the
21 investment of technologies from some of our other
22 sites and also through capital investment, we've
23 been able to move the needle on recycling from a
24 number of 73 percent that was reported to DEP back
25 in 2014 and in 2016 we're currently on target for

1 just about 76 percent recycling. You know, it's a
2 modest improvement from 73 to 76.

3 Some of the other additional things that
4 we're looking to do this year as we continue to
5 increase the amount of recycling that we do and
6 reduce the amount of material that ultimately goes
7 to landfill is we're actively looking at a
8 mattress recycling program working with some folks
9 in the Massachusetts market. We currently collect
10 and segregate approximately 12,000 mattresses a
11 year. We're also looking at carpeting recycling
12 within the State of Maine and also some additional
13 technology and improvements to recover additional
14 metals and also aggregates. We'll do some
15 programs to increase the quantity of mixed rigid
16 plastics and cardboard. Actually we're looking to
17 do that in partnership with the Casella folks down
18 the street in Lewiston at their zero sort
19 facility.

20 Why is Juniper Ridge important to us?
21 When we looked to buy this facility three years
22 ago -- excuse me, just a tad over three years ago,
23 knowing that or believing that we had a disposal
24 site available to us was critical to us making the
25 decision to invest in the facility. In addition

1 to bringing our oversize bulky waste to that
2 facility, oversize bulky waste is typically -- we
3 call it at our other facilities difficult to
4 manage waste, those things which have very limited
5 recycling capability. Some of the things that it
6 includes is mattresses and carpeting, which we
7 spoke about earlier, that we will be initiating
8 programs to look to take that out of the OBW waste
9 stream and recycle that.

10 In addition to that, it's also the home
11 for our fines. Our fines material, they're used
12 at the Juniper Ridge Landfill, it's used
13 beneficially for alternate daily cover. So having
14 that site available to us for the use of fines
15 beneficially for alternate daily cover and also
16 for the disposal of oversize bulky waste was an
17 integral part of our decision to move forward with
18 acquisition of that site in partnership with the
19 City of Lewiston.

20 In preparing for today's opportunity to
21 comment, I did note that on the public benefit
22 determination that came out in 2012 that there was
23 some discussion relative to limiting oversize
24 bulky waste. I will say to the Board that we are
25 -- our goal is to limit the amount of oversize

1 bulky waste that comes in. We've seen that
2 reduced since that time that we've accepted --
3 taken ownership of the facility, we're continuing
4 to work on that to reduce that; however, what we
5 see with this uptick in economic activity, there's
6 more and more C&D generated. There's more and
7 more C&D that's going to be available for
8 recycling at our facility and although the
9 recycling rate won't change and will only get
10 better through investment and technology to
11 recover more material, is that we feel that
12 putting an arbitrary limit on the amount of
13 oversize bulky waste would restrict our ability to
14 grow with the improving economy.

15 I'd like to thank you for the ability to
16 speak and any questions?

17 CHAIRMAN PARKER: Thank you.

18 MR. GEISSER: Thank you.

19 CHAIRMAN PARKER: Tracy Flagg and the next
20 one to speak after Tracy is Scott Adams. You can
21 actually come down and sit at the table and be
22 ready if you'd like.

23 We have one more little technicality I
24 suppose we should take care of. Would everyone
25 who's going to testify please stand up? And even

1 the person who testified. One thing I forgot
2 tonight. Raise your right hand. Do you affirm
3 that the testimony you're about to give is the
4 whole truth and nothing but the truth?

5 **(WITNESSES RESPOND IN AFFIRMATIVE)**

6 CHAIRMAN PARKER: Thank you. Now we're
7 back to where we should be, and now we'll hear
8 from Tracy Flagg and the next person is Scott
9 Adams. Oh, Scott is there, okay, thank you,
10 Scott.

11 MS. FLAGG: My name is Tracy Flagg, and I
12 work for Casella Resource Solutions. My main job
13 is at Juniper Ridge and again, I would like to say
14 thank you to each and every one of you. I know
15 this takes a lot of time and effort and it is much
16 appreciated.

17 I just wanted to say that I am extremely
18 proud that in the past 14 months we have brought
19 in over 1,300 people to educate them not about
20 just the landfill but how to reduce, recycle, and
21 reuse the items that they have every day. We've
22 done that through our open house, we've done that
23 through Boy Scouts, we've had Girl Scouts come in,
24 we've done field trips with the schools and we put
25 it out there that our doors are always open and

1 we're here to educate. We're not looking to just
2 fill the landfill. We truly do want to help, like
3 I said, educate people on what they can do. You
4 know, it's a gratification -- instant
5 gratification world and we go through the
6 drive-thrus and we don't think about it and we
7 throw that stuff in the trash cans and stuff but
8 we want people to think about it. We want them to
9 know that there are other ways. It always makes
10 me smile to see the little kids when you tell them
11 that the hat they're wearing or maybe the coat was
12 once their plastic bottle of water they're
13 drinking out of. Yeah, so every day we're there
14 to educate and teach people on how we can reduce
15 things and not just throw them in a landfill.
16 Thank you for your time. Do you have any --

17 CHAIRMAN PARKER: Thank you. Next is Matt
18 Albert. Scott you're up now and next will be Matt
19 Albert.

20 MR. ADAMS: I'm sorry?

21 CHAIRMAN PARKER: The floor is yours.

22 MR. ADAMS: The floor is mine.

23 CHAIRMAN PARKER: The floor is yours.

24 MR. ADAMS: Okay. My name is Scott Adams,
25 I'm from Corinth, I'm a facilities operator at the

1 Pine Tree Landfill and Gas to Energy Plant in
2 Hampden. I'm employed with Casella and I'll keep
3 my comments brief.

4 I've been with the company since startup
5 of the plant. We came online in January of 2008,
6 and I've seen firsthand Casella's diligence and
7 conscientiousness in managing the landfill, and I
8 believe they've got a good handle on things.

9 You know, trash is a fact of life in our
10 society, it's got to go somewhere. I think we
11 ought to use the landfills that we have to the
12 fullest extent, otherwise we're going to have to
13 build another one someplace else. And so I
14 support the expansion. Thank you. Questions?

15 CHAIRMAN PARKER: Thank you. Henry Lang
16 is next after Matt.

17 MR. LANG: That's me.

18 CHAIRMAN PARKER: You're Matt, right?

19 MR. LANG: No, I'm Hank.

20 CHAIRMAN PARKER: You're Hank?

21 MR. LANG: Matt signed up but I've got the
22 stuff to deliver.

23 CHAIRMAN PARKER: So you're pretending
24 you're Matt right now then?

25 MR. LANG: Well, I'm going to pretend I'm

1 Matt and then I'll pretend to be Hank.

2 CHAIRMAN PARKER: Okay, go for it. That
3 will work. The floor is yours.

4 MR. LANG: Thank you. Good evening. My
5 name is Henry Lang. I'm the plant manager at the
6 Penobscot Energy Recovery Company, the waste to
7 energy facility across the river in Orrington.
8 I'm a resident of Lincolnville, Maine, so I travel
9 all the time, I come up here. I am pleased to be
10 here tonight on behalf of our owners and employees
11 to support the need for properly designed and
12 well-operate landfills. We feel that the
13 expansion of the Juniper Ridge Landfill is
14 appropriate and necessary to provide ongoing
15 capacity for Eastern Maine.

16 For 28 years PERC has taken municipal
17 solid waste from all over eastern, northern,
18 central and midcoast Maine and turned it into
19 renewable power. In doing so, we also have
20 reduced the volume of waste that would otherwise
21 end up in the landfill by approximately 90
22 percent.

23 We are also strong supporters of Maine's
24 Solid Waste Management Hierarchy. In fact, PERC
25 and its owners worked hard for the passage of LD

1 1483 a few years ago so that the hierarchy would
2 be a matter of law, not just a matter of good
3 intentions. We believe in the hierarchy and have
4 put our money where our mouth is as a company.

5 In current and future waste contracts, we
6 encourage recycling and reuse and the growing need
7 for economic -- for organics diversion. In fact,
8 we have teamed up with WasteZero, Exeter Agri
9 Energy and Casella to make it easier for the
10 communities and private haulers we serve to reduce
11 the volumes of waste they bring to us. In turn,
12 that reduces the volume of waste as residues that
13 end up at the landfill. If it can be reused, it
14 should never have come to us in the first place,
15 PERC; if it can be recycled, we don't need it; if
16 it's an organic waste, we don't want it. After
17 all, lettuce, tomatoes and other food wastes don't
18 burn very well.

19 The reality of a modern society is that
20 not everything can be recycled, reused or diverted
21 and that's where we come in. We take in what's
22 left, process it, remove any metals or material
23 that can be further recycled, incinerate it and
24 create steam to power our turbine, turning our
25 generator that can produce enough electricity for

1 about 28,000 homes, but even then there is
2 residual waste from us and every other disposal or
3 recycling facility that has to go somewhere.
4 Fortunately for us and our customers, that
5 somewhere is just a few miles away at Juniper
6 Ridge. Quite simply, PERC could not exist in its
7 present form without Juniper Ridge, and even
8 though landfills fall below us on the hierarchy,
9 we don't see a facility like Juniper Ridge as the
10 least important piece of the hierarchy. Quite the
11 contrary, we see the landfill as the very
12 foundation of the hierarchy. It all stands on the
13 foundation. Until the day that we become a zero
14 waste society, we will need all the steps in the
15 hierarchy and landfills like Juniper Ridge will
16 continue to be vital to the success of every rung
17 above them. We also have to be careful that
18 certain policies such as restrictions on oversize
19 bulky waste don't discourage complete and
20 unfettered recycling or place unnecessary
21 financial and operational burdens on commercial
22 businesses.

23 We've worked closely with Casella over the
24 years as both a customer and a vendor. We send
25 material to them, they bring material to us. They

1 bring tons of solid waste to our facility each
2 year and we send our ash, glass and grit and other
3 non-processables to them. They also serve as our
4 bypass facility when our plant is down temporarily
5 for maintenance or some unforeseen issue. Being
6 able to safely dispose of ash at a licensed
7 facility just 23 miles away or being able to
8 divert a load of waste such a short distance is a
9 great convenience and cost savings for us and our
10 customers, especially when the next closest
11 facility is more than 70 miles away and it's
12 filling fast. In addition, fewer truck miles on
13 the road only makes sense from an environmental
14 standpoint.

15 CHAIRMAN PARKER: Ten seconds.

16 MR. LANG: The PERC facility is in great
17 shape and we intend to be part of a comprehensive
18 integrated waste system in Maine for many years to
19 come. The Juniper Ridge Landfill is key to our
20 future success and our ability to provide proven,
21 affordable, environmentally sound waste disposal
22 options for the communities and private haulers
23 throughout Maine. Thank you.

24 CHAIRMAN PARKER: Thank you. And when I
25 was debating Matt and Henry, I forgot to call Carl

1 Ekstead I think it is that will be next, and
2 following Carl will be Donald Bickford.

3 MR. EKSTEAD: Good evening. My name is
4 Carl Ekstead. I am the owner of two different
5 corporations, Oceanside Rubbish which is a
6 collection company and Waste Recycling
7 Technologies which is a transfer station
8 operation.

9 MR. EASTLER: Carl, can you raise that up
10 a little bit so you're closer to it? Thank you.

11 MR. EKSTEAD: How's that?

12 MR. EASTLER: Better.

13 MR. EKSTEAD: Thank you. For 37 years
14 after I got out of school, I've been in the waste
15 business. I was sent to New York City and Long
16 Island to learn the business. Trust me when I
17 tell you I was educated rather quickly at 21 years
18 old. I've been all over New England and I've been
19 around the world on my own dime investigating all
20 sorts of technology from diesel production from
21 trash to organic separation to refuse derived fuel
22 pellets. I've seen it, I've looked at it. I'm
23 here in support of the landfill because as a
24 youngster and looking at working for a
25 publicly-traded company, not Casella, my job was a

1 landfill market developer at one point in time and
2 what that means is I either have to go out and buy
3 existing landfills or site new ones. I had no
4 idea until I got into that arena just how
5 difficult it was to site landfills or acquire
6 them. I've been escorted from a lot of places in
7 my life but I've been asked to leave many
8 buildings because the NIMBY syndrome throughout
9 the course of my 37-year career has been rampant.
10 One thing that's important to note, I had no idea
11 where you could build a landfill so I started to
12 map out throughout New England and New York where
13 you couldn't buy -- where you couldn't build any
14 particular sites from groundwater to bedrock to
15 problems and I can assure you there are very few
16 places in the northeast and New York that you can
17 site landfills.

18 The importance of Juniper Ridge is such
19 that the new technology is coming, I've seen it,
20 I've gone -- I'm a New Englander, I had to go kick
21 the tires, I had to touch it, I had to smell it, I
22 had to see how it worked. The problem is it's
23 manufactured overseas. To get it over here, the
24 Europeans -- it takes quite a long time. Even
25 with all the new technology, whether it's

1 anaerobic digestion, whether it's source
2 separation, even with that technology, I think
3 you've heard a landfill well run is the best
4 source and always will be needed because, as the
5 Board knows, there is always that question of
6 where do we bring it when the -- what if, what if
7 your machinery breaks down, what if that happens,
8 and you always go back to a well-run landfill as
9 to where you're going to go when there's a
10 problem. I have visited Juniper Ridge. With all
11 my years of experience, with all my travels from
12 Europe and around the world, Juniper Ridge hands
13 down is the most scientific, best landfill that I
14 personally have ever seen. Without that landfill
15 and without the expansion, another issue will
16 arise. We in this room, we all generate trash
17 every day. Those of us in the business, we make
18 it disappear, we wave that magic wand every day,
19 we go out, we pick it up, when people get home, as
20 long as their barrels are empty, as long as their
21 dumpster is clean, they're happy. We need places
22 like Juniper Ridge. It's not going to happen if
23 we don't get the expansion. Without that
24 expansion, you're going to be looking at many
25 people, individuals and businesses and communities

1 where the economics of supply and demand are going
2 to fall in an adverse effect. When there's a
3 short supply of landfill space, there will be a
4 higher demand for it and with that demand comes
5 higher pricing. So it's not just the truckers who
6 are going to lose jobs, it's not just the
7 collectors, it's everyone who generates the waste
8 will be adversely impacted and affected statewide.
9 So I implore you to please take and hear both
10 sides of the equation, take a look at it but in my
11 experience there's no reason not to expand the
12 landfill. They do a tremendous job there, I
13 compete with them, I work with them, but that
14 being set aside, it's the best landfill I've ever
15 seen. Any questions?

16 CHAIRMAN PARKER: Thank you.

17 MR. EKSTEAD: Thank you.

18 CHAIRMAN PARKER: Donald Bickford and
19 following him will be Kenny Chamberland.

20 MR. BICKFORD: Yes, my name is Donald
21 Bickford. I'm an independent owner/operator that
22 hauls into the landfill. I've been hauling in
23 there since its conception. I've seen the
24 day-to-day operations, I've seen the cells being
25 built, I've seen the daily operations of how the

1 material is handled and stuff. Like I said, I've
2 been hauling for about 20 years waste, and we do
3 need to put this material somewhere and they are
4 doing things right at the landfill, and I believe
5 we do need to expand this landfill and I believe
6 it will be safe or as safe as possible in today's
7 society. Thank you.

8 CHAIRMAN PARKER: Thank you. Okay,
9 Chamberland is up. Barry Staples.

10 MR. CHAMBERLAND: Good evening, everyone.
11 My name is Kenny Chamberland, and I'm proud to say
12 that I'm just a humble truck driver.

13 I just want to point out a couple of
14 things that I haven't heard yet. Burning trash
15 for energy and recycling still produce waste and
16 that waste needs to go somewhere. Recycling is a
17 great thing, we all believe in it, I know all the
18 people in the landfill believe in it, there are
19 signs posted all over the place at the landfill
20 about recycling all the way down the two mile
21 road. It's not that everybody likes piling trash
22 because we make money with it and, you know,
23 recycling is still a good thing but it's still --
24 recycling is a process and it still produces waste
25 and that waste needs to go somewhere. So even

1 though we recycle, there will still always be a
2 need for landfills.

3 This landfill, look at the chart, these
4 people thought this through, they know what
5 they're doing. It's like the couple of guys
6 before me said, it's very well scientifically
7 thought out and they share a lot of that
8 information with us. Even as a truck driver I get
9 sheets sometimes at the scale house that say look
10 at this, you know, this is how we do what we do
11 and this is why it's safe and why it's good. So I
12 like that about the landfill. It's not all about
13 just throwing things away.

14 This landfill is in a good secluded area.
15 Making it that much bigger is not going to change
16 that. I think it's in a good location and if we
17 don't expand the landfill, like a few other people
18 said, the trash still needs to go somewhere. If
19 we send it somewhere else, it might be out of
20 state which is going to drive a lot of prices up
21 and it's going to ship a lot of jobs out of the
22 state and it's going to shut down another business
23 in the State of Maine which is something that none
24 of us want. We're struggling enough for business
25 and industry in the State of Maine, we don't need

1 to be shipping more of them out of here, and it's
2 not just the landfill, the gentleman from ReEnergy
3 came in, his business is directly affected by the
4 success of the landfill and this expansion and so
5 are many other small businesses and large
6 businesses alike, so are humble truck drivers like
7 myself who work and serve all these people moving
8 their stuff around. There's an enormous tree
9 that's coming down from this landfill and if it
10 closes, it's going to take everything out with it.
11 That's a lot of jobs.

12 Let me see, I have one other -- a couple
13 other things here. Something else I like about
14 the landfill is the gentleman from Hampden came
15 up, I know the landfill over there, they use the
16 methane gas to generate electricity. That's free
17 renewable energy. All you've got to do is plug it
18 in. Well, it's not that easy I'm sure but anyway,
19 it's free, it's coming out of the ground. That's
20 another form of energy we can use besides burning,
21 burning things people don't like, some people
22 don't like the noise of turbines and whatnot.
23 Well, there's something else that's good for
24 electricity and energy.

25 The last thing I want to point out is the

1 problem that people have with landfills should not
2 lie with the landfill. It should lie with people.
3 We throw things away that don't belong in the
4 trash and that's been said so I'm not going to
5 spend too much time on it but I do think it needs
6 to be stressed, is that people need to be educated
7 and made aware of why recycling and reusing things
8 matters, just as Tracy stated, and she has given
9 me sheets at the scale house also about recycling
10 and things, and I know they're all very -- you
11 know, they are very for it. They don't want trash
12 in their landfill, and that's about all I have.
13 Does anybody have any questions?

14 CHAIRMAN PARKER: Thank you, Kenny.

15 MR. CHAMBERLAND: No problem, thank you.

16 CHAIRMAN PARKER: I called Barry Staples,
17 I didn't see him show up. Next on the list will
18 be Sarah Chamberlain. Sarah? How about Ben
19 Worcester? Come forward. Following Ben Worcester
20 will be Mike Haggan.

21 MR. WORCESTER: My name is Ben Worcester,
22 I live at 66 Long Pond Road in Southwest Harbor.
23 Along with my brother and sister we own and
24 operate a solid waste transfer station and bulky
25 waste storage facility in Southwest Harbor. We

1 name is Mike Haggan and I work for John Rand,
2 Incorporated. I haul into the landfill. We have
3 a reputable company that's running this landfill.
4 They haven't violated any DEP or state regulations
5 in all the years they've been there, they've
6 complied with everything and if not here, where?
7 How long will it take to fill up Norridgewock?
8 Then it will have to go out of state, and that
9 will be costly for everyone. I don't think that
10 anyone is going to win there. They know how to do
11 this, they do it well, they've been doing it for a
12 long time and I hope that it goes well.

13 Thank you.

14 CHAIRMAN PARKER: Thank you. Is Jay
15 Saucier here? Richard Rackliffe? The last couple
16 sheets have been in support. We have some in
17 opposition. I'm going to give them an opportunity
18 to speak now. The first one to speak will be
19 Karin Spitfire? Following Karin will be Pamela
20 Bell.

21 MS. SPITFIRE: Hi, my name is Karin
22 Spitfire and I'm from Belfast. I'd like to thank
23 all the people who have spoken. I've learned a
24 lot already just being here today and this evening
25 and I really applaud all of your efforts to create

1 recycling and I'm beginning to understand what the
2 hierarchy is. So thank you for the education.

3 The first thing I want to say is that all
4 the comments have been about people and jobs and
5 those are important and we're important but water
6 and fish and other critters who live here haven't
7 been mentioned in the comments for. So I'm going
8 to address you as the people who are responsible
9 and in charge of maintaining a clean environment
10 for the people and the critters of the State of
11 Maine, maintaining the Clean Water Act of the
12 United States of America and upholding the
13 treaties with the Penobscot Nation that guarantees
14 sustenant fishing rights. You might not think
15 that you're responsible for upholding those
16 treaties but you're a part of the State of Maine
17 that has treaties with the Penobscots and I'm
18 opposed to the expansion of Juniper Ridge
19 Landfill. And I don't speak this language, and I
20 don't -- so -- and I really appreciate that you do
21 and that you wade through all of this and you try
22 to figure out what's best and I thank you for your
23 work. I know that you don't get -- that you're
24 volunteers, this board, and that's incredible. I
25 do speak the language of anatomy and physiology

1 and we are 70 percent water, people, we all are 70
2 percent water. While you might drink things laced
3 with sugar, chemicals and alcohol, you probably
4 wouldn't drink battery acid, you probably wouldn't
5 drink battery acid with the benefit of a dental
6 dam, you're not going to add toxins into the water
7 in your body on purpose. We're 70 percent water
8 and water is what our cells live in and our cells
9 are like fish, the living structures that do
10 everything to keep us alive. Our cells are also
11 primarily water. Water in the rivers, our
12 bloodstream of our body, carry oxygen and
13 nutrients to the capillary beds and the capillary
14 beds are like wetlands. That's where all the
15 exchanges happen. Everything happens there. The
16 oxygen and the -- the oxygen and the waste go back
17 and forth in the wetlands and the capillaries then
18 merge into rivers and carry all that waste and the
19 cellular creations to everything else in the body
20 and excrete it, and this waste for eons before
21 industrialization was completely useful and
22 metabolized by everything else living. And that's
23 our problem. I understand you understand that
24 we're creating waste that we can't metabolize in
25 our natural system, but you wouldn't take a

1 capillary bed and put it at the top of your heart
2 right next to the aorta which is the main river of
3 your body and put a barrier around it and think
4 that that barrier -- and then inject toxins in it
5 and think that barrier was going to hold. You
6 wouldn't do that. That part of your heart would
7 die. That part of your life force would die and I
8 didn't understand how not just the lining here but
9 that then there's the leakage -- leachate -- how
10 do you say that word -- leachate gets taken to the
11 wastewater treatment plant, so let's say they have
12 to put a pipe in from your heart to your liver in
13 order to get that to be filtered out before it
14 goes into the river, would you do that? So that's
15 what you're doing is you're putting toxins into
16 water and water -- everybody knows water seeks its
17 own level, water cannot be contained.

18 CHAIRMAN PARKER: Twenty seconds.

19 MS. SPITFIRE: Okay. So according to your
20 rules, the licensing says solid waste facilities
21 will not contaminate any water of the state. The
22 landfill land is owned by the state and by their
23 own admissions here, the wetlands and vernal pools
24 of the state will be contaminated. It doesn't say
25 anything about mitigated. It says shall not be

1 contaminated. Thank you.

2 CHAIRMAN PARKER: Thank you. Pamela Bell
3 and following Pamela will be Peter Crockett. I'm
4 going to ask the assistant here when you've got
5 one minute left just to raise her hand so you'll
6 know what you have for time if you use your five
7 minutes, okay? Pamela Bell, the floor is yours.

8 MS. BELL: Okay. Thanks for giving me the
9 opportunity to talk tonight. My name is Pamela
10 Bell and I live in Milford. I live right on the
11 Penobscot River. When the river is high from a
12 lot of rain, I have a 50-foot backyard, when it's
13 low and it's drought time like now, I have 100
14 feet of backyard. So the river is a big part of
15 my life and I'm really pleased about the River
16 Restoration Project and we're hoping, our little
17 conclave in Costigan, Maine, where we live in the
18 northern part of Milford, we're glad that -- we're
19 looking forward to more different kinds of fish
20 coming up there instead of just river bass to
21 catch. It would be very pleasant to have more
22 fish varieties. We live right next to the
23 Sunkhaze Meadow Refuge. So we're pretty -- we're
24 -- well, let me just say in general I think this
25 expansion is a dangerous toxic overload for this

1 Penobscot River watershed.

2 I'm very concerned about what goes into
3 the river; in other words, what's in that
4 leachate. I would like to know if anyone can tell
5 me tonight if a study has been done to determine
6 what's in the leachate as it leaves the landfill
7 and what's in it as it leaves the treatment plant.
8 Can someone tell me whether that information is
9 available and where I might find it? Suddenly
10 they have no information.

11 That's basically what I want to know and I
12 came here and I listened all day and I didn't -- I
13 didn't get that information, and I think we people
14 who live on the river need that information and
15 that leachate needs to be treated good to put it
16 in the river, otherwise you're going to
17 contaminate the river and Penobscot Nation people
18 are supposed to be able to sustainably fish that
19 river and be able to eat those fish. This isn't
20 going to help. I understand that the first part
21 of the landfill was -- as it was inherited only
22 had a single liner on it so whatever they do now
23 to make it so wonderful, there's still that first
24 part there where it will spring a leak sooner than
25 this fancy stuff. So it's a concern. Thank you.

1 CHAIRMAN PARKER: Thank you. Peter
2 Crockett. Following Peter will be Diane
3 Oltarzewski. I'm sorry if I mess your name up.
4 Peter, the floor is yours.

5 MR. CROCKETT: Good evening. Thank you
6 for the opportunity to speak. Peter Crockett, I
7 live in Argyle, Maine, I live within a couple of
8 miles of Juniper Ridge landfill.

9 I've seen the steady parade so far of
10 Casella employees, some expert witness, and I
11 would like to say on record that I believe Casella
12 is doing a pretty good job of managing that
13 facility. That's not the issues that I have.
14 Every witness that had preceded me in favor of
15 this has spoken in terms of finances. Heavy
16 industry has pretty much left our state and left a
17 lot of people without work. I look around and I
18 see astounding natural beauty. Dirigo and
19 Vacationland are words we use to describe our
20 world in the heading of our state in an
21 ideological manner. I believe we should be far
22 more protective of our environment than money
23 which can be derived from a great amount of
24 different directions. The health and wellbeing of
25 our river and our natural resources should be held

1 above everything else.

2 The origins of this project were products
3 of backroom deals contrived in the wee hours of
4 the night when there was no one there to protest
5 this poor idea or slow the process of this blight
6 being created in such an inappropriate place.
7 Ever since the time of its conception in the early
8 2000s this monstrosity of waste has provided
9 millions of dollars to the bottom line of its
10 operator while its physical presence is constantly
11 growing, is constantly concocting a more complex
12 stew of toxins as each day passes. It is seen as
13 a proverbial paint can full of death teetering
14 above the doorjamb just waiting for some unseen
15 event which will allow the massive stew of certain
16 death to drain into the surrounding wetlands,
17 travel to the Penobscot River and then on to the
18 Penobscot Bay where it will adversely affect the
19 fisheries of Maine and the health of our coast and
20 ocean.

21 This mountain of municipal refuse is
22 already presenting a threat to the health and
23 wellbeing of our world. This is not a question of
24 whether or not this project will come to fruition;
25 this is a question of how much worse we are

1 willing to allow this ticking time bomb to grow.
2 The ugly truth of the matter is that the operator
3 of this landfill is making money by filling our
4 space with imported refuse that does not belong in
5 the State of Maine.

6 Many of the people have testified that if
7 Juniper Ridge is closed, our waste will have to go
8 out of state. I think that's a wonderful idea. I
9 think that equating a higher level of financial
10 responsibility to people throwing things out is a
11 wonderful idea. Waste does not disappear, as some
12 people said. Energy and matter is neither created
13 nor destroyed. There are very many pertinent
14 issues to this project which have been deemed
15 irrelevant by the minion of industry. All I can
16 say to this is that talk is cheap and when your
17 irrelevant issues jump instantly into the reality
18 of our world, they will seem quite real and will
19 offer up true life consequences which will be
20 anything but irrelevant.

21 If the BEP chooses not to consider the
22 real life effects of changing weather conditions
23 and allows this permit to be issued regarding
24 false and outdated data, the people of Maine will
25 hold them accountable for their actions. I urge

1 the BEP to step back in the best interest of the
2 people of the State of Maine and the best interest
3 of the environment which sustains us all and not
4 the best interest of the corporate entities whose
5 only concern is that of profits. I believe if
6 this project was landfilling only the waste in the
7 State of Maine, I guess there would be very few
8 people who would be opposed to it.

9 And talking about leachate and going into
10 the river, we read every day about how many things
11 cannot be treated in leachate. Micro balloons
12 which are used in cosmetics and sparkly lipstick
13 and eye liner go through treatments because
14 they're too small. Pharmaceutical chemicals go
15 through treatment plants without being affected in
16 the least. They all end up in that river.

17 I watched a meager attempt to shut down
18 Professor Coghlan earlier by trying to relate the
19 difference of 8,000 more gallons a day to the
20 allowed total flow of a wastewater treatment
21 plant. All I have to say is a thousand pounds of
22 toxins on that table is a thousand pounds of
23 toxins regardless of how much water it's mixed
24 with. We must protect and sustain the health and
25 welfare of our world. It's the only one we have.

1 Industry comes and goes. It's the only
2 environment we have. Thank you very much for your
3 time.

4 CHAIRMAN PARKER: Thank you. Diane,
5 followed by Bill Lippincott.

6 MS. OLTARZEWSKI: Let me say that for you.
7 I'm Diane Oltarzewski from Belfast, Maine, and
8 thank you for the opportunity.

9 Massive trucks rumbling over our roads,
10 diesel emissions spewing into our air, a too heavy
11 burden placed on our heartland from far-off places
12 which are buying a pass from looking after their
13 own waste streams. This is no incentive for them
14 to reduce, reuse, recycle or compost. Seepage of
15 toxins into the waters of our heartland, lining
16 insulation to last only 50 or 100 years, not
17 enough to prevent us passing on to our
18 grandchildren yet another super fund cleanup site.
19 Two acres of precious wetland gone, dwindling
20 natural habitat destroyed forever leaving us
21 vulnerable, I ask you to reject this landfill --
22 the expansion of this landfill. Each
23 jurisdiction, each home, each town, each state
24 must accept responsibility to resolve its own
25 waste stream. Maine should not be the dumping

1 ground for more than its share of municipal waste.
2 The watershed of the Penobscot River must be
3 protected. Our people's lives and health depend
4 on it. Expanding Juniper Ridge would take us in
5 exactly the wrong direction at a critical
6 crossroads in our environmental policy. I ask you
7 to bring your better judgment to bear and to
8 reject this expansion as wrong for Maine. Thank
9 you.

10 CHAIRMAN PARKER: Thank you. After Bill
11 Lippincott will be Ryan Parker. The floor is
12 yours.

13 MR. LIPPINCOTT: Thank you. My name is
14 Bill Lippincott, I live in Hampden.

15 The whole point of having a state-owned
16 landfill is to be able to preserve the state's
17 landfill capacity for Maine generated waste and to
18 be able to limit out-of-state waste coming to
19 Maine. Juniper Ridge is not operating in a way
20 that meets the long-term capacity needs of this
21 state. The way it operates is not consistent with
22 state solid waste policy which places landfilling
23 at the bottom of the hierarchy. As Ed Spencer
24 pointed out in his written testimony regarding the
25 expansion, oversize bulky waste, OBW, increased

1 dramatically at Juniper Ridge from 9,649 tons in
2 2007 to 21,000 tons in 2008, over 51,000 tons in
3 2009, to almost 99,000 tons in 2011. Less than
4 10,000 tons in 2007, almost 99,000 tons in 2011.
5 DEP Commissioner Aho expressed concerns about this
6 dramatic increase as well as large amounts of demo
7 debris coming to Juniper Ridge at the time. This
8 is all part of a pattern of Casella to fill its
9 landfills as fast as they can with as much waste
10 as they can possibly attract. I've experienced
11 watching Casella's operations in Hampden which is
12 revealing.

13 In 1998, Casella estimated in its
14 application it would dispose of approximately
15 143,000 tons a year in its expansion providing
16 capacity for approximately 23 years which meant
17 that the capacity would last until 2021; however,
18 in 2002, when PTL's public benefit determination
19 was changed to accept MSW bypass, they changed
20 their estimated capacity and said it would only
21 last until 2012. They stated in response to a
22 variety of factors it took in approximately
23 567,000 tons in 2003, so 143,000 tons in 1998,
24 five years later 567,000 tons. The game changer
25 was DEP allowing MSW bypass in 2002.

1 In 2004, Casella estimated the landfill
2 would reach capacity in 2007. So it went from
3 initially 2021 to 2007 in six years. Now, Casella
4 said the increase was because of new customers,
5 they said they had no control over how much waste
6 the landfill was taking in. The new customers
7 were MERC, wastewater treatment plant sludge,
8 which is New England Organics which is owned by
9 Casella, MERC was owned by Casella and bypass MSW
10 from MERC. And they said that over half the
11 increase in disposal was from waste generated in
12 Maine but when MERC processed waste, they were
13 taking a lot of waste from out of state. They'd
14 park their trucks there and all of a sudden waste
15 that came to MERC would become MSW bypass. At the
16 time I requested of the State Planning Office how
17 much out-of-state waste was coming into Pine Tree
18 Landfill and I got a reply from George MacDonald
19 in 2001 Pine Tree Landfill 19,000 tons of MSW and
20 demo debris that was generated out of state. One
21 minute, okay. In 2003, the number was 218,000, so
22 in two years it went from 19,000 to 218,000.

23 I go on in this with many more examples
24 and I will send this to the Board. But my point
25 is that they're not practicing -- they're not

1 trying to preserve the long-term capacity of this
2 landfill. This is a priceless resource. We heard
3 from someone else how difficult it is to site
4 landfills. This is a state-owned landfill and the
5 way they operate it is not in the long-term
6 interest of our state. Thank you.

7 CHAIRMAN PARKER: Thank you. Brian Parker
8 is up and then following him will be Cheryl
9 Spencer.

10 MR. PARKER: Good evening, Chairman Parker
11 and members of the Board of Environmental
12 Protection. My name is Ryan Parker, I'm the
13 environmental policy advocate for the Natural
14 Resource Council of Maine, and I appreciate the
15 opportunity to speak to you all tonight in
16 opposition to the proposed expansion of the
17 Juniper Ridge Landfill.

18 NRCM believes that the proposed expansion
19 does not adhere to the State Solid Waste
20 Management Hierarchy licensing criteria because
21 the state hasn't first implemented common sense
22 ways to reduce the fill rate at the landfill to
23 extend the life of the current license capacity.
24 In that vein, I want to thank you, Chairman
25 Parker, for your line of questioning this

1 afternoon regarding efforts to reduce the amount
2 of MSW taking up landfill space.

3 In addition to some other issues, I want
4 to point out an apparent inconsistency between the
5 application and the requirements for its approval.
6 Chapter 400, Section 3 reads, in part, "the
7 Department shall issue a license for a solid waste
8 facility or activity whenever it finds that the
9 facility or activity satisfies all applicable
10 requirements of this chapter," and I think this
11 gets straight to the heart of Dr. Eastler's
12 questions this afternoon regarding metrics.
13 Chapter 400, Section 3D reads, "the Department
14 shall issue a license for a solid waste facility
15 whenever it finds based upon substantial evidence
16 in the record that the solid waste facility will
17 not contaminate any water of the state,
18 contaminate the ambient air, constitute a hazard
19 to health or welfare" -- and here comes the
20 important phrase -- "or create a nuisance." It is
21 important to note that the word "nuisance" is not
22 defined in the definition section of Chapter 400
23 presumably because the word has a clear definition
24 upon which the Department and/or Board can rely in
25 their determinations. The established definition

1 of nuisance is, quote, a person, thing or
2 situation that is annoying or that causes trouble
3 or problems, end quote. While the application in
4 question has attempted to address several of the
5 other criteria listed under Chapter 400, Section
6 3D, the application does not address the nuisance
7 standard. In fact, the Board could find for
8 residents with property adjacent to and near the
9 site in question ample evidence that the existing
10 site is a nuisance and that the proposed expansion
11 will result in a directly proportional increase in
12 that nuisance. Some of those residents have
13 submitted testimony to that effect. We urge the
14 Board to consider the nuisance standard, the
15 application's apparent failure to address it and
16 the evidence that the expansion may, in fact, be a
17 nuisance to residents in its determination as to
18 whether to again quote Chapter 400 the facility or
19 activity satisfies all applicable requirements of
20 this chapter.

21 In addition to technical issues with the
22 application itself there are larger issues the
23 proposed expansion touches and we encourage BEP to
24 reject this application and instead work to pass
25 legislation that reduces what goes into JRL to

1 extend the life of the existing license capacity
2 by, one, preventing out-of-state waste from
3 entering the landfill; two, require the landfill
4 operator to use an alternative daily cover that
5 does not take up air space; and, three, prevent
6 anything that is going into JRL from being applied
7 to the state's recycling rates.

8 The applicant asserts that this expansion
9 is necessary to meet the long-term capacity needs
10 of the state but we disagree. In January of 2010,
11 DEP Commissioner Littell also disagreed when he
12 issued a denial letter explaining why an expansion
13 of JRL did not provide public benefit. The five
14 conclusions outlined in the 22-page denial letter
15 included several things I'm going to skip tonight
16 in the interest of time and with your indulgence,
17 Chairman and Board, we'll be submitting these in
18 writing with additional attachments.

19 NRCM is particularly concerned that there
20 is clearly a large amount of waste originating
21 from out of state entering JRL which is causing
22 the landfill to fill more quickly than it
23 otherwise would. This landfill is instead being
24 used to meet the disposal needs of other states
25 and, therefore, it should not have passed the

1 public benefit determination criteria and we ask
2 you to take that into consideration.

3 At issue is the problematic language in 38
4 MRSA 1310-N11 which states, in part, "waste
5 generated within the state includes residue and
6 bypass generated within the state or outside the
7 state if it is used for daily cover." Defining
8 out-of-state waste as in-state waste depending on
9 its use is misleading and is allowing our
10 state-owned landfill to be a dumping ground for
11 New England. For instance, in 2013, 88 percent of
12 the material accepted at ReEnergy in Lewiston was
13 delivered from out of state and after some
14 processing at the facility, Re-Energy sent 97
15 percent of their material to JRL. Then because of
16 this nonsensical definition of in-state waste, the
17 applicant is able to verify that no out-of-state
18 waste entered the landfill in their annual report.

19 CHAIRMAN PARKER: Time.

20 MR. PARKER: Thank you.

21 CHAIRMAN PARKER: Cheryl Spencer is next
22 and then Charles Leithiser.

23 MS. SPENCER: Good evening, Chair Parker
24 and members of the Board. Thank you for your
25 time, attention and patience in listening to the

1 public this evening, we appreciate it.

2 My name is Cheryl Spencer and I live in
3 close proximity to the landfill, and I'm opposed
4 to its expansion. Imagine that. I'm sensitive to
5 hydrogen sulfide gas. If you've never been gassed
6 before, be thankful. It is a horrifying
7 experience. The gas is a neurotoxin, heavier than
8 air and stays close to the ground. I was kneeling
9 in my garden weeding when the familiar smell came
10 and I tried one more time to ignore it, then the
11 asthmatic response came, I couldn't breathe, I
12 couldn't get up. Luckily my partner recognized
13 this as a significant event and carried me to the
14 car and drove me out of the area. I live in fear
15 every day that this may happen again to me or, God
16 forbid, a small grandchild. Despite the
17 operator's best efforts to control this gas, this
18 event could happen again at any time.

19 A couple of points I would like you to
20 consider in your deliberations are, number one,
21 that anything that ends up in a landfill for
22 whatever purpose the operator uses it cannot be
23 considered recycled material. It resides in a
24 landfill forever. The applicant points to
25 complying with state law as far as what is

1 acceptable for this landfill but special
2 conditions apply to this state-owned landfill.
3 The state may control what comes into it but thus
4 far it has failed to do so.

5 Point three, this was cited as a
6 generator-owned landfill because it was close to
7 the mill and would be accepting only paper mill
8 waste. It has gradually evolved to accept all
9 types of waste, even hazardous waste. As Mr.
10 Labbe testified, they would take action in
11 consultation with the DEP. This has happened in
12 the past. Loads of hazardous lead-laden ash from
13 the Old Town mill's biomass boiler was delivered
14 to JRL. When it was discovered to be hazardous,
15 it was never removed. It was mixed in and still
16 resides there.

17 Number four, if there's anything you can
18 do to rein in the bypass of not only MSW and CDD
19 but also wastewater treatment plant sludge. We
20 have a state statute that calls materials
21 discarded in another state Maine waste contrary to
22 any reasonably intelligent interpretation of the
23 definition of out-of-state waste. We are just
24 asking for abuse. Please find the means to turn
25 down this expansion application and stop that

1 abuse. Thank you for your time.

2 CHAIRMAN PARKER: Thank you. Charles
3 Leithiser, following Charles will be Paul
4 Schroeder.

5 MR. LEITHISER: Good evening. My name is
6 Charles Leithiser. I'm a resident of Maine and
7 been a homeowner in Old Town for about the last 40
8 years. Thank you for your time and for allowing
9 me to speak this evening.

10 Back in the early 1990s residents of Old
11 Town were promised by Mr. Doyle and others that if
12 the City of Old Town allowed a paper mill sludge
13 dump, said dump could never become anything else.
14 Since then we've been told that the now Juniper
15 Ridge Landfill would not be permitted to accept
16 municipal solid waste, there would be no odor
17 problems or issues created by trash trucks, there
18 could be hot house tomatoes growing on top of the
19 landfill, the landfill gas is going to be used to
20 heat the University of Maine, possibly an expanded
21 industrial park in Old Town and on and on. All of
22 these claims turned out to be false and I, for
23 one, am frustrated by and tired of the best case
24 scenarios that never come true.

25 Citizens of Maine have been told that the

1 site of the Juniper Ridge Landfill is -- this may
2 be a new word -- but hydrogeologically speaking
3 perfect as the groundwater under the landfill
4 bubbles up. What happens, however, to that
5 groundwater and waters beneath the ground when
6 millions of tons of waste are piled on top of it?
7 If this water begins to be squished out to the
8 sides, it threatens numerous small streams near
9 the landfill, vernal pools within the landfill
10 property and then the Penobscot River. Leachate
11 from the landfill also ends up in the Penobscot
12 River which is currently at the center of Atlantic
13 salmon recovery efforts. It makes no sense to try
14 and improve the water quality of the river on one
15 hand while simultaneously allowing contaminated
16 water from the landfill into the river with the
17 other hand.

18 The Bureau of Government Services acting
19 as owner of the Juniper Ridge Landfill for the
20 State of Maine has failed miserably in its
21 oversight of the landfill. In her partial
22 approval of the public benefit determination for
23 the proposed expansion then Commissioner -- then
24 DEP Commissioner Patricia Aho included
25 recommendations and steps that should occur before

1 the expansion application be submitted. The
2 Bureau of Government Services and Casella ignored
3 those recommendations. It appears that one state
4 department believes it can disregard the requests
5 of another state department. In this case, I
6 believe that the regulating agency, the Maine DEP
7 and BEP, should have the final authority over the
8 proposed expansion which would include the
9 findings of the public benefit determination.

10 The Landfill Operating Services Agreement
11 needs to be firmed up to actually prohibit any
12 waste whose point of discard is outside of Maine's
13 boundaries and determine how much oversize bulky
14 waste is appropriate for disposal at the landfill,
15 both of which were mentioned by Commissioner Aho.

16 What I have a particular concern here is
17 that the 187 Maine communities that were part of
18 the MERC consortium, including most of Maine's
19 largest towns and cities, produce exponentially
20 less oversize bulky waste than the amounts
21 produced at the KTI and now ReEnergy facility in
22 Lewiston which is supposedly delivering to the
23 landfill only in-state waste from the few
24 remaining communities not part of the MRC.

25 As a member of the Juniper Ridge Landfill

1 Advisory Committee, I was surprised to learn at
2 one of our meetings that the Bureau of Government
3 Services has no other plans for waste disposal in
4 Maine beyond Juniper Ridge, and, in fact, the
5 Bureau of Government Services is not even looking
6 for or considering any other options.

7 It kind of looks like the BGS and Casella
8 has backed you into a corner and one could
9 conclude that the BEP has no choice in this case
10 other than the approval of the expansion because
11 of that.

12 Much has changed with regard to waste in
13 Maine since the public benefit determination.
14 There is less of a need for increased landfill
15 space now than there was just two years ago. By
16 2018, about half of the MRC communities which had
17 been sending trash to the PERC plant will no
18 longer be doing so because they are instead
19 signing on with the new waste plant to be built in
20 Hampden. This will result in less volume coming
21 to the PERC plant which processed MRC waste and
22 then going to Juniper Ridge. Residues from the
23 Hampden plant will not be sent to Juniper Ridge at
24 all.

25 As we've heard earlier tonight, food waste

1 and other organic materials are now --

2 CHAIRMAN PARKER: One minute.

3 MR. LEITHISER: -- food waste and other
4 organic materials are now beginning to be removed
5 from the waste stream and those efforts will no
6 doubt increase moving forward. This also reduces
7 the amount of waste needing to be landfilled.
8 Between one-third and one-half of the waste
9 disposed of at Juniper Ridge did not become waste
10 within Maine's borders, it was disposed of in
11 other states. Tightening the regulations around
12 what is supposed to be in-state waste only would
13 greatly reduce that amount of landfill space
14 needed in the future.

15 The Bureau of Government Services and
16 Casella have created a false trash basis and by
17 doing so have efficiently given you only one
18 solution. As I see it, the BEP does have options
19 for its decision in this matter. You can outright
20 deny the expansion application or delay it until
21 the state gets a handle on what is coming to
22 Juniper Ridge and from where. Enforcing
23 Commissioner Aho's recommendations in the public
24 benefit determination would be a great place to
25 start that process. The whole premise for the

1 state owning a landfill is to enable the state to
2 control it, something that BGS has not
3 accomplished. That task now falls to you. Mr.
4 Geisser of ReEnergy --

5 CHAIRMAN PARKER: Time.

6 MR. LEITHISER: Okay. We heard that the
7 out-of-state waste coming into ReEnergy has gone
8 down by seven percent. That still means that more
9 than 80 percent of their source is from out of
10 state and more than 85 percent of that ends up in
11 Juniper Ridge. Please prohibit the practice of
12 trash laundering that allows much of Maine's
13 landfill capacity to be used up by waste that was
14 not discarded within the state's borders.
15 Citizens of Maine and the residents of Old Town
16 certainly deserve at least that much; if not, we
17 will sadly be right back here within a few years.
18 Thank you.

19 CHAIRMAN PARKER: Thank you. Paul
20 Schroeder followed by Ridgely Fuller. Try to stay
21 in your five minutes. We'll give you a one-minute
22 warning but we don't want to take time from other
23 people who would like to speak as well. Mr.
24 Schroeder, the floor is yours.

25 MR. SCHROEDER: Thank you, Chairman

1 Parker, members of the Board. My name is Paul
2 Schroeder, I live in Orono and I do appreciate the
3 careful efforts that you all make to try to make
4 sure that our waste disposal policies, laws and
5 rules are implemented -- created and implemented
6 appropriately. Tomorrow before the 5 p.m.
7 deadline I'll submit a written summary of my oral
8 comments here which I think will be brief.

9 The outcomes I'd like to see of this
10 process are, first of all, that there should be no
11 expansion of the Juniper Ridge Landfill. If
12 there's going to be an expansion, let this one be
13 the last. I haven't heard mention today at all
14 that the public benefit determination was made on
15 the basis of a proposal to build out this landfill
16 to its full 30 million cubic yard capacity. That
17 proposal was denied. If we think in terms of
18 thirds, we're in phase one, that's ten million,
19 we're going to come into phase two, that's another
20 ten or 9.25, then there's going to be another
21 phase. Let's make this one the last.

22 I also feel that we should establish a
23 clear audit trail for all the materials that are
24 coming to the landfill, their sources and
25 alternatives. So those are my two

1 recommendations, number one, build a box around
2 this, do not let it grow after this expansion even
3 if it's -- even if it's approved.

4 Now, I've been paying close attention to
5 this issue since January 21st, 2004, when the DEP
6 held a public informational meeting. You know
7 that there hasn't been a public hearing on this
8 landfill ever since the expansion permit was
9 proposed. This is the first in all these years.
10 My attention got caught when questions about the
11 Resolve -- the Legislative Resolve were proposed
12 to the State Planning Office and they deferred to
13 the representative of Pierce Atwood who at that
14 time was representing Casella, previously GP, for
15 explanation of the Resolve. I thought that was
16 really an interesting development. So I thought
17 I'd get to the bottom for my own interest of what
18 really happened, so I brought 15 copies for all of
19 you today for the intervenors and for the Board
20 members of a detailed year one timeline history
21 that I prepared in 2004. It's been online for 12
22 years now with a request that if there are any
23 problems or inaccuracies or corrections, please
24 get in touch with me and please, that's my --
25 that's my plea. I invite you to read this early

1 history, the first year of this process, how it
2 came to be, how we're here now. Think about this
3 and think about how this history and where we're
4 at now can be useful to create better decisions
5 and better policies for where we're heading for
6 Maine's trash future. Please, build a box around
7 this, we should work toward a zero waste future
8 and we should work toward a zero growth strategy
9 for the Juniper Ridge Landfill. Thank you very
10 much.

11 CHAIRMAN PARKER: Ridgely Fuller.

12 MS. FULLER: Thank you very much for
13 allowing me to speak this evening in opposition to
14 the expansion of the Juniper Ridge Landfill. My
15 name is Ridgely Fuller and I'm from Belfast,
16 Maine. I've been listening -- I'm deeply moved by
17 the way more reasoned arguments against the
18 expansion of this landfill and also by the
19 suffering it's caused for the people in the
20 surrounding communities. I'm also very
21 discouraged and saddened by realizing how many
22 people's livelihoods really depend on us creating
23 waste in our economy. I think that we should not
24 be talking about an expansion of a landfill that
25 sets a dangerous precedent, instead that our

1 efforts really need to go towards creating a zero
2 waste economy and society. I think we realize
3 that in the long run our planet really depends on
4 that.

5 When I learned first that there was a
6 refusal to consider the impact of the possible --
7 of Juniper Ridge Landfill on the people living in
8 the town who will be immediately affected, what
9 many of us would call an environmental justice
10 issue, I immediately went to the constitution of
11 Maine which I believe is the foundation of our
12 agreement for government. The purpose of our
13 uniting in such a State of Maine is described in
14 the preamble as to establish justice, to ensure
15 tranquility, provide for a mutual defense, promote
16 our common welfare and to secure to ourselves and
17 to our posterity the blessings of liberty.
18 Section 1 reads natural rights, and that all the
19 people born are created free and independent --
20 equally free and independent and have certain
21 natural inherent and inalienable rights, among
22 which of those enjoying and defending life and
23 liberty, acquiring, possessing and protecting
24 property and pursuing and obtaining safety and
25 happiness. I believe it's a clear violation of

1 this basic covenant when the air and water
2 pollution resulting from state policies which
3 favor a corporate entity degrades the health of
4 specific communities living in -- in the existing,
5 let alone, an expanded Juniper Ridge Landfill.
6 Most notably, I understand there are increased
7 cancer and asthma rates which clearly undermine
8 people's constitutionally guaranteed and
9 unalienable rights of pursuing and obtaining
10 safety and happiness.

11 You'll notice that -- when we talked about
12 the difficulty in siting landfills, you'll notice
13 that these landfills are not located in Belfast or
14 Cape Elizabeth or Falmouth Foreside but in very
15 vulnerable communities which is extremely unjust.
16 Moreover, U.S. and Maine statutes make it clear
17 that we are bound to protect the sustenance
18 fishing rights guaranteed to four tribes through
19 the Maine Implementation Act to fish in waters in
20 Indian lands and on all waters subject -- that are
21 described as reserved fishing rights.

22 CHAIRMAN PARKER: Excuse me, slow down
23 just a little bit so she can stay with you.

24 MS. FULLER: Oh, I'm sorry. I'm just
25 really passionate. All of a sudden tonight I'm

1 more passionate about this issue. I'm sorry.

2 Have you gotten me?

3 I'm also distressed by the apparent
4 disregard of the natural resources of Maine, which
5 according to almost every governmental source
6 represents the real and long-term economic engine
7 of our state.

8 Having just returned from the desert of
9 Arizona, I am once again reminded how critical on
10 so many levels, including for the future
11 generations of all of us, to protect the quality
12 of our water in this state. Groundwater streams
13 as well as the Penobscot are all jeopardized by
14 increased leachate, obviously affecting all the
15 fish and other wildlife that call the waterways
16 and wetlands, etcetera, their home. Section
17 101-A-2 of the Clean Water Act establishes the
18 national goal that water quality should provide
19 for the protection and propagation of fish,
20 shellfish, wildlife and recreation in and on
21 water. States are bound to establish and ensure
22 water quality standards for water under their
23 jurisdiction to protect these goals, including the
24 designated uses of which sustenance fishing is
25 one.

1 CHAIRMAN PARKER: One minute.

2 MS. FULLER: So the criteria -- we have to
3 protect this use. The economic solution of
4 turning Maine into an ever-expanding landfill for
5 in- or out-of-state waste is simply reprehensible.
6 In summary, for the rights of the low income and
7 tribal communities living in proximity to the
8 existing Juniper Ridge Landfill the obligation to
9 protect sustenance fishing rights of Native
10 Americans and for the future of our state and all
11 its inhabitants, I oppose any expansion of the
12 Juniper Ridge Landfill and call for clear
13 accountability of all existing air and water
14 pollution generated by the existing landfill.

15 Thank you so much.

16 CHAIRMAN PARKER: Thank you. We're going
17 to take two more and then we're going to give a
18 little break to our stenographer. These are
19 actually the last two signed in opposition. Next
20 will be Andy Jones, followed by Sherry Verrill.

21 MR. JONES: Hi, my name is Andy Jones.
22 Thank you so much for the opportunity to speak. I
23 work for an organization called Toxics Action
24 Center. We are a New England wide nonprofit and
25 we work side by side with community groups to

1 clean up and prevent pollution, and I am speaking
2 today in opposition to the application to expand
3 the Juniper Ridge Landfill.

4 So we're here today to debate the
5 expansion, should Juniper Ridge grow to double its
6 current size, and I say no. I say no because
7 expansion is directly against the solid waste
8 hierarchy and I think it's a bad idea to grant
9 Casella a permit to expand without a plan to
10 decrease the amount of garbage going into the
11 landfill, and I want to stop --

12 CHAIRMAN PARKER: Slow down just a little
13 bit.

14 MR. JONES: Certainly.

15 CHAIRMAN PARKER: Sorry.

16 MR. JONES: So Casella is really good at
17 what they do, and there are a lot of hard working
18 Casella employees here today, and I have to say
19 hands down, those are the biggest, glossiest
20 posters I've ever seen. One of the things that
21 Casella is really good at doing is expanding and
22 ten years ago we wrote a report called Casella,
23 Coming to a Community Near You, which I will
24 forward you the PDF so you have a chance to read
25 this before the 5 p.m. deadline tomorrow. I'm

1 glad that Bill Lippincott was here from Hampden to
2 share his stories of Casella expanding the
3 landfill in Hampden, I'm glad that Ryan spoke
4 about previous expansion attempts for the Juniper
5 Ridge Landfill. They're good at this, they run a
6 pretty tight ship, so they do have the ability to
7 expand.

8 I really just don't think doubling the
9 size of the landfill sets a good precedent, and if
10 we double it, even if it's only every ten years
11 that we double it, by the time I'm done with my
12 snowboarding career, Juniper Ridge will be big
13 enough to ski down and I don't think that's a good
14 idea. I really don't see a plan here in Maine to
15 follow the waste hierarchy. I don't see -- and
16 some of this isn't something the Board can do and
17 there needs to be legislative action on this, but
18 if we are continuing to fill up our state-owned
19 landfill with out-of-state waste, if we are
20 bringing in construction and demolition waste and
21 calling it recycling, those are serious problems,
22 but one further question that we need to answer is
23 should we be burning out-of-state waste in
24 ReEnergy's biomass plants or should we be burying
25 out-of-state waste in our landfill or should we be

1 accepting out-of-state waste in our state at all.
2 These are all questions that I think need to be
3 answered before we expand this landfill. I think
4 granting a permit to expand this landfill is
5 handing Casella a blank check. I would feel a lot
6 more comfortable with this expansion if I knew we
7 had a plan going forward to deal with the
8 out-of-state waste that's coming into our state
9 and into our state-owned landfill. If you have
10 any questions, I'm happy to answer them.

11 CHAIRMAN PARKER: Thank you. Sherry
12 Verrill. Just remember to speak slow because she
13 has to interpret a lot of voices she's never
14 heard. The floor is yours.

15 MS. VERRILL: Thank you, Chairman Parker,
16 and good evening to everyone here.

17 My name is Andrea Verrill but I'm known
18 professionally and to my friends as Shri.

19 CHAIRMAN PARKER: Shri, okay, thank you.

20 MS. VERRILL: I'm here as a wetland
21 scientist, a concerned citizen of Maine invested
22 in water quality, recovery of the endangered
23 Atlantic salmon and as a friend of the Penobscot
24 Indian Nation. I'm here to offer testimony in
25 opposition to the expansion of the Juniper Ridge

1 landfill. I believe that zero growth of the
2 landfill footprint is in order. There's already a
3 significant burden in the form of health and
4 environmental hazards from the pre-existing dump
5 and other toxic sites in the area to the water,
6 endangered species and the people practicing their
7 federally-protected cultural and sustenance life
8 ways on the Penobscot River. According to the US
9 EPA and the University of Massachusetts in
10 Amherst, the following schools in Bradley, Old
11 Town and Milford were listed as affected by toxic
12 chemicals. I'll skip the scientific names,
13 they're in the writing. These were admitted by
14 the Fort James operating company pulp mills, Viola
15 Rand School, Old Town High School, Dr. Lewis S.
16 Libby School, Leonard Middle School and Old Town
17 Regional Special Ed Program. State fish
18 consumption advisories for mercury, PCPs and
19 dioxins are in place for the Penobscot River
20 suggesting that it's only safe to eat one to two
21 fish per month unless one is pregnant, nursing, a
22 woman who may get pregnant or a child under the
23 age of eight, in which case the suggested amount
24 is zero.

25 A report put forth by the EPA contingency

1 with the Agency for Toxic Substances and Disease
2 Registry states that ATSDR, the Toxic Substances
3 and Disease Registry, determined early in the
4 health assessment process that Penobscot Indian
5 Nation members who ate fish and turtles were the
6 main people potentially exposed to Penobscot River
7 contaminants.

8 Some known constituents being discharged
9 include suspended solids, heat oxygen depleting
10 substances, chlorinated organics, chromium,
11 copper, dioxin, lead, mercury, phenols, vanadium
12 and zinc. The state water quality standards must
13 protect the sustenance life ways of the Penobscot
14 people as mandated by the Clean Water Act, thus
15 it's imperative that the state water quality
16 standards are such that the hardship of our
17 Penobscot Indian Nation friends and neighbors are
18 reduced not increased.

19 Juniper Ridge falls within an area of
20 interest for NOAA's efforts to restore the
21 Atlantic salmon population. These are beautiful,
22 well thought out, scientifically sound barriers.
23 They won't last forever. Leachate barriers are a
24 temporary solution to a long-term threat to our
25 waters. They break over time but the contaminants

1 do not stop leaking. Juniper Ridge is located
2 within the floodplain of the Penobscot River and
3 along two streams. Recent storm surges of
4 Hurricane Matthew through flooded hog farms in
5 Wayne County, North Carolina, causing immense
6 pathogenic bacteria contamination of local surface
7 waters and the Neuse River. What happens when the
8 Penobscot River swells with flood waters and
9 overtops the barriers? Is there a contingency
10 plan for such extensive surface water
11 contamination?

12 Nearly all surface water features interact
13 with groundwater. Juniper Ridge has not proven
14 that groundwater will not be polluted from the
15 existing landfill, much less from the proposed
16 expansion proving that -- I see the one minute.

17 CHAIRMAN PARKER: One minute.

18 MS. VERRILL: Okay. It's only a matter of
19 time before environmentally harmful substances
20 enter and pollute the state's waters here
21 constituting a health hazard to the people, plants
22 and animals which depend upon clean water for life
23 and which are already overburdened with
24 disproportionate exposure to health and
25 environmental hazards.

1 Remember to speak rather slowly and our
2 stenographer is dealing with different voices
3 every time someone steps up so she has to be
4 clever to keep up with you so help her all you
5 can.

6 The next person to testify will be Robert
7 Morrison and he'll be followed by Gordon Chase.

8 MR. MORRISON: Members of the Board, thank
9 you very much for your service. You've got some
10 very difficult decisions to make with the mining
11 regulations which are parallel in a way to our
12 dump problem.

13 CHAIRMAN PARKER: Mr. Morrison, can you
14 pull that in a little closer to you?

15 MR. MORRISON: Well, I'm not much -- can
16 you hear that? Anyway, and thank you for the
17 members of the DEP for putting in a long day
18 today. I'd just like to acknowledge my friends at
19 Casella who ran an open house on October 1st which
20 I enjoyed very much. We were able to go up to the
21 top of the mountain and watch people drive golf
22 balls off into the offloading things, but the
23 thing that really interested me at the open
24 house -- one of the things -- was the tank in
25 which they put the leachate. It's a very

1 significant tank and it got me thinking about what
2 happens to the leachate. Well, there clearly is
3 an unloading location next to the tank where they
4 can unload trucks, where the trucks go, we know
5 they go down to the old Georgia-Pacific mill down
6 in Old Town and where do they unload, they unload
7 into the aeration pond at the Georgia-Pacific
8 plant. So being primarily a poker around rather
9 than a technical expert, I went down to the
10 Georgia-Pacific plant to see what happened to the
11 leachate in the plant and they have an aerator
12 running regularly. There are 11 aerators in the
13 pond, of which one -- now, somebody for
14 Georgia-Pacific -- well, it's not anymore, but
15 anyway, somebody can correct me how the aerators
16 run but it looked to me as though they run one in
17 rotation of the 11. So I asked myself, well, what
18 do the aerators do? Not being very technically
19 capable, I kind of shrugged my shoulders and said,
20 well, generally aerators oxidize some kind of
21 organic material to try to neutralize it, but I
22 was -- I have to step back a minute. I -- before
23 all this happened, I did go to the Old Town town
24 office where there was a copy of that 45-pound
25 application which I thumbed through and in that

1 thumbing through, I found this whole series of
2 samples and the results of the samples, and one of
3 the samples was from the leachate pump location,
4 and that particular list that I looked at had a
5 concentration of around 350 milligrams per liter
6 for arsenic in that leachate pump and as you
7 probably know, about five grams per liter --
8 milligrams per liter is the EPA standard for
9 arsenic. So the significant -- I came away from
10 looking at the records with the feeling that there
11 are sometimes high and at least significant
12 arsenic in the leachate. So then I said, well,
13 what does -- going back I wondered, well, what
14 does aerating do to arsenic in leachate and
15 somebody here, I'm sure, can tell me but I don't
16 know. Then it wasn't perfectly obvious what
17 happened --

18 CHAIRMAN PARKER: Forty-five seconds.

19 MR MORRISON: Excuse me?

20 CHAIRMAN PARKER: Forty-five seconds.

21 MR. MORRISON: Forty-five seconds, okay.

22 Well, anyway, clearly the leachate is --
23 eventually goes into the Penobscot River and we
24 don't -- I don't know what happens in the mill
25 between the aeration pond and the outfall.

1 Presumably there's some kind of a skimmer or
2 clarifier and presumably that takes out any of the
3 suspended solids.

4 Trying to follow the trail from the plant
5 down to the river produces a structure which
6 should be in the Maine Historic Preservation
7 Society records, a silo from which the leachate or
8 the treated leachate is discharged into the river.
9 I would hope that Casella or the DEP can regularly
10 sample the leachate that goes into the river.
11 Thank you very much.

12 CHAIRMAN PARKER: Gordon Chase? No Gordon
13 Chase. How about Brian Hovey? How about T.J.
14 Troiano? Did I come anywhere close?

15 MR. TROIANO: Perfect.

16 CHAIRMAN PARKER: And he'll be followed by
17 Terri Blair.

18 MR. TROIANO: Good evening. Thank you for
19 the opportunity to speak tonight. I'm speaking in
20 support of the expansion at the Juniper Ridge
21 facility. I -- I'm not a good public speaker so
22 just bear with me here, I'll be as quick as I can.
23 First off, I'd like to say I don't think anybody
24 wants to landfill everything. That's not the
25 intention here but we do have some bypass waste

1 right now that we don't have the technology or the
2 way to get rid of and there will be a capacity
3 issue at some point in the State of Maine but
4 hopefully not as soon as projected but we've
5 extended the life by recycling more and Casella
6 has actually been huge in the recycling system.
7 They built a plant in Lewiston to take material
8 out of the landfills with a single sort, zero sort
9 recycling that we're using, we've got the
10 incinerators in Maine that are the waste to energy
11 plants that a lot of the trash goes to, but at the
12 end, we don't have enough technology yet to be a
13 hundred percent zero waste, if that makes any
14 sense.

15 It would be great if they get the
16 expansion and we never need it but I don't see
17 that as a reality quite yet. I think technology
18 is getting better and better every day and we
19 should strive towards that, but I do believe we
20 are following the hierarchy as best we can right
21 now. Compost facilities are growing, the EcoMaine
22 facility in Portland is dabbling in it now and
23 hopefully that helps get more out of the waste
24 stream prior to getting to the landfill but at the
25 end of the day, there's still materials that need

1 to go to the landfill and we need it right now.

2 I also wanted to just speak briefly on you
3 hear so many people bring up out-of-state waste.
4 We're a waste collection company based in
5 Portland, Maine, servicing Augusta south and we go
6 both ways with the waste. A lot of our waste that
7 we haul does leave the State of Maine. You never
8 hear that so I figured -- I just wanted to point
9 that out that we utilize the Wheelerabrator
10 facility in Massachusetts for some of the waste
11 that comes out of our facility, the Covanta
12 facility down in Massachusetts, as well as we use
13 the Turnkey Landfill. So it does cross the state
14 line leaving the state as well and I just think
15 it's important to point that out because you
16 always hear it's coming into the state when it
17 does go out of state as well.

18 Thank you, and if you have any questions,
19 I'm here.

20 CHAIRMAN PARKER: Thank you. Terri Blair,
21 followed by Paul Blair.

22 MR. HOVEY: I'm Brian Hovey. I missed
23 your call earlier.

24 CHAIRMAN PARKER: Okay. We'll have Brian
25 Hovey and then we'll have Terri Blair.

1 MR. HOVEY: Good evening. My name is
2 Brian Hovey. I am the market area manager for the
3 central and northern Maine hauling divisions for
4 Casella. Though I'm an employee, I'd like to
5 speak to you for just a few minutes as a resident
6 first. When I started my career with Casella 18
7 years ago, I did so in Houlton, Maine. I lived in
8 Houlton about a mile from the Casella facility for
9 approximately 12 years from the time that I
10 started working for Casella. I raised my family
11 there, I have four children that are in their
12 middle to upper twenties, I'm happy to say that
13 they're all healthy. I moved to the Bangor area a
14 little over six years ago when my market area
15 expanded and I currently live for the last six
16 years or so on the Paper Mill Road in Hampden
17 approximately a mile from the Pine Tree transfer
18 station and gas-to-energy facility. As a general
19 manager with the company, I'm privy to the inner
20 workings and structure in many ways with how
21 Casella does business and one of the things that I
22 wanted to share tonight is that my family is the
23 most important thing to me, and I assure you that
24 if there was ever a concern as an employee or a
25 resident as to the professionalism and how Casella

1 conducts its business in a very environmentally
2 sound way, I would never consider having my family
3 anywhere near a facility. We currently live, as I
4 mentioned, in Hampden where my wife and I are
5 raising our ten-year-old daughter that was adopted
6 from India, we have three cats and a dog, and
7 again, very close to that facility. I believe the
8 expansion is not going to change anything in the
9 way that Casella has operated their business.

10 The last thing that I want to mention from
11 the hierarchy perspective which I know is a great
12 concern and certainly a big consideration in this
13 expansion process, I think we should look at this
14 as it is, that the landfills are considered to be
15 the lowest rung on the hierarchy. I believe that
16 any of the upper rungs of that hierarchy could be
17 removed and the solid waste management system in
18 the State of Maine would continue on, maybe not as
19 effectively but it would continue on. If
20 landfills which are the foundation of the
21 hierarchy are removed, then the entire system
22 comes tumbling down in the State of Maine.

23 I believe that this expansion is important
24 to continue that hierarchy moving as it is and
25 certainly as effectively as it is. I'm not

1 concerned at all with the expansion and how
2 Casella will continue to operate highly
3 professionally and in an environmentally sound
4 manner, and I believe that this expansion should
5 be approved. Thank you very much.

6 CHAIRMAN PARKER: Okay. Terri Blair.

7 MR. BLAIR: We'll pass, thank you.

8 CHAIRMAN PARKER: What's that?

9 MR. BLAIR: We'll pass, thank you.

10 CHAIRMAN PARKER: Let's try Kevin Gordon.
11 Craig Shorey? After Craig we have Ryan Modely.

12 MR. SHOREY: Good evening. Thank you all
13 for letting me speak. My name is Craig Shorey, I
14 live in Hermon, Maine, I work for Sargent
15 Corporation. I've been exposed to Juniper Ridge
16 for probably 15 years now at various levels of
17 construction, watching their operation. I'd like
18 to speak highly in favor of them. I think they do
19 a very good job at operating their landfill. I
20 think they're proactive about educating the public
21 about ways to recycle and things about how their
22 landfill operates. I have attended some of their
23 open houses, they do a wonderful job with that,
24 they invite folks in, they want to educate them
25 about their process and their landfill, and I

1 think -- I really haven't gotten into a lot of the
2 ins and outs of the regulatory process. I
3 certainly take my hat off to you folks, you know,
4 you're spending your time trying to do your due
5 diligence and I'm sure the folks in the State of
6 Maine appreciate that. It's a lot of work. I
7 mean, nobody wants to be here at 8:00 at night all
8 night sometimes. It makes for a long evening when
9 you have an early morning, but anyhow, gosh, I
10 have to -- I have to be honest. I signed up, I
11 thought it was a sign-in sheet. I didn't intend
12 to say anything. Then when you said that I'm
13 going to have to say something, I was like, well,
14 I've got to get up and say something.

15 I would like to speak to some of these
16 folks that got up in opposition. It was very eye
17 opening. Thank you very much. You had a lot of
18 thought in your comments and I certainly
19 appreciate that. These folks over here in
20 support, same thing, there was a lot of good
21 points and a lot of bad points. At the end of the
22 day, I think we need to have a landfill someplace,
23 Juniper Ridge is already there and I think Casella
24 does a good job at operating it in a responsible
25 manner and I think you should have somebody --

1 that you should have somebody that does that and I
2 think starting a landfill in a new location isn't
3 really the best solution. I think expanding this
4 landfill is a better solution for the folks in the
5 State of Maine and I just support it. Thanks.

6 CHAIRMAN PARKER: Thank you. Brian
7 Modely? Michael Eben? Steve Raymond? Pete
8 Parizo? Sean Milligan? Jonathan Nadder?
9 Samantha Carroll? Brandon Carroll? Dan Thornton?

10 MR. THORNTON: Bingo.

11 CHAIRMAN PARKER: Bingo. After Dan we
12 have Carl Staples. The floor is yours.

13 MR. THORNTON: Thank you you very much.
14 I'm Dan and representing Thornton Construction, a
15 contractor in Milford, Maine.

16 I have grown up around the landfill my
17 entire life. My dad was contracted to work with
18 the Milford Landfill with the pulp and paper mill
19 in Old Town and then worked through the transition
20 into what is now Juniper Ridge. I don't think
21 there are many more people in this room that have
22 seen and been as close to the operations without
23 directly working there since the beginning as me
24 and my father. I also was fortunate enough to
25 grow up on the Penobscot River and probably one of

1 my larger regrets in life are moving out when I
2 was 18 because I have so much passion for the
3 river from swimming, fishing, motorboating,
4 waterskiing and I'm trying my hardest to get back
5 on it.

6 With that -- with that passion for the
7 river, I have zero concerns with the operation of
8 Juniper Ridge Landfill or the expansion. I bring
9 my kids over to swim in it, I just -- actually the
10 water quality in my opinion has gone up over the
11 last couple of years. The clarity is -- has
12 improved drastically.

13 It's certainly shocking to see the growth
14 when you go out there from when I was six or seven
15 years old to where it is now. I understand that
16 we have to go somewhere with it, and seeing the
17 operations working with Juniper Ridge Landfill and
18 Casella, the steps that they go through to prevent
19 any environmental hazards is -- is off the charts.
20 We are almost an emergency responder for some
21 services such as odor control, and being a small
22 company, we have about 40 employees in the town,
23 we're very dependent on the landfill and
24 sometimes, you know, it's -- it's shocking the
25 amount of money that they will put into odor

1 control, something so simple that's just in the
2 community's best interest. I -- it's just very
3 impressive to see the steps that they go through
4 to be a good neighbor to all of us.

5 Business wise, they are one of our best
6 and biggest customers. Like I said, we employ 40
7 to 50 people indirectly and directly. It's not
8 just the employees that go into the landfill every
9 day that Casella helps with, it's the stability
10 and success of their business that passes down to
11 us and gives us the stability of that business.
12 Being a general contractor, stability is one of
13 the biggest things that we can look for and
14 unfortunately in these markets, especially in
15 Maine, we're not seeing a stability out of any
16 other places other than Juniper Ridge.

17 As a -- that was my -- as a customer, but
18 now as a vendor of theirs, we do several different
19 demolition jobs throughout the state, a lot of
20 construction and demolition debris that we bring
21 up to the landfill. It's certainly been a game
22 changer having them in the area. You used to see
23 a lot of houses being demolished and buried
24 onsite, dig a hole in the back yard, clean wood
25 debris, dig a hole in the backyard. With the

1 affordable disposal fees that they offer this
2 area, instead of being buried in a hole in the
3 backyard, it's going to the landfill. You used to
4 see a lot of gravel pits being filled in with
5 things that, you know, shouldn't be in there,
6 shingles and such. It -- it -- that will pick up
7 again. We are -- we have some acreage on the
8 outskirts of Milford and we used to get a lot of
9 dumping, people coming out and just getting rid of
10 shingles and wood debris and old sheds and stuff.
11 You don't see that anymore. The sides of the
12 roads have been cleaned up, the old pits aren't
13 being filled anymore. So I think that we --
14 environmentally our area needs this resource.

15 And then lastly, as a community member, if
16 we do not allow this expansion, in my opinion it
17 would be a nail in the coffin for the Old Town
18 mill. It was a tremendous hit for our company
19 losing the mill, you know, such a hit would be the
20 same for Juniper Ridge, but if the mill does not
21 have Juniper Ridge to operate, it would be a nail
22 in the coffin for them, and the woods business has
23 seen a tremendous downfall without the Old Town
24 mill and it's -- it's only going to get worse.
25 It's one of the greatest resources that that mill

1 has is the cheap waste disposal.

2 So with that, I hope you are willing to
3 listen to everybody's testimony but in the end, we
4 support the Juniper Ridge Landfill expansion.
5 Thank you.

6 CHAIRMAN PARKER: Thank you, Dan. Carl
7 Staples? And following Carl we have James Braley.

8 MR. STAPLES: Carl Staples from Lee,
9 Maine, and I'm a truck driver, owner/operator, and
10 probably for the last eight to ten years have been
11 going in on an occasional basis and just want to
12 testify to the fact that I have seen what these
13 diagrams show on a placard day by day operations
14 of laying the base and the barriers and putting
15 each part in exactly where it needs to be, putting
16 the pipe in and it's not being just thrown
17 together. As my observations, it's -- they're
18 doing a fantastic job.

19 As I came and I listened, one of the other
20 things that I wanted to kind of pick up here this
21 evening was if there is an alternative because --
22 and unfortunately, I did not hear an alternative
23 and obviously that's not the focus, but it would
24 by nice to think that there's an alternative, and
25 we all hope for the day when there will be an

1 alternative, but in my lifetime, I do remember one
2 alternative that we had when I was a young fellow
3 growing up in Lincoln in the sixties and seventies
4 and it was of a 55-gallon drum in everybody's
5 backyard and when it comes to talking about a
6 nuisance of a landfill, you have to really take
7 into consideration the nuisance of everybody
8 burning their own trash in their own backyard.

9 CHAIRMAN PARKER: Okay. James Braley and
10 John Leslie is next.

11 MR. BRALEY: Jim Braley, I live in the
12 Town of Alton, not very far from the landfill.
13 Much of what I had written down has already been
14 stated. A lot of the opposition, in my mind it's
15 a Utopia. That's just not how we live. I mean,
16 we have natural resources and the beauty and all
17 that we speak of and it is all important but as
18 was just said, what was really on my mind is if we
19 don't have a landfill, it goes to the sides of the
20 roads, it goes to the pits. I mean, that's why we
21 have spring cleanup, fall cleanup, electronics
22 days, right, so people will discard their waste
23 properly; otherwise, we -- we get it where we
24 don't want it and where it is not contained, and
25 as the gentleman before me just talked about, what

1 is the alternative? We speak of this hierarchy
2 and another person talks about this being the
3 bottom of the rung, and it is a rung, it's
4 necessary. We can recycle and break these things
5 down but at the end of the day, there's still
6 waste that needs to go somewhere.

7 And then to say to ship it out of state,
8 there's a lot of problems with that as well, and
9 again, this was spoke to several times, our
10 economy is not in great shape and to tell the
11 everyday family that you're going to have to pay
12 more to get rid of your waste, it's a pretty tough
13 pill to swallow when we have the opportunities
14 here in our backyard, and those people have the
15 same concerns, we're just going to take our trash
16 and put it there, it seems a bit hypocritical. We
17 have the place to do it, it's run well, like Craig
18 who spoke before me, I work for Sargent
19 Corporation, I've been involved with the landfills
20 for a number of years and these guys to do well.
21 I mean, the folks that design these are top shelf
22 and they know what they're doing and it's not like
23 Casella is hiring shoddy engineers. People know
24 what they're doing and I'm sure that DEP can speak
25 to that.

1 So I guess rather than rambling on, I hope
2 that you go and vote in favor of it. It's needed
3 and again, we can continue to improve with our
4 technologies and come up with ways to reduce the
5 waste but at the end of the day we still need a
6 place to put it and until we get to zero waste,
7 there needs to be someplace. Thanks.

8 CHAIRMAN PARKER: Thank you. John Leslie?
9 Bill Rayfield is next.

10 MR. LESLIE: Thanks for having me. You
11 know it's been a long day when the lighting
12 reminds you of cramming in college. My name is
13 John Leslie, I live in Orrington, Maine. I
14 started work in organics recycling in 1989 with a
15 company called Resource Conservation Services. We
16 were purchased by Casella in the late nineties. I
17 think in '99 or 2000 the state passed -- well,
18 they adopted new regulations, Chapter 419, and
19 under those new regulations, the land application
20 of biosolids became a lot tighter and it forced
21 much of what we were land applying out in the
22 field, the biosolids, into other alternatives,
23 whether that be composting or landfilling at the
24 time.

25 The organics side of the business is what

1 I work in. We have a compost facility in Unity,
2 Maine. We take in 40,000 -- roughly 40,000 tons a
3 year of sludge, biosolids, we manufacture about
4 75,000 cubic yards of compost, 60 percent we
5 recycle in Maine and you'll probably be happy to
6 know about 40 percent of it we send right to
7 Massachusetts. They love our compost, they love
8 to buy it, it's approved for growing garden crops
9 as well as horticultural crops.

10 The landfill is particularly important to
11 organics -- Casella Organics because in our
12 business sometimes we manage generators, we sign
13 contractors -- contracts with generators such as
14 municipalities and when those municipalities have
15 an upset, an oil spill or something like that,
16 oftentimes the biosolids cannot be composted or
17 land applied and they need an alternative place to
18 go and the landfill is a safety net for us in that
19 capacity. We also have -- there's seasonal
20 generation, so we try to model the facility to be
21 full at all times and seasonally you can have
22 large fluctuations. For instance, in late summer
23 and early fall is when there's less biosolids
24 produced than in, let's say, November or the
25 spring of the year when a lot of the municipal

1 sewers and such are getting flushed out by
2 precipitation.

3 So for us, Juniper Ridge is a very
4 important backup to our recycling facilities for
5 recycling biosolids. We're not content with just
6 that though. In the past three to five years
7 we've brought on more capacity. We are now the
8 exclusive provider for a new 30,000 ton per year
9 anaerobic digester that accepts biosolids in
10 Brunswick. It's located at the Brunswick Naval
11 Base there, Air Base, and also at
12 Lewiston/Auburn -- anaerobic digestion is one of
13 the new things that's really being developed both
14 in the state and around the country, and anaerobic
15 digestion was also developed by Lewiston/Auburn
16 Pollution Control Authority, LAPCA as we call
17 them, and they brought that online and they're now
18 digesting their biosolids, but the amount of
19 biosolids they're now producing is greatly reduced
20 in volume. As such, their compost facility became
21 open for capacity. So we are now marketing
22 biosolids into that facility and we're marketing
23 biosolids, of course, into the Village Green
24 facility, as well as our Unity Hot Ridge facility,
25 and so we really need Juniper Ridge as a backup to

1 these programs.

2 That's all I've got, and if you have any
3 questions, I'd be happy to answer them.

4 CHAIRMAN PARKER: Thank you.

5 MR. LESLIE: Thank you.

6 CHAIRMAN PARKER: Bill Rayfield? Next is
7 Craig -- I can't pronounce your -- I can't read
8 your last name. The floor is yours.

9 MR. RAYFIELD: I want to thank you for the
10 opportunity to speak with you tonight. My name is
11 Bill Rayfield and I work for J.D. Raymond
12 Transport. I've been with our company for about
13 ten years and we've done business with Casella for
14 upwards of 15 years. Our business has primarily
15 been as a hauler for Casella servicing facilities
16 throughout the State of Maine. Operations at J.D.
17 Raymond involve much more than the trucking we do
18 for Casella; however, without Casella, many of
19 those other operations would not be possible.
20 Casella has been a critical component to the
21 success of our employees throughout all
22 operations. Many people, including myself, may
23 not have been able to sustain employment if it
24 weren't for the good work that Casella does at
25 Juniper Ridge Landfill and throughout the State of

1 Maine.

2 Over the years my company has invested
3 heavily in more efficient trucks and newer
4 trailers that allow us to haul more efficiently in
5 an effort to reduce our impact on the communities
6 surrounding Juniper Ridge Landfill. My
7 perspective is as a business partner and I want to
8 say in that regard that Casella has been great to
9 work with over the years. They are exactly what
10 we want in a partner. They do what they say they
11 are going to do. They honor whatever agreement
12 they've made, whether it be in writing or on a
13 handshake and they are willing to work with their
14 partners to assist them whenever possible. We
15 pride ourselves on keeping our word and providing
16 the best possible service and one reason for our
17 strong working relationship is that Casella does
18 the same.

19 I want to emphasize that in my experience
20 Casella has proven to be a company that Mainers
21 should feel good about having around and one which
22 we should try to keep around for many years to
23 come. Thank you.

24 CHAIRMAN PARKER: Next on the list is
25 Craig and I can't read the last name, from

1 Broadway in Bangor. Is there a Craig here from
2 Broadway? Chuck Eaton? Greg McDougal? Andrew
3 Bennett? After Andrew it will be Josh Williams --
4 Wellman, I'm sorry.

5 MR. BENNETT: All right. Good evening.
6 Thank you for having this meeting. My name is
7 Andrew Bennett. I operate a state-of-the-art
8 hydrogen sulfide removal system with the trade
9 name Thiopaq at the Juniper Ridge Landfill. This
10 system minimizes sulfur dioxide pollution.
11 Casella gave me an opportunity to come back to
12 Maine to live and work. With the reductions in
13 industrial employment in the region, it is
14 unlikely that my family and I could have moved
15 back to the region without this opportunity.
16 Casella invested close to seven million dollars to
17 build this facility in 2014 and invested
18 substantial additional capital in 2015 to ensure
19 that odor is minimized. I work at JRL every day.
20 This is not your parents' landfill. There's a
21 complicated system for securely disposing of solid
22 waste and removing all liquids and gases from the
23 waste.

24 We have nothing to hide at the landfill.
25 We have an extensive and redundant liner system

1 which prevents any escape of leachate into the
2 environment and allows us to confirm that no liner
3 failure has occurred, as you learned about today.
4 The leachate is treated in a wastewater treatment
5 facility before release into the environment.
6 This is all regulated by the DEP and the EPA. I
7 also work at the site every day. Many of my
8 colleagues live next to the landfill with their
9 families and have not experienced any significant
10 nuisance. Any member of the public is welcome to
11 visit the site at any time. I would personally be
12 happy to show you exactly what we do anytime you
13 want. I encourage you to approve the expansion
14 based on Juniper Ridge Landfill's compliance with
15 the relevant licensing criteria. Thank you.

16 CHAIRMAN PARKER: Thank you. Josh
17 Wellman. After Josh is Bill Michaud.

18 MR. WELLMAN: Good evening. Thank you for
19 the opportunity to speak. I'm in favor of the
20 expansion of the Juniper Ridge Landfill. I own --
21 I'm co-owner of two companies, D, M & J Waste and
22 Ellsworth Waste Services. D, M & J Waste is
23 located in Winterport, Maine. They're both DEP
24 licensed solid waste transfer stations. The other
25 location is -- Ellsworth Waste is located in

1 Ellsworth on the Industrial Road. Both of these
2 companies we generate waste from town transfer
3 stations, 20-plus town transfer stations where our
4 trucks pick up the waste at the transfer stations
5 in large dumpsters and brought back to our
6 transfer stations. Also homeowners, builders,
7 contractors, other waste companies haul waste into
8 our transfer stations, and then once the waste is
9 at our transfer station, we recycle as much of the
10 waste as possible. We recycle demolition debris
11 wood out of the waste, asphalt shingles,
12 cardboard, metal, aggregate. Anything that is
13 feasible to recycle we do so. Last year we
14 recycled 1,500 ton of asphalt shingles that was
15 ground and sold to Pike Industry to be used in the
16 asphalt industry and the paving industry.

17 Once the material is recycled at our
18 facilities, it is hauled in tractor-trailers to
19 the Juniper Ridge Landfill. The Juniper Ridge
20 Landfill is a huge part of our business. We
21 employ 18 people. Without this expansion, it
22 would put the tipping fees very high and the cost
23 would be spread out to the town transfer stations,
24 the homeowners, the builders, the contractors, and
25 so forth and so on, the other waste haulers and

1 also our company. So we try to recycle as much as
2 we can before it goes to the landfill but there's
3 still a portion of waste that cannot be recycled.
4 I've been in this business for 20 years and
5 certain materials you just can't recycle. It
6 doesn't make financial sense. So there has to be
7 a landfill and Juniper Ridge makes sense for us.
8 I've been in the landfill many times, driving
9 trucks myself into the landfill, seeing the
10 process of them designing and building the
11 landfill. They do a good job. Casella has been
12 good to work with in the waste business, we
13 compete with them but we also work with them on
14 other basis like hauling the waste into the
15 landfill, and I think they do a good job and we
16 support it, and I hope you do also because if it
17 didn't happen, it would really affect our
18 business. I don't know where we'd take the waste
19 that we generate. It would have to go to a
20 different landfill and there's only one landfill
21 in the state. Tipping fees are going to go up and
22 that would mean for everybody. Thank you.

23 CHAIRMAN PARKER: Thank you. Bill
24 Michaud? How about Amanda Willey?

25 MS. WILLEY: I am Amanda Willey from

1 Alton, Maine. I didn't plan on actually speaking
2 today, but as I have heard, I have felt a need to
3 kind of say out loud what I've been thinking with
4 what I've been hearing.

5 I have been in Alton well before the
6 landfill came along. I am happy to say and
7 surprised that I don't have any nuisances from it.
8 I'm less than three miles from it as the crow
9 flies. I've never smelled it at my house
10 surprisingly. I've never had any nuisances or any
11 problems from the landfill and I certainly
12 expected it. I remember when I heard the landfill
13 was coming, all I could think of, without any
14 disrespect, I was thinking of Lincoln and how bad
15 it stunk, and I said, oh, my God, I don't want to
16 have my town smelling like Lincoln, I didn't want
17 that, and that's all I could think of and I have
18 been happily surprised ever since it came around
19 that I have not had that issue.

20 As I have listened, what I'm hearing is
21 that we have a side that says, okay, we have
22 economic issues, we have a need. It's very clear,
23 as everyone has said over and over again, that
24 there's a certain amount of waste -- and I'm no
25 waste specialist but there's a certain amount of

1 waste that obviously we can't get rid of by
2 recycling, and the other side we're talking about
3 which I totally respect and totally agree with, we
4 have to worry about our environment and we have to
5 worry about our water, but then there comes down
6 to a place where you say, okay, we have to look at
7 what we have for information now and if I can, as
8 a registered nurse, if I can compare it to drugs
9 that some of you may have taken back in the
10 fifties that you now found out you probably never
11 should have been taking them but the FDA approved
12 them, they didn't approve them, thinking, ah,
13 forget it, no big deal, we're going to approve it
14 and you'll probably live through it and it will
15 help you, suck up the side effects, which was
16 death. They didn't do that; they didn't do that,
17 and Casella isn't doing that and landfills weren't
18 created to see if we could somehow secretly poison
19 waters. They're something that we have to have
20 and every single one of us does make that waste.
21 I don't care how green you are, you make waste
22 that can't all be recycled and so you have to look
23 at what you have now, and the best you have is
24 things like this, where you have engineers, that
25 the best that you know of right now today, this

1 landfill is what's working and it's the best we
2 have today. Fifty years from now I'm sure they're
3 going to be laughing at us, just like fifty years
4 ago with some of the other stuff and the
5 scientists were saying that we've had all these
6 problems, we've learned every year, haven't we?
7 We've learned every year that, hey, you know what,
8 we can't do it this way, oh, this is causing this,
9 this caused this consequence, and in 50 years, 20
10 years, how technology is flying, we are going to
11 learn what we have done now, but you can't make
12 that decision now on what might be in fifty years.
13 We have to put waste somewhere today, and today is
14 with what you know of is the best, safest way to
15 do that, and I can -- from what I have and I have
16 looked into Casella and what they do, they're
17 doing it as best as they can that we have to offer
18 today. You wouldn't want to have a heart
19 transplant 25 years ago but you have it today. So
20 you don't say today, oh, I don't want you to do a
21 heart transplant because, you know, Aunt Nellie
22 died, nope, but you do today not the way it was
23 done 25 years ago but the way it was done now, and
24 the same thing, I don't want to have a landfill
25 the way it was done 20 years ago but we have no

1 other choice but to have a landfill that takes
2 care of waste now, and in ten years there will be
3 new stuff that we learned, etcetera. It's just --
4 it's just the way it goes.

5 So as a resident, and I have children and
6 I have grandchildren in the town, I don't have any
7 water issues, I haven't been gassed in any garden,
8 I don't have any smell, I don't have any nuisance
9 that causes me to not want to live in Alton, but I
10 do make waste, I do know it has to go there and we
11 have a long way to go on recycling and learning
12 how to recycle so that we don't have all this
13 stuff that's going there, because from what the
14 rumors are that I hear what goes in the landfill,
15 yup, what goes in the landfill is stuff that these
16 people -- they're opposing the landfill, they
17 probably should be going to these huge companies
18 that are dumping a whole 18-wheeler load of the
19 supplies they couldn't sell and all the plastics
20 and all the other stuff. That is the crime, is
21 what we're filling the landfill with. Casella
22 isn't making up that stuff. They didn't create
23 that information or that trash to throw it in.
24 That's what's coming to them. That's the crime is
25 the stuff that's being thrown out today, but

1 there's no public session tomorrow?

2 CHAIRMAN PARKER: There's no public
3 session tomorrow.

4 MR. DOYLE: Thank you.

5 CHAIRMAN PARKER: Thank you and have a
6 good evening.

7 **(HEARING IN RECESS UNTIL 8:30 A.M., OCTOBER 19, 2016)**

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#	110 [2] - 212:15, 241:19	327:22	2011 [4] - 12:1, 115:14, 326:3, 326:4	25-year [2] - 79:10, 273:5
#1 [1] - 9:10	112,000 [1] - 80:4	1978 [1] - 274:8	2012 [10] - 8:20, 13:18, 51:3, 132:1, 132:15, 134:7, 134:8, 289:20, 296:22, 326:21	25-year/24-hour [6] - 78:14, 78:15, 79:5, 79:20, 79:25, 88:15
#21 [1] - 91:15	11:05 [1] - 90:21	1988 [1] - 269:12	2013 [4] - 171:3, 293:21, 294:13, 332:11	250-foot [6] - 95:2, 95:11, 95:14, 100:15, 100:18, 101:1
#3 [1] - 18:25	11:06 [1] - 90:21	1989 [2] - 9:19, 372:14	2014 [15] - 23:1, 23:19, 23:25, 24:7, 92:15, 116:4, 116:11, 116:12, 118:23, 164:19, 164:23, 170:24, 171:3, 294:25, 377:17	266 [7] - 103:23, 107:25, 219:18, 220:3, 224:16, 224:17, 224:23
#33 [1] - 104:14	12 [18] - 29:18, 61:22, 63:9, 67:25, 78:21, 87:19, 112:23, 115:7, 186:5, 234:3, 234:5, 234:6, 234:7, 234:8, 259:14, 342:21, 361:9	1990 [1] - 40:14	2014/2015 [2] - 290:24, 291:6	266-acre [2] - 107:16, 291:14
#41 [1] - 107:13	12,000 [1] - 295:10	1990s [2] - 29:11, 335:10	2015 [19] - 23:5, 23:24, 92:15, 101:4, 104:23, 106:24, 109:18, 114:17, 151:18, 164:25, 165:17, 171:3, 194:14, 242:12, 243:14, 289:25, 290:2, 290:17, 377:18	27.9 [1] - 166:9
#42 [1] - 114:2	12-foot [1] - 66:10	1998 [2] - 326:13, 326:23	2016 [10] - 1:9, 2:3, 3:23, 11:18, 134:10, 243:11, 244:9, 285:22, 294:25, 386:7	28 [1] - 301:16
#5 [1] - 29:19	12-inch [1] - 234:12	1:00 [3] - 5:10, 130:2, 292:18	2018 [3] - 63:24, 114:25, 338:16	28,000 [2] - 23:7, 303:1
#9 [1] - 48:24	120 [2] - 32:9	1st [1] - 355:19	2019 [4] - 13:21, 115:1, 171:11, 172:4	282 [2] - 107:25, 225:3
\$	120,000 [2] - 164:25, 165:1	2	2020 [2] - 14:6, 172:5	29,000 [1] - 164:22
\$959,000 [1] - 134:12	125 [2] - 103:13, 104:10	2 [8] - 12:10, 130:22, 131:16, 133:12, 159:19, 168:15, 191:16, 191:21	2020s [1] - 274:12	2:30 [1] - 178:24
'	13 [5] - 11:19, 61:22, 96:6, 193:15, 245:8	2,100 [1] - 55:14	2021 [5] - 14:6, 135:11, 172:5, 326:17, 327:3	3
'99 [1] - 372:17	13,000 [1] - 47:9	2,300 [2] - 110:18, 111:4	209 [2] - 108:1, 226:19	3 [7] - 3:19, 132:3, 134:9, 187:11, 263:11, 285:18, 329:6
0	1310-N11 [1] - 332:4	2,350 [1] - 110:20	21 [1] - 305:17	3,480 [1] - 23:6
0.00001 [1] - 35:25	1310-S(2) [2] - 3:18, 285:17	2.04 [2] - 99:5, 102:21	21,000 [1] - 326:2	3.4 [2] - 53:13, 97:22
0.2 [1] - 272:14	14 [5] - 61:22, 94:15, 115:5, 298:18	20 [13] - 24:5, 48:15, 57:12, 157:3, 174:23, 254:5, 263:19, 264:13, 290:6, 309:2, 380:4, 383:9, 383:25	218,000 [2] - 327:21, 327:22	30 [17] - 57:12, 69:1, 69:3, 69:7, 128:15, 130:25, 131:12, 149:11, 150:12, 150:13, 208:17, 256:12, 294:6, 294:9, 294:12, 341:16, 354:24
1	143,000 [2] - 326:15, 326:23	20,000 [2] - 80:3, 105:12	21st [1] - 342:5	30,000 [1] - 374:8
1 [7] - 191:12, 259:3, 262:12, 273:2, 290:16, 290:18, 344:18	1453 [1] - 259:3	20-plus [1] - 379:3	22-page [1] - 331:14	30-year [6] - 11:1, 131:1, 131:9, 150:2, 150:7, 150:8
1,000 [1] - 116:23	1483 [1] - 302:1	200 [2] - 31:19, 32:16	23 [2] - 304:7, 326:16	300,000 [3] - 171:4, 171:20, 294:5
1,300 [1] - 298:19	15 [19] - 61:22, 76:15, 102:6, 102:25, 125:11, 187:2, 188:7, 239:15, 239:19, 239:24, 244:15, 248:16, 248:18, 280:16, 283:3, 342:18, 363:16, 375:14	2000 [2] - 41:16, 372:17	24 [4] - 119:21, 124:5, 280:1, 280:2	300-foot [1] - 55:18
1,500 [1] - 379:14	16 [11] - 61:22, 104:8, 107:23, 117:2, 117:3, 179:11, 179:22, 180:16, 225:3, 239:8, 290:19	2000s [1] - 321:8	24.4 [3] - 279:2, 279:11, 279:23	31 [2] - 103:1, 103:12
1.5 [1] - 86:7	16.3 [2] - 102:23, 104:7	2001 [1] - 327:19	25 [7] - 29:25, 31:17, 104:2, 106:25, 182:8, 383:19, 383:23	310 [3] - 93:17, 101:10, 105:10
10 [8] - 28:1, 51:24, 115:7, 145:13, 145:14, 290:16, 290:18, 290:19	170 [1] - 123:13	2002 [2] - 326:18, 326:25	25,000 [1] - 172:13	32 [2] - 87:20, 100:23
10,000 [2] - 155:3, 326:4	17th [2] - 3:22, 285:21	2003 [4] - 17:10, 168:17, 326:23, 327:21		335 [1] - 94:18
10-to-12-year [1] - 50:15	18 [8] - 1:9, 2:3, 51:21, 51:24, 72:2, 361:6, 366:2, 379:21	2004 [15] - 10:9, 10:15, 10:16, 10:25, 11:17, 11:25, 17:9, 92:13, 114:11, 129:3, 289:9, 289:12, 327:1, 342:5, 342:21		341-D(2) [2] - 3:18, 285:17
100 [5] - 86:9, 112:5, 112:6, 318:13, 324:16	18-wheeler [1] - 384:18	2005 [5] - 38:10, 120:14, 134:10, 201:21, 243:11		35 [2] - 48:11, 111:13
100,000 [2] - 212:12, 254:9	187 [1] - 337:17	2006 [1] - 111:17		350 [1] - 357:5
100-year [2] - 273:4, 275:1	19 [1] - 386:7	2007 [5] - 243:13, 326:2, 326:4, 327:2, 327:3		36,473 [1] - 165:17
101-A-2 [1] - 346:17	19,000 [2] - 327:19,	2008 [3] - 92:13, 300:5, 326:2		37 [1] - 305:13
102,500 [1] - 212:14		2009 [1] - 326:3		37-year [1] - 306:9
105 [3] - 212:14, 241:18, 241:19		2010 [1] - 331:10		
108,000 [1] - 152:12				
11 [13] - 61:22, 63:24, 89:6, 117:17, 254:1, 270:12, 271:14, 271:25, 272:5, 272:10, 290:19, 356:12, 356:17				

<p>38 [3] - 3:17, 285:16, 332:3</p> <p>3D [2] - 329:13, 330:6</p>	<p>50-foot [1] - 318:12</p> <p>500 [2] - 19:9, 271:20</p> <p>500-year [2] - 272:15, 275:1</p> <p>51,000 [1] - 326:2</p> <p>54 [3] - 50:4, 115:4, 290:5</p> <p>54-acre [1] - 290:3</p> <p>55 [1] - 263:11</p> <p>55-gallon [1] - 370:4</p> <p>567,000 [2] - 326:23, 326:24</p> <p>57 [1] - 104:1</p> <p>57,500 [1] - 263:14</p> <p>58 [2] - 51:16, 51:19</p> <p>5:00 [1] - 7:7</p>	<p>750-foot [3] - 103:8, 103:16, 103:18</p> <p>76 [2] - 295:1, 295:2</p> <p>780-acre [2] - 94:7, 289:8</p>	<p>a.m [4] - 2:3, 117:22, 117:23, 118:1</p> <p>ability [17] - 25:12, 27:8, 32:7, 34:1, 34:2, 34:4, 46:16, 57:18, 62:25, 143:13, 164:17, 190:2, 190:17, 297:13, 297:15, 304:20, 349:6</p> <p>able [28] - 17:19, 34:5, 35:20, 59:14, 65:8, 78:22, 80:4, 139:23, 165:20, 174:8, 197:1, 197:11, 197:12, 232:4, 233:13, 236:12, 269:18, 275:16, 294:23, 304:6, 304:7, 319:18, 319:19, 325:16, 325:18, 332:17, 355:20, 375:23</p> <p>abnormalities [1] - 189:23</p> <p>above-ground [1] - 122:13</p> <p>abreast [1] - 269:4</p> <p>absence [1] - 199:12</p> <p>absolutely [13] - 93:8, 143:8, 163:1, 240:7, 265:25, 271:16, 276:18, 281:8, 281:17, 281:20, 282:3, 282:4</p> <p>abundance [2] - 254:5, 266:21</p> <p>abundant [1] - 254:2</p> <p>abuse [3] - 268:4, 334:24, 335:1</p> <p>abutters [1] - 135:2</p> <p>abutting [3] - 3:24, 4:10, 285:23</p> <p>ACC [1] - 268:7</p> <p>accept [21] - 21:6, 27:8, 126:6, 126:9, 135:15, 139:18, 140:23, 152:13, 161:12, 161:22, 177:15, 186:6, 196:11, 201:11, 213:24, 324:24, 326:19, 334:8, 335:15, 385:17, 385:20</p> <p>acceptable [7] - 101:18, 127:25, 130:21, 194:22, 234:3, 281:1, 334:1</p> <p>acceptably [1] -</p>	<p>212:20</p> <p>acceptance [9] - 90:5, 114:22, 115:9, 116:5, 129:8, 129:9, 129:18, 172:20, 221:3</p> <p>accepted [14] - 27:21, 28:2, 114:12, 116:12, 127:19, 153:13, 157:13, 165:17, 192:1, 192:3, 244:17, 289:25, 297:2, 332:12</p> <p>accepting [3] - 9:25, 334:7, 350:1</p> <p>accepts [4] - 114:15, 139:18, 201:12, 374:9</p> <p>access [5] - 11:14, 50:9, 244:22, 253:16, 266:11</p> <p>accessible [1] - 266:25</p> <p>accessory [1] - 98:17</p> <p>accommodate [1] - 129:14</p> <p>accommodated [3] - 115:23, 116:2, 129:11</p> <p>accommodating [1] - 250:6</p> <p>accomplished [1] - 340:3</p> <p>accordance [6] - 84:1, 90:6, 92:25, 119:10, 124:14, 127:23</p> <p>according [8] - 92:17, 94:9, 96:2, 161:18, 174:3, 317:19, 346:5, 351:8</p> <p>account [4] - 59:2, 212:22, 272:25, 275:2</p> <p>accountability [1] - 347:13</p> <p>accountable [1] - 322:25</p> <p>accounted [1] - 204:15</p> <p>accounting [1] - 114:13</p> <p>accurate [5] - 113:1, 129:18, 200:17, 200:20, 241:17</p> <p>achieving [2] - 157:20, 161:20</p> <p>acid [2] - 316:4, 316:5</p> <p>acknowledge [2] - 268:11, 355:18</p>	
4		8			
<p>4 [4] - 135:6, 152:21, 153:1, 153:9</p> <p>4.5 [1] - 97:22</p> <p>4.8 [1] - 80:2</p> <p>40 [8] - 107:5, 294:6, 294:9, 294:11, 335:7, 366:22, 367:6, 373:6</p> <p>40,000 [3] - 263:18, 373:2</p> <p>40-foot [1] - 81:21</p> <p>40-mil [1] - 68:18</p> <p>40-plus [1] - 274:13</p> <p>400 [11] - 19:17, 20:25, 55:17, 90:13, 178:2, 178:5, 329:6, 329:13, 329:22, 330:5, 330:18</p> <p>400,000 [1] - 23:21</p> <p>401 [2] - 90:13, 189:25</p> <p>419 [1] - 372:18</p> <p>420 [1] - 55:16</p> <p>43 [5] - 179:11, 179:22, 180:8, 180:16, 226:7</p> <p>44,000 [1] - 164:22</p> <p>44,256 [1] - 164:20</p> <p>45 [4] - 29:5, 243:8, 292:8, 354:4</p> <p>45-pound [1] - 356:24</p> <p>47 [2] - 128:18, 201:22</p> <p>47,000 [1] - 165:2</p> <p>48,000 [2] - 263:14, 263:18</p> <p>49 [2] - 111:16, 152:10</p> <p>4:00 [1] - 249:13</p>	<p>6</p> <p>6 [5] - 31:6, 117:22, 179:8, 181:3, 183:2</p> <p>6.2 [1] - 44:8</p> <p>60 [5] - 117:23, 118:2, 235:22, 236:2, 373:4</p> <p>60-mil [3] - 66:23, 68:17, 69:16</p> <p>600 [3] - 146:22, 171:12, 262:12</p> <p>600,000 [3] - 114:12, 116:13, 142:1</p> <p>62 [2] - 23:6, 24:24</p> <p>66 [1] - 312:22</p> <p>67 [1] - 119:23</p> <p>68 [2] - 289:17, 289:19</p> <p>68.2 [1] - 44:8</p> <p>6:00 [3] - 5:7, 282:25, 283:2</p> <p>6:00 [1] - 284:2</p>	<p>8 [3] - 184:2, 185:21, 258:8</p> <p>8,000 [3] - 277:4, 279:9, 323:19</p> <p>80 [6] - 32:3, 154:10, 235:21, 235:25, 270:6, 340:9</p> <p>80-mil [1] - 66:25</p> <p>800 [4] - 54:19, 110:24, 112:9, 112:15</p> <p>83,000 [1] - 148:7</p> <p>85 [1] - 340:10</p> <p>850 [1] - 110:13</p> <p>88 [1] - 332:11</p> <p>8:00 [1] - 364:7</p> <p>8:30 [3] - 286:8, 385:10, 386:7</p> <p>8th [2] - 3:23, 285:22</p>	<p>9</p> <p>9 [3] - 16:3, 74:7, 290:17</p> <p>9,649 [1] - 326:1</p> <p>9.25 [1] - 341:20</p> <p>9.35 [7] - 2:9, 18:7, 52:9, 53:4, 115:4, 284:11, 289:21</p> <p>9.5 [1] - 16:10</p> <p>90 [7] - 22:1, 24:25, 27:22, 32:2, 145:10, 171:24, 301:21</p> <p>90-degree [1] - 47:17</p> <p>900 [1] - 107:17</p> <p>900,000 [1] - 171:20</p> <p>9051-9064 [2] - 3:16, 285:15</p> <p>93 [1] - 10:10</p> <p>94 [4] - 103:9, 103:11, 103:16, 103:21</p> <p>95 [2] - 242:6, 242:10</p> <p>950 [2] - 110:15, 111:3</p> <p>97 [1] - 332:14</p> <p>98 [1] - 111:16</p> <p>99,000 [2] - 326:3, 326:4</p> <p>9:00 [2] - 2:3, 385:10</p>	<p>ability [17] - 25:12, 27:8, 32:7, 34:1, 34:2, 34:4, 46:16, 57:18, 62:25, 143:13, 164:17, 190:2, 190:17, 297:13, 297:15, 304:20, 349:6</p> <p>able [28] - 17:19, 34:5, 35:20, 59:14, 65:8, 78:22, 80:4, 139:23, 165:20, 174:8, 197:1, 197:11, 197:12, 232:4, 233:13, 236:12, 269:18, 275:16, 294:23, 304:6, 304:7, 319:18, 319:19, 325:16, 325:18, 332:17, 355:20, 375:23</p> <p>abnormalities [1] - 189:23</p> <p>above-ground [1] - 122:13</p> <p>abreast [1] - 269:4</p> <p>absence [1] - 199:12</p> <p>absolutely [13] - 93:8, 143:8, 163:1, 240:7, 265:25, 271:16, 276:18, 281:8, 281:17, 281:20, 282:3, 282:4</p> <p>abundance [2] - 254:5, 266:21</p> <p>abundant [1] - 254:2</p> <p>abuse [3] - 268:4, 334:24, 335:1</p> <p>abutters [1] - 135:2</p> <p>abutting [3] - 3:24, 4:10, 285:23</p> <p>ACC [1] - 268:7</p> <p>accept [21] - 21:6, 27:8, 126:6, 126:9, 135:15, 139:18, 140:23, 152:13, 161:12, 161:22, 177:15, 186:6, 196:11, 201:11, 213:24, 324:24, 326:19, 334:8, 335:15, 385:17, 385:20</p> <p>acceptable [7] - 101:18, 127:25, 130:21, 194:22, 234:3, 281:1, 334:1</p> <p>acceptably [1] -</p>	<p>212:20</p> <p>acceptance [9] - 90:5, 114:22, 115:9, 116:5, 129:8, 129:9, 129:18, 172:20, 221:3</p> <p>accepted [14] - 27:21, 28:2, 114:12, 116:12, 127:19, 153:13, 157:13, 165:17, 192:1, 192:3, 244:17, 289:25, 297:2, 332:12</p> <p>accepting [3] - 9:25, 334:7, 350:1</p> <p>accepts [4] - 114:15, 139:18, 201:12, 374:9</p> <p>access [5] - 11:14, 50:9, 244:22, 253:16, 266:11</p> <p>accessible [1] - 266:25</p> <p>accessory [1] - 98:17</p> <p>accommodate [1] - 129:14</p> <p>accommodated [3] - 115:23, 116:2, 129:11</p> <p>accommodating [1] - 250:6</p> <p>accomplished [1] - 340:3</p> <p>accordance [6] - 84:1, 90:6, 92:25, 119:10, 124:14, 127:23</p> <p>according [8] - 92:17, 94:9, 96:2, 161:18, 174:3, 317:19, 346:5, 351:8</p> <p>account [4] - 59:2, 212:22, 272:25, 275:2</p> <p>accountability [1] - 347:13</p> <p>accountable [1] - 322:25</p> <p>accounted [1] - 204:15</p> <p>accounting [1] - 114:13</p> <p>accurate [5] - 113:1, 129:18, 200:17, 200:20, 241:17</p> <p>achieving [2] - 157:20, 161:20</p> <p>acid [2] - 316:4, 316:5</p> <p>acknowledge [2] - 268:11, 355:18</p>
5	7	9	A		
<p>5 [11] - 3:16, 16:4, 184:19, 185:6, 258:8, 276:4, 278:8, 278:20, 285:15, 341:6, 348:25</p> <p>5.1 [3] - 141:17, 141:22, 172:11</p> <p>5.27 [1] - 79:25</p> <p>5.5 [1] - 100:16</p> <p>50 [12] - 26:3, 114:13, 152:15, 153:25, 157:15, 157:21, 161:20, 182:5, 182:16, 324:16, 367:7, 383:9</p>	<p>7 [3] - 117:22, 117:25, 118:1</p> <p>70 [5] - 270:6, 304:11, 316:1, 316:7</p> <p>700,000 [11] - 13:23, 62:11, 115:9, 115:13, 116:5, 116:14, 141:25, 142:9, 146:23, 171:12, 172:22</p> <p>71 [1] - 107:15</p> <p>73 [2] - 294:24, 295:2</p> <p>74 [2] - 50:8, 107:14</p> <p>75 [5] - 50:8, 100:21, 101:2, 112:6, 254:8</p> <p>75,000 [1] - 373:4</p> <p>75-foot [2] - 111:19, 112:2</p> <p>750 [1] - 103:7</p>	<p>A.M [1] - 386:7</p>			

<p>acquaintance [1] - 249:22</p> <p>acquire [2] - 17:19, 306:5</p> <p>acquired [8] - 9:22, 10:3, 10:9, 10:16, 221:6, 289:9, 293:19, 294:13</p> <p>acquiring [1] - 344:23</p> <p>Acquisition [1] - 278:17</p> <p>acquisition [2] - 17:9, 296:18</p> <p>acre [3] - 99:11, 100:1, 103:21</p> <p>acreage [5] - 103:9, 203:16, 203:20, 204:15, 368:7</p> <p>acres [46] - 49:13, 50:5, 50:8, 53:12, 53:13, 53:14, 63:9, 75:4, 97:22, 97:23, 99:5, 102:21, 102:23, 103:1, 103:9, 103:11, 103:12, 103:13, 103:16, 103:23, 104:1, 104:7, 104:10, 107:14, 107:23, 107:25, 108:1, 115:4, 115:5, 204:12, 219:18, 220:3, 224:16, 224:17, 224:20, 224:21, 224:24, 224:25, 225:3, 225:4, 289:18, 289:19, 290:6, 290:7, 324:19</p> <p>acronyms [1] - 59:24</p> <p>Act [23] - 2:13, 2:16, 3:16, 49:12, 50:20, 92:10, 92:11, 176:9, 192:10, 258:21, 261:9, 261:10, 263:2, 263:7, 264:11, 285:15, 286:20, 289:24, 291:18, 315:11, 345:19, 346:17, 352:14</p> <p>act [3] - 45:22, 108:18, 247:21</p> <p>acting [3] - 108:13, 289:14, 336:18</p> <p>Action [1] - 347:23</p> <p>action [8] - 44:21, 44:22, 214:3, 214:5, 214:12, 234:13, 334:10, 349:17</p>	<p>actions [2] - 234:11, 322:25</p> <p>active [9] - 82:2, 120:6, 121:11, 121:22, 122:8, 123:24, 198:7, 198:19, 240:17</p> <p>actively [3] - 19:11, 21:17, 295:7</p> <p>activities [5] - 50:2, 84:2, 95:20, 190:13, 232:1</p> <p>activity [11] - 65:14, 131:17, 189:24, 209:9, 216:21, 244:16, 258:9, 297:5, 329:8, 329:9, 330:19</p> <p>acts [1] - 180:4</p> <p>actual [23] - 50:4, 50:6, 52:1, 53:1, 54:1, 54:6, 57:5, 70:25, 79:18, 79:22, 79:23, 83:17, 85:9, 89:16, 92:2, 100:20, 164:17, 207:7, 255:4, 257:16, 269:14, 270:3, 280:4</p> <p>acute [2] - 239:25, 248:17</p> <p>Adams [3] - 297:20, 298:9, 299:24</p> <p>ADAMS [3] - 299:20, 299:22, 299:24</p> <p>adapted [1] - 275:11</p> <p>add [6] - 37:5, 210:23, 211:16, 229:10, 231:12, 316:6</p> <p>added [1] - 210:23</p> <p>addendum [1] - 259:6</p> <p>adding [3] - 182:18, 210:12, 210:17</p> <p>addition [18] - 24:17, 26:3, 50:6, 76:4, 80:11, 80:16, 119:15, 126:3, 155:22, 183:9, 199:15, 238:14, 294:19, 295:25, 296:10, 304:12, 329:3, 330:21</p> <p>additional [28] - 5:9, 7:6, 27:3, 34:14, 41:3, 52:11, 79:13, 104:4, 107:1, 111:8, 111:14, 135:6, 160:13, 161:5, 170:14, 203:24, 204:20, 213:12, 213:15, 225:22,</p>	<p>226:3, 227:4, 292:20, 295:3, 295:12, 295:13, 331:18, 377:18</p> <p>additionally [9] - 37:5, 109:16, 116:24, 118:4, 122:5, 124:6, 125:18, 237:9, 243:21</p> <p>address [18] - 15:2, 16:19, 42:14, 45:24, 49:10, 70:24, 76:20, 109:3, 217:3, 225:10, 260:8, 272:24, 287:11, 315:8, 330:4, 330:6, 330:15, 385:23</p> <p>addressed [4] - 57:22, 63:3, 133:1, 227:17</p> <p>addresses [2] - 190:7, 220:4</p> <p>addressing [1] - 288:17</p> <p>adds [2] - 107:24, 231:23</p> <p>adequate [4] - 192:11, 244:4, 244:13, 249:2</p> <p>adequately [2] - 123:4, 129:10</p> <p>adhere [1] - 328:19</p> <p>adjacency [1] - 112:2</p> <p>adjacent [7] - 31:22, 42:22, 43:7, 101:14, 185:22, 258:12, 330:8</p> <p>adjourn [2] - 282:25, 385:9</p> <p>adjust [1] - 123:14</p> <p>adjusted [2] - 11:6, 274:14</p> <p>administration [1] - 50:11</p> <p>Administrative [4] - 1:20, 3:15, 12:4, 285:14</p> <p>administrative [2] - 3:7, 285:2</p> <p>administrator [3] - 8:24, 108:14, 108:18</p> <p>admissions [1] - 317:23</p> <p>admitted [2] - 201:22, 351:13</p> <p>adopted [2] - 362:5, 372:18</p> <p>adults [1] - 252:22</p> <p>advance [1] - 4:13</p> <p>Advancement [1] - 251:4</p> <p>advantage [2] - 21:20,</p>	<p>68:20</p> <p>advantages [1] - 53:6</p> <p>adverse [3] - 109:19, 259:7, 308:2</p> <p>adversely [2] - 308:8, 321:18</p> <p>advisories [1] - 351:18</p> <p>Advisory [11] - 13:5, 117:8, 125:24, 128:20, 129:1, 131:18, 168:10, 168:18, 212:10, 244:19, 338:1</p> <p>advocate [2] - 251:10, 328:13</p> <p>aerate [1] - 243:23</p> <p>aerating [1] - 357:14</p> <p>aeration [2] - 356:7, 357:25</p> <p>aerator [1] - 356:11</p> <p>aerators [4] - 356:12, 356:15, 356:18, 356:20</p> <p>aerial [3] - 111:2, 179:19, 245:22</p> <p>aerobic [1] - 241:5</p> <p>aesthetics [1] - 245:14</p> <p>affairs [1] - 9:2</p> <p>affect [9] - 41:15, 110:8, 155:18, 190:2, 236:23, 260:6, 262:17, 321:18, 380:17</p> <p>affected [9] - 3:25, 258:16, 259:18, 285:24, 308:8, 311:3, 323:15, 344:8, 351:11</p> <p>affecting [1] - 346:14</p> <p>affects [1] - 32:21</p> <p>affiliation [1] - 287:21</p> <p>affirm [2] - 6:12, 298:2</p> <p>AFFIRMATIVE [2] - 6:15, 298:5</p> <p>affordable [2] - 304:21, 368:1</p> <p>aftermarket [1] - 237:15</p> <p>afternoon [7] - 4:25, 5:2, 5:3, 18:5, 292:18, 329:1, 329:12</p> <p>age [2] - 34:13, 351:23</p> <p>agencies [4] - 12:11, 101:25, 108:17, 110:3</p> <p>Agency [1] - 352:1</p> <p>agency [3] - 8:2, 12:6, 337:6</p>	<p>agenda [1] - 169:9</p> <p>aggregate [1] - 379:12</p> <p>aggregates [1] - 295:14</p> <p>ago [22] - 38:5, 40:19, 47:9, 57:12, 77:10, 148:7, 154:16, 230:25, 247:23, 266:7, 293:21, 295:22, 302:1, 338:15, 348:22, 361:7, 361:14, 383:4, 383:19, 383:23, 383:25</p> <p>agree [5] - 75:18, 180:19, 279:13, 280:20, 382:3</p> <p>Agreement [6] - 12:15, 130:25, 133:5, 133:9, 289:12, 337:10</p> <p>agreement [8] - 10:24, 10:25, 11:6, 11:13, 24:20, 108:12, 344:12, 376:11</p> <p>agreements [1] - 11:16</p> <p>Agri [1] - 302:8</p> <p>agricultural [1] - 165:9</p> <p>ahead [8] - 46:24, 48:6, 129:24, 141:13, 147:9, 195:15, 249:19, 284:4</p> <p>AHLERS [22] - 138:18, 139:7, 140:10, 140:14, 140:21, 140:25, 141:4, 141:8, 213:4, 214:2, 214:17, 215:9, 216:3, 216:10, 216:17, 217:16, 217:25, 219:10, 220:1, 220:15, 223:22, 224:12</p> <p>Ahlers [3] - 1:14, 2:24, 284:19</p> <p>Aho [3] - 326:5, 336:24, 337:15</p> <p>Aho's [1] - 339:23</p> <p>Air [3] - 176:9, 198:1, 374:11</p> <p>air [21] - 118:21, 118:24, 119:2, 119:5, 119:10, 119:15, 124:15, 129:14, 188:13, 188:14, 241:4, 242:5, 243:25,</p>
--	---	--	---	--

<p>287:5, 324:10, 329:18, 331:5, 333:8, 345:1, 347:13</p> <p>airlift [1] - 207:16</p> <p>airspace [1] - 73:12</p> <p>alarm [5] - 118:15, 236:20, 236:24, 238:1, 240:1</p> <p>alarms [8] - 118:6, 118:7, 118:11, 125:10, 236:6, 236:14, 237:5, 237:14</p> <p>Albert [2] - 299:18, 299:19</p> <p>alcohol [1] - 316:3</p> <p>alewife [6] - 254:3, 254:6, 266:21, 267:5, 267:11</p> <p>alike [1] - 311:6</p> <p>alive [1] - 316:10</p> <p>all-lined [1] - 77:3</p> <p>Allen [1] - 259:16</p> <p>Alley [4] - 3:12, 285:7, 285:8</p> <p>allotment [1] - 149:23</p> <p>allow [23] - 25:13, 27:1, 27:3, 66:10, 69:1, 69:8, 77:19, 97:10, 105:18, 105:25, 142:12, 144:4, 160:12, 212:13, 221:20, 253:15, 256:18, 313:10, 321:15, 322:1, 368:16, 376:4</p> <p>allowable [1] - 264:13</p> <p>allowed [9] - 6:6, 61:2, 147:6, 160:23, 212:15, 262:2, 281:15, 323:20, 335:12</p> <p>allowing [9] - 32:3, 101:13, 118:12, 184:4, 326:25, 332:9, 335:8, 336:15, 343:13</p> <p>allows [16] - 22:16, 37:2, 46:6, 62:20, 62:21, 88:11, 100:17, 101:11, 121:5, 122:20, 122:21, 122:22, 123:11, 322:23, 340:12, 378:2</p> <p>almost [6] - 36:23, 273:22, 326:3, 326:4, 346:5, 366:20</p> <p>alone [2] - 261:11, 345:5</p>	<p>Alpha [1] - 191:10</p> <p>alter [1] - 230:8</p> <p>alteration [1] - 245:10</p> <p>alterations [2] - 92:3, 99:3</p> <p>alternate [4] - 51:11, 152:19, 296:13, 296:15</p> <p>alternation [1] - 96:22</p> <p>alternations [1] - 105:21</p> <p>alternative [20] - 15:13, 15:14, 50:19, 50:22, 51:12, 51:13, 52:5, 52:6, 52:15, 121:20, 121:24, 159:17, 331:4, 369:21, 369:22, 369:24, 370:1, 370:2, 371:1, 373:17</p> <p>alternatives [11] - 28:5, 49:11, 49:23, 50:21, 52:17, 53:13, 97:16, 97:21, 184:23, 341:25, 372:22</p> <p>Alton [14] - 2:10, 11:13, 11:15, 11:21, 13:7, 131:19, 134:11, 168:25, 284:13, 289:8, 370:12, 381:1, 381:5, 384:9</p> <p>Alvin [4] - 1:14, 2:24, 213:3, 284:19</p> <p>Amanda [2] - 380:24, 380:25</p> <p>ambient [3] - 119:5, 119:15, 329:18</p> <p>amend [1] - 132:15</p> <p>amendment [1] - 148:6</p> <p>America [3] - 18:24, 113:17, 315:12</p> <p>American [3] - 254:8, 254:11, 266:22</p> <p>Americans [2] - 254:14, 347:10</p> <p>Amherst [1] - 351:10</p> <p>amount [46] - 16:14, 20:10, 20:14, 28:19, 28:22, 46:3, 52:8, 52:18, 52:24, 54:2, 54:23, 66:13, 69:12, 83:12, 120:15, 134:19, 147:9, 148:1, 148:17, 153:12, 154:21, 161:22, 161:24, 163:3, 181:19,</p>	<p>203:16, 203:20, 205:21, 217:8, 244:4, 293:25, 295:5, 295:6, 296:25, 297:12, 320:23, 329:1, 331:20, 339:7, 339:13, 348:10, 351:23, 366:25, 374:18, 381:24, 381:25</p> <p>amounts [4] - 134:15, 275:17, 326:6, 337:20</p> <p>ample [2] - 28:13, 330:9</p> <p>anaerobic [5] - 199:12, 307:1, 374:9, 374:12, 374:14</p> <p>analyses [3] - 56:14, 60:14, 86:13</p> <p>analysis [36] - 8:7, 42:17, 42:25, 44:6, 44:16, 49:23, 50:19, 56:7, 56:17, 56:24, 58:9, 58:13, 58:20, 58:24, 59:18, 60:6, 60:7, 60:21, 61:6, 61:10, 63:18, 84:25, 85:24, 86:1, 97:16, 179:13, 187:8, 190:21, 191:11, 191:19, 192:18, 213:18, 228:8, 232:10, 262:13</p> <p>analyst [2] - 3:5, 284:25</p> <p>Analyst [1] - 1:19</p> <p>analytical [1] - 224:4</p> <p>analyzed [1] - 154:20</p> <p>analyzing [1] - 191:25</p> <p>anatomy [1] - 315:25</p> <p>ancient [1] - 36:6</p> <p>Andrea [1] - 350:17</p> <p>Andrew [3] - 377:2, 377:3, 377:7</p> <p>Andy [2] - 347:20, 347:21</p> <p>angle [1] - 36:24</p> <p>angles [2] - 37:1, 37:5</p> <p>animals [2] - 353:22, 354:14</p> <p>Ann [3] - 1:20, 3:6, 285:1</p> <p>annoying [1] - 330:2</p> <p>annual [17] - 126:4, 134:13, 141:25, 146:14, 148:19, 151:14, 154:7,</p>	<p>154:8, 156:16, 157:10, 161:19, 170:21, 170:25, 177:1, 189:21, 231:18, 332:18</p> <p>annually [5] - 26:19, 157:17, 172:22, 176:25, 254:16</p> <p>annulus [2] - 78:5, 187:22</p> <p>answer [15] - 14:9, 65:15, 132:2, 132:12, 145:4, 158:8, 181:11, 187:1, 197:24, 207:3, 218:6, 223:21, 349:22, 350:10, 375:3</p> <p>answered [3] - 241:10, 267:23, 350:3</p> <p>anthropogenic [3] - 252:16, 268:7, 268:12</p> <p>anticipate [5] - 79:15, 109:19, 147:8, 172:21, 274:24</p> <p>anticipated [5] - 115:18, 116:5, 116:6, 230:17, 263:12</p> <p>anyhow [1] - 364:9</p> <p>anytime [1] - 378:12</p> <p>anyway [6] - 65:22, 145:3, 311:18, 355:16, 356:15, 357:22</p> <p>aorta [1] - 317:2</p> <p>apart [1] - 174:12</p> <p>apologize [10] - 64:13, 153:7, 222:11, 254:21, 264:7, 265:20, 270:14, 270:23, 275:24, 276:15</p> <p>Appalachian [1] - 47:12</p> <p>apparent [3] - 329:4, 330:15, 346:3</p> <p>appealed [1] - 166:3</p> <p>appear [2] - 152:12, 262:16</p> <p>Appendix [1] - 187:12</p> <p>appendix [2] - 187:13, 246:18</p> <p>applaud [1] - 314:25</p> <p>apples [2] - 23:24</p> <p>applicable [5] - 119:4, 119:5, 161:17, 329:9, 330:19</p>	<p>applicant [15] - 4:4, 4:23, 7:10, 7:18, 8:18, 20:6, 22:7, 271:6, 271:8, 276:2, 286:3, 289:23, 331:8, 332:17, 333:24</p> <p>applicant's [3] - 4:5, 4:24, 286:4</p> <p>applicants [1] - 276:22</p> <p>Application [2] - 6:25, 21:13</p> <p>application [84] - 2:14, 2:16, 4:16, 4:20, 6:19, 7:25, 10:8, 15:17, 16:2, 26:17, 35:1, 35:2, 49:13, 50:21, 52:10, 53:16, 64:4, 80:1, 80:14, 88:21, 89:5, 109:2, 109:7, 109:18, 109:23, 112:25, 122:8, 131:6, 146:9, 148:9, 154:15, 164:24, 165:3, 165:8, 165:24, 166:3, 172:6, 176:11, 177:25, 178:16, 187:7, 187:12, 192:19, 204:13, 204:14, 204:16, 207:17, 209:11, 225:21, 225:22, 226:4, 226:5, 258:5, 259:1, 259:22, 261:12, 262:10, 268:10, 272:23, 274:2, 274:4, 277:7, 280:8, 284:10, 286:11, 286:15, 286:19, 288:23, 288:25, 289:2, 290:20, 291:18, 326:14, 329:5, 330:3, 330:6, 330:22, 330:24, 334:25, 337:1, 339:20, 348:2, 356:25, 372:19</p> <p>application's [1] - 330:15</p> <p>APPLICATIONS [1] - 1:5</p> <p>Applications [1] - 2:7</p> <p>applications [5] - 2:12, 48:16, 172:2, 289:24, 290:1</p> <p>applied [10] - 15:8,</p>
---	---	--	--	--

25:17, 26:13, 146:7, 146:12, 164:25, 165:17, 172:1, 331:6, 373:17
applies [1] - 165:9
apply [6] - 88:13, 165:20, 176:10, 177:3, 222:5, 334:2
applying [2] - 211:11, 372:21
appointed [1] - 169:2
appreciate [15] - 48:3, 71:6, 74:2, 93:7, 129:25, 163:25, 250:13, 315:20, 328:14, 333:1, 341:2, 364:6, 364:19, 385:2, 385:6
appreciated [1] - 298:16
appreciation [1] - 82:10
apprised [1] - 169:15
approach [11] - 19:21, 33:19, 34:17, 34:20, 54:17, 56:21, 64:8, 123:11, 228:22, 228:23
approaches [1] - 54:24
approaching [2] - 251:21, 269:24
appropriate [13] - 22:1, 22:3, 37:16, 44:21, 58:14, 145:1, 184:5, 184:12, 184:14, 194:7, 217:11, 301:14, 337:14
appropriately [3] - 46:7, 144:14, 341:6
approval [7] - 89:23, 109:1, 126:21, 290:22, 329:5, 336:22, 338:10
approve [6] - 62:4, 222:14, 313:21, 378:13, 382:12, 382:13
approved [19] - 13:22, 16:14, 89:3, 94:13, 100:18, 101:4, 108:17, 122:14, 128:8, 219:19, 222:18, 227:16, 230:3, 232:4, 232:14, 342:3, 363:5, 373:8, 382:11
approximate [1] - 182:17

April [1] - 274:8
aquatic [4] - 250:22, 250:25, 258:12, 258:14
aquifer [6] - 41:11, 42:23, 43:15, 57:9, 185:23, 186:4
aquifers [1] - 57:11
arbitrary [2] - 154:13, 297:12
ARC [2] - 151:9, 154:8
area [129] - 3:25, 4:9, 30:9, 30:11, 31:19, 37:20, 48:12, 50:8, 51:17, 52:4, 57:23, 62:18, 63:5, 63:8, 63:9, 75:5, 77:4, 78:19, 80:1, 87:21, 88:6, 93:10, 93:11, 93:22, 93:24, 93:25, 94:3, 94:6, 94:16, 95:1, 95:4, 95:8, 95:16, 96:12, 100:7, 102:5, 103:25, 104:1, 104:13, 104:15, 104:16, 104:17, 104:19, 104:21, 105:3, 105:6, 106:16, 106:23, 107:10, 107:11, 107:14, 107:16, 107:19, 107:21, 108:1, 108:20, 109:15, 111:6, 111:7, 112:3, 112:5, 121:11, 121:12, 121:23, 189:3, 193:4, 193:11, 195:1, 199:8, 205:3, 205:4, 205:5, 205:9, 205:10, 206:1, 206:3, 207:23, 208:20, 215:10, 215:22, 218:23, 219:3, 219:5, 219:6, 219:8, 219:9, 219:17, 219:24, 220:6, 220:9, 220:10, 220:11, 224:20, 225:2, 225:4, 226:13, 231:7, 238:9, 240:17, 246:12, 246:16, 247:3, 247:4, 258:18, 262:15, 285:24, 290:4, 290:24, 291:1, 291:2, 291:3, 294:8, 310:14,

313:5, 333:14, 351:5, 352:19, 354:14, 361:2, 361:13, 361:14, 367:22, 368:2, 368:14
areas [43] - 29:6, 37:21, 40:6, 40:8, 40:10, 55:22, 63:13, 63:14, 63:16, 63:21, 82:12, 85:15, 85:16, 87:25, 88:2, 93:20, 93:21, 93:25, 98:17, 105:6, 106:5, 106:10, 117:20, 120:6, 180:2, 180:17, 181:17, 181:18, 199:4, 199:11, 204:23, 205:2, 205:6, 205:8, 205:10, 205:12, 210:25, 231:3, 235:10, 250:17, 290:10, 290:11
arena [1] - 306:4
argue [5] - 196:25, 263:20, 274:11, 275:8, 276:25
arguing [2] - 16:5, 153:14
argument [2] - 157:9, 158:2
arguments [2] - 158:14, 343:17
Argyle [1] - 320:7
arise [3] - 124:5, 125:11, 307:16
Arizona [1] - 346:9
Army [5] - 91:25, 92:11, 102:9, 203:17, 224:16
arrival [1] - 185:7
arrived [2] - 127:11, 247:6
arrives [1] - 22:12
arsenic [5] - 263:25, 357:6, 357:9, 357:12, 357:14
art [1] - 377:7
artificially [1] - 162:23
ascertain [1] - 177:3
ash [10] - 25:3, 25:15, 121:14, 126:14, 135:19, 201:1, 304:2, 304:6, 334:12
ashes [5] - 15:11, 25:16, 25:17, 26:4, 122:3
aside [9] - 27:18, 177:4, 184:6,

204:12, 204:19, 205:13, 219:17, 257:16, 308:14
aspect [1] - 160:21
aspects [4] - 20:16, 55:5, 76:5, 253:12
asphalt [3] - 379:11, 379:14, 379:16
asserts [1] - 331:8
assess [2] - 246:12, 246:19
assesses [3] - 96:5, 245:8, 245:12
assessing [1] - 274:11
assessment [12] - 27:17, 96:1, 96:11, 115:25, 117:16, 117:21, 218:8, 218:14, 245:16, 245:19, 352:4
assessments [3] - 91:9, 91:11, 97:13
assign [1] - 245:17
assigns [1] - 260:13
assimilated [1] - 254:18
assist [1] - 376:14
Assistant [3] - 1:19, 1:20, 7:20
assistant [6] - 3:2, 3:7, 259:15, 284:22, 285:2, 318:4
assisting [2] - 21:19, 39:10
associate [1] - 250:14
associated [16] - 20:21, 44:11, 49:14, 53:15, 75:21, 99:12, 99:14, 109:20, 120:11, 120:18, 120:24, 192:20, 232:2, 272:22, 275:10, 291:20
associates [1] - 52:25
Associates [3] - 8:6, 8:8, 117:15
Association [4] - 9:3, 18:23, 94:9, 113:17
assume [7] - 43:7, 60:14, 60:15, 138:10, 171:7, 206:20, 207:1
assumed [3] - 43:23, 43:25, 132:1
assumes [1] - 260:21
assuming [8] - 139:9, 156:21, 196:3, 213:14, 219:11, 222:17, 228:23, 232:14

assumption [2] - 271:5, 273:7
assumptions [4] - 56:16, 56:23, 171:6, 171:21
assurance [1] - 59:23
assurance/quality [1] - 89:10
assure [7] - 122:16, 124:3, 126:22, 127:14, 127:19, 306:15, 361:23
asthma [1] - 345:7
asthmatic [1] - 333:11
ASTM [1] - 211:20
astounding [1] - 320:18
AT [1] - 1:18
ate [1] - 352:5
Atlantic [32] - 92:6, 92:7, 109:4, 109:15, 110:8, 110:20, 111:10, 112:10, 192:6, 192:15, 193:6, 252:9, 252:19, 254:9, 257:1, 257:3, 257:11, 258:1, 258:19, 258:22, 259:17, 259:19, 259:23, 261:7, 262:25, 263:24, 264:19, 275:10, 336:12, 350:23, 352:21
atmosphere [1] - 269:18
atmospheric [1] - 269:22
ATSDR [1] - 352:2
attachment [2] - 259:13, 259:14
attachments [1] - 331:18
attempt [5] - 154:25, 155:7, 177:14, 266:3, 323:17
attempted [2] - 163:18, 330:4
attempting [1] - 162:20
attempts [2] - 181:6, 349:4
attendant [2] - 223:5, 223:6
attended [1] - 363:22
attendees [1] - 6:22
attends [1] - 169:16
attention [3] - 332:25, 342:4, 342:10

<p>attorney [2] - 3:3, 284:22</p> <p>Attorney [2] - 1:19, 7:20</p> <p>attract [1] - 326:10</p> <p>attributed [1] - 189:23</p> <p>attributes [1] - 202:16</p> <p>attributing [1] - 190:12</p> <p>Atwood [2] - 7:15, 342:13</p> <p>Auburn [1] - 148:14</p> <p>audience [2] - 224:18, 385:4</p> <p>audit [2] - 220:21, 341:23</p> <p>auger [3] - 187:20, 187:22, 187:23</p> <p>augmented [3] - 70:3, 70:10, 210:10</p> <p>August [2] - 289:25, 293:21</p> <p>Augusta [1] - 360:5</p> <p>Aunt [1] - 383:21</p> <p>authority [3] - 143:12, 287:11, 337:7</p> <p>Authority [1] - 374:16</p> <p>automated [1] - 22:20</p> <p>automatically [1] - 124:5</p> <p>availability [1] - 20:19</p> <p>available [24] - 4:17, 4:21, 5:23, 18:4, 88:22, 119:21, 122:4, 179:24, 180:13, 185:16, 208:11, 210:13, 211:11, 234:19, 245:20, 245:23, 277:17, 286:12, 286:16, 292:17, 295:24, 296:14, 297:7, 319:9</p> <p>avenue [1] - 200:21</p> <p>average [5] - 263:14, 263:17, 277:4, 278:25, 279:9</p> <p>avoid [8] - 25:8, 97:18, 98:11, 113:7, 113:8, 135:8, 170:16, 240:5</p> <p>avoidance [2] - 92:1, 97:14</p> <p>avoided [1] - 113:11</p> <p>avoiding [1] - 155:1</p> <p>awake [1] - 114:6</p> <p>awakened [1] - 354:4</p> <p>awarded [1] - 10:18</p> <p>aware [13] - 13:17, 17:13, 133:8, 136:17, 136:20,</p>	<p>136:25, 149:22, 166:2, 173:8, 203:11, 281:4, 281:10, 312:7</p> <p style="text-align: center;">B</p> <p>bachelor [4] - 9:6, 18:19, 48:22, 91:3</p> <p>bachelor's [2] - 29:12, 29:15</p> <p>backed [2] - 67:15, 338:8</p> <p>backfilled [1] - 187:24</p> <p>background [2] - 9:17, 29:12</p> <p>backing [4] - 237:1, 237:25, 238:3, 238:4</p> <p>backroom [1] - 321:3</p> <p>backup [13] - 80:9, 80:15, 118:5, 118:7, 118:11, 170:3, 236:6, 237:25, 241:23, 242:4, 243:4, 374:4, 374:25</p> <p>backyard [7] - 318:12, 318:14, 367:25, 368:3, 370:5, 370:8, 371:14</p> <p>bacteria [3] - 243:5, 243:23, 353:6</p> <p>bad [3] - 348:8, 364:21, 381:14</p> <p>bag [1] - 124:21</p> <p>balance [2] - 86:3, 199:22</p> <p>balancing [1] - 192:2</p> <p>bale [2] - 23:9, 241:6</p> <p>baling [1] - 22:19</p> <p>balloons [1] - 323:11</p> <p>balls [1] - 355:22</p> <p>ban [1] - 143:11</p> <p>Bangor [6] - 1:10, 2:2, 3:22, 285:21, 361:13, 377:1</p> <p>banned [1] - 9:20</p> <p>Bar [1] - 313:2</p> <p>Barden [20] - 8:19, 9:12, 14:11, 128:11, 128:19, 130:17, 130:18, 136:7, 136:16, 137:17, 147:2, 149:1, 158:25, 160:9, 168:8, 170:13, 172:9, 172:16, 175:1</p> <p>BARDEN [48] - 9:13, 15:1, 16:17, 16:24, 17:13, 17:17, 17:24, 131:4, 131:8,</p>	<p>131:25, 132:10, 132:19, 132:25, 133:8, 133:12, 133:20, 133:23, 134:6, 134:18, 134:24, 135:4, 135:13, 135:21, 136:3, 136:23, 137:4, 137:10, 137:21, 138:4, 138:10, 147:11, 147:19, 148:5, 149:20, 150:10, 159:3, 159:6, 159:13, 159:16, 160:1, 160:4, 161:1, 161:14, 162:7, 162:12, 168:14, 169:10, 170:20</p> <p>barely [1] - 238:2</p> <p>barrels [1] - 307:20</p> <p>barrier [10] - 40:9, 59:6, 72:11, 180:4, 213:19, 226:16, 227:12, 317:3, 317:4, 317:5</p> <p>barriers [4] - 352:22, 352:23, 353:9, 369:14</p> <p>Barry [2] - 309:9, 312:16</p> <p>base [13] - 25:6, 44:17, 58:5, 62:14, 63:6, 63:15, 64:20, 69:19, 69:24, 71:2, 188:8, 211:1, 369:14</p> <p>Base [2] - 374:11</p> <p>based [48] - 19:21, 23:5, 51:14, 51:18, 52:2, 53:25, 54:11, 54:18, 59:19, 83:14, 83:20, 86:21, 87:15, 90:14, 117:21, 123:15, 130:19, 141:23, 142:7, 146:25, 157:9, 170:20, 171:21, 172:20, 179:18, 184:17, 191:9, 192:1, 193:8, 221:15, 223:10, 232:10, 245:18, 248:25, 251:25, 259:3, 259:22, 261:15, 261:17, 266:2, 268:20, 273:7, 273:16, 274:7, 274:12, 329:15, 360:4, 378:14</p>	<p>basement [1] - 206:21</p> <p>bases [1] - 53:20</p> <p>basic [4] - 17:21, 242:13, 269:17, 345:1</p> <p>basing [1] - 268:18</p> <p>basis [13] - 13:6, 38:1, 45:7, 49:24, 53:17, 148:19, 157:25, 244:20, 261:10, 339:16, 341:15, 369:11, 380:14</p> <p>bass [2] - 254:11, 318:20</p> <p>battery [2] - 316:4, 316:5</p> <p>Bay [1] - 321:18</p> <p>bear [2] - 325:7, 358:22</p> <p>beautiful [2] - 47:17, 352:21</p> <p>beauty [2] - 320:18, 370:16</p> <p>beaver [3] - 105:7, 106:10, 106:12</p> <p>became [3] - 17:18, 372:20, 374:20</p> <p>become [8] - 122:4, 186:9, 188:14, 209:3, 303:13, 327:15, 335:13, 339:9</p> <p>becomes [2] - 36:11, 175:17</p> <p>becoming [1] - 292:14</p> <p>bed [1] - 317:1</p> <p>bedrock [46] - 31:2, 32:1, 32:5, 32:15, 32:16, 32:18, 32:19, 32:24, 36:7, 36:8, 36:13, 37:3, 37:4, 37:25, 38:4, 38:16, 38:24, 39:3, 39:4, 39:7, 39:16, 39:22, 40:22, 40:24, 41:1, 41:6, 41:8, 41:19, 45:19, 47:13, 57:23, 57:25, 58:8, 58:23, 61:5, 63:16, 179:22, 180:12, 190:9, 211:1, 213:10, 213:21, 226:23, 228:19, 306:14</p> <p>beds [2] - 316:13, 316:14</p> <p>beeping [5] - 118:7, 118:9, 118:10, 118:15, 236:24</p> <p>began [2] - 92:12, 242:9</p>	<p>begin [4] - 4:22, 6:17, 30:7, 227:24</p> <p>beginning [7] - 2:3, 172:4, 267:16, 283:2, 315:1, 339:4, 365:23</p> <p>begins [1] - 336:7</p> <p>begun [1] - 154:21</p> <p>behalf [4] - 14:23, 249:17, 293:12, 301:10</p> <p>behave [2] - 213:22, 226:12</p> <p>behaved [1] - 180:9</p> <p>behaves [2] - 38:12, 40:22</p> <p>behaving [1] - 46:7</p> <p>behavior [4] - 30:12, 31:1, 38:7, 39:11</p> <p>behind [3] - 212:8, 248:7, 249:8</p> <p>BEHR [7] - 225:8, 225:19, 227:3, 227:13, 229:19, 231:14, 233:14</p> <p>Behr [4] - 1:24, 3:8, 247:12, 285:3</p> <p>Belfast [4] - 314:22, 324:7, 343:15, 345:13</p> <p>believes [4] - 39:19, 277:25, 328:18, 337:4</p> <p>Bell [4] - 314:20, 318:2, 318:7, 318:10</p> <p>BELL [1] - 318:8</p> <p>belong [2] - 312:3, 322:4</p> <p>below [15] - 35:5, 64:19, 64:21, 67:1, 67:25, 68:12, 69:16, 70:2, 74:21, 74:22, 86:15, 187:17, 215:10, 215:16, 303:8</p> <p>Ben [4] - 312:18, 312:19, 312:21, 313:13</p> <p>beneath [5] - 30:12, 36:9, 183:4, 183:12, 336:5</p> <p>beneficial [2] - 28:5, 216:1</p> <p>beneficially [9] - 23:20, 25:5, 26:4, 119:13, 145:17, 146:7, 152:18, 296:13, 296:15</p> <p>benefit [28] - 13:16, 18:7, 51:1, 132:9,</p>
--	--	---	---	--

132:10, 152:23,
152:24, 153:10,
155:5, 156:11,
156:15, 157:3,
158:15, 171:23,
253:22, 289:19,
289:22, 294:3,
296:21, 316:5,
326:18, 331:13,
332:1, 336:22,
337:9, 338:13,
339:24, 341:14
benefits [3] - 11:9,
11:20, 22:21
Bennett [2] - 377:3,
377:7
BENNETT [1] - 377:5
bentonite [1] - 67:5
BEP [8] - 1:19, 1:20,
322:21, 323:1,
330:23, 337:7,
338:9, 339:18
berms [2] - 50:9,
98:23
Bertocci [3] - 1:19,
3:4, 284:24
BERTOCCI [15] - 17:2,
130:15, 152:7,
152:20, 153:1,
153:5, 153:9, 156:7,
164:2, 164:5,
165:11, 165:21,
166:5, 174:18,
385:14
beside [2] - 284:17,
284:23
Best [1] - 84:1
best [29] - 19:19, 52:4,
98:25, 119:3,
142:13, 206:5,
206:11, 243:3,
252:5, 259:5, 307:3,
307:13, 308:14,
315:22, 323:1,
323:2, 323:4,
333:17, 335:23,
359:20, 365:3,
367:2, 367:5,
376:16, 382:23,
382:25, 383:1,
383:14, 383:17
Better [1] - 305:12
better [20] - 23:24,
38:11, 40:21, 60:2,
103:6, 169:23,
186:2, 191:19,
230:22, 233:10,
244:8, 266:11,
281:3, 297:10,
325:7, 343:4, 343:5,

359:18, 365:4
between [21] - 12:11,
33:8, 37:9, 38:13,
45:4, 47:8, 63:15,
73:12, 87:17, 87:20,
127:21, 179:13,
187:22, 192:2,
260:10, 289:12,
294:6, 294:9, 329:4,
339:8, 357:25
Beyer [3] - 1:24, 3:10,
285:5
BEYER [2] - 244:24,
247:8
beyond [10] - 27:4,
42:1, 150:8, 204:20,
213:7, 248:3, 248:4,
271:15, 274:12,
338:4
BGS [5] - 9:10, 134:1,
173:7, 338:7, 340:2
BGS/NEWSME [8] -
18:24, 29:19, 48:24,
91:15, 100:23,
114:2, 130:7, 179:4
BICKFORD [1] -
308:20
Bickford [3] - 305:2,
308:18, 308:21
Biddeford [1] - 148:8
bidding [1] - 10:14
bids [1] - 10:18
big [12] - 15:11, 65:6,
65:24, 90:2, 103:20,
150:11, 217:11,
292:10, 318:14,
349:12, 362:12,
382:13
bigger [6] - 79:13,
81:8, 86:25, 87:2,
242:15, 310:15
biggest [8] - 78:21,
88:13, 229:3,
240:13, 240:19,
348:19, 367:6,
367:13
biggies [1] - 264:1
bill [1] - 380:23
Bill [10] - 7:20, 8:13,
324:5, 325:10,
325:14, 349:1,
372:9, 375:6,
375:11, 378:17
billion [6] - 125:11,
239:15, 239:19,
239:24, 248:16,
248:19
binary [1] - 260:9
Bingo [2] - 365:10,
365:11

Biofuels [2] - 155:13,
293:20
biologist [1] - 259:16
biomass [2] - 334:13,
349:24
biophysical [3] -
250:21, 252:2, 260:2
biosolids [18] - 24:3,
26:20, 164:20,
164:23, 165:1,
165:2, 165:8,
372:20, 372:22,
373:3, 373:16,
373:23, 374:5,
374:9, 374:18,
374:19, 374:22,
374:23
bird [1] - 259:20
birds [1] - 267:10
bit [38] - 34:8, 41:1,
44:6, 44:12, 47:18,
66:16, 70:24, 81:8,
92:4, 93:4, 95:13,
97:13, 100:2, 100:3,
106:22, 107:22,
116:8, 121:8,
154:10, 168:15,
213:5, 215:9,
217:17, 227:18,
228:19, 236:13,
249:8, 250:12,
251:14, 284:5,
289:5, 291:11,
305:10, 345:23,
348:13, 371:16
bite [1] - 283:3
black [6] - 68:5, 95:9,
100:25, 105:1,
106:5, 291:1
blade [1] - 237:23
Blair [5] - 358:17,
360:20, 360:21,
360:25, 363:6
BLAIR [2] - 363:7,
363:9
blank [1] - 350:5
blanket [3] - 221:19,
221:23, 222:5
blessings [1] - 344:17
blight [1] - 321:5
block [2] - 82:16,
205:11
blocked [1] - 163:16
bloodstream [1] -
316:12
blown [1] - 244:7
blue [9] - 20:1, 63:13,
94:1, 107:17,
117:19, 218:21,
219:3, 278:21, 291:5

blueback [1] - 266:21
bluntly [1] - 268:9
board [3] - 138:17,
169:4, 315:24
BOARD [2] - 1:2, 1:13
Board [66] - 2:1, 2:6,
2:18, 2:19, 3:2, 3:3,
3:14, 4:3, 4:14, 4:25,
5:6, 5:9, 5:11, 5:12,
5:14, 5:16, 6:8, 6:21,
6:22, 7:12, 8:10,
9:14, 14:10, 18:3,
47:23, 55:3, 91:21,
136:11, 137:17,
138:15, 156:17,
156:21, 162:3,
169:18, 170:10,
204:3, 209:23,
250:5, 277:18,
278:10, 282:21,
284:9, 284:14,
284:16, 284:21,
284:23, 285:13,
286:2, 286:6, 286:9,
287:10, 290:1,
293:11, 296:24,
307:5, 327:24,
328:11, 329:24,
330:7, 330:14,
331:17, 332:24,
341:1, 342:19,
349:16, 355:8
Board's [5] - 3:5, 3:6,
284:24, 285:1,
286:21
bodies [3] - 42:23,
43:9, 85:11
body [4] - 316:7,
316:12, 316:19,
317:3
boiler [2] - 25:15,
334:13
boilers [2] - 151:12,
176:2
bomb [1] - 322:1
boot [1] - 76:12
Booth [16] - 44:5,
48:8, 97:15, 120:21,
123:7, 148:16,
179:4, 184:19,
189:20, 202:13,
206:18, 208:7,
210:9, 214:2,
233:17, 233:18
BOOTH [37] - 49:2,
185:2, 185:13,
186:1, 186:10,
186:18, 186:25,
187:6, 187:18,
188:5, 188:15,

188:18, 188:24,
189:9, 190:4,
202:17, 203:10,
206:24, 207:3,
207:10, 208:5,
208:16, 210:16,
211:8, 211:14,
214:7, 214:21,
215:14, 216:5,
216:16, 216:19,
234:5, 234:8,
234:13, 235:5,
235:19, 235:24
borders [5] - 185:1,
185:5, 339:10,
340:14
bore [2] - 32:15, 33:9
borings [3] - 32:3,
32:6
born [1] - 344:19
bothered [1] - 143:20
bottle [1] - 299:12
bottom [21] - 53:12,
60:12, 68:15, 70:19,
70:22, 72:21, 80:24,
81:1, 188:1, 188:2,
188:7, 188:9,
233:20, 233:25,
271:25, 272:8,
274:6, 321:9,
325:23, 342:17,
371:3
bound [3] - 242:23,
345:17, 346:21
boundaries [9] -
11:11, 11:15, 52:20,
87:11, 87:15, 92:24,
193:9, 337:13
boundary [4] - 52:21,
55:15, 117:24, 118:3
box [2] - 342:1, 343:6
Boy [1] - 298:23
Bradley [1] - 351:10
Brale [3] - 369:7,
370:9, 370:11
BRALEY [1] - 370:11
Brandon [1] - 365:9
Bravo [1] - 47:1
breaching [1] - 275:6
break [15] - 4:19, 7:6,
36:20, 61:1, 90:20,
130:1, 149:5,
178:22, 178:25,
181:15, 347:18,
352:25, 354:19,
371:4
breaks [1] - 307:7
breathe [1] - 333:11
breeding [1] - 106:17
brevity [1] - 354:7

<p>Brewer [6] - 170:3, 170:7, 257:23, 263:5, 264:13, 276:6</p> <p>Brian [8] - 7:16, 143:18, 328:7, 358:13, 360:22, 360:24, 361:2, 365:6</p> <p>bridge [1] - 224:1</p> <p>brief [5] - 288:16, 288:23, 291:21, 300:3, 341:8</p> <p>briefly [9] - 30:11, 35:4, 65:12, 227:17, 240:4, 245:3, 249:20, 255:11, 360:2</p> <p>briefs [2] - 158:13, 158:18</p> <p>bring [25] - 72:23, 74:20, 157:2, 160:18, 173:22, 196:7, 197:9, 197:10, 211:17, 217:13, 222:9, 223:2, 223:9, 241:12, 251:12, 251:16, 302:11, 303:25, 304:1, 307:6, 325:7, 360:3, 366:8, 367:20, 385:16</p> <p>bringing [9] - 142:15, 160:19, 171:16, 201:20, 222:23, 223:10, 296:1, 349:20, 354:15</p> <p>brink [2] - 255:23, 257:7</p> <p>broach [1] - 14:13</p> <p>broad [2] - 23:22, 258:18</p> <p>broadband [3] - 236:5, 236:20, 237:5</p> <p>Broadway [2] - 377:1, 377:2</p> <p>broken [1] - 36:14</p> <p>broker [1] - 23:8</p> <p>Brook [3] - 110:18, 110:19, 111:5</p> <p>brook [2] - 112:1, 254:12</p> <p>brooks [2] - 110:9, 112:14</p> <p>brother [1] - 312:23</p> <p>brought [16] - 7:2, 33:13, 150:19, 150:20, 160:15, 173:25, 176:14, 186:8, 186:15, 186:23, 223:13,</p>	<p>298:18, 342:18, 374:7, 374:17, 379:5</p> <p>Brunswick [2] - 374:10</p> <p>Bryan [10] - 52:22, 90:25, 91:6, 91:16, 91:19, 93:1, 113:12, 179:5, 192:4</p> <p>Bryan's [1] - 91:14</p> <p>bubbles [1] - 336:4</p> <p>buffer [4] - 111:12, 111:19, 112:6, 291:19</p> <p>buffering [1] - 111:8</p> <p>buffers [7] - 103:19, 108:7, 110:21, 111:16, 111:23, 111:25, 112:22</p> <p>build [19] - 50:22, 63:24, 64:1, 64:4, 64:5, 88:23, 90:5, 149:13, 149:14, 209:16, 234:16, 252:22, 300:13, 306:11, 306:13, 341:15, 342:1, 343:6, 377:17</p> <p>builders [2] - 379:6, 379:24</p> <p>building [4] - 5:25, 50:11, 80:22, 380:10</p> <p>buildings [2] - 290:8, 306:8</p> <p>builds [1] - 81:12</p> <p>buildup [2] - 66:14, 234:1</p> <p>built [12] - 31:11, 52:13, 61:20, 74:6, 75:2, 183:17, 188:10, 230:3, 244:2, 308:25, 338:19, 359:7</p> <p>bulbs [2] - 194:21, 195:5</p> <p>bulky [26] - 26:7, 126:15, 138:22, 153:12, 153:16, 154:16, 154:21, 154:23, 155:4, 155:14, 162:17, 173:6, 173:14, 173:21, 296:1, 296:2, 296:16, 296:24, 297:1, 297:13, 303:19, 312:24, 313:8, 325:25, 337:13, 337:20</p> <p>bulldozer [1] - 237:23</p> <p>bunch [1] - 254:9</p>	<p>burden [3] - 271:6, 324:11, 351:3</p> <p>burdens [1] - 303:21</p> <p>Bureau [19] - 2:8, 2:10, 4:4, 7:18, 7:21, 12:5, 114:9, 132:20, 244:18, 284:10, 286:3, 286:18, 288:20, 289:14, 336:18, 337:2, 338:2, 338:5, 339:15</p> <p>BUREAU [1] - 1:5</p> <p>buried [2] - 367:23, 368:2</p> <p>Burke [3] - 1:20, 3:6, 285:1</p> <p>burn [4] - 150:24, 151:13, 154:25, 302:18</p> <p>burning [5] - 309:14, 311:20, 311:21, 349:23, 370:8</p> <p>BURNS [2] - 172:9, 172:25</p> <p>Burns [3] - 1:23, 3:10, 285:4</p> <p>burnt [1] - 175:24</p> <p>burying [1] - 349:24</p> <p>business [26] - 130:6, 150:25, 155:20, 163:14, 305:15, 305:16, 307:17, 310:22, 310:24, 311:3, 361:21, 362:1, 362:9, 367:5, 367:10, 367:11, 368:22, 372:25, 373:12, 375:13, 375:14, 376:7, 379:20, 380:4, 380:12, 380:18</p> <p>businesses [5] - 23:6, 303:22, 307:25, 311:5, 311:6</p> <p>button [1] - 249:13</p> <p>buy [4] - 295:21, 306:2, 306:13, 373:8</p> <p>buying [1] - 324:12</p> <p>BY [1] - 1:5</p> <p>by-product [1] - 175:14</p> <p>bypass [26] - 15:21, 27:6, 27:9, 139:8, 139:19, 139:21, 140:17, 140:18, 140:21, 140:24, 147:5, 147:13, 147:16, 147:17, 148:12, 148:17, 172:11, 172:16,</p>	<p>304:4, 326:19, 326:25, 327:9, 327:15, 332:6, 334:18, 358:25</p>	<p>326:17, 326:20, 327:2, 328:1, 328:23, 331:1, 331:9, 340:13, 341:16, 359:2, 373:19, 374:7, 374:21</p> <p>Capacity [1] - 166:22</p> <p>Cape [1] - 345:14</p> <p>capillaries [1] - 316:17</p> <p>capillary [3] - 316:13, 317:1</p> <p>capital [2] - 294:22, 377:18</p> <p>capped [1] - 11:5</p> <p>caption [1] - 278:14</p> <p>capture [1] - 42:7</p> <p>car [1] - 333:14</p> <p>carbon [4] - 199:20, 244:3, 244:7, 244:13</p> <p>cardboard [2] - 295:16, 379:12</p> <p>care [9] - 12:15, 12:16, 131:11, 131:12, 161:10, 182:13, 297:24, 382:21, 384:2</p> <p>career [4] - 48:17, 306:9, 349:12, 361:6</p> <p>careful [4] - 154:1, 248:23, 303:17, 341:3</p> <p>canopy [1] - 153:20</p> <p>Caribou [2] - 3:1, 284:21</p> <p>Carl [8] - 304:25, 305:2, 305:4, 305:9, 365:12, 369:6, 369:7, 369:8</p> <p>Carolina [1] - 353:5</p> <p>Caron [3] - 1:24, 3:11, 285:6</p> <p>carpet [1] - 67:4</p> <p>carpeting [2] - 295:11, 296:6</p> <p>carried [1] - 333:13</p> <p>carrier [1] - 78:8</p> <p>Carroll [2] - 365:9</p> <p>carry [3] - 316:12, 316:18, 385:12</p> <p>case [21] - 11:11, 15:10, 37:22, 55:12, 55:23, 61:13, 139:22, 157:15, 165:3, 166:6, 181:16, 195:21, 206:5, 240:18, 242:4, 258:25, 260:15, 335:23,</p>
C				
<p>C&D [10] - 139:24, 153:23, 154:4, 163:13, 195:25, 293:16, 294:9, 294:10, 297:6, 297:7</p> <p>calculate [4] - 33:22, 34:6, 56:6, 64:9</p> <p>calculated [3] - 65:18, 171:5, 189:16</p> <p>calculation [5] - 42:17, 43:1, 44:4, 44:7, 88:17</p> <p>calculations [7] - 14:4, 30:23, 34:23, 86:23, 188:23, 189:9, 189:17</p> <p>calendar [1] - 23:25</p> <p>camera [2] - 234:19, 234:21</p> <p>Canada [1] - 151:20</p> <p>cancel [1] - 250:7</p> <p>cancer [1] - 345:7</p> <p>cannot [6] - 259:25, 317:17, 323:11, 333:22, 373:16, 380:3</p> <p>canopy [1] - 99:14</p> <p>cans [2] - 196:4, 299:7</p> <p>capability [2] - 147:24, 296:5</p> <p>capable [3] - 253:9, 269:18, 356:19</p> <p>capacity [62] - 13:19, 13:20, 14:6, 24:1, 51:6, 52:10, 52:11, 53:5, 61:20, 62:11, 66:5, 66:19, 68:14, 78:13, 78:23, 79:8, 79:18, 80:13, 80:16, 81:7, 83:12, 96:24, 98:16, 114:19, 114:20, 114:24, 115:5, 115:6, 131:3, 131:12, 135:7, 135:10, 136:5, 162:9, 170:15, 170:21, 170:23, 171:6, 171:9, 171:11, 171:21, 172:5, 200:18, 213:22, 301:15, 313:18, 325:17, 325:20, 326:16,</p>	<p>326:17, 326:20, 327:2, 328:1, 328:23, 331:1, 331:9, 340:13, 341:16, 359:2, 373:19, 374:7, 374:21</p>			

<p>337:5, 338:9, 351:23 Casella [106] - 10:18, 10:25, 11:1, 11:12, 11:18, 12:19, 14:3, 18:13, 18:23, 23:19, 24:3, 24:14, 26:16, 28:6, 80:7, 80:9, 131:2, 132:15, 133:14, 133:17, 133:25, 134:11, 134:15, 136:4, 137:23, 138:23, 139:14, 149:24, 155:11, 155:12, 156:22, 156:25, 158:6, 158:10, 159:21, 160:16, 160:19, 161:9, 164:19, 164:25, 193:13, 231:19, 232:5, 232:6, 235:16, 236:6, 289:13, 293:20, 295:17, 298:12, 300:2, 302:9, 303:23, 305:25, 320:10, 320:11, 326:8, 326:13, 327:1, 327:3, 327:9, 337:2, 338:7, 339:16, 342:14, 348:9, 348:16, 348:18, 348:21, 348:22, 349:2, 350:5, 355:19, 358:9, 359:5, 361:4, 361:6, 361:8, 361:10, 361:21, 361:25, 362:9, 363:2, 364:23, 366:18, 367:9, 371:23, 372:16, 373:11, 375:13, 375:15, 375:18, 375:20, 375:24, 376:8, 376:17, 376:20, 377:11, 377:16, 380:11, 382:17, 383:16, 384:21 Casella's [4] - 22:10, 22:16, 300:6, 326:11 cases [2] - 21:23, 26:2 cash [1] - 149:18 CASSE [1] - 251:5 Castell [1] - 111:13 catastrophic [2] - 260:21, 275:6 catch [2] - 199:10, 318:21</p>	<p>categories [2] - 131:23, 141:18 categorize [1] - 12:24 category [3] - 142:7, 173:14, 221:22 cats [1] - 362:6 caught [2] - 194:13, 342:10 caused [2] - 343:19, 383:9 causes [6] - 76:6, 76:18, 190:24, 191:1, 330:2, 384:9 causing [8] - 20:14, 42:13, 72:25, 124:14, 184:9, 331:21, 353:5, 383:8 caution [2] - 285:9 cautioned [1] - 249:17 CDD [6] - 135:19, 151:17, 152:13, 152:16, 157:16, 334:18 cell [46] - 61:24, 62:14, 62:18, 62:19, 63:2, 63:24, 64:4, 64:6, 69:19, 71:1, 74:5, 74:6, 74:7, 74:8, 74:13, 75:2, 76:9, 77:7, 77:14, 77:15, 78:21, 79:9, 79:19, 80:5, 88:23, 89:6, 89:24, 90:7, 110:25, 114:25, 123:7, 211:12, 233:21, 234:1, 234:17, 238:3, 238:7, 238:10, 238:11, 290:17, 290:22 cells [28] - 15:20, 25:6, 50:15, 61:20, 61:22, 62:3, 62:9, 62:10, 62:22, 63:23, 71:6, 71:10, 74:9, 77:2, 77:7, 80:11, 89:4, 211:8, 211:9, 234:2, 290:11, 290:16, 290:18, 290:19, 308:24, 316:8, 316:10 cellular [1] - 316:19 Center [4] - 1:10, 2:2, 251:4, 347:24 center [3] - 100:24, 270:12, 336:12 centimeters [4] - 35:24, 36:1, 69:20, 71:22 central [2] - 301:18, 361:3</p>	<p>centuries [1] - 267:17 certain [25] - 34:18, 42:22, 55:10, 59:11, 59:25, 60:5, 60:25, 72:20, 96:5, 123:22, 135:12, 176:17, 217:7, 221:21, 232:3, 239:22, 239:23, 262:16, 303:18, 321:15, 344:20, 380:5, 381:24, 381:25 certainly [15] - 149:21, 158:7, 250:11, 263:20, 264:1, 264:15, 280:18, 340:16, 362:12, 362:25, 364:3, 364:18, 366:13, 367:21, 381:11 Certainly [1] - 348:14 certification [1] - 217:5 certified [5] - 18:22, 29:4, 91:1, 113:16, 124:7 CES [1] - 179:14 cetera [2] - 132:17, 185:12 CFLs [1] - 195:9 chair [5] - 136:10, 282:6, 282:8, 284:14, 285:5 Chair [5] - 2:17, 6:21, 137:16, 179:7, 332:23 chairman [3] - 129:23, 254:21, 279:21 Chairman [19] - 7:11, 8:15, 9:13, 65:16, 91:21, 166:7, 255:25, 261:19, 264:3, 265:6, 270:7, 273:17, 279:6, 328:10, 328:24, 331:17, 340:25, 350:15, 385:25 CHAIRMAN [209] - 1:12, 2:5, 6:16, 7:5, 14:10, 15:23, 16:21, 16:25, 17:4, 17:14, 17:21, 18:1, 18:9, 19:4, 28:24, 46:21, 46:24, 47:21, 48:3, 90:19, 90:23, 93:1, 93:3, 93:6, 113:12, 116:8, 121:7, 129:21, 129:25, 130:5, 131:14, 136:8, 136:13,</p>	<p>137:14, 138:14, 141:9, 141:11, 143:15, 144:19, 144:21, 144:25, 145:6, 146:18, 147:15, 147:21, 148:20, 148:23, 148:25, 150:6, 150:11, 151:21, 158:23, 159:4, 159:9, 159:14, 159:23, 160:2, 160:5, 161:7, 162:2, 162:10, 162:14, 163:2, 163:8, 163:24, 164:3, 168:6, 169:18, 170:10, 173:1, 174:15, 174:21, 175:8, 177:20, 178:21, 179:2, 193:19, 193:22, 193:25, 194:6, 200:6, 200:10, 202:7, 204:2, 204:10, 205:14, 206:17, 207:1, 207:5, 208:2, 208:6, 209:21, 210:7, 212:2, 213:3, 224:13, 225:6, 233:22, 236:9, 247:9, 248:6, 248:10, 249:7, 249:15, 250:3, 250:23, 255:5, 255:17, 256:2, 256:7, 256:10, 256:13, 256:17, 256:21, 262:5, 264:12, 265:8, 265:13, 265:16, 265:22, 270:10, 271:13, 271:22, 272:1, 272:5, 272:9, 273:21, 274:3, 275:25, 277:13, 277:20, 278:2, 279:24, 282:7, 282:10, 282:16, 282:18, 282:20, 282:24, 284:3, 291:23, 293:8, 297:17, 297:19, 298:6, 299:17, 299:21, 299:23, 300:15, 300:18, 300:20, 300:23, 301:2, 304:15, 304:24, 308:16, 308:18, 309:8,</p>	<p>312:14, 312:16, 313:23, 314:14, 317:18, 318:2, 320:1, 324:4, 325:10, 328:7, 332:19, 332:21, 335:2, 339:2, 340:5, 340:19, 343:11, 345:22, 347:1, 347:16, 348:12, 348:15, 350:11, 350:19, 353:17, 354:18, 354:22, 355:13, 357:18, 357:20, 358:12, 358:16, 360:20, 360:24, 363:6, 363:8, 363:10, 365:6, 365:11, 369:6, 370:9, 372:8, 375:4, 375:6, 376:24, 378:16, 380:23, 385:2, 385:24, 386:2, 386:5 Chairman's [1] - 152:9 chairs [1] - 293:3 Chamberlain [1] - 312:18 Chamberland [3] - 308:19, 309:9, 309:11 CHAMBERLAND [2] - 309:10, 312:15 chance [5] - 109:22, 124:22, 143:21, 191:13, 348:24 chances [1] - 182:3 change [22] - 45:23, 145:2, 151:15, 155:24, 209:7, 209:8, 209:19, 211:19, 218:18, 228:4, 230:16, 232:9, 240:13, 243:2, 252:17, 268:7, 268:12, 269:10, 270:1, 297:9, 310:15, 362:8 Change [1] - 269:3 changed [10] - 87:9, 92:21, 154:19, 191:1, 211:22, 231:18, 276:8, 326:19, 338:12 changer [2] - 326:24, 367:22 changes [11] - 88:15, 111:20, 132:16, 156:2, 160:11, 190:11, 231:22,</p>
--	---	--	---	--

<p>231:25, 232:10, 232:24, 269:15</p> <p>changing [3] - 272:22, 275:2, 322:22</p> <p>Chapter [20] - 3:19, 10:10, 19:17, 20:25, 90:13, 93:17, 94:18, 101:9, 105:10, 178:2, 178:5, 189:25, 251:3, 285:18, 329:6, 329:13, 329:22, 330:5, 330:18, 372:18</p> <p>chapter [2] - 329:10, 330:20</p> <p>chapters [1] - 90:14</p> <p>characteristic [2] - 35:13, 35:22</p> <p>characteristics [6] - 32:18, 35:21, 46:11, 47:14, 105:18, 105:25</p> <p>characterization [4] - 126:22, 209:12, 221:10, 276:21</p> <p>characterize [1] - 32:6</p> <p>characterized [2] - 127:9, 201:21</p> <p>charge [2] - 160:21, 315:9</p> <p>charged [1] - 159:18</p> <p>charging [1] - 159:11</p> <p>Charles [4] - 332:22, 335:2, 335:3, 335:6</p> <p>chart [4] - 120:12, 147:1, 166:8, 310:3</p> <p>charts [1] - 366:19</p> <p>CHASE [7] - 145:8, 145:22, 146:17, 210:8, 211:5, 211:9, 212:1</p> <p>Chase [6] - 1:15, 2:22, 284:18, 355:7, 358:12, 358:13</p> <p>cheap [2] - 322:16, 369:1</p> <p>cheaper [2] - 171:15, 171:16</p> <p>check [7] - 56:17, 57:16, 198:20, 199:7, 246:4, 291:11, 350:5</p> <p>checks [1] - 98:5</p> <p>chemical [3] - 233:1, 265:3, 275:18</p> <p>chemicals [5] - 263:23, 265:2, 316:3, 323:14, 351:12</p>	<p>chemistry [3] - 9:7, 91:4, 232:20</p> <p>Cheryl [3] - 328:8, 332:21, 333:2</p> <p>chickens [1] - 183:18</p> <p>child [1] - 351:22</p> <p>children [2] - 361:11, 384:5</p> <p>chip [2] - 151:12, 151:18</p> <p>Chip [1] - 4:11</p> <p>chloride [1] - 233:1</p> <p>chlorinated [1] - 352:10</p> <p>choice [2] - 338:9, 384:1</p> <p>choose [2] - 200:1, 292:2</p> <p>chooses [1] - 322:21</p> <p>chosen [1] - 63:17</p> <p>chromium [1] - 352:10</p> <p>chronic [1] - 239:24</p> <p>Chuck [1] - 377:2</p> <p>Cindy [5] - 3:4, 158:24, 164:1, 250:5, 284:24</p> <p>Cindy's [1] - 156:9</p> <p>circle [8] - 95:9, 95:11, 100:25, 101:1, 103:16, 103:17, 103:18, 103:20</p> <p>circles [4] - 103:8, 104:22, 105:1, 291:7</p> <p>circular [1] - 238:6</p> <p>circulation [1] - 269:22</p> <p>cited [2] - 176:5, 334:5</p> <p>cities [2] - 114:16, 337:19</p> <p>citizen [3] - 168:19, 168:22, 350:21</p> <p>citizens [5] - 136:18, 137:2, 169:5, 335:25, 340:15</p> <p>City [31] - 4:7, 5:4, 11:12, 11:20, 13:7, 108:11, 108:12, 108:17, 108:18, 116:24, 125:14, 126:2, 131:18, 136:9, 136:11, 168:23, 170:3, 179:14, 200:6, 244:20, 276:6, 282:12, 282:14, 286:10, 293:23, 293:24, 294:3, 294:4, 296:19, 305:15, 335:12</p> <p>city [6] - 117:8,</p>	<p>125:16, 125:23, 128:20, 128:25, 294:2</p> <p>City's [1] - 180:20</p> <p>civil [4] - 29:13, 48:22, 84:5, 113:23</p> <p>claim [1] - 252:3</p> <p>claims [1] - 335:22</p> <p>clarification [3] - 17:7, 18:6, 172:10</p> <p>clarified [1] - 17:15</p> <p>clarifier [1] - 358:2</p> <p>clarify [5] - 18:1, 18:2, 145:13, 197:23, 234:4</p> <p>clarifying [1] - 5:13</p> <p>clarity [1] - 366:11</p> <p>class [3] - 42:22, 93:15, 250:8</p> <p>classes [1] - 269:5</p> <p>classified [1] - 196:18</p> <p>clay [29] - 35:6, 35:11, 38:22, 46:13, 64:20, 67:2, 67:5, 68:1, 69:11, 69:17, 69:18, 69:20, 70:5, 70:13, 71:8, 71:9, 71:12, 71:13, 73:3, 73:16, 86:25, 87:5, 202:21, 203:1, 210:24, 242:15</p> <p>clean [20] - 24:15, 25:16, 35:17, 63:1, 74:12, 77:20, 77:21, 84:8, 115:20, 129:7, 152:13, 234:14, 234:18, 234:22, 253:14, 307:21, 315:9, 348:1, 353:22, 367:24</p> <p>Clean [6] - 92:11, 198:1, 264:11, 315:11, 346:17, 352:14</p> <p>cleaned [2] - 144:14, 368:12</p> <p>cleaning [1] - 234:22</p> <p>cleanup [4] - 201:4, 324:18, 370:21</p> <p>Clear [1] - 176:9</p> <p>clear [14] - 47:2, 93:14, 101:17, 225:20, 238:4, 238:8, 238:11, 281:7, 329:23, 341:23, 344:25, 345:16, 347:12, 381:22</p> <p>cleared [1] - 99:24</p> <p>clearer [2] - 236:10,</p>	<p>291:11</p> <p>clearing [6] - 99:11, 99:13, 100:1, 100:15, 100:16, 100:24</p> <p>clearly [6] - 101:1, 285:10, 331:20, 345:7, 356:2, 357:22</p> <p>clever [1] - 355:4</p> <p>client [1] - 223:23</p> <p>Climate [1] - 269:3</p> <p>climate [12] - 252:16, 268:7, 268:12, 268:19, 269:8, 269:9, 269:15, 269:23, 269:25, 272:12, 272:23, 275:16</p> <p>climatologist [1] - 269:6</p> <p>clock [1] - 125:9</p> <p>close [19] - 6:9, 34:20, 77:14, 107:16, 238:25, 263:4, 264:20, 267:12, 267:25, 292:14, 294:5, 333:3, 333:8, 334:6, 342:4, 358:14, 362:7, 365:22, 377:16</p> <p>closed [7] - 122:12, 147:18, 155:13, 200:15, 202:5, 235:11, 322:7</p> <p>closely [3] - 77:25, 238:1, 303:23</p> <p>closer [7] - 57:24, 211:1, 239:8, 294:11, 294:12, 305:10, 355:14</p> <p>closes [1] - 311:10</p> <p>closest [10] - 43:24, 55:14, 110:15, 110:17, 110:18, 110:23, 111:4, 112:11, 112:17, 304:10</p> <p>closing [1] - 148:9</p> <p>closure [10] - 9:24, 77:23, 128:15, 131:10, 131:11, 131:12, 150:2, 290:23</p> <p>co [3] - 7:18, 253:23, 378:21</p> <p>co-applicant [1] - 7:18</p> <p>co-evolved [1] - 253:23</p> <p>co-owner [1] - 378:21</p> <p>coast [1] - 321:19</p>	<p>coastal [1] - 93:18</p> <p>coat [1] - 299:11</p> <p>coated [1] - 242:17</p> <p>coffin [2] - 368:17, 368:22</p> <p>cofounded [1] - 29:7</p> <p>COGHLAN [52] - 249:24, 250:2, 250:4, 250:24, 255:2, 255:11, 255:18, 256:4, 256:9, 256:12, 256:15, 256:19, 256:25, 261:24, 262:7, 264:9, 264:14, 264:18, 265:10, 265:15, 265:18, 265:25, 270:21, 271:1, 271:16, 271:24, 272:3, 272:6, 272:11, 273:19, 274:1, 274:5, 276:11, 276:13, 276:18, 276:25, 277:6, 278:6, 278:15, 278:18, 278:24, 279:2, 280:11, 280:14, 280:22, 281:2, 281:7, 281:11, 281:16, 281:24, 282:3, 282:23</p> <p>Coghlan [14] - 5:1, 49:20, 109:5, 191:4, 249:16, 249:21, 250:14, 254:22, 271:13, 276:3, 279:12, 280:7, 286:7, 323:18</p> <p>Coghlan's [1] - 261:13</p> <p>coincide [1] - 235:17</p> <p>cold [3] - 111:21, 253:14, 275:11</p> <p>cold-adapted [1] - 275:11</p> <p>collate [1] - 13:4</p> <p>colleagues [2] - 269:2, 378:8</p> <p>collect [16] - 6:1, 11:3, 23:9, 30:20, 41:24, 66:6, 77:4, 78:6, 81:18, 82:8, 118:22, 215:15, 215:18, 216:9, 227:3, 295:9</p> <p>collected [12] - 33:12, 46:4, 62:19, 62:23, 78:2, 83:2, 84:8, 84:9, 124:10, 183:10, 184:1,</p>
---	--	---	--	---

<p>215:17 collecting [4] - 67:20, 82:6, 124:3, 232:5 collection [18] - 22:25, 42:2, 42:3, 62:23, 65:2, 66:3, 66:8, 67:19, 73:18, 76:25, 123:2, 123:12, 187:3, 187:16, 198:6, 240:24, 305:6, 360:4 collective [1] - 90:15 collectively [2] - 206:5, 206:10 collector [2] - 123:12, 199:24 collectors [4] - 123:9, 123:15, 308:7 collects [1] - 138:8 college [2] - 195:19, 372:12 Columbia [1] - 268:22 column [2] - 188:10, 278:22 combined [6] - 54:20, 103:5, 103:8, 121:13, 225:3, 245:19 combining [1] - 34:5 combust [2] - 27:9, 124:13 combusted [1] - 119:13 combustion [2] - 157:13, 176:8 comfortable [7] - 14:23, 15:4, 15:22, 112:25, 225:24, 252:6, 350:6 coming [60] - 12:20, 15:3, 15:10, 16:2, 44:20, 45:8, 115:12, 118:10, 118:13, 118:18, 118:20, 139:8, 139:11, 141:19, 142:21, 143:9, 146:24, 147:20, 147:22, 148:12, 160:3, 160:22, 161:7, 164:16, 167:4, 175:10, 196:2, 196:4, 213:14, 220:16, 220:23, 221:12, 226:13, 237:2, 237:4, 237:7, 237:8, 237:10, 240:19, 242:23, 293:1, 294:16, 294:18, 306:19,</p>	<p>311:9, 311:19, 318:20, 325:18, 326:7, 327:17, 338:20, 339:21, 340:7, 341:24, 350:8, 360:16, 368:9, 381:13, 384:24 Coming [1] - 348:23 commencement [1] - 242:11 comment [10] - 46:22, 68:25, 75:15, 87:13, 109:22, 143:17, 210:1, 292:17, 296:21, 385:18 comments [9] - 8:2, 109:23, 109:25, 110:1, 300:3, 315:4, 315:7, 341:8, 364:18 commercial [7] - 9:20, 14:1, 135:9, 155:18, 170:6, 201:10, 303:21 commingle [1] - 22:17 Commission [1] - 9:1 Commissioner [6] - 326:5, 331:11, 336:23, 336:24, 337:15, 339:23 commissioner [4] - 16:12, 133:2, 156:13, 157:23 commissioner's [1] - 157:4 committed [1] - 294:19 Committee [11] - 13:5, 117:9, 125:24, 128:21, 129:1, 131:18, 168:10, 168:18, 212:10, 244:19, 338:1 committee [2] - 169:2, 169:8 commodities [3] - 143:8, 174:5, 174:11 common [8] - 75:13, 76:6, 97:5, 189:21, 195:13, 218:24, 328:21, 344:16 communication [1] - 127:21 communities [18] - 11:10, 11:17, 171:15, 184:24, 184:25, 267:2, 302:10, 304:22, 307:25, 313:1, 337:17, 337:24,</p>	<p>338:16, 343:20, 345:4, 345:15, 347:7, 376:5 community [8] - 11:9, 11:20, 99:16, 186:14, 186:21, 246:5, 347:25, 368:15 Community [2] - 12:9, 348:23 community's [1] - 367:2 compact [1] - 202:24 compacted [6] - 35:8, 64:19, 67:25, 71:11, 73:3, 73:16 compaction [2] - 171:23, 171:25 companies [5] - 24:14, 378:21, 379:2, 379:7, 384:17 company [21] - 19:9, 74:20, 155:11, 293:15, 293:16, 293:19, 300:4, 302:4, 305:6, 305:25, 314:3, 351:14, 360:4, 361:19, 366:22, 368:18, 372:15, 375:12, 376:2, 376:20, 380:1 Company [3] - 24:23, 293:20, 301:6 company's [1] - 131:23 comparative [1] - 27:17 compare [8] - 61:6, 203:8, 233:3, 277:22, 279:5, 279:17, 279:19, 382:8 compared [3] - 53:14, 124:23, 226:3 comparison [1] - 23:25 compatible [1] - 126:10 compensate [9] - 101:6, 102:14, 102:18, 103:2, 103:10, 113:10, 134:16, 280:9, 291:19 compensation [20] - 91:18, 101:9, 101:12, 101:18, 102:8, 103:14, 107:12, 112:4,</p>	<p>113:9, 203:25, 219:11, 280:20, 281:1, 281:6, 281:13, 281:15, 281:23, 282:1, 291:16, 291:17 compensatory [1] - 92:5 compete [2] - 308:13, 380:13 competent [2] - 36:13, 127:7 competitive [2] - 10:14, 10:18 compile [1] - 89:25 complaint [10] - 119:18, 119:20, 119:22, 119:24, 125:19, 125:22, 196:20, 196:22, 196:24, 243:9 complaints [5] - 120:13, 120:15, 243:11, 243:12, 243:14 complete [5] - 125:2, 208:3, 227:4, 229:7, 303:19 completed [10] - 64:23, 74:5, 74:7, 113:5, 113:24, 115:25, 116:4, 117:16, 225:15, 385:3 completely [4] - 99:9, 99:22, 230:12, 316:21 completes [1] - 129:23 completion [1] - 5:15 complex [3] - 252:20, 253:13, 321:11 complexity [1] - 228:17 compliance [14] - 12:14, 13:8, 18:16, 19:1, 21:2, 21:10, 28:11, 113:21, 132:5, 132:8, 153:22, 176:24, 287:8, 378:14 complicated [3] - 41:1, 252:20, 377:21 complied [2] - 282:1, 314:6 compliment [2] - 354:22, 385:4 comply [7] - 23:16, 49:5, 55:12, 117:15, 129:13, 186:17,</p>	<p>186:24 complying [2] - 177:16, 333:25 component [8] - 58:23, 59:8, 139:6, 146:24, 147:6, 202:21, 375:20 components [9] - 50:1, 58:14, 59:11, 59:18, 59:19, 64:25, 65:11, 137:22, 260:7 composite [9] - 63:20, 69:5, 70:14, 72:7, 72:8, 72:10, 73:2, 73:15, 210:23 Compost [1] - 146:14 compost [15] - 19:22, 23:18, 25:13, 26:19, 164:17, 164:22, 165:2, 165:7, 165:8, 324:14, 359:21, 373:1, 373:4, 373:7, 374:20 composted [7] - 23:21, 26:13, 146:6, 164:18, 164:23, 165:16, 373:16 composting [10] - 20:3, 20:8, 28:15, 146:13, 162:21, 164:11, 164:12, 164:13, 164:15, 372:23 compounds [6] - 124:14, 198:14, 222:17, 232:18, 232:22, 233:9 comprehensive [2] - 19:11, 304:17 compressed [1] - 188:14 compressibility [1] - 33:15 compressible [1] - 87:1 compression [2] - 47:7, 87:5 compromise [1] - 85:20 compromised [2] - 208:9, 275:21 computer [3] - 39:12, 229:20, 230:21 concentrated [1] - 189:14 concentration [3] - 248:15, 264:23, 357:5 concentrations [2] - 60:19, 248:23</p>
--	---	--	---	---

<p>concept [1] - 77:12</p> <p>conception [2] - 308:23, 321:7</p> <p>conceptual [1] - 108:25</p> <p>concern [9] - 88:3, 151:22, 226:7, 226:10, 319:25, 323:5, 337:16, 361:24, 362:12</p> <p>concerned [8] - 142:3, 142:4, 144:3, 203:3, 319:2, 331:19, 350:21, 363:1</p> <p>concerns [4] - 127:17, 326:5, 366:7, 371:15</p> <p>concise [1] - 292:7</p> <p>conclave [1] - 318:17</p> <p>conclude [1] - 338:9</p> <p>concluded [2] - 5:8, 111:18</p> <p>concludes [1] - 291:21</p> <p>concluding [1] - 113:1</p> <p>conclusion [9] - 6:5, 85:2, 129:2, 153:22, 156:12, 156:13, 180:20, 180:21, 273:6</p> <p>conclusions [7] - 34:22, 88:8, 90:8, 247:7, 259:21, 275:5, 331:14</p> <p>concocting [1] - 321:11</p> <p>concurrent [1] - 85:5</p> <p>condensate [2] - 82:15, 82:16</p> <p>condition [7] - 27:5, 152:24, 153:11, 153:21, 155:4, 155:6, 158:15</p> <p>conditioned [1] - 156:15</p> <p>conditions [14] - 52:1, 54:1, 54:3, 54:6, 66:14, 79:14, 86:19, 132:8, 229:24, 246:3, 247:6, 275:18, 322:22, 334:2</p> <p>Conduct [2] - 3:19, 285:18</p> <p>conducted [8] - 29:25, 30:8, 32:18, 36:15, 94:2, 94:6, 191:6, 261:3</p> <p>conductivity [1] - 71:23</p> <p>conducts [2] - 91:7,</p>	<p>362:1</p> <p>confidence [5] - 34:18, 34:22, 233:5, 233:12, 258:5</p> <p>confident [1] - 76:2</p> <p>configuration [1] - 49:25</p> <p>configure [1] - 98:15</p> <p>confined [1] - 121:12</p> <p>confirm [7] - 39:21, 71:19, 197:11, 197:12, 226:16, 228:7, 378:2</p> <p>confirmation [2] - 259:10, 259:17</p> <p>confirmed [3] - 180:9, 196:25, 218:16</p> <p>confirming [1] - 180:6</p> <p>conflicts [1] - 5:2</p> <p>conform [3] - 53:21, 252:1, 281:19</p> <p>conformance [1] - 89:13</p> <p>conforming [1] - 265:5</p> <p>confused [1] - 166:10</p> <p>confusing [1] - 47:4</p> <p>confusion [3] - 136:17, 137:1, 137:18</p> <p>Congress [1] - 269:14</p> <p>conjunction [2] - 119:6, 242:1</p> <p>connect [1] - 74:24</p> <p>connections [1] - 97:7</p> <p>conscientiousness [1] - 300:7</p> <p>consequence [1] - 383:9</p> <p>consequences [1] - 322:19</p> <p>consequently [1] - 69:13</p> <p>conservation [1] - 204:16</p> <p>Conservation [1] - 372:15</p> <p>conservative [6] - 56:16, 56:23, 66:9, 115:8, 191:10</p> <p>conserve [1] - 121:25</p> <p>consider [19] - 76:5, 101:22, 132:4, 132:16, 218:18, 262:8, 263:21, 267:5, 267:9, 268:11, 268:12, 272:20, 274:17, 277:1, 322:21, 330:14, 333:20,</p>	<p>344:6, 362:2</p> <p>consideration [6] - 20:18, 286:21, 332:2, 354:17, 362:12, 370:7</p> <p>considerations [1] - 246:17</p> <p>considered [2] - 96:8, 96:24, 97:21, 100:10, 135:11, 140:13, 165:6, 165:10, 166:14, 166:15, 166:16, 195:2, 195:10, 220:7, 246:24, 262:13, 262:19, 271:19, 274:25, 333:23, 362:14</p> <p>considering [2] - 53:7, 338:6</p> <p>considers [4] - 112:1, 112:2, 112:4, 260:9</p> <p>consist [1] - 35:6</p> <p>consisted [1] - 192:6</p> <p>consistency [1] - 18:25</p> <p>consistent [12] - 14:22, 26:6, 50:25, 109:25, 115:18, 118:23, 126:9, 129:4, 147:4, 185:7, 275:4, 325:21</p> <p>consistently [2] - 21:3, 112:5</p> <p>consists [2] - 3:8, 84:8</p> <p>consortium [1] - 337:18</p> <p>constant [3] - 122:18, 127:21, 248:13</p> <p>constantly [4] - 122:15, 142:15, 321:10, 321:11</p> <p>constituents [4] - 264:16, 265:2, 265:3, 352:8</p> <p>constitute [1] - 329:18</p> <p>constituting [1] - 353:21</p> <p>constitution [1] - 344:10</p> <p>constitutionally [1] - 345:8</p> <p>constrained [1] - 252:2</p> <p>constraint [1] - 34:15</p> <p>construct [5] - 62:1, 63:12, 75:22, 89:8, 114:24</p> <p>constructed [16] -</p>	<p>25:6, 50:16, 51:7, 52:7, 64:23, 71:6, 71:16, 71:19, 72:5, 73:1, 88:10, 215:23, 230:12, 290:17, 290:18</p> <p>constructing [3] - 61:23, 90:3, 232:2</p> <p>Construction [1] - 365:14</p> <p>construction [78] - 18:17, 24:2, 24:11, 24:17, 25:9, 25:21, 25:25, 50:2, 62:5, 62:6, 62:9, 65:14, 65:23, 70:25, 71:5, 72:17, 75:21, 75:23, 76:19, 80:20, 83:1, 83:24, 84:22, 84:24, 88:9, 89:1, 89:7, 89:9, 89:11, 89:12, 89:14, 118:8, 122:1, 126:12, 126:14, 132:16, 137:25, 138:6, 138:22, 139:11, 139:24, 140:3, 150:16, 150:18, 151:3, 151:6, 151:11, 157:6, 159:1, 159:10, 161:23, 163:15, 163:18, 166:8, 167:2, 167:3, 167:5, 167:24, 189:23, 190:12, 201:1, 203:4, 215:20, 215:23, 216:3, 216:12, 216:13, 216:15, 216:22, 216:23, 217:13, 219:14, 236:25, 290:23, 313:7, 349:20, 363:17, 367:20</p> <p>construction-related [1] - 76:19</p> <p>constructions [1] - 217:9</p> <p>consultants [2] - 18:15, 54:21</p> <p>consultation [6] - 192:5, 192:8, 192:12, 192:14, 192:17, 334:11</p> <p>consulted [2] - 110:2, 136:20</p> <p>Consulting [2] - 91:5, 115:24</p> <p>consume [1] - 254:15</p> <p>Consumer [1] - 11:7</p>	<p>consumption [1] - 351:18</p> <p>contact [4] - 67:6, 84:12, 120:22, 221:7</p> <p>contacted [2] - 137:4, 216:25</p> <p>contain [12] - 36:14, 41:20, 41:24, 79:9, 80:5, 105:22, 121:5, 183:17, 258:22, 259:17, 263:23, 270:21</p> <p>contained [7] - 49:7, 90:12, 194:21, 215:3, 254:1, 317:17, 370:24</p> <p>container [1] - 195:23</p> <p>containing [4] - 26:18, 121:19, 128:2, 258:15</p> <p>containment [5] - 45:14, 59:12, 203:7, 214:24, 274:22</p> <p>contains [7] - 108:1, 124:1, 153:10, 253:20, 257:8, 263:22, 270:18</p> <p>contaminant [3] - 56:11, 60:6, 61:10</p> <p>contaminants [2] - 352:7, 352:25</p> <p>contaminate [5] - 260:23, 317:21, 319:17, 329:17, 329:18</p> <p>contaminated [14] - 15:13, 26:24, 122:3, 126:17, 138:21, 174:7, 183:11, 183:23, 201:3, 221:7, 221:21, 317:24, 318:1, 336:15</p> <p>contamination [9] - 149:8, 150:4, 181:7, 191:6, 191:9, 191:22, 221:15, 353:6, 353:11</p> <p>content [3] - 38:22, 374:5</p> <p>context [6] - 238:18, 252:14, 266:14, 268:7, 270:10, 278:1</p> <p>contingency [2] - 351:25, 353:9</p> <p>continually [1] - 28:6</p> <p>continuance [1] - 115:15</p> <p>continue [19] - 28:18, 120:1, 129:4, 148:2,</p>
---	---	---	---	---

<p>161:21, 163:15, 165:22, 180:14, 214:16, 272:10, 273:24, 274:4, 295:4, 303:16, 362:18, 362:19, 362:24, 363:2, 372:3 continuing [2] - 297:3, 349:18 continuity [1] - 33:7 continuous [5] - 120:8, 123:11, 205:11, 214:19, 225:4 continuously [4] - 77:21, 124:4, 208:25, 209:13 contour [1] - 87:23 contract [15] - 10:14, 11:1, 12:16, 17:11, 131:1, 131:8, 131:9, 149:12, 149:15, 149:24, 150:6, 150:7, 150:8, 169:25, 170:3 contracted [1] - 365:17 contractor [4] - 89:8, 142:13, 365:15, 367:12 contractors [10] - 73:24, 74:3, 75:5, 140:1, 167:15, 201:2, 212:18, 373:13, 379:7, 379:24 contracts [2] - 302:5, 373:13 contrary [5] - 261:12, 267:20, 268:3, 303:11, 334:21 contrived [1] - 321:3 Control [1] - 374:16 control [43] - 20:6, 22:7, 23:13, 23:15, 24:18, 24:22, 25:21, 28:18, 35:20, 38:6, 59:23, 65:4, 69:12, 69:14, 75:25, 83:19, 83:21, 83:23, 89:10, 116:20, 118:22, 120:16, 124:17, 133:6, 133:7, 138:23, 143:5, 143:6, 155:16, 155:19, 156:4, 161:9, 173:7, 176:20, 176:22, 182:10, 238:18, 327:5, 333:17,</p>	<p>334:3, 340:2, 366:21, 367:1 controlled [1] - 41:6 controls [1] - 85:8 controversy [1] - 8:2 convenience [3] - 22:22, 160:13, 304:9 convenient [1] - 147:5 conveniently [1] - 16:15 conventional [2] - 75:17, 211:17 conversant [1] - 269:6 conversation [1] - 218:1 conversations [3] - 5:18, 192:16, 206:3 convey [3] - 66:7, 265:20, 269:7 conveyance [1] - 123:25 conveyed [2] - 83:3, 84:13 conveys [1] - 258:5 convince [2] - 190:21, 190:22 convinced [1] - 214:13 cool [2] - 237:22, 253:1 cooperatively [1] - 125:14 coordination [1] - 261:3 copies [4] - 4:15, 13:12, 154:7, 342:18 copper [1] - 352:11 copy [6] - 4:15, 91:14, 114:1, 259:13, 286:10, 356:24 cordon [1] - 206:1 Corinth [1] - 299:25 corner [2] - 291:5, 338:8 corners [1] - 44:1 corporate [2] - 323:4, 345:3 Corporation [2] - 363:15, 371:19 corporations [1] - 305:5 Corps [27] - 91:25, 92:11, 92:17, 92:21, 96:2, 100:9, 101:18, 101:22, 102:6, 102:9, 102:13, 102:16, 102:25, 103:3, 103:6, 103:11, 103:14, 104:10, 108:9,</p>	<p>108:16, 108:25, 112:3, 192:16, 203:17, 219:20, 224:17, 245:7 correct [23] - 17:11, 136:5, 150:10, 152:14, 153:17, 153:19, 159:3, 160:1, 160:8, 178:17, 184:1, 193:15, 210:16, 216:5, 219:16, 276:12, 276:24, 278:13, 280:21, 281:17, 281:18, 356:15 corrected [1] - 214:14 correcting [1] - 47:20 corrections [1] - 342:23 correctly [1] - 152:11 corridor [1] - 258:13 corroborated [1] - 34:12 corroborative [2] - 33:18, 34:16 cosmetics [1] - 323:12 cost [4] - 19:10, 20:19, 304:9, 379:22 Costigan [1] - 318:17 costly [2] - 243:2, 314:9 costs [5] - 20:15, 20:21, 22:23, 149:5, 152:5 Council [2] - 108:18, 328:14 counsel [3] - 3:3, 5:12, 284:23 counted [1] - 204:17 counter [1] - 190:13 counterproductive [1] - 267:18 counting [1] - 204:18 country [2] - 74:15, 374:14 counts [1] - 107:9 County [2] - 183:15, 353:5 county [1] - 13:1 couple [20] - 43:5, 63:4, 66:16, 76:5, 77:10, 95:21, 106:2, 106:18, 146:18, 147:16, 148:6, 202:9, 276:8, 309:13, 310:5, 311:12, 314:15, 320:7, 333:19, 366:11</p>	<p>course [14] - 13:9, 21:13, 47:10, 151:23, 155:3, 231:8, 254:12, 254:14, 254:19, 257:5, 260:12, 260:20, 306:9, 374:23 courses [1] - 250:18 coursework [1] - 113:24 Covanta [1] - 360:11 covenant [1] - 345:1 cover [37] - 25:20, 26:6, 64:1, 64:5, 64:14, 64:15, 64:23, 74:8, 74:11, 84:9, 84:10, 84:11, 100:22, 121:21, 121:24, 124:17, 124:18, 124:19, 124:20, 124:23, 149:5, 152:19, 152:20, 159:11, 159:17, 193:3, 198:25, 208:3, 235:11, 240:8, 240:21, 240:23, 296:13, 296:15, 331:4, 332:7 covered [7] - 64:8, 98:7, 102:12, 198:19, 199:11, 199:16, 230:13 covering [1] - 98:7 covers [1] - 84:11 Cox [1] - 109:11 crack [1] - 124:24 Craig [7] - 363:11, 363:13, 371:17, 375:7, 376:25, 377:1 cramming [1] - 372:12 Cranberry [1] - 313:3 create [13] - 74:23, 117:14, 129:12, 151:11, 189:10, 241:7, 243:5, 302:24, 314:25, 329:20, 343:4, 354:12, 384:22 created [9] - 164:21, 168:18, 321:6, 322:12, 335:17, 339:16, 341:5, 344:19, 382:18 creates [2] - 40:8, 180:3 creating [5] - 163:22, 241:4, 316:24, 343:22, 344:1</p>	<p>creations [1] - 316:19 credits [6] - 59:10, 59:13, 210:18, 210:19, 210:20, 210:22 creek [2] - 226:19, 227:2 crest [1] - 31:12 crime [2] - 384:20, 384:24 Criteria [2] - 90:11, 190:1 criteria [29] - 30:2, 30:19, 31:4, 35:23, 36:4, 36:5, 42:8, 44:13, 49:6, 55:6, 56:25, 59:17, 61:9, 84:4, 100:10, 108:5, 190:7, 208:16, 239:23, 259:5, 261:18, 286:22, 286:24, 287:2, 328:20, 330:5, 332:1, 347:2, 378:15 critical [22] - 33:20, 95:2, 100:15, 110:19, 127:10, 193:5, 193:7, 257:11, 257:14, 257:18, 258:1, 258:2, 258:16, 258:19, 259:11, 259:19, 295:24, 325:5, 346:9, 375:20 criticisms [2] - 258:4, 260:1 critters [2] - 315:6, 315:10 CROCKETT [1] - 320:5 Crockett [3] - 318:3, 320:2, 320:6 crops [2] - 373:8, 373:9 Cross [2] - 1:10, 2:2 cross [11] - 4:9, 4:23, 5:16, 130:2, 130:7, 130:8, 265:23, 276:1, 277:15, 282:12, 360:13 crossings [1] - 110:11 Crossroads [1] - 171:1 crossroads [1] - 325:6 crow [1] - 381:8 crowd [1] - 293:3 crushed [4] - 174:9, 187:25, 188:2, 188:3 crushing [2] - 187:4, 187:6</p>
---	---	--	--	---

<p>cubic [13] - 2:9, 16:4, 16:10, 18:8, 52:9, 53:4, 62:11, 114:18, 115:4, 284:11, 289:21, 341:16, 373:4</p> <p>cull [1] - 313:8</p> <p>cultural [1] - 351:7</p> <p>cum [1] - 113:22</p> <p>current [25] - 27:20, 53:10, 74:23, 74:24, 88:19, 88:25, 115:6, 115:16, 115:18, 116:18, 118:23, 120:14, 129:14, 172:20, 194:21, 211:25, 229:23, 231:15, 266:16, 269:4, 279:18, 302:5, 328:23, 348:6</p> <p>customer [4] - 201:14, 201:17, 303:24, 367:17</p> <p>customers [6] - 21:19, 303:4, 304:10, 327:4, 327:6, 367:6</p> <p>cut [8] - 74:11, 75:6, 76:11, 89:16, 183:20, 201:15, 201:18, 201:25</p> <p>cuts [1] - 64:22</p> <p>cycle [2] - 62:8</p> <p>Cynthia [1] - 1:19</p>	<p>318:25, 343:25</p> <p>data [19] - 35:3, 125:9, 125:25, 179:23, 191:25, 209:18, 214:14, 217:2, 222:19, 232:5, 269:14, 270:3, 270:18, 270:20, 270:22, 271:4, 271:9, 322:24</p> <p>database [3] - 209:16, 222:13, 222:19</p> <p>date [5] - 17:13, 17:18, 98:8, 117:11, 119:25</p> <p>dates [2] - 17:7, 223:13</p> <p>daughter [1] - 362:5</p> <p>Dave [1] - 285:4</p> <p>David [2] - 1:23, 3:10</p> <p>day-to-day [1] - 308:24</p> <p>days [8] - 69:3, 69:7, 119:21, 208:8, 208:17, 208:20, 247:25, 370:22</p> <p>daytime [1] - 118:1</p> <p>dead [1] - 183:18</p> <p>deadline [2] - 341:7, 348:25</p> <p>deal [8] - 23:8, 35:18, 78:1, 145:20, 149:16, 231:12, 350:7, 382:13</p> <p>dealing [3] - 84:6, 248:1, 355:2</p> <p>deals [1] - 321:3</p> <p>dealt [1] - 149:10</p> <p>death [4] - 264:2, 321:13, 321:16, 382:16</p> <p>debate [2] - 163:25, 348:4</p> <p>debating [1] - 304:25</p> <p>debris [39] - 24:3, 24:11, 24:18, 25:21, 25:25, 26:24, 65:24, 122:2, 126:13, 126:15, 132:17, 138:1, 138:7, 138:23, 139:11, 139:24, 139:25, 140:4, 150:16, 150:19, 151:4, 151:6, 159:2, 159:10, 161:23, 163:16, 163:18, 166:9, 167:3, 167:4, 167:6, 201:1, 313:7, 326:7, 327:20, 367:20, 367:25,</p>	<p>368:10, 379:10</p> <p>decade [1] - 274:8</p> <p>decades [1] - 46:5</p> <p>DECB [1] - 244:23</p> <p>DECD [1] - 131:20</p> <p>decent [2] - 16:5, 99:21</p> <p>decide [2] - 169:11, 232:21</p> <p>decided [2] - 98:12, 240:1</p> <p>decision [8] - 15:9, 27:9, 261:14, 261:16, 295:25, 296:17, 339:19, 383:12</p> <p>decisions [2] - 343:4, 355:10</p> <p>decline [1] - 275:20</p> <p>declined [1] - 255:12</p> <p>declining [1] - 266:3</p> <p>decomposing [1] - 199:6</p> <p>decrease [2] - 267:19, 348:10</p> <p>decreased [1] - 243:13</p> <p>deed [7] - 104:20, 108:11, 108:14, 108:15, 108:19, 205:6, 219:18</p> <p>deemed [1] - 322:14</p> <p>deep [3] - 32:15, 105:22, 226:23</p> <p>deeper [3] - 32:4, 32:17, 327:9</p> <p>deepest [1] - 63:8</p> <p>deeply [1] - 343:16</p> <p>defect [2] - 60:24, 74:23</p> <p>defects [2] - 75:1, 76:4</p> <p>defend [1] - 252:25</p> <p>defending [1] - 344:22</p> <p>defense [1] - 344:15</p> <p>deferred [1] - 342:12</p> <p>defies [1] - 26:9</p> <p>define [2] - 185:24, 227:4</p> <p>defined [7] - 42:20, 93:17, 130:23, 144:6, 210:4, 261:8, 329:22</p> <p>defines [1] - 94:18</p> <p>defining [2] - 54:2, 332:7</p> <p>definite [1] - 146:23</p> <p>definition [17] - 94:21, 94:24, 100:7, 105:13, 107:7,</p>	<p>136:18, 137:7, 140:8, 176:4, 186:10, 254:14, 277:1, 329:22, 329:23, 329:25, 332:16, 334:23</p> <p>definitions [2] - 105:10, 280:23</p> <p>deforestation [2] - 255:13, 255:19</p> <p>defunct [1] - 136:2</p> <p>degradation [1] - 72:17</p> <p>degrades [1] - 345:3</p> <p>degree [11] - 9:7, 9:8, 29:13, 29:15, 34:17, 34:21, 48:22, 91:3, 113:23, 113:25</p> <p>delay [2] - 116:20, 339:20</p> <p>deliberately [1] - 59:20</p> <p>deliberations [1] - 333:20</p> <p>delineated [2] - 274:13, 291:6</p> <p>delineation [5] - 91:17, 92:21, 92:23, 273:14, 274:19</p> <p>delineations [8] - 91:8, 92:14, 92:16, 92:18, 94:2, 98:5, 98:8</p> <p>deliver [1] - 300:22</p> <p>delivered [5] - 27:7, 205:16, 313:12, 332:13, 334:13</p> <p>deliveries [2] - 135:8, 170:17</p> <p>delivering [3] - 121:1, 212:19, 337:22</p> <p>delving [1] - 289:1</p> <p>demand [3] - 308:1, 308:4</p> <p>demo [2] - 326:6, 327:20</p> <p>demolished [1] - 367:23</p> <p>demolition [35] - 24:2, 24:11, 24:18, 25:21, 25:25, 65:23, 122:2, 126:13, 126:14, 132:17, 138:1, 138:7, 138:22, 139:11, 139:24, 140:3, 150:16, 150:18, 151:4, 151:6, 151:11, 159:2, 159:10, 163:16, 163:18,</p>	<p>166:9, 167:2, 167:4, 167:6, 167:24, 201:1, 349:20, 367:19, 367:20, 379:10</p> <p>demonstrate [1] - 89:22</p> <p>demonstrated [1] - 40:11</p> <p>demonstrates [1] - 230:4</p> <p>demonstrating [1] - 126:10</p> <p>demonstrations [1] - 157:10</p> <p>denial [2] - 331:12, 331:14</p> <p>denied [1] - 341:17</p> <p>denote [1] - 291:7</p> <p>denoted [2] - 290:3, 290:11</p> <p>denotes [1] - 291:6</p> <p>dense [4] - 35:6, 46:14, 105:23, 246:12</p> <p>density [7] - 35:9, 66:22, 68:17, 80:25, 171:5, 171:22</p> <p>dental [1] - 316:5</p> <p>deny [1] - 339:20</p> <p>deodorizing [2] - 121:9, 122:5</p> <p>DEP [77] - 3:8, 5:12, 12:15, 23:25, 30:2, 30:19, 36:5, 40:21, 42:15, 44:14, 62:3, 76:14, 84:1, 85:4, 85:25, 86:7, 86:11, 89:3, 89:22, 91:25, 92:19, 94:14, 94:19, 94:21, 96:4, 100:17, 102:3, 102:10, 104:7, 104:9, 107:7, 108:8, 108:16, 108:24, 109:10, 112:1, 113:6, 126:4, 126:24, 143:19, 154:7, 161:17, 169:16, 170:22, 172:1, 176:25, 187:7, 191:25, 206:4, 219:20, 221:20, 222:7, 222:15, 228:10, 228:24, 238:22, 244:18, 277:18, 282:2, 285:2, 286:14, 288:16, 288:20, 294:24, 314:4, 326:5,</p>
D				
<p>dabbling [1] - 359:22</p> <p>dad [1] - 365:17</p> <p>Daily [2] - 3:22, 285:21</p> <p>daily [15] - 25:20, 120:5, 121:20, 121:24, 152:19, 152:20, 159:11, 159:17, 208:10, 240:23, 296:13, 296:15, 308:25, 331:4, 332:7</p> <p>dam [3] - 251:2, 266:19, 316:6</p> <p>damage [2] - 73:1, 76:19</p> <p>damming [1] - 255:13</p> <p>Damming [1] - 255:18</p> <p>dams [3] - 266:5, 266:6, 266:9</p> <p>Dan [4] - 365:9, 365:11, 365:14, 369:6</p> <p>Dana [1] - 4:10</p> <p>dangerous [2] -</p>				

<p>326:25, 331:11, 334:11, 336:24, 337:6, 342:5, 355:17, 358:9, 371:24, 378:6, 378:23</p> <p>DEP's [8] - 94:24, 100:7, 101:22, 102:19, 107:4, 200:4, 206:10, 281:6</p> <p>DEP/EPA [1] - 221:4</p> <p>department [3] - 136:21, 337:4, 337:5</p> <p>Department [21] - 3:16, 6:23, 9:5, 12:4, 12:8, 55:3, 94:13, 109:8, 109:9, 109:13, 109:16, 156:24, 157:7, 157:18, 244:21, 259:12, 262:10, 285:15, 329:7, 329:13, 329:24</p> <p>DEPARTMENT [1] - 1:22</p> <p>Department's [7] - 3:19, 4:1, 4:21, 6:25, 285:18, 285:25, 286:17</p> <p>dependent [4] - 131:2, 138:5, 207:19, 366:23</p> <p>depleting [1] - 352:9</p> <p>deposit [2] - 43:18, 252:22</p> <p>depression [1] - 100:20</p> <p>depth [4] - 32:1, 36:11, 36:12, 115:25</p> <p>derived [2] - 305:21, 320:23</p> <p>describe [22] - 29:23, 35:4, 49:5, 49:22, 49:23, 96:8, 104:5, 168:12, 187:3, 187:19, 191:19, 197:14, 200:12, 221:14, 234:10, 236:7, 236:13, 238:17, 240:4, 245:3, 252:13, 320:19</p> <p>described [12] - 28:7, 184:21, 188:12, 193:2, 210:17, 210:18, 234:2, 235:21, 244:25, 255:20, 344:13, 345:21</p> <p>describing [1] - 30:7</p>	<p>description [4] - 20:2, 50:1, 210:10, 220:24</p> <p>descriptions [1] - 28:14</p> <p>desert [1] - 346:8</p> <p>Desert [2] - 313:1, 313:2</p> <p>deserve [1] - 340:16</p> <p>Design [1] - 90:12</p> <p>design [98] - 18:16, 30:23, 30:24, 37:16, 44:11, 48:13, 48:15, 48:21, 48:25, 49:4, 49:8, 49:19, 49:24, 52:21, 53:11, 53:17, 53:19, 53:20, 53:21, 53:25, 54:5, 54:10, 54:12, 54:14, 54:15, 54:17, 54:19, 54:20, 54:24, 54:25, 55:6, 55:19, 56:3, 56:5, 56:19, 56:22, 57:1, 58:1, 58:10, 58:12, 58:15, 58:16, 58:17, 59:9, 59:13, 59:19, 60:3, 61:15, 61:25, 62:2, 62:11, 63:19, 66:9, 66:14, 67:7, 68:3, 68:4, 69:2, 78:14, 78:15, 78:16, 79:4, 79:7, 80:14, 82:25, 83:1, 85:6, 85:22, 88:18, 88:20, 88:23, 88:24, 88:25, 90:6, 90:8, 90:13, 90:14, 90:17, 91:10, 97:20, 97:22, 97:25, 98:6, 110:7, 113:21, 172:15, 202:13, 207:19, 207:22, 210:20, 211:16, 217:14, 227:24, 230:25, 247:13, 287:3, 371:21</p> <p>design-related [1] - 90:13</p> <p>designated [4] - 195:1, 257:11, 258:19, 346:24</p> <p>designed [24] - 29:10, 49:5, 50:12, 52:18, 60:4, 66:12, 66:19, 76:3, 78:22, 83:20, 83:25, 84:1, 84:19, 92:5, 102:16, 123:4, 129:16, 175:24, 187:10, 188:19, 188:20, 191:11, 215:11, 301:11</p> <p>designer's [1] -</p>	<p>202:17</p> <p>designing [3] - 61:18, 101:20, 380:10</p> <p>designs [6] - 54:16, 59:21, 72:12, 89:5, 89:6, 211:18</p> <p>desirable [2] - 35:13, 46:11</p> <p>desktop [1] - 245:19</p> <p>despite [2] - 99:1, 333:16</p> <p>destined [2] - 164:10, 164:12</p> <p>destroyed [3] - 267:15, 322:13, 324:20</p> <p>destroying [1] - 124:13</p> <p>destruction [2] - 255:14, 255:19</p> <p>detail [8] - 44:6, 53:24, 57:20, 62:24, 196:1, 239:19, 252:13, 289:5</p> <p>detailed [10] - 49:25, 89:4, 89:6, 117:16, 117:21, 119:18, 126:20, 128:10, 129:20, 342:20</p> <p>detailing [1] - 244:16</p> <p>details [3] - 128:24, 216:14, 290:21</p> <p>detect [17] - 42:12, 44:17, 59:14, 68:21, 68:23, 69:2, 69:9, 74:18, 75:11, 191:17, 191:21, 196:2, 196:4, 208:8, 233:13, 237:6, 238:13</p> <p>detected [4] - 125:17, 189:22, 228:3, 247:15</p> <p>detecting [2] - 198:13, 247:18</p> <p>detection [18] - 45:1, 45:2, 65:1, 68:12, 68:16, 69:6, 69:15, 70:8, 70:11, 71:25, 72:4, 77:24, 184:3, 202:11, 208:15, 208:24, 247:18, 247:21</p> <p>detention [1] - 84:14</p> <p>determination [26] - 6:3, 13:17, 18:7, 20:17, 51:1, 132:9, 132:11, 152:23, 152:24, 153:10, 155:5, 156:11,</p>	<p>157:4, 158:15, 196:21, 289:20, 289:22, 296:22, 326:18, 330:17, 332:1, 336:22, 337:9, 338:13, 339:24, 341:14</p> <p>determinations [1] - 329:25</p> <p>determine [16] - 30:18, 42:13, 42:18, 43:2, 116:1, 144:4, 176:6, 176:9, 191:7, 196:23, 196:24, 232:7, 245:24, 246:21, 319:5, 337:13</p> <p>determined [10] - 93:13, 96:14, 96:18, 97:1, 116:4, 116:22, 119:1, 127:4, 212:17, 352:3</p> <p>determining [4] - 190:11, 231:24, 245:2, 245:4</p> <p>detoxified [1] - 254:18</p> <p>detrimental [1] - 354:3</p> <p>develop [5] - 15:19, 34:17, 70:20, 84:21, 152:5</p> <p>developable [1] - 108:2</p> <p>developed [14] - 41:24, 50:8, 50:14, 68:4, 108:8, 113:9, 167:14, 215:25, 222:8, 235:9, 290:9, 293:22, 374:13, 374:15</p> <p>developer [1] - 306:1</p> <p>developing [1] - 49:11</p> <p>Development [1] - 12:9</p> <p>development [13] - 51:11, 52:4, 63:23, 64:6, 84:20, 85:2, 85:3, 108:3, 219:21, 219:25, 235:7, 246:14, 342:16</p> <p>developments [1] - 52:6</p> <p>diagram [6] - 31:21, 31:23, 32:11, 182:21, 290:15</p> <p>diagrams [2] - 291:12, 369:13</p> <p>diameter [1] - 187:23</p> <p>Diane [3] - 320:2, 324:4, 324:7</p> <p>dichotomy [1] -</p>	<p>260:10</p> <p>dictates [1] - 96:7</p> <p>die [2] - 317:7</p> <p>died [1] - 383:22</p> <p>diesel [2] - 305:20, 324:10</p> <p>difference [10] - 70:4, 70:7, 87:17, 87:19, 150:12, 179:15, 198:18, 201:9, 294:9, 323:19</p> <p>differences [3] - 191:8, 200:13, 201:7</p> <p>different [30] - 31:20, 52:7, 55:11, 55:21, 84:4, 90:2, 100:2, 106:11, 142:19, 151:8, 184:15, 194:12, 196:8, 196:9, 197:2, 197:3, 211:20, 222:15, 222:16, 222:17, 239:23, 245:8, 251:17, 290:15, 305:4, 318:19, 320:24, 355:2, 367:18, 380:20</p> <p>difficult [11] - 65:7, 143:7, 166:19, 206:8, 212:21, 233:7, 285:11, 296:3, 306:5, 328:3, 355:10</p> <p>difficulty [2] - 231:24, 345:12</p> <p>dig [3] - 75:5, 367:24, 367:25</p> <p>digester [1] - 374:9</p> <p>digesting [1] - 374:18</p> <p>digestion [3] - 307:1, 374:12, 374:15</p> <p>digging [1] - 267:23</p> <p>diligence [3] - 56:15, 300:6, 364:5</p> <p>diligent [1] - 127:7</p> <p>dime [1] - 305:19</p> <p>dimensional [1] - 39:12</p> <p>dinner [1] - 7:7</p> <p>DINNER [1] - 283:4</p> <p>dioxide [2] - 199:20, 377:10</p> <p>dioxin [1] - 352:11</p> <p>dioxins [1] - 351:19</p> <p>direct [29] - 9:14, 12:18, 15:2, 23:12, 24:21, 26:17, 31:6, 34:11, 49:17, 49:21, 78:12, 99:5, 100:6, 100:12, 104:14,</p>
---	---	--	---	---

<p>110:9, 112:13, 122:8, 129:23, 151:25, 152:22, 153:2, 153:3, 170:14, 178:21, 179:20, 243:8, 244:15, 264:4</p> <p>directed [5] - 23:3, 48:15, 138:18, 179:22, 271:7</p> <p>direction [10] - 38:9, 118:19, 180:7, 180:8, 227:8, 230:1, 230:6, 325:5</p> <p>directional [1] - 118:12</p> <p>directions [7] - 30:25, 32:12, 37:14, 37:17, 229:21, 232:9, 320:24</p> <p>directly [15] - 43:6, 132:13, 134:19, 137:5, 257:24, 267:4, 268:2, 276:7, 276:10, 276:14, 311:3, 330:11, 348:7, 365:23, 367:7</p> <p>director [5] - 9:1, 9:4, 109:12, 251:3, 268:23</p> <p>Dirigo [1] - 320:18</p> <p>disagree [2] - 156:18, 331:10</p> <p>disagreed [2] - 156:21, 331:11</p> <p>disappear [3] - 162:13, 307:18, 322:11</p> <p>disappears [1] - 36:11</p> <p>discard [3] - 175:18, 337:12, 370:22</p> <p>discarded [6] - 186:7, 186:13, 186:21, 334:21, 340:14, 354:9</p> <p>discarding [1] - 217:18</p> <p>discernible [1] - 269:11</p> <p>Discharge [2] - 278:11, 278:12</p> <p>discharge [7] - 85:9, 181:6, 181:22, 259:8, 280:1, 280:2, 280:4</p> <p>discharged [6] - 257:24, 276:7, 276:10, 276:14, 352:8, 358:8</p> <p>discipline [1] - 91:13</p>	<p>discourage [1] - 303:19</p> <p>discouraged [1] - 343:21</p> <p>discovered [2] - 29:9, 334:14</p> <p>discrepancy [1] - 179:13</p> <p>discrete [1] - 33:8</p> <p>discuss [13] - 18:25, 30:11, 44:5, 48:25, 91:16, 92:1, 92:2, 93:9, 95:13, 97:13, 99:2, 228:10, 239:16</p> <p>discussed [16] - 14:20, 97:20, 98:13, 101:24, 101:25, 108:23, 120:21, 125:8, 174:4, 203:15, 225:13, 236:5, 239:13, 247:14, 264:17, 273:13</p> <p>discusses [1] - 153:22</p> <p>discussing [5] - 29:19, 30:13, 91:22, 114:3, 252:8</p> <p>discussion [9] - 78:12, 139:7, 139:10, 143:22, 160:7, 174:16, 214:3, 261:21, 296:23</p> <p>discussions [3] - 98:3, 102:2, 135:22</p> <p>Disease [2] - 352:1, 352:3</p> <p>displaced [1] - 204:13</p> <p>display [1] - 166:23</p> <p>displayed [1] - 154:9</p> <p>disposal [45] - 14:15, 20:10, 21:5, 21:17, 21:23, 22:23, 24:1, 24:16, 25:1, 26:10, 27:5, 27:10, 27:24, 27:25, 51:5, 53:5, 114:14, 114:23, 126:7, 128:8, 130:24, 137:24, 153:13, 157:12, 157:17, 164:21, 167:25, 192:20, 200:21, 223:23, 224:9, 294:1, 294:20, 295:23, 296:16, 303:2, 304:21, 313:6, 327:11, 331:24, 337:14, 338:3, 341:4, 368:1, 369:1</p>	<p>Disposal [1] - 166:21</p> <p>dispose [4] - 156:20, 170:2, 304:6, 326:14</p> <p>disposed [9] - 14:16, 20:14, 21:24, 23:4, 24:10, 28:22, 139:14, 339:9, 339:10</p> <p>disposer [1] - 142:15</p> <p>disposing [1] - 377:21</p> <p>disproportionate [1] - 353:24</p> <p>disregard [2] - 337:4, 346:4</p> <p>disrespect [1] - 381:14</p> <p>disrupted [1] - 269:21</p> <p>disruption [3] - 114:23, 135:8, 170:16</p> <p>distance [8] - 38:25, 116:21, 116:22, 236:15, 236:20, 237:11, 237:20, 304:8</p> <p>distinct [3] - 223:1, 263:1, 290:10</p> <p>distinction [1] - 276:17</p> <p>distressed [1] - 346:3</p> <p>distribution [1] - 262:22</p> <p>disturb [1] - 57:24</p> <p>disturbance [5] - 97:8, 190:1, 190:8, 219:23, 275:17</p> <p>disturbances [1] - 108:21</p> <p>disturbing [1] - 57:22</p> <p>ditches [1] - 84:3</p> <p>diverse [4] - 105:4, 105:23, 106:12, 107:20</p> <p>diversion [8] - 14:21, 19:13, 19:20, 20:13, 21:18, 22:15, 28:21, 302:7</p> <p>diversity [6] - 97:3, 217:19, 219:6, 219:7, 220:13, 246:7</p> <p>divert [3] - 24:17, 74:12, 304:8</p> <p>diverted [10] - 13:21, 13:24, 14:5, 22:1, 151:2, 159:11, 164:14, 164:20, 172:4, 302:20</p> <p>divide [5] - 25:12, 184:20, 225:12, 225:25, 227:5</p>	<p>divided [1] - 61:20</p> <p>division [4] - 9:4, 12:3, 293:14, 293:15</p> <p>divisions [1] - 361:3</p> <p>DMR [1] - 109:22</p> <p>DOBBINS [16] - 141:10, 141:16, 142:3, 142:10, 142:22, 143:1, 143:12, 143:14, 166:7, 166:18, 166:25, 167:10, 168:5, 224:14, 224:25, 225:5</p> <p>Dobbins [3] - 1:16, 2:25, 284:20</p> <p>doc [1] - 90:1</p> <p>document [1] - 60:5</p> <p>documentation [2] - 90:3, 127:15</p> <p>documented [2] - 104:2, 247:5</p> <p>documents [2] - 7:1, 127:13</p> <p>dog [1] - 362:6</p> <p>Dolby [1] - 9:23</p> <p>dollars [7] - 11:19, 11:21, 134:12, 137:24, 150:1, 321:9, 377:16</p> <p>dominated [1] - 106:5</p> <p>Donald [3] - 305:2, 308:18, 308:20</p> <p>done [49] - 24:7, 31:17, 31:18, 44:25, 47:10, 49:23, 50:25, 51:15, 54:19, 58:2, 71:17, 74:17, 74:19, 76:2, 76:21, 86:14, 92:14, 120:14, 121:23, 141:24, 147:7, 151:7, 151:25, 158:15, 172:2, 176:25, 180:24, 183:11, 183:22, 192:19, 198:25, 202:14, 211:19, 228:2, 229:21, 229:22, 280:13, 280:15, 298:22, 298:24, 319:5, 349:11, 375:13, 383:11, 383:23, 383:25</p> <p>doorjamb [1] - 321:14</p> <p>doors [1] - 298:25</p> <p>dot [1] - 95:9</p> <p>dots [1] - 95:7</p> <p>double [6] - 78:4, 204:17, 247:16,</p>	<p>348:5, 349:10, 349:11</p> <p>doubling [1] - 349:8</p> <p>doubt [2] - 171:24, 339:6</p> <p>douse [1] - 195:8</p> <p>doused [1] - 194:15</p> <p>down [98] - 15:20, 32:4, 32:16, 33:3, 35:7, 36:20, 37:20, 38:3, 51:21, 59:6, 60:16, 61:4, 62:21, 63:11, 66:7, 67:12, 67:16, 68:22, 69:10, 69:11, 69:18, 69:23, 70:2, 70:15, 70:18, 70:19, 70:21, 70:22, 74:21, 77:17, 77:18, 79:3, 80:23, 81:4, 84:14, 93:3, 112:20, 116:8, 116:9, 121:7, 121:19, 131:7, 134:5, 141:13, 143:10, 145:11, 147:18, 166:25, 180:17, 181:15, 187:21, 188:6, 197:15, 205:4, 207:13, 208:18, 208:22, 215:21, 215:22, 216:1, 226:22, 227:9, 228:10, 228:18, 234:19, 234:21, 245:11, 250:23, 255:16, 274:6, 285:12, 288:11, 295:17, 297:21, 304:4, 307:7, 307:13, 309:20, 310:22, 311:9, 323:17, 334:25, 340:8, 345:22, 348:12, 348:19, 349:13, 356:5, 356:9, 358:5, 360:12, 362:22, 367:10, 370:13, 371:5, 382:5</p> <p>downfall [1] - 368:23</p> <p>downgradient [1] - 231:6</p> <p>downhill [3] - 38:8, 38:9, 39:22</p> <p>downstream [7] - 257:19, 260:8, 262:8, 262:17, 262:20, 267:1, 268:2</p> <p>downward [1] - 181:22</p>
---	---	--	---	--

<p>DOYLE [27] - 7:11, 18:6, 18:12, 29:2, 47:22, 48:4, 90:24, 113:13, 129:22, 130:3, 139:2, 177:22, 178:4, 178:7, 178:9, 178:15, 178:20, 193:16, 193:18, 193:21, 193:23, 194:3, 204:7, 247:11, 248:5, 385:25, 386:4</p> <p>Doyle [3] - 7:15, 179:5, 335:11</p> <p>dozer [1] - 195:7</p> <p>Dr [16] - 4:25, 191:4, 249:16, 249:21, 254:22, 268:21, 269:12, 272:4, 272:7, 274:9, 276:3, 279:12, 280:7, 286:6, 329:11, 351:15</p> <p>drags [1] - 292:13</p> <p>drain [5] - 62:22, 63:11, 67:12, 85:15, 321:16</p> <p>drainage [7] - 64:16, 66:4, 66:12, 66:19, 68:14, 69:5, 85:15</p> <p>draining [2] - 226:25, 234:15</p> <p>drains [1] - 62:17</p> <p>dramatic [1] - 326:6</p> <p>dramatically [1] - 326:1</p> <p>Draper [3] - 1:15, 2:25, 284:21</p> <p>DRAPER [2] - 168:7, 169:7</p> <p>drastically [1] - 366:12</p> <p>draw [1] - 85:2</p> <p>drawing [1] - 82:20</p> <p>drawn [2] - 5:18, 267:10</p> <p>drew [1] - 103:18</p> <p>drifting [1] - 253:1</p> <p>drill [2] - 41:19, 187:20</p> <p>drilled [4] - 41:7, 187:20, 187:21, 188:6</p> <p>drink [3] - 316:2, 316:4, 316:5</p> <p>drinking [3] - 61:8, 61:12, 299:13</p> <p>drive [3] - 299:6, 310:20, 355:21</p> <p>drive-thrus [1] - 299:6</p> <p>driven [2] - 65:25, 67:11</p> <p>driver [3] - 309:12, 310:8, 369:9</p> <p>drivers [3] - 127:14, 221:1, 311:6</p> <p>driving [4] - 56:3, 121:19, 141:5, 380:8</p> <p>drone [1] - 199:3</p> <p>drop [2] - 82:16, 173:20</p> <p>drops [2] - 31:14, 31:15</p> <p>drought [1] - 318:13</p> <p>drove [1] - 333:14</p> <p>drugs [1] - 382:8</p> <p>drum [1] - 370:4</p> <p>dual [1] - 73:8</p> <p>due [6] - 22:23, 38:21, 56:14, 188:23, 259:8, 364:4</p> <p>dug [2] - 31:25, 51:25</p> <p>dump [4] - 335:13, 351:4, 355:12</p> <p>dumped [2] - 174:2, 215:1</p> <p>dumping [6] - 201:15, 267:24, 324:25, 332:10, 368:9, 384:18</p> <p>dumpster [1] - 307:21</p> <p>dumpsters [1] - 379:5</p> <p>duration [2] - 11:1, 248:17</p> <p>during [38] - 4:3, 4:19, 13:9, 21:13, 33:11, 35:7, 64:3, 79:23, 82:19, 83:23, 89:9, 89:11, 104:3, 104:23, 106:8, 115:3, 119:12, 121:4, 122:7, 122:9, 124:22, 125:13, 129:5, 129:17, 134:9, 182:11, 184:10, 194:24, 216:11, 216:12, 216:21, 217:12, 226:5, 234:25, 239:6, 243:14, 243:18, 285:9</p> <p>dwelt [1] - 385:7</p> <p>dwindling [1] - 324:19</p> <p>dynamic [1] - 154:14</p>	<p>E</p> <p>e-mail [3] - 192:7, 192:11, 385:22</p>	<p>e-mails [1] - 109:10</p> <p>early [17] - 16:1, 29:11, 45:22, 51:16, 101:24, 108:24, 110:1, 117:5, 123:11, 184:10, 247:21, 321:7, 335:10, 342:25, 352:3, 364:9, 373:23</p> <p>earned [2] - 18:18, 48:22</p> <p>ears [1] - 236:23</p> <p>earth [2] - 33:2, 33:6</p> <p>ease [1] - 22:22</p> <p>easier [2] - 203:5, 302:9</p> <p>easily [1] - 188:21</p> <p>East [3] - 9:23, 10:1, 37:23</p> <p>east [9] - 31:9, 31:15, 83:5, 99:25, 110:13, 110:24, 181:20, 181:23, 181:24</p> <p>Eastern [2] - 18:14, 301:15</p> <p>eastern [2] - 18:17, 301:17</p> <p>EASTLER [12] - 46:22, 46:25, 141:13, 143:17, 144:20, 144:23, 145:2, 209:24, 225:17, 250:1, 305:9, 305:12</p> <p>Eastler [3] - 1:16, 2:21, 284:16</p> <p>Easter's [1] - 329:11</p> <p>easy [7] - 42:4, 144:11, 160:17, 202:23, 202:24, 220:20, 311:18</p> <p>eat [3] - 283:3, 319:19, 351:20</p> <p>eating [1] - 267:10</p> <p>Eaton [1] - 377:2</p> <p>Eben [1] - 365:7</p> <p>ecological [3] - 250:20, 251:1, 252:14</p> <p>ecologically [2] - 220:8, 266:2</p> <p>ecologically-based [1] - 266:2</p> <p>ecologist [1] - 251:12</p> <p>ecology [7] - 250:15, 250:19, 250:20, 250:22, 250:25, 251:22, 260:3</p> <p>EcoMaine [2] - 148:14, 359:21</p> <p>economic [6] - 155:21, 297:5, 302:7, 346:6, 347:3, 381:22</p> <p>Economic [1] - 12:9</p> <p>economics [2] - 250:21, 308:1</p> <p>Economy [1] - 251:5</p> <p>economy [6] - 251:23, 251:24, 297:14, 343:23, 344:2, 371:10</p> <p>ecosystem [2] - 260:4, 260:6</p> <p>Ed [5] - 130:16, 250:4, 261:1, 325:23, 351:17</p> <p>edge [3] - 77:2, 78:9, 208:22</p> <p>edges [1] - 62:19</p> <p>educate [5] - 298:19, 299:1, 299:3, 299:14, 363:24</p> <p>educated [2] - 305:17, 312:6</p> <p>educating [1] - 363:20</p> <p>education [1] - 315:2</p> <p>educational [1] - 29:11</p> <p>Edward [4] - 4:7, 5:1, 5:4, 286:7</p> <p>eel [1] - 254:11</p> <p>effect [7] - 191:14, 191:17, 191:22, 213:19, 226:25, 308:2, 330:13</p> <p>effective [9] - 17:18, 17:20, 19:10, 21:8, 30:5, 117:12, 124:23, 125:1, 238:24</p> <p>effectively [7] - 45:19, 45:21, 46:18, 124:9, 183:20, 362:19, 362:25</p> <p>effects [14] - 214:12, 251:1, 262:8, 262:13, 264:1, 264:21, 264:22, 266:19, 267:5, 267:9, 272:25, 322:22, 354:3, 382:15</p> <p>Efficiency [1] - 8:25</p> <p>efficient [4] - 22:25, 115:20, 129:7, 376:3</p> <p>efficiently [2] - 339:17, 376:4</p> <p>effluent [10] - 257:24, 260:8, 262:21, 263:11, 263:18,</p>	<p>264:10, 265:5, 268:1, 276:9, 276:11</p> <p>effort [5] - 98:10, 117:3, 117:10, 298:15, 376:5</p> <p>efforts [20] - 19:13, 20:4, 21:19, 22:15, 28:15, 92:1, 97:14, 98:13, 99:1, 166:12, 268:3, 314:25, 329:1, 333:17, 336:13, 339:5, 341:3, 344:1, 352:20, 354:8</p> <p>egg [4] - 95:21, 107:4, 107:5, 107:9</p> <p>eggs [1] - 252:23</p> <p>eight [12] - 81:1, 84:13, 93:10, 102:4, 102:23, 107:2, 112:18, 112:19, 224:21, 228:17, 351:23, 369:10</p> <p>eighty [2] - 235:25, 236:1</p> <p>eighty-thousandths [1] - 235:25</p> <p>either [27] - 8:2, 15:8, 16:18, 26:20, 27:25, 51:22, 83:9, 93:10, 99:7, 112:11, 119:13, 161:25, 162:5, 162:7, 162:18, 167:25, 180:17, 197:11, 214:9, 217:13, 248:3, 251:10, 257:22, 276:5, 284:6, 288:8, 306:2</p> <p>Ekstead [2] - 305:1, 305:4</p> <p>EKSTEAD [4] - 305:3, 305:11, 305:13, 308:17</p> <p>elaborate [1] - 225:25</p> <p>electrical [3] - 33:2, 95:12, 99:25</p> <p>electricity [3] - 302:25, 311:16, 311:24</p> <p>electrodes [1] - 74:21</p> <p>electronically [3] - 13:12, 244:23, 385:18</p> <p>electronics [1] - 370:21</p> <p>Eleftheriou [3] - 1:23, 3:9, 285:4</p> <p>ELEFThERIOU [5] - 170:13, 173:3,</p>
---	--	--	--

<p>241:22, 243:7, 244:14</p> <p>element [1] - 229:3</p> <p>elemental [1] - 243:6</p> <p>elevated [1] - 189:22</p> <p>elevation [3] - 81:25, 87:21, 181:4</p> <p>elevationally [1] - 87:17</p> <p>elevations [10] - 37:19, 38:3, 38:4, 40:2, 40:3, 40:4, 40:6, 87:19, 213:23</p> <p>eligible [1] - 259:10</p> <p>eliminate [4] - 76:17, 76:23, 240:15, 240:22</p> <p>eliminated [5] - 12:1, 51:22, 230:14, 244:9</p> <p>Elimination [1] - 278:12</p> <p>Eliot [1] - 151:9</p> <p>Elizabeth [1] - 345:14</p> <p>Ellsworth [3] - 378:22, 378:25, 379:1</p> <p>emanating [1] - 179:10</p> <p>embankments [1] - 79:8</p> <p>emerge [1] - 252:24</p> <p>emergency [1] - 366:20</p> <p>emergent [7] - 93:20, 99:16, 105:7, 105:12, 106:8, 246:6, 246:11</p> <p>emerging [1] - 105:24</p> <p>EMERSON [17] - 91:20, 93:2, 93:5, 93:8, 192:13, 192:23, 193:7, 203:18, 203:22, 204:22, 217:23, 218:5, 219:16, 220:3, 224:23, 225:1, 245:6</p> <p>Emerson [9] - 52:22, 90:25, 179:5, 192:4, 203:15, 204:4, 217:16, 224:15, 244:25</p> <p>emission [3] - 118:24, 119:4, 176:9</p> <p>emissions [5] - 118:25, 119:2, 119:6, 129:15, 324:10</p> <p>emphasis [1] - 29:14</p> <p>emphasize [1] - 376:19</p>	<p>employ [4] - 120:4, 294:6, 367:6, 379:21</p> <p>employed [4] - 27:14, 91:4, 208:7, 300:2</p> <p>employee [2] - 361:4, 361:24</p> <p>employees [7] - 19:9, 301:10, 320:10, 348:18, 366:22, 367:8, 375:21</p> <p>employment [2] - 375:23, 377:13</p> <p>empty [3] - 121:15, 121:18, 307:20</p> <p>en [1] - 194:14</p> <p>enable [3] - 220:2, 232:5, 340:1</p> <p>encompasses [1] - 205:9</p> <p>encompassing [2] - 104:20, 225:3</p> <p>encourage [8] - 5:16, 21:17, 237:17, 302:6, 313:8, 313:21, 330:23, 378:13</p> <p>encouraging [3] - 19:12, 117:1, 162:25</p> <p>encroach [1] - 274:20</p> <p>encroachment [1] - 275:3</p> <p>end [43] - 22:3, 22:8, 25:3, 64:7, 80:21, 82:13, 103:22, 104:16, 114:17, 126:13, 130:25, 131:20, 132:6, 133:6, 134:13, 135:18, 164:18, 179:12, 181:7, 181:9, 183:6, 183:10, 184:6, 184:24, 185:9, 185:23, 186:6, 190:3, 200:25, 228:14, 275:11, 301:21, 302:13, 323:16, 330:3, 359:12, 359:25, 364:21, 369:3, 371:5, 372:5, 385:19</p> <p>Endangered [6] - 192:10, 258:20, 261:9, 261:10, 263:2, 263:7</p> <p>endangered [8] - 218:10, 218:15, 245:14, 258:11, 259:8, 261:8, 350:22, 351:6</p>	<p>endeavors [2] - 115:19, 129:6</p> <p>ends [12] - 89:25, 152:13, 152:16, 164:13, 165:12, 165:13, 181:23, 181:25, 195:20, 333:21, 336:11, 340:10</p> <p>energy [10] - 8:23, 83:10, 301:7, 309:15, 311:17, 311:20, 311:24, 322:12, 359:10, 361:18</p> <p>Energy [7] - 24:23, 155:7, 155:12, 300:1, 301:6, 302:9, 332:14</p> <p>energy-type [1] - 83:10</p> <p>Enforcement [1] - 9:5</p> <p>enforcement [1] - 161:18</p> <p>enforcing [1] - 339:22</p> <p>engage [1] - 192:7</p> <p>engaged [1] - 192:13</p> <p>engine [1] - 346:6</p> <p>engineer [6] - 18:13, 18:21, 29:4, 29:18, 48:9, 113:15</p> <p>engineering [14] - 18:16, 18:20, 29:6, 29:7, 29:8, 29:13, 29:14, 30:22, 48:11, 48:18, 48:23, 84:5, 113:24, 113:25</p> <p>engineers [4] - 149:9, 217:14, 371:23, 382:24</p> <p>Engineers [10] - 29:8, 91:25, 92:12, 92:22, 101:19, 102:10, 112:3, 203:17, 219:21, 245:8</p> <p>Engineers' [3] - 92:17, 96:2, 101:23</p> <p>England [7] - 173:10, 173:12, 305:18, 306:12, 327:8, 332:11, 347:24</p> <p>Englander [1] - 306:20</p> <p>enhance [1] - 81:2</p> <p>enhanced [1] - 63:17</p> <p>enhancing [1] - 59:9</p> <p>enjoyed [1] - 355:20</p> <p>enjoying [1] - 344:22</p> <p>enormous [1] - 311:8</p> <p>ensure [5] - 12:13,</p>	<p>12:20, 344:14, 346:21, 377:18</p> <p>entail [1] - 205:19</p> <p>entails [1] - 245:3</p> <p>enter [2] - 6:18, 353:20</p> <p>entered [1] - 332:18</p> <p>entering [4] - 6:25, 213:16, 331:3, 331:21</p> <p>enters [1] - 213:15</p> <p>entire [16] - 18:18, 19:23, 66:11, 69:18, 74:14, 77:22, 94:7, 114:16, 122:20, 196:17, 213:17, 235:5, 235:8, 252:15, 362:21, 365:17</p> <p>entirety [1] - 268:10</p> <p>entities [1] - 323:4</p> <p>entity [2] - 155:19, 345:3</p> <p>envelope [1] - 55:20</p> <p>environment [16] - 49:9, 61:3, 70:17, 199:13, 232:12, 241:5, 241:7, 248:3, 251:24, 315:9, 320:22, 323:3, 324:2, 378:2, 378:5, 382:4</p> <p>Environmental [9] - 2:1, 2:7, 2:18, 3:17, 9:6, 55:3, 284:9, 285:16, 328:11</p> <p>ENVIRONMENTAL [1] - 1:2</p> <p>environmental [17] - 9:2, 18:19, 48:11, 91:3, 113:18, 113:20, 127:10, 194:4, 243:3, 304:13, 325:6, 328:13, 344:9, 351:4, 353:25, 354:13, 366:19</p> <p>environmentally [9] - 21:21, 115:21, 129:7, 185:19, 304:21, 353:19, 362:1, 363:3, 368:14</p> <p>eons [1] - 316:20</p> <p>EPA [10] - 126:23, 175:16, 175:23, 176:5, 191:25, 222:15, 351:9, 351:25, 357:8, 378:6</p> <p>EPA's [4] - 123:19, 198:4, 198:25, 200:3</p>	<p>Epsilon [2] - 8:5, 117:15</p> <p>equal [3] - 141:19, 280:23, 281:22</p> <p>equally [1] - 344:20</p> <p>equals [1] - 280:21</p> <p>equating [1] - 322:9</p> <p>equation [1] - 308:10</p> <p>equipment [14] - 22:20, 62:5, 72:20, 72:25, 73:21, 74:25, 117:22, 117:24, 118:6, 118:13, 196:5, 234:22, 236:6, 237:14</p> <p>equivalent [1] - 281:12</p> <p>Eric [1] - 8:7</p> <p>ericaceous [1] - 106:6</p> <p>erode [1] - 85:14</p> <p>erosion [6] - 65:4, 83:19, 83:20, 83:22, 124:25</p> <p>error [4] - 191:13, 191:16, 191:21, 192:2</p> <p>ESA [5] - 192:12, 258:21, 261:3, 261:14, 261:22</p> <p>ESAs [1] - 261:17</p> <p>escape [1] - 378:1</p> <p>escorted [1] - 306:6</p> <p>especially [4] - 250:5, 275:12, 304:10, 367:14</p> <p>essence [1] - 102:15</p> <p>essential [1] - 259:20</p> <p>essentially [6] - 9:20, 10:21, 64:21, 116:16, 154:18, 168:22</p> <p>establish [6] - 62:14, 157:8, 252:25, 341:22, 344:14, 346:21</p> <p>established [9] - 56:25, 62:15, 155:6, 156:16, 168:21, 248:14, 248:24, 248:25, 329:25</p> <p>establishes [1] - 346:17</p> <p>establishing [2] - 58:4, 61:9</p> <p>estimated [5] - 38:16, 129:8, 326:13, 326:20, 327:1</p> <p>estimates [2] - 138:2, 254:5</p> <p>estimating [1] - 34:18</p>
---	--	---	--	--

<p>estimation [1] - 182:2</p> <p>estuarine [1] - 258:13</p> <p>et [2] - 132:17, 185:12</p> <p>etcetera [6] - 105:21, 273:3, 273:5, 346:16, 384:3</p> <p>Europe [1] - 307:12</p> <p>Europeans [1] - 306:24</p> <p>evaluate [9] - 32:11, 157:18, 190:15, 216:8, 217:3, 218:9, 221:18, 232:19, 275:9</p> <p>evaluated [3] - 86:19, 116:17, 116:21</p> <p>evaluation [3] - 50:24, 54:24, 126:2</p> <p>evaporates [1] - 269:19</p> <p>evening [26] - 5:7, 5:8, 284:3, 284:4, 284:16, 288:18, 301:4, 305:3, 309:10, 314:24, 320:5, 328:10, 332:23, 333:1, 335:5, 335:9, 343:13, 350:16, 358:18, 361:1, 363:12, 364:8, 369:21, 377:5, 378:18, 386:6</p> <p>EVENING [1] - 284:1</p> <p>event [17] - 27:6, 41:18, 78:24, 79:6, 79:20, 85:17, 85:18, 88:15, 183:8, 232:3, 271:19, 272:11, 273:6, 275:7, 321:15, 333:13, 333:18</p> <p>events [8] - 79:23, 260:22, 269:21, 271:3, 271:18, 272:19, 273:8, 274:24</p> <p>eventually [3] - 85:15, 260:24, 357:23</p> <p>ever-expanding [1] - 347:4</p> <p>everyday [1] - 371:11</p> <p>evidence [18] - 4:4, 6:6, 20:1, 21:3, 28:13, 179:18, 179:19, 179:23, 180:5, 180:11, 182:9, 225:13, 261:16, 273:10, 277:17, 329:15,</p>	<p>330:9, 330:16</p> <p>evidenced [1] - 24:19</p> <p>evolution [1] - 168:1</p> <p>evolved [2] - 253:23, 334:8</p> <p>evolving [1] - 155:23</p> <p>exact [6] - 18:10, 133:10, 171:6, 171:8, 187:6, 237:20</p> <p>exactly [13] - 17:17, 38:7, 141:2, 166:20, 169:1, 218:1, 223:10, 225:1, 288:8, 325:5, 369:15, 376:9, 378:12</p> <p>examination [9] - 4:9, 4:24, 5:16, 130:2, 130:7, 130:9, 276:1, 277:15, 282:12</p> <p>examine [4] - 31:25, 32:5, 32:17, 265:23</p> <p>example [20] - 33:20, 33:21, 55:14, 98:21, 133:17, 133:25, 135:18, 185:17, 195:18, 196:16, 223:25, 224:19, 256:1, 258:8, 258:15, 262:15, 268:21, 271:20, 272:12, 273:2</p> <p>examples [2] - 106:18, 327:23</p> <p>excavations [1] - 31:25</p> <p>exceed [3] - 55:13, 55:24, 86:18</p> <p>exceeded [2] - 234:12, 269:25</p> <p>exceeds [2] - 90:9, 108:8</p> <p>excellent [3] - 52:16, 90:15, 149:10</p> <p>except [2] - 6:7, 228:3</p> <p>excess [2] - 27:8, 214:1</p> <p>exchange [1] - 192:11</p> <p>exchanges [1] - 316:15</p> <p>exciting [1] - 242:12</p> <p>excluded [1] - 130:23</p> <p>exclusive [3] - 11:2, 133:13, 374:8</p> <p>excrete [1] - 316:20</p> <p>excuse [7] - 43:10, 93:1, 96:13, 106:13, 121:7, 295:22, 357:19</p> <p>Excuse [7] - 144:21,</p>	<p>174:18, 233:22, 236:9, 255:15, 277:13, 345:22</p> <p>executive [2] - 3:5, 284:25</p> <p>Executive [1] - 1:19</p> <p>exercise [1] - 56:15</p> <p>Exeter [1] - 302:8</p> <p>exhibit [4] - 273:21, 273:23, 273:24, 274:2</p> <p>Exhibit [15] - 9:10, 12:10, 18:25, 29:19, 31:6, 48:24, 91:15, 100:23, 104:14, 107:13, 114:2, 119:23, 128:18, 152:10, 243:8</p> <p>exhibits [1] - 166:1</p> <p>exist [6] - 43:6, 43:8, 184:22, 226:16, 262:15, 303:6</p> <p>existed [1] - 191:14</p> <p>existence [1] - 225:24</p> <p>existing [40] - 31:8, 31:10, 50:5, 52:12, 64:1, 64:2, 70:6, 74:9, 81:17, 83:6, 83:11, 84:17, 84:23, 87:22, 93:24, 101:14, 115:23, 116:2, 118:25, 119:11, 129:9, 129:11, 138:12, 171:10, 208:4, 214:20, 231:21, 232:24, 235:3, 236:7, 289:16, 306:3, 330:9, 331:1, 345:4, 347:8, 347:13, 347:14, 351:4, 353:15</p> <p>exists [3] - 180:6, 191:18, 279:22</p> <p>exit [1] - 194:16</p> <p>expand [11] - 84:16, 88:6, 267:22, 308:11, 309:5, 310:17, 348:2, 348:9, 349:7, 350:3, 350:4</p> <p>expanded [6] - 16:7, 268:13, 276:23, 335:20, 345:5, 361:15</p> <p>expanding [6] - 98:24, 325:4, 347:4, 348:21, 349:2, 365:3</p> <p>EXPANSION [1] - 1:6</p> <p>Expansion [5] - 6:24,</p>	<p>7:14, 21:13, 51:5, 51:7</p> <p>expansion [185] - 2:9, 7:19, 10:7, 13:22, 15:16, 16:4, 29:21, 30:9, 30:11, 31:8, 31:19, 31:22, 32:14, 35:1, 38:11, 49:1, 49:4, 49:5, 49:11, 49:15, 49:24, 50:11, 52:12, 52:18, 54:11, 55:13, 61:19, 63:23, 81:17, 83:13, 83:20, 85:23, 88:8, 88:10, 88:17, 90:8, 90:14, 92:12, 93:10, 93:11, 93:22, 93:23, 93:25, 94:3, 94:6, 94:16, 95:1, 95:4, 95:8, 96:12, 100:7, 103:25, 105:6, 107:11, 107:14, 108:4, 109:21, 114:4, 114:25, 115:2, 115:7, 115:15, 115:22, 116:7, 117:13, 117:17, 119:1, 119:8, 123:5, 125:13, 129:5, 129:10, 129:12, 129:15, 129:17, 131:6, 132:9, 138:3, 141:19, 147:13, 147:20, 148:9, 148:12, 153:14, 156:14, 157:7, 171:11, 172:1, 172:6, 186:5, 193:11, 193:24, 204:14, 205:7, 219:3, 219:5, 219:9, 226:2, 227:15, 229:25, 232:4, 232:14, 232:16, 235:1, 235:3, 247:3, 251:11, 251:22, 258:17, 258:18, 263:13, 266:14, 268:6, 269:10, 273:4, 279:7, 279:8, 284:11, 286:21, 286:23, 288:22, 288:25, 289:21, 290:2, 290:6, 290:20, 290:25, 291:1, 291:3, 291:21, 293:13, 300:14, 301:13, 307:15, 307:23, 307:24, 311:4,</p>	<p>315:18, 318:25, 324:22, 325:8, 325:25, 326:15, 328:16, 328:18, 330:10, 330:16, 330:23, 331:8, 331:12, 333:4, 334:25, 336:23, 337:1, 337:8, 338:10, 339:20, 341:11, 341:12, 342:2, 342:8, 343:14, 343:18, 343:24, 347:11, 348:5, 348:7, 349:4, 350:6, 350:25, 353:16, 354:11, 358:20, 359:16, 362:8, 362:13, 362:23, 363:1, 363:4, 366:8, 368:16, 369:4, 378:13, 378:20, 379:21</p> <p>expect [7] - 41:12, 56:20, 110:4, 145:4, 158:12, 213:7, 214:4</p> <p>expected [4] - 116:19, 234:25, 271:21, 381:12</p> <p>expense [1] - 191:15</p> <p>experience [19] - 29:5, 48:11, 54:11, 54:18, 54:20, 54:23, 57:3, 67:14, 79:22, 83:15, 90:16, 90:17, 173:11, 217:8, 307:11, 308:11, 333:7, 354:3, 376:19</p> <p>experienced [3] - 273:9, 326:10, 378:9</p> <p>expert [3] - 277:11, 320:10, 356:9</p> <p>expertise [1] - 252:3</p> <p>experts [2] - 7:25, 83:1</p> <p>explain [7] - 101:7, 179:15, 188:25, 236:22, 241:25, 243:16, 247:17</p> <p>explained [2] - 47:18, 202:20</p> <p>explaining [1] - 331:12</p> <p>explanation [2] - 202:9, 342:15</p> <p>explicitly [1] - 281:5</p> <p>exploitation [1] - 267:17</p> <p>exploration [1] - 227:2</p>
---	--	---	---	--

<p>explorations [6] - 31:16, 31:20, 31:23, 225:23, 226:1, 227:4</p> <p>explored [1] - 28:6</p> <p>exponentially [1] - 337:19</p> <p>export [1] - 96:22</p> <p>exposed [2] - 352:6, 363:15</p> <p>exposure [4] - 248:13, 248:18, 265:1, 353:24</p> <p>expressed [1] - 326:5</p> <p>extend [3] - 180:18, 328:23, 331:1</p> <p>extended [1] - 359:5</p> <p>extends [1] - 257:12</p> <p>extensive [6] - 51:15, 61:25, 84:25, 240:23, 353:10, 377:25</p> <p>extent [20] - 12:19, 20:9, 20:18, 21:25, 22:12, 26:2, 26:13, 28:9, 98:1, 113:8, 153:25, 154:6, 154:12, 156:25, 157:14, 157:24, 158:18, 185:14, 212:19, 300:12</p> <p>extinct [1] - 266:3</p> <p>extinction [2] - 255:23, 257:7</p> <p>extinguish [1] - 194:17</p> <p>extra [4] - 79:12, 80:13, 98:5, 210:24</p> <p>extracted [1] - 119:8</p> <p>extraction [6] - 82:4, 82:5, 82:18, 207:19, 207:22, 229:2</p> <p>extrapolated [2] - 142:8, 172:21</p> <p>extreme [8] - 269:20, 271:2, 271:17, 272:19, 273:11, 274:18, 274:24</p> <p>extremely [8] - 39:14, 113:2, 123:6, 127:7, 129:5, 215:3, 298:17, 345:15</p> <p>eye [3] - 75:2, 323:13, 364:16</p> <p>eyes [1] - 266:20</p>	<p>face [1] - 122:8</p> <p>facilitate [3] - 20:6, 22:8, 215:20</p> <p>facilitated [1] - 24:5</p> <p>facilities [52] - 11:16, 22:20, 23:10, 23:19, 24:19, 51:10, 57:5, 78:18, 87:12, 135:15, 135:20, 140:4, 140:6, 140:9, 143:6, 147:23, 151:8, 152:16, 153:23, 154:5, 155:10, 156:3, 157:11, 157:16, 157:20, 158:5, 161:5, 161:15, 162:24, 163:14, 163:21, 164:7, 173:12, 174:6, 176:1, 176:12, 176:16, 176:22, 176:23, 177:15, 177:17, 268:13, 293:17, 294:14, 296:3, 299:25, 317:20, 359:21, 374:4, 375:15, 379:18</p> <p>facilities' [1] - 158:3</p> <p>facility [152] - 10:16, 10:23, 11:24, 13:8, 15:10, 15:11, 20:15, 21:5, 23:2, 23:3, 25:23, 26:1, 26:8, 26:19, 27:5, 50:6, 50:23, 51:8, 51:9, 52:7, 53:2, 53:3, 54:17, 55:23, 56:19, 58:13, 58:17, 61:13, 61:16, 64:11, 77:22, 80:3, 81:17, 81:19, 82:2, 82:7, 82:9, 82:19, 83:8, 83:25, 86:5, 87:8, 87:11, 87:16, 88:1, 88:7, 88:11, 94:8, 114:10, 114:11, 114:19, 115:6, 118:25, 119:11, 119:24, 121:3, 121:4, 122:14, 126:7, 127:20, 128:9, 128:13, 139:12, 146:13, 146:24, 150:21, 151:9, 155:17, 157:14, 159:20, 160:11, 161:3, 162:9, 162:18, 162:19,</p>	<p>164:10, 164:13, 164:15, 165:2, 165:7, 166:24, 167:6, 167:7, 167:9, 169:6, 172:17, 174:1, 175:10, 175:13, 185:18, 186:8, 186:16, 186:23, 190:3, 195:23, 196:7, 197:8, 212:16, 212:21, 225:13, 227:22, 243:20, 244:2, 288:24, 289:9, 290:10, 294:1, 294:4, 294:16, 294:18, 295:19, 295:21, 295:25, 296:2, 297:3, 297:8, 301:7, 303:3, 303:9, 304:1, 304:4, 304:7, 304:11, 304:16, 312:25, 313:20, 320:13, 329:8, 329:9, 329:14, 329:16, 330:18, 332:14, 337:21, 358:21, 359:22, 360:10, 360:11, 360:12, 361:8, 361:18, 362:3, 362:7, 373:1, 373:20, 374:20, 374:22, 374:24, 377:17, 378:5</p> <p>Facility [1] - 146:14</p> <p>facility's [2] - 20:17, 163:12</p> <p>facings [1] - 238:4</p> <p>fact [22] - 35:22, 41:21, 79:23, 110:11, 128:12, 138:19, 138:23, 153:21, 156:15, 190:18, 200:2, 205:8, 214:3, 277:2, 277:3, 300:9, 301:24, 302:7, 330:7, 330:16, 338:4, 369:12</p> <p>factor [5] - 86:8, 182:18, 188:22, 189:8, 229:10</p> <p>factors [4] - 86:15, 86:18, 189:16, 326:22</p> <p>factory [1] - 215:2</p> <p>fail [1] - 86:4</p> <p>failed [2] - 334:4,</p>	<p>336:20</p> <p>failing [1] - 191:17</p> <p>failure [6] - 80:9, 260:21, 268:11, 275:2, 330:15, 378:3</p> <p>failures [1] - 215:12</p> <p>fair [2] - 280:24, 293:24</p> <p>fairly [6] - 34:19, 61:24, 61:25, 84:24, 287:24, 292:5</p> <p>fall [7] - 78:20, 146:3, 252:22, 303:8, 308:2, 370:21, 373:23</p> <p>falls [3] - 87:22, 340:3, 352:19</p> <p>Falmouth [1] - 345:14</p> <p>false [3] - 322:24, 335:22, 339:16</p> <p>familiar [7] - 48:19, 175:15, 175:19, 189:24, 190:4, 194:23, 333:9</p> <p>families [1] - 378:9</p> <p>family [5] - 361:10, 361:22, 362:2, 371:11, 377:14</p> <p>fancy [1] - 319:25</p> <p>fantastic [1] - 369:18</p> <p>far [33] - 16:1, 23:11, 40:5, 41:15, 47:25, 62:8, 145:19, 157:20, 181:10, 201:17, 206:21, 206:24, 207:7, 207:18, 237:11, 237:21, 238:12, 244:13, 249:3, 249:19, 251:18, 254:2, 271:15, 276:14, 284:25, 288:14, 292:8, 320:9, 320:21, 324:11, 333:25, 334:4, 370:12</p> <p>far-off [1] - 324:11</p> <p>farm [1] - 165:5</p> <p>Farmington [2] - 2:21, 284:17</p> <p>farms [1] - 353:4</p> <p>FARRAR [16] - 233:15, 233:24, 234:7, 234:10, 234:23, 235:15, 235:20, 236:4, 236:12, 237:19, 238:14, 239:13, 240:3, 241:9, 241:14, 241:21</p>	<p>Farrar [3] - 1:23, 3:9, 285:3</p> <p>fashion [2] - 180:10, 238:7</p> <p>fashions [1] - 165:13</p> <p>fast [2] - 304:12, 326:9</p> <p>faster [4] - 22:25, 229:14, 254:16, 269:16</p> <p>father [1] - 365:24</p> <p>fault [1] - 57:14</p> <p>favor [8] - 194:10, 287:15, 287:16, 320:14, 345:3, 363:18, 372:2, 378:19</p> <p>favorable [2] - 202:16, 202:18</p> <p>FDA [1] - 382:11</p> <p>fear [1] - 333:14</p> <p>feasible [5] - 15:13, 15:14, 174:9, 184:22, 379:13</p> <p>feature [7] - 43:20, 45:12, 46:17, 54:5, 107:8, 183:3, 183:5</p> <p>features [7] - 39:18, 39:23, 42:21, 63:5, 65:4, 95:23, 353:12</p> <p>fed [1] - 30:22</p> <p>federal [2] - 261:14, 261:22</p> <p>Federal [3] - 192:9, 263:2, 263:7</p> <p>federally [6] - 193:5, 252:8, 257:11, 257:17, 262:24, 351:7</p> <p>federally-designated [1] - 257:11</p> <p>federally-listed [1] - 262:24</p> <p>federally-protected [2] - 257:17, 351:7</p> <p>fee [2] - 159:12, 159:15</p> <p>feeds [1] - 37:15</p> <p>fees [10] - 11:4, 134:13, 137:19, 137:24, 138:8, 159:4, 159:6, 368:1, 379:22, 380:21</p> <p>feet [39] - 32:16, 38:18, 38:25, 41:16, 55:14, 55:16, 57:25, 58:3, 58:7, 63:15, 66:1, 72:2, 72:21, 86:24, 87:20, 100:25, 103:7, 105:13, 110:13,</p>
F				
<p>fabric [3] - 72:13, 173:18, 174:8</p> <p>fabulous [1] - 47:1</p>				

<p>110:15, 110:18, 110:20, 110:24, 111:3, 111:4, 111:16, 112:5, 112:9, 112:15, 116:23, 117:23, 118:2, 187:24, 188:7, 190:9, 234:3, 237:24, 318:14 fellow [1] - 370:2 felt [8] - 43:16, 88:2, 206:23, 207:8, 207:18, 226:14, 249:1, 381:2 FEMA [3] - 87:10, 87:15, 274:7 fertilize [1] - 252:23 fertilizer [1] - 165:4 few [21] - 11:14, 14:19, 40:19, 74:14, 228:9, 229:18, 252:18, 253:13, 258:24, 259:25, 266:7, 268:21, 288:2, 302:1, 303:5, 306:15, 310:17, 323:7, 337:23, 340:17, 361:5 fewer [2] - 37:6, 304:12 fiber [2] - 23:9, 26:4 Fiberight [2] - 166:1, 166:3 fiberoptic [1] - 122:19 field [16] - 33:11, 97:12, 98:4, 98:5, 111:2, 123:18, 165:5, 183:16, 218:15, 221:8, 245:18, 246:1, 247:5, 298:24, 372:22 field-based [1] - 245:18 fifties [1] - 382:10 fifty [3] - 383:2, 383:3, 383:12 figure [19] - 31:5, 31:7, 31:16, 43:21, 44:19, 87:12, 95:5, 99:18, 100:22, 103:6, 103:15, 104:12, 110:14, 110:23, 237:3, 238:22, 243:10, 270:4, 315:22 figured [1] - 360:8 figures [2] - 234:24, 235:2 file [8] - 4:18, 6:19,</p>	<p>6:25, 7:1, 128:16, 223:15, 286:12, 286:14 filed [18] - 2:11, 4:13, 4:16, 4:20, 8:3, 234:23, 252:7, 254:24, 261:5, 261:20, 261:22, 262:5, 264:4, 271:14, 276:20, 286:10, 286:15, 286:18 files [1] - 286:16 fill [7] - 99:14, 299:2, 314:7, 326:8, 328:22, 331:22, 349:18 filled [10] - 74:11, 77:14, 99:9, 99:19, 99:22, 119:23, 123:8, 127:2, 368:4, 368:13 filling [4] - 219:11, 304:12, 322:3, 384:21 filtered [1] - 317:13 filters [1] - 66:7 final [12] - 64:1, 64:23, 82:3, 84:11, 89:23, 103:22, 113:13, 123:9, 123:10, 203:14, 252:18, 337:7 finalize [2] - 102:2, 222:20 finally [8] - 19:23, 23:18, 30:24, 50:2, 54:10, 109:3, 112:10, 162:22 finances [1] - 320:15 financial [3] - 303:21, 322:9, 380:6 Financial [1] - 12:4 findings [4] - 153:21, 157:5, 218:16, 337:9 fine [6] - 56:24, 151:23, 158:10, 158:12, 218:4 finer [11] - 25:22, 26:3, 122:2, 126:15, 152:14, 152:16, 159:17, 167:6, 296:11, 296:14 finesse [1] - 73:25 fingerprint [3] - 233:3, 233:4, 233:10 finish [3] - 28:25, 44:15, 174:19 finished [1] - 249:12 finite [1] - 16:13</p>	<p>fire [3] - 194:13, 194:18, 240:9 firefighters [2] - 194:17, 195:8 fires [1] - 240:6 firm [2] - 3:12, 29:8 firmed [1] - 337:11 First [1] - 46:25 first [83] - 7:8, 7:9, 8:14, 8:17, 8:18, 30:15, 36:24, 53:1, 53:11, 53:21, 55:6, 58:21, 61:17, 61:18, 63:23, 64:25, 66:2, 68:21, 72:5, 75:20, 77:7, 78:7, 78:8, 81:19, 83:21, 88:3, 109:6, 114:24, 120:18, 120:25, 123:3, 126:23, 126:25, 127:2, 130:6, 130:8, 130:20, 138:16, 168:9, 177:6, 179:6, 179:18, 182:22, 189:12, 190:19, 199:8, 199:10, 204:10, 210:11, 210:15, 221:16, 234:13, 234:17, 241:15, 252:3, 252:8, 253:14, 257:2, 258:4, 260:1, 266:24, 267:4, 269:10, 269:13, 274:9, 278:23, 287:22, 292:24, 293:4, 293:10, 302:14, 314:18, 315:3, 319:20, 319:23, 328:21, 341:10, 342:9, 343:1, 344:5, 358:23, 361:6, 385:4 firsthand [1] - 300:6 Fish [4] - 192:8, 192:14, 261:4, 262:11 fish [31] - 112:8, 252:9, 254:2, 258:3, 258:7, 262:9, 262:16, 262:18, 263:24, 265:1, 266:4, 266:5, 266:8, 266:10, 267:10, 275:10, 275:11, 275:16, 315:6, 316:9, 318:19, 318:22, 319:18, 319:19, 345:19,</p>	<p>346:15, 346:19, 351:17, 351:21, 352:5 fish-eating [1] - 267:10 fisheries [10] - 8:9, 109:20, 109:24, 192:20, 250:15, 250:19, 254:13, 255:12, 258:14, 321:19 Fisheries [6] - 94:14, 109:9, 109:12, 109:17, 256:6, 259:12 fishery [1] - 109:18 fishes [1] - 252:11 fishing [6] - 315:14, 345:18, 345:21, 346:24, 347:9, 366:3 fit [2] - 19:24, 222:5 fits [1] - 47:11 five [28] - 35:24, 57:24, 58:3, 58:7, 65:15, 65:17, 66:1, 90:20, 99:6, 148:18, 154:18, 172:3, 178:22, 190:9, 191:10, 205:22, 254:7, 288:5, 292:7, 318:6, 326:24, 331:13, 340:21, 357:7, 357:18, 357:20, 357:21, 374:6 five-foot [1] - 65:15 five-minute [4] - 90:20, 178:22, 288:5, 292:7 Flagg [4] - 293:6, 297:19, 298:8, 298:11 FLAGG [1] - 298:11 flare [4] - 83:9, 119:13, 124:13, 198:16 flat [1] - 189:4 flies [1] - 381:9 flood [9] - 87:10, 87:24, 88:1, 96:22, 245:10, 271:20, 272:21, 273:8, 353:8 flooded [1] - 353:4 flooding [3] - 272:19, 274:12, 274:18 floodplain [11] - 87:7, 87:14, 87:15, 87:18, 87:22, 88:7, 273:4, 273:14, 274:19, 274:20, 353:2</p>	<p>floodplains [4] - 87:8, 93:19, 274:13, 275:3 floor [16] - 80:24, 164:4, 204:4, 209:22, 293:8, 299:21, 299:22, 299:23, 301:3, 318:7, 320:4, 325:11, 340:24, 350:14, 365:12, 375:8 flow [43] - 33:21, 33:22, 39:13, 39:19, 58:21, 77:18, 83:7, 84:20, 85:18, 85:19, 96:22, 105:20, 181:5, 189:10, 189:12, 189:13, 189:14, 189:15, 208:25, 209:2, 209:5, 209:8, 209:12, 209:13, 213:5, 213:10, 229:21, 229:23, 230:1, 230:4, 230:6, 232:9, 245:10, 275:19, 277:24, 278:23, 279:1, 279:7, 279:10, 279:14, 279:15, 279:19, 323:20 flowages [1] - 105:7 flowing [3] - 189:18, 253:15, 259:24 flows [12] - 81:13, 84:21, 85:2, 85:3, 85:13, 123:17, 181:16, 181:17, 181:18, 235:17, 263:13, 279:18 fluctuations [1] - 373:22 fluorescent [3] - 194:20, 195:5, 195:10 flushed [1] - 374:1 flying [1] - 383:10 focus [8] - 19:25, 21:1, 48:13, 49:3, 97:17, 250:18, 287:9, 369:23 focused [4] - 37:11, 38:11, 40:23, 251:1 focusing [1] - 30:9 fold [1] - 123:11 folks [11] - 294:7, 295:8, 295:17, 363:24, 364:3, 364:5, 364:16, 364:19, 365:4,</p>
---	---	--	---	---

<p>371:21, 385:14 follow [9] - 64:6, 123:21, 156:5, 156:9, 169:7, 175:7, 206:16, 349:15, 358:4 follow-up [2] - 123:21, 175:7 followed [11] - 4:23, 145:10, 145:11, 182:10, 197:18, 324:5, 340:20, 347:20, 355:7, 358:16, 360:21 following [16] - 2:11, 14:24, 226:22, 287:3, 305:2, 308:19, 312:19, 313:24, 314:19, 318:3, 320:2, 328:8, 335:3, 351:10, 359:20, 369:7 follows [3] - 38:1, 40:7, 179:25 followup [2] - 15:23, 152:8 food [3] - 302:17, 338:25, 339:3 foot [13] - 55:16, 64:15, 65:15, 66:3, 68:13, 69:18, 69:21, 70:13, 71:22, 81:22, 111:23, 111:25, 112:6 footnote [2] - 168:15, 168:20 footprint [16] - 31:22, 42:19, 43:3, 43:12, 44:9, 50:4, 50:7, 55:9, 98:14, 98:15, 115:2, 231:21, 289:17, 290:3, 351:2 FOR [1] - 1:5 forbid [1] - 333:16 force [6] - 61:2, 78:3, 78:4, 86:2, 142:23, 317:7 forced [1] - 372:20 foremost [2] - 109:6, 252:3 Foreside [1] - 345:14 forested [9] - 93:12, 97:4, 99:6, 100:21, 105:8, 106:14, 193:3, 246:5, 246:8 forests [1] - 253:21 forever [4] - 214:5, 324:20, 333:24, 352:23 forget [1] - 382:13</p>	<p>forgot [2] - 298:1, 304:25 form [10] - 25:2, 101:11, 101:18, 119:22, 221:16, 281:6, 281:15, 303:7, 311:20, 351:3 formal [5] - 192:8, 192:12, 192:14, 192:17, 261:2 format [1] - 131:21 formations [2] - 33:24, 42:24 former [2] - 268:23, 293:20 forms [2] - 127:1, 263:24 Fort [2] - 114:17, 351:14 forth [12] - 19:6, 33:16, 97:25, 98:3, 98:9, 127:5, 179:20, 228:18, 239:20, 316:17, 351:25, 379:25 fortunate [3] - 73:23, 74:2, 365:24 fortunately [1] - 303:4 Forty [2] - 357:18, 357:21 forty [1] - 357:20 Forty-five [2] - 357:18, 357:21 forty-five [1] - 357:20 forward [9] - 172:22, 235:16, 296:17, 312:19, 318:19, 339:6, 348:24, 350:7, 385:16 forwarded [1] - 109:10 foundation [8] - 30:21, 46:15, 86:17, 163:10, 303:12, 303:13, 344:11, 362:20 four [17] - 50:21, 53:11, 81:1, 107:15, 125:18, 179:18, 204:3, 225:14, 238:15, 238:20, 253:4, 260:3, 289:2, 293:16, 334:17, 345:18, 361:11 four-by-eight [1] - 81:1 fourth [1] - 180:10 fracture [3] - 38:5, 38:14, 39:15 fractured [1] - 47:12 fractures [10] - 32:23,</p>	<p>36:14, 36:17, 36:20, 36:25, 37:4, 37:8, 39:8, 179:21, 180:12 fracturing [2] - 41:2, 47:11 frame [1] - 173:18 free [9] - 79:11, 138:17, 253:15, 289:6, 293:25, 311:16, 311:19, 344:19, 344:20 free-flowing [1] - 253:15 Frenchboro [1] - 313:4 frequency [5] - 208:12, 271:2, 272:21, 274:22, 274:25 freshwater [5] - 250:15, 250:19, 257:9, 258:10, 258:13 friend [1] - 350:23 friends [3] - 350:18, 352:17, 355:18 frog [1] - 107:5 frogs [2] - 107:15, 218:25 Front [1] - 25:3 front [10] - 7:3, 25:3, 126:13, 135:18, 200:25, 202:3, 236:19, 265:12, 265:21, 269:13 front-end [2] - 25:3, 135:18 Front-end [1] - 25:3 fruition [1] - 321:24 frustrated [1] - 335:23 fuel [9] - 25:15, 151:12, 151:18, 157:13, 176:1, 240:11, 240:14, 305:21 fuels [1] - 176:8 full [9] - 132:7, 205:25, 216:20, 244:7, 274:8, 313:6, 321:13, 341:16, 373:21 full-blown [1] - 244:7 full-time [1] - 216:20 Fuller [3] - 340:20, 343:11, 343:15 FULLER [3] - 343:12, 345:24, 347:2 fullest [1] - 300:12 fully [3] - 41:24, 176:17, 177:3</p>	<p>function [15] - 95:25, 96:15, 96:19, 105:16, 169:9, 184:8, 184:16, 218:7, 218:13, 218:19, 246:20, 246:22, 246:23, 246:25, 247:20 functional [1] - 245:12 functioning [8] - 94:23, 97:2, 104:2, 106:25, 107:3, 253:20, 279:19, 279:20 functions [20] - 91:9, 96:6, 96:9, 96:10, 96:13, 96:19, 96:23, 97:11, 101:16, 105:15, 105:19, 106:1, 168:13, 218:9, 220:10, 245:2, 245:5, 245:9, 245:25, 246:9 Fund [1] - 159:8 fund [3] - 10:22, 149:23, 324:18 fundamental [1] - 260:2 furniture [1] - 313:11 future [26] - 43:8, 83:10, 108:3, 116:1, 126:8, 146:20, 171:8, 219:15, 227:15, 230:9, 231:13, 232:13, 272:18, 273:7, 273:11, 274:18, 274:20, 302:5, 304:20, 313:18, 339:14, 343:6, 343:7, 346:10, 347:10, 385:8</p>	<p>garden [3] - 333:9, 373:8, 384:7 gas [51] - 8:8, 81:16, 81:18, 82:3, 82:6, 82:8, 82:14, 82:18, 82:20, 82:21, 82:23, 82:25, 83:1, 83:2, 83:3, 83:7, 83:8, 83:9, 83:12, 83:17, 118:22, 119:8, 120:23, 123:1, 123:2, 123:5, 123:6, 123:9, 123:12, 123:17, 123:18, 124:9, 124:11, 124:17, 126:12, 187:16, 198:6, 198:14, 199:22, 199:23, 199:24, 240:24, 241:1, 242:19, 311:16, 333:5, 333:7, 333:17, 335:19, 361:18 Gas [1] - 300:1 gas-to-energy [1] - 361:18 gases [4] - 144:17, 197:22, 199:18, 377:22 gassed [2] - 333:5, 384:7 gather [2] - 189:7, 284:8 gauge [1] - 239:10 GCL [5] - 67:22, 70:12, 73:4, 73:16, 210:24 geared [1] - 150:21 Geisser [3] - 293:4, 293:13, 340:4 GEISSER [3] - 293:7, 293:10, 297:18 GENERAL [1] - 1:5 general [25] - 3:3, 5:7, 10:22, 38:2, 39:21, 128:5, 149:23, 167:15, 173:8, 212:17, 217:24, 243:12, 250:17, 250:20, 250:21, 250:24, 252:11, 256:22, 264:10, 284:22, 288:23, 290:9, 318:24, 361:18, 367:12 General [15] - 1:19, 2:8, 2:11, 4:4, 7:19, 7:20, 7:21, 12:5, 114:9, 132:20,</p>
G				
			<p>gained [1] - 83:15 gallon [3] - 205:22, 280:1, 280:2 gallons [11] - 80:3, 80:4, 194:15, 194:18, 277:4, 279:3, 279:5, 279:9, 279:11, 279:23, 323:19 game [2] - 326:24, 367:21 gaps [2] - 251:15 garbage [4] - 136:19, 137:8, 201:23, 348:10</p>	

<p>244:19, 284:10, 286:4, 286:18, 289:14</p> <p>generally [10] - 5:15, 37:18, 38:17, 57:23, 111:24, 181:5, 181:14, 268:14, 269:16, 356:20</p> <p>generate [8] - 39:18, 83:7, 157:11, 223:15, 307:16, 311:16, 379:2, 380:19</p> <p>generated [18] - 12:25, 81:18, 82:8, 83:13, 128:22, 160:15, 185:4, 232:16, 235:9, 241:1, 241:2, 297:6, 325:17, 327:11, 327:20, 332:5, 332:6, 347:14</p> <p>generates [1] - 308:7</p> <p>generating [1] - 161:24</p> <p>generation [14] - 19:19, 24:1, 64:10, 78:25, 83:17, 119:20, 122:17, 123:5, 123:15, 138:12, 163:12, 173:19, 294:10, 373:20</p> <p>generations [1] - 346:11</p> <p>generator [14] - 12:25, 27:10, 127:3, 128:7, 143:10, 155:14, 159:22, 166:13, 175:12, 205:18, 206:4, 222:9, 302:25, 334:6</p> <p>Generator [1] - 221:5</p> <p>generator-owned [1] - 334:6</p> <p>generators [10] - 22:11, 22:17, 26:16, 80:10, 141:3, 176:15, 177:4, 202:3, 373:12, 373:13</p> <p>gentleman [3] - 311:2, 311:14, 370:25</p> <p>geocomposite [3] - 66:4, 73:19, 75:7</p> <p>geographic [2] - 262:15, 275:12</p> <p>geologic [4] - 29:23, 39:17, 59:25, 60:2</p> <p>geologist [1] - 29:4</p>	<p>geology [8] - 30:10, 32:5, 32:6, 35:4, 47:2, 47:12, 56:4, 180:12</p> <p>geomembrane [7] - 66:22, 72:18, 73:6, 73:16, 74:16, 210:21, 235:22</p> <p>geophysical [4] - 33:1, 33:4, 33:5</p> <p>George [1] - 327:18</p> <p>Georgia [6] - 10:9, 10:16, 356:5, 356:7, 356:10, 356:14</p> <p>Georgia-Pacific [6] - 10:9, 10:16, 356:5, 356:7, 356:10, 356:14</p> <p>geosynthetic [1] - 67:2</p> <p>geotechnical [4] - 29:6, 29:14, 33:13, 113:25</p> <p>gesturing [1] - 237:3</p> <p>giant [1] - 124:21</p> <p>Girl [1] - 298:23</p> <p>given [12] - 11:2, 30:3, 44:13, 134:19, 135:19, 156:17, 213:23, 232:8, 247:16, 294:13, 312:8, 339:17</p> <p>glacial [7] - 35:6, 35:7, 37:18, 37:24, 43:13, 44:3, 47:13</p> <p>glad [4] - 65:7, 318:18, 349:1, 349:3</p> <p>glaring [1] - 268:9</p> <p>glass [1] - 304:2</p> <p>Global [1] - 269:21</p> <p>global [6] - 252:17, 268:8, 272:25, 274:14, 275:4, 275:8</p> <p>glossiest [1] - 348:19</p> <p>goal [6] - 163:4, 163:5, 246:20, 296:25, 346:18</p> <p>goals [2] - 267:21, 346:23</p> <p>God [2] - 333:15, 381:15</p> <p>Goddard [2] - 268:24</p> <p>golf [1] - 355:21</p> <p>Gordon [4] - 355:7, 358:12, 363:10</p> <p>Gorrill [4] - 8:4, 8:5, 115:24, 116:17</p> <p>gosh [1] - 364:9</p> <p>governed [1] - 252:2</p> <p>Governing [2] - 3:19,</p>	<p>285:18</p> <p>Government [5] - 336:18, 337:2, 338:2, 338:5, 339:15</p> <p>government [1] - 344:12</p> <p>governmental [1] - 346:5</p> <p>Governor's [1] - 8:23</p> <p>GP [1] - 342:14</p> <p>grab [1] - 283:3</p> <p>grade [4] - 58:5, 82:3, 123:10, 211:1</p> <p>graded [2] - 71:10, 77:6</p> <p>grades [1] - 62:14</p> <p>gradients [1] - 33:24</p> <p>grading [2] - 26:5, 71:1</p> <p>gradually [1] - 334:8</p> <p>graduate [3] - 91:2, 113:22, 250:17</p> <p>grains [1] - 37:9</p> <p>grams [1] - 357:7</p> <p>grandchild [1] - 333:16</p> <p>grandchildren [2] - 324:18, 384:6</p> <p>grant [2] - 8:24, 348:8</p> <p>granting [1] - 350:4</p> <p>graphic [1] - 68:7</p> <p>grass [1] - 64:13</p> <p>grasses [1] - 246:12</p> <p>gratification [2] - 299:4, 299:5</p> <p>Gratiot [1] - 183:15</p> <p>gravel [10] - 42:23, 43:15, 57:9, 57:11, 185:23, 186:3, 240:18, 252:22, 252:24, 368:4</p> <p>Great [1] - 10:1</p> <p>great [16] - 54:22, 120:14, 203:6, 216:25, 230:24, 238:5, 249:21, 304:9, 304:16, 309:17, 320:23, 339:24, 359:15, 362:11, 371:10, 376:8</p> <p>greater [9] - 34:4, 34:17, 34:21, 53:10, 105:12, 160:22, 161:20, 219:8, 274:24</p> <p>greatest [4] - 20:10, 28:19, 98:16, 368:25</p> <p>greatly [4] - 251:19, 253:22, 339:13,</p>	<p>374:19</p> <p>Green [1] - 374:23</p> <p>green [1] - 382:21</p> <p>greened [1] - 106:9</p> <p>Greg [1] - 377:2</p> <p>grew [1] - 23:5</p> <p>grind [1] - 154:24</p> <p>grinding [1] - 155:1</p> <p>grit [3] - 185:18, 223:25, 304:2</p> <p>ground [16] - 35:5, 40:5, 85:11, 85:13, 122:13, 180:2, 215:1, 218:16, 226:13, 226:22, 311:19, 325:1, 332:10, 333:8, 336:5, 379:15</p> <p>groundwater [125] - 29:7, 30:12, 30:13, 30:25, 32:7, 32:9, 32:10, 32:12, 32:17, 32:19, 32:22, 33:21, 33:22, 34:1, 34:3, 34:4, 34:6, 34:8, 34:9, 34:10, 34:12, 34:13, 34:15, 36:2, 37:2, 37:7, 37:12, 37:15, 37:17, 37:20, 37:23, 37:24, 38:1, 38:12, 38:15, 38:17, 38:19, 38:23, 39:6, 39:11, 39:13, 39:19, 39:22, 39:24, 40:1, 40:4, 40:7, 40:9, 40:11, 40:15, 40:17, 40:22, 41:5, 41:8, 41:10, 41:13, 41:15, 41:20, 41:25, 42:21, 43:5, 43:6, 45:24, 46:6, 46:8, 46:9, 46:16, 57:6, 179:9, 179:11, 179:25, 180:1, 180:9, 180:15, 181:4, 181:5, 181:8, 181:16, 181:18, 181:19, 181:23, 181:25, 183:3, 183:9, 191:9, 206:19, 206:23, 207:8, 207:21, 213:5, 213:9, 213:13, 213:15, 213:16, 213:20, 215:10, 225:11, 225:24, 226:6, 226:12, 226:21, 227:5, 227:11, 229:2, 229:21,</p>	<p>230:4, 230:15, 230:18, 230:22, 231:4, 231:8, 231:11, 231:15, 232:9, 232:20, 248:3, 260:24, 306:14, 336:3, 336:5, 346:12, 353:13, 353:14</p> <p>groundwaters [2] - 30:6, 45:25</p> <p>groundwork [1] - 227:23</p> <p>group [6] - 36:25, 131:23, 143:19, 168:19, 292:10, 354:23</p> <p>grouping [3] - 36:21, 36:23, 36:24</p> <p>groups [3] - 36:21, 184:20, 347:25</p> <p>grow [5] - 297:14, 322:1, 342:2, 348:5, 365:25</p> <p>growing [6] - 302:6, 321:11, 335:18, 359:21, 370:3, 373:8</p> <p>grown [1] - 365:16</p> <p>growth [7] - 155:21, 156:3, 253:2, 253:8, 343:8, 351:1, 366:13</p> <p>guarantee [2] - 140:16, 265:4</p> <p>guaranteed [6] - 135:25, 136:4, 140:25, 141:2, 345:8, 345:18</p> <p>guarantees [1] - 315:13</p> <p>guess [23] - 17:6, 28:24, 137:6, 137:12, 150:16, 150:19, 151:21, 152:13, 153:6, 157:19, 160:10, 162:3, 163:25, 166:2, 197:24, 205:20, 214:17, 218:3, 238:11, 278:2, 323:7, 372:1</p> <p>guidance [1] - 101:23</p> <p>guidelines [1] - 102:7</p> <p>Gulf [1] - 263:1</p> <p>guy [2] - 236:21, 240:9</p> <p>guys [10] - 118:8, 118:16, 124:21, 137:8, 221:8, 236:24, 237:24, 238:10, 310:5, 371:20</p>
---	--	--	--	---

H				
<p>habitat [58] - 91:11, 94:23, 95:2, 95:3, 95:14, 95:24, 96:14, 96:17, 96:18, 97:3, 100:16, 100:17, 100:18, 101:2, 103:4, 103:8, 103:17, 103:20, 104:5, 105:17, 106:17, 107:9, 110:20, 111:10, 193:5, 193:7, 218:10, 219:7, 220:13, 245:10, 245:14, 246:7, 257:9, 257:11, 257:14, 257:18, 258:1, 258:2, 258:10, 258:11, 258:12, 258:16, 258:19, 258:23, 258:25, 259:11, 259:20, 260:16, 263:9, 266:12, 266:15, 266:25, 267:13, 324:20</p> <p>Habitat [1] - 109:12</p> <p>habitats [4] - 106:13, 246:10, 253:16, 258:7</p> <p>Haggan [2] - 312:20, 314:1</p> <p>HAGGAN [1] - 313:25</p> <p>half [15] - 46:5, 53:12, 53:13, 112:18, 114:20, 154:18, 175:1, 187:24, 201:25, 202:1, 212:13, 327:10, 328:16, 339:8</p> <p>halfway [1] - 150:13</p> <p>Hampden [10] - 300:2, 311:14, 325:14, 326:11, 338:20, 338:23, 349:1, 349:3, 361:16, 362:4</p> <p>Hampshire [2] - 171:17, 293:18</p> <p>hand [11] - 6:12, 38:24, 149:19, 180:19, 265:24, 274:6, 278:22, 298:2, 318:5, 336:15, 336:17</p> <p>handing [1] - 350:5</p> <p>handle [14] - 28:18, 62:10, 78:22, 79:5, 79:7, 83:12, 85:16,</p>	<p>123:4, 164:15, 209:15, 244:4, 279:23, 300:8, 339:21</p> <p>handled [4] - 13:15, 151:22, 206:16, 309:1</p> <p>handling [6] - 20:10, 20:20, 20:22, 128:7, 196:15, 212:20</p> <p>hands [3] - 8:4, 307:12, 348:19</p> <p>handshake [1] - 376:13</p> <p>Hank [3] - 300:19, 300:20, 301:1</p> <p>Hanson [4] - 268:22, 269:13, 272:4, 272:6</p> <p>Hanson's [2] - 272:7, 274:9</p> <p>happily [1] - 381:18</p> <p>happiness [2] - 344:25, 345:10</p> <p>happy [14] - 14:9, 237:16, 244:6, 244:10, 244:11, 307:21, 350:10, 361:12, 373:5, 375:3, 378:12, 381:6, 385:17, 385:19</p> <p>Harbor [4] - 312:22, 312:25, 313:2</p> <p>harbors [1] - 257:2</p> <p>hard [11] - 36:13, 65:9, 72:14, 80:6, 104:24, 117:19, 128:18, 264:6, 301:25, 348:17</p> <p>harder [1] - 291:9</p> <p>hardest [1] - 366:4</p> <p>hardship [1] - 352:16</p> <p>harm [1] - 258:9</p> <p>harmful [1] - 353:19</p> <p>harvested [1] - 254:13</p> <p>harvesting [2] - 108:4, 219:23</p> <p>hashed [1] - 291:14</p> <p>hat [2] - 299:11, 364:3</p> <p>haul [6] - 196:8, 196:9, 314:2, 360:7, 376:4, 379:7</p> <p>hailed [3] - 263:15, 263:17, 379:18</p> <p>hauler [2] - 12:25, 375:15</p> <p>haulers [4] - 13:13, 302:10, 304:22, 379:25</p> <p>hauling [5] - 12:23,</p>	<p>308:22, 309:2, 361:3, 380:14</p> <p>haults [1] - 308:22</p> <p>Hawk [5] - 26:18, 146:13, 164:23, 165:1, 165:19</p> <p>hay [1] - 241:6</p> <p>hazard [3] - 329:18, 353:21, 354:13</p> <p>Hazardous [1] - 2:12</p> <p>hazardous [7] - 205:15, 224:6, 224:8, 224:9, 334:9, 334:12, 334:14</p> <p>hazards [3] - 351:4, 353:25, 366:19</p> <p>HDB [1] - 75:20</p> <p>HDPE [1] - 187:4</p> <p>head [11] - 66:10, 66:13, 66:14, 66:20, 69:15, 130:1, 234:1, 234:16, 237:7, 249:5, 279:12</p> <p>Head [2] - 8:7, 82:25</p> <p>headed [1] - 179:21</p> <p>header [5] - 83:3, 83:4, 83:6</p> <p>heading [3] - 166:11, 320:20, 343:5</p> <p>headwater [1] - 253:17</p> <p>health [14] - 119:5, 248:19, 320:24, 321:19, 321:22, 323:24, 325:3, 329:19, 345:3, 351:3, 352:4, 353:21, 353:24, 354:13</p> <p>healthy [1] - 361:13</p> <p>hear [29] - 4:25, 5:6, 5:9, 18:5, 21:14, 118:8, 118:17, 130:14, 131:15, 144:7, 225:17, 233:17, 237:1, 237:25, 238:2, 238:4, 238:8, 238:10, 249:25, 279:16, 286:9, 298:7, 308:9, 355:16, 360:3, 360:8, 360:16, 369:22, 384:14</p> <p>heard [22] - 47:24, 75:17, 137:18, 172:15, 194:19, 241:14, 251:18, 257:10, 257:19, 258:23, 286:2,</p>	<p>286:6, 288:7, 307:3, 309:14, 328:2, 338:25, 340:6, 341:13, 350:14, 381:2, 381:12</p> <p>hearing [34] - 2:1, 2:6, 2:19, 3:11, 3:14, 3:21, 4:3, 4:13, 4:17, 4:20, 4:22, 6:5, 6:9, 6:20, 7:13, 14:13, 21:14, 130:5, 141:14, 158:13, 158:18, 161:12, 161:13, 284:9, 284:15, 285:7, 285:13, 285:20, 286:12, 288:4, 342:7, 381:4, 381:20, 386:7</p> <p>Hearings [2] - 3:20, 285:19</p> <p>hears [1] - 278:10</p> <p>heart [6] - 317:1, 317:6, 317:12, 329:11, 383:18, 383:21</p> <p>heartland [2] - 324:11, 324:15</p> <p>heat [2] - 335:20, 352:9</p> <p>heavier [2] - 211:3, 333:7</p> <p>heavily [1] - 376:3</p> <p>heavy [4] - 47:14, 264:16, 320:15, 324:10</p> <p>height [1] - 47:8</p> <p>held [6] - 2:1, 3:14, 86:10, 285:13, 320:25, 342:6</p> <p>help [8] - 72:9, 225:23, 239:11, 288:6, 299:2, 319:20, 355:4, 382:15</p> <p>helped [1] - 225:10</p> <p>helpful [1] - 71:5</p> <p>helps [5] - 67:7, 121:25, 251:13, 359:23, 367:9</p> <p>Henry [3] - 300:15, 301:5, 304:25</p> <p>Hermon [1] - 363:14</p> <p>herring [2] - 254:4, 266:21</p> <p>herrings [1] - 253:24</p> <p>hi [1] - 347:21</p> <p>Hi [1] - 314:21</p> <p>hide [1] - 377:24</p> <p>Hierarchy [15] - 19:1, 19:17, 20:12, 23:17,</p>	<p>28:20, 162:20, 165:24, 178:1, 178:3, 178:6, 178:14, 185:8, 287:9, 301:24, 328:20</p> <p>hierarchy [35] - 14:14, 14:22, 14:25, 19:7, 21:16, 22:5, 24:8, 25:10, 26:6, 147:4, 163:6, 163:7, 163:11, 176:19, 185:11, 186:17, 186:24, 302:1, 302:3, 303:8, 303:10, 303:12, 303:15, 315:2, 325:23, 348:8, 349:15, 354:16, 359:20, 362:11, 362:15, 362:16, 362:21, 362:24, 371:1</p> <p>high [27] - 20:11, 27:23, 28:3, 28:20, 66:5, 66:22, 68:14, 68:17, 80:25, 88:5, 96:10, 104:4, 105:5, 107:2, 125:10, 125:16, 145:17, 247:1, 254:5, 260:17, 267:13, 275:21, 294:11, 318:11, 357:11, 379:22</p> <p>High [1] - 351:15</p> <p>high-density [3] - 66:22, 68:17, 80:25</p> <p>high-quality [1] - 267:13</p> <p>high-value [2] - 104:4, 105:5</p> <p>higher [24] - 21:16, 34:3, 35:18, 37:19, 38:3, 39:1, 40:2, 40:6, 78:25, 81:7, 93:16, 102:6, 102:17, 105:15, 107:10, 180:1, 180:3, 188:7, 213:8, 213:11, 308:4, 308:5, 322:9</p> <p>highest [3] - 79:12, 87:21, 257:8</p> <p>highlighted [3] - 19:25, 21:1, 273:15</p> <p>highly [2] - 363:2, 363:18</p> <p>Highway [5] - 96:2, 245:1, 245:7,</p>

<p>245:15, 246:18 hill [1] - 194:9 hills [1] - 180:1 hillside [1] - 189:7 hiring [1] - 371:23 historic [1] - 358:6 historic [4] - 95:19, 97:8, 254:5, 266:11 historical [1] - 35:2 historically [4] - 115:11, 116:14, 141:24, 253:25 history [7] - 141:21, 252:20, 253:13, 268:4, 342:20, 343:1, 343:3 hit [3] - 112:16, 368:18, 368:19 hits [1] - 189:5 hog [1] - 353:4 hold [9] - 5:15, 28:24, 86:6, 86:9, 131:14, 169:11, 260:17, 317:5, 322:25 holding [3] - 169:22, 170:8, 269:19 holds [1] - 187:15 hole [9] - 33:3, 67:13, 76:11, 187:21, 207:13, 267:24, 367:24, 367:25, 368:2 holes [3] - 32:15, 33:9, 81:13 holistic [1] - 266:2 home [9] - 163:20, 202:6, 224:7, 257:4, 296:10, 307:19, 324:23, 346:16 Homeowner [1] - 221:24 homeowner [1] - 335:7 homeowners [2] - 379:6, 379:24 homes [1] - 303:1 honest [2] - 137:9, 364:10 honor [1] - 376:11 hook [1] - 80:10 hope [9] - 145:4, 235:19, 269:6, 314:12, 358:9, 369:2, 369:25, 372:1, 380:16 hopefully [9] - 7:8, 145:2, 155:9, 287:24, 292:6, 292:18, 292:25, 359:4, 359:23</p>	<p>hoping [2] - 200:12, 318:16 horizontal [5] - 81:19, 81:23, 82:9, 82:17, 123:8 horizontal-type [1] - 123:8 horrifying [1] - 333:6 horsepower [1] - 81:7 horticultural [1] - 373:9 host [2] - 11:9, 11:19 hosting [1] - 11:22 hot [8] - 194:25, 195:1, 195:2, 195:4, 240:16, 240:18, 335:18 Hot [1] - 374:24 Houlton [2] - 361:7, 361:8 hour [4] - 48:1, 116:10, 283:3, 354:4 hours [6] - 48:1, 117:25, 118:1, 119:21, 124:6, 321:3 house [12] - 13:13, 13:15, 50:10, 55:14, 127:12, 298:22, 310:9, 312:9, 335:18, 355:19, 355:24, 381:9 houses [2] - 363:23, 367:23 hovering [1] - 142:1 Hovey [4] - 358:13, 360:22, 360:25, 361:2 HOVEY [2] - 360:22, 361:1 huge [3] - 359:6, 379:20, 384:17 hum [2] - 241:13, 278:24 human [1] - 75:2 humble [2] - 309:12, 311:6 hundred [7] - 81:22, 85:17, 87:14, 111:23, 111:25, 359:13 hundred-foot [3] - 81:22, 111:23, 111:25 hundreds [2] - 266:24, 267:7 Hurricane [1] - 353:4 hurting [1] - 155:25 hydraulic [8] - 33:24, 40:9, 71:23, 180:4, 202:23, 213:19,</p>	<p>226:16, 227:12 hydrogen [23] - 119:9, 120:8, 124:12, 125:4, 125:6, 125:17, 125:20, 144:12, 197:22, 199:2, 199:4, 199:5, 199:16, 199:25, 238:15, 239:14, 239:21, 242:19, 248:13, 248:15, 248:22, 333:5, 377:8 hydrogeologic [3] - 29:20, 29:24, 226:20 hydrogeologically [1] - 336:2 hydrogeology [2] - 29:6, 226:17 hydrologically [1] - 275:15 hypocritical [1] - 371:16</p> <p style="text-align: center;">I</p> <p>I-95 [2] - 117:1, 117:3 ice [6] - 35:7, 35:8, 47:6, 47:7, 47:8, 47:14 idea [12] - 57:15, 60:2, 111:12, 195:14, 237:1, 306:4, 306:10, 321:5, 322:8, 322:11, 348:8, 349:14 ideal [1] - 270:25 identification [1] - 127:15 identified [23] - 6:8, 6:9, 43:4, 43:11, 51:16, 51:24, 52:3, 58:21, 81:25, 93:9, 94:1, 94:15, 94:22, 95:8, 104:22, 106:25, 111:1, 127:8, 127:20, 128:2, 128:6, 193:5, 229:16 identifies [1] - 42:25 identify [14] - 44:19, 54:4, 55:15, 58:14, 58:24, 59:17, 94:25, 98:10, 125:20, 184:3, 207:22, 223:3, 251:14, 287:20 ideological [1] - 320:21 IF&W [2] - 109:22, 111:22</p>	<p>ignition [2] - 240:11, 240:16 ignorance [1] - 265:18 ignore [2] - 263:10, 333:10 ignored [1] - 337:2 ignores [1] - 260:1 illustrated [1] - 33:5 illustrates [4] - 19:15, 20:23, 27:22, 243:10 images [2] - 256:16, 256:17 imagine [2] - 333:4, 354:2 immediate [2] - 2:23, 266:19 immediately [9] - 42:7, 45:24, 128:3, 205:25, 208:11, 209:3, 216:25, 344:8, 344:10 immense [1] - 353:5 impact [19] - 56:13, 56:18, 56:19, 58:7, 60:12, 60:25, 72:17, 88:7, 100:12, 100:25, 102:11, 102:22, 134:13, 213:10, 258:7, 260:9, 260:10, 344:6, 376:5 impacted [6] - 99:8, 102:5, 105:16, 218:12, 259:25, 308:8 impacting [1] - 205:7 impacts [46] - 20:16, 49:14, 52:25, 53:10, 53:15, 57:6, 91:18, 97:19, 97:23, 98:1, 98:20, 98:24, 99:2, 99:5, 99:6, 99:15, 100:8, 100:12, 100:17, 100:20, 101:1, 101:5, 101:7, 101:9, 109:19, 109:24, 110:4, 110:9, 110:10, 112:4, 112:13, 112:14, 113:2, 113:7, 113:9, 113:10, 192:20, 205:12, 259:7, 259:10, 260:11, 262:20, 280:9, 287:5, 287:6, 291:20 impeach [1] - 277:17 impeded [1] - 213:6 impel [1] - 275:9 imperative [1] -</p>	<p>352:15 implement [5] - 42:4, 44:21, 184:5, 228:25, 229:13 Implementation [1] - 345:19 implemented [8] - 83:23, 117:6, 214:12, 229:1, 234:11, 328:21, 341:5 implore [1] - 308:9 import [2] - 59:1, 59:4 importance [3] - 257:1, 267:1, 306:18 important [40] - 7:13, 25:18, 30:24, 34:19, 35:10, 35:21, 39:23, 40:13, 46:17, 52:5, 53:18, 54:13, 57:7, 58:15, 68:2, 111:21, 115:11, 116:12, 121:21, 123:3, 124:16, 231:2, 231:7, 240:7, 240:8, 253:13, 256:19, 295:20, 303:10, 306:10, 315:5, 329:20, 329:21, 360:15, 361:23, 362:23, 370:17, 373:10, 374:4 Importantly [1] - 30:1 imported [8] - 58:25, 69:17, 69:22, 70:5, 71:8, 71:12, 138:20, 322:4 impose [1] - 156:24 imposed [1] - 21:8 impregnated [1] - 242:16 impressed [1] - 67:23 impressive [1] - 367:3 improperly [1] - 233:7 improve [5] - 120:2, 125:15, 266:5, 336:14, 372:3 improved [2] - 266:10, 366:12 improvement [1] - 295:2 improvements [1] - 295:13 improving [3] - 182:23, 252:14, 297:14 IN [4] - 1:5, 6:15, 298:5, 386:7 in-depth [1] - 115:25 in-state [17] - 126:7,</p>
--	---	---	---	--

<p>139:16, 139:19, 140:11, 140:13, 150:20, 170:17, 185:3, 186:6, 186:9, 186:10, 200:22, 201:12, 332:8, 332:16, 337:23, 339:12</p> <p>inaccuracies [1] - 342:23</p> <p>inactive [1] - 82:12</p> <p>inalienable [1] - 344:21</p> <p>inappropriate [2] - 143:25, 321:6</p> <p>Inc [1] - 289:13</p> <p>incentive [2] - 167:22, 324:13</p> <p>inch [7] - 66:15, 66:18, 80:25, 82:13, 235:25, 236:1, 236:3</p> <p>inches [8] - 67:25, 79:25, 80:2, 234:6, 234:7, 234:8, 235:23, 236:1</p> <p>incidental [1] - 154:23</p> <p>incidentally [1] - 195:22</p> <p>incinerate [4] - 19:22, 23:18, 139:23, 302:23</p> <p>incinerated [1] - 16:8</p> <p>incinerating [1] - 162:22</p> <p>incineration [2] - 25:14, 27:2</p> <p>incinerator [13] - 15:20, 24:23, 25:15, 27:7, 122:2, 126:14, 139:20, 147:14, 147:17, 148:9, 148:11, 148:13, 200:25</p> <p>incinerators [7] - 23:3, 23:14, 25:4, 27:4, 140:19, 148:15, 359:10</p> <p>include [25] - 12:22, 18:15, 22:21, 23:6, 24:2, 31:24, 44:10, 58:10, 59:11, 72:12, 134:15, 134:20, 134:23, 134:25, 135:4, 156:20, 209:6, 225:22, 235:3, 262:14, 270:4, 287:2, 337:8, 352:9</p> <p>included [13] - 12:10, 22:6, 63:4, 89:19,</p>	<p>166:1, 235:2, 246:18, 256:13, 259:13, 262:9, 273:23, 331:15, 336:24</p> <p>includes [17] - 20:18, 25:14, 29:12, 35:2, 50:9, 99:4, 99:6, 104:1, 117:7, 119:20, 124:3, 140:8, 229:23, 290:6, 291:4, 296:6, 332:5</p> <p>including [17] - 12:2, 18:18, 20:1, 21:22, 24:13, 90:11, 91:8, 120:5, 125:3, 165:25, 191:13, 287:7, 290:7, 337:18, 346:10, 346:23, 375:22</p> <p>inclusion [2] - 43:13, 44:3</p> <p>income [1] - 347:6</p> <p>incoming [1] - 120:19</p> <p>inconsistency [1] - 329:4</p> <p>incorporate [5] - 39:14, 39:15, 54:14, 54:16, 88:12</p> <p>Incorporated [1] - 314:2</p> <p>incorporated [1] - 180:12</p> <p>incorporating [1] - 210:21</p> <p>increase [22] - 22:24, 116:10, 116:15, 155:9, 209:2, 243:17, 263:12, 263:17, 267:18, 274:23, 276:22, 277:23, 279:7, 279:8, 279:13, 295:5, 295:15, 326:6, 327:4, 327:11, 330:11, 339:6</p> <p>increased [12] - 22:22, 243:14, 266:21, 270:5, 271:18, 272:16, 274:17, 325:25, 338:14, 345:6, 346:14, 352:18</p> <p>increases [2] - 20:15, 171:19</p> <p>increasing [5] - 191:16, 233:2, 252:14, 271:1, 271:2</p>	<p>incredible [1] - 315:24</p> <p>incredibly [1] - 154:14</p> <p>incubate [1] - 252:23</p> <p>incur [1] - 10:22</p> <p>indeed [1] - 151:10</p> <p>independent [4] - 89:17, 308:21, 344:19, 344:20</p> <p>Index [1] - 11:7</p> <p>India [1] - 362:6</p> <p>Indian [5] - 168:25, 345:20, 350:24, 352:4, 352:17</p> <p>indicate [1] - 191:9</p> <p>indicated [6] - 54:4, 77:1, 87:24, 89:1, 125:22, 179:9</p> <p>indicates [1] - 154:2</p> <p>indicating [2] - 13:18, 236:2</p> <p>indicator [1] - 198:9</p> <p>indirectly [1] - 367:7</p> <p>individual [6] - 24:9, 77:5, 81:3, 128:17, 194:12, 235:10</p> <p>individually [1] - 123:14</p> <p>individuals [4] - 169:1, 226:8, 275:13, 307:25</p> <p>indulgence [1] - 331:16</p> <p>Industrial [1] - 379:1</p> <p>industrial [9] - 15:10, 15:11, 26:11, 145:15, 146:11, 221:25, 243:19, 335:21, 377:13</p> <p>industrialization [1] - 316:21</p> <p>Industry [1] - 379:15</p> <p>industry [10] - 76:7, 86:14, 94:11, 154:14, 310:25, 320:16, 322:15, 324:1, 379:16</p> <p>inexcusable [1] - 268:9</p> <p>infiltration [1] - 64:22</p> <p>influence [2] - 206:22, 236:15</p> <p>influenced [1] - 260:14</p> <p>information [56] - 7:6, 9:18, 30:20, 30:22, 32:1, 32:8, 32:11, 32:22, 32:25, 33:8, 33:14, 34:13, 34:24, 34:25, 35:3, 41:4, 46:3, 54:3, 85:4,</p>	<p>88:12, 89:20, 89:21, 89:25, 92:6, 106:23, 110:3, 110:7, 132:4, 133:1, 169:3, 170:23, 187:11, 210:14, 221:18, 222:12, 222:22, 226:10, 226:15, 227:1, 228:8, 228:21, 232:15, 249:5, 251:16, 261:11, 265:9, 265:20, 268:18, 278:11, 310:8, 319:8, 319:10, 319:13, 319:14, 382:7, 384:23</p> <p>informational [2] - 288:25, 342:6</p> <p>infrastructure [9] - 7:13, 52:13, 65:3, 81:16, 83:11, 124:7, 129:16, 279:22, 290:7</p> <p>ingredients [1] - 176:8</p> <p>inhabitants [1] - 347:11</p> <p>inherent [3] - 147:25, 156:19, 344:21</p> <p>inherited [1] - 319:21</p> <p>initial [4] - 92:13, 209:11, 222:12, 290:22</p> <p>initiate [2] - 206:3, 209:4</p> <p>initiating [1] - 296:7</p> <p>initiative [1] - 23:5</p> <p>initiatives [1] - 24:4</p> <p>inject [1] - 317:4</p> <p>Inland [4] - 94:13, 109:9, 109:17, 259:12</p> <p>inner [1] - 361:19</p> <p>input [7] - 26:20, 146:15, 156:25, 158:11, 158:19, 206:11, 385:6</p> <p>insert [1] - 38:6</p> <p>inside [5] - 184:25, 195:4, 196:5, 234:16, 243:22</p> <p>insight [1] - 230:22</p> <p>inspect [7] - 4:18, 127:13, 127:16, 223:6, 234:14, 234:18, 286:13</p> <p>inspecting [1] - 223:7</p> <p>inspection [6] - 4:17, 89:23, 127:6, 127:9, 223:7, 286:13</p>	<p>inspections [1] - 13:8</p> <p>instability [1] - 269:23</p> <p>install [10] - 32:7, 45:20, 45:21, 60:3, 123:6, 124:7, 208:1, 227:24, 237:15</p> <p>installation [4] - 59:22, 71:9, 74:19, 182:11</p> <p>installations [1] - 74:16</p> <p>installed [23] - 25:5, 43:18, 68:11, 71:25, 72:5, 72:6, 72:8, 73:18, 75:12, 81:20, 81:21, 82:1, 82:4, 83:5, 118:5, 125:6, 180:8, 183:18, 214:8, 214:9, 243:16, 244:2</p> <p>installers [1] - 217:6</p> <p>installing [1] - 59:22</p> <p>instance [7] - 33:6, 167:5, 167:20, 173:13, 232:23, 332:11, 373:22</p> <p>instances [1] - 224:3</p> <p>instant [1] - 299:4</p> <p>instantly [1] - 322:17</p> <p>instead [10] - 117:1, 117:3, 165:13, 167:16, 318:20, 330:24, 331:23, 338:18, 343:25, 368:2</p> <p>Institute [3] - 268:24, 268:25, 269:3</p> <p>instrumentation [1] - 197:9</p> <p>insufficiencies [1] - 251:15</p> <p>insulation [1] - 324:16</p> <p>insurance [3] - 149:23, 149:25, 150:8</p> <p>Insurance [2] - 1:10, 2:2</p> <p>intact [2] - 36:13, 253:20</p> <p>intake [1] - 141:25</p> <p>integral [1] - 296:17</p> <p>integrated [3] - 19:8, 19:20, 304:18</p> <p>integrity [4] - 85:21, 252:15, 274:21, 280:19</p> <p>intelligent [1] - 334:22</p> <p>intend [2] - 304:17, 364:11</p> <p>intended [2] - 82:17,</p>
--	---	---	---	--

<p>172:23 intensive [1] - 243:2 intent [1] - 62:15 intention [1] - 358:25 intentions [1] - 302:3 interact [2] - 265:3, 353:12 interaction [1] - 38:13 intercept [1] - 253:1 interconnected [1] - 267:16 interconnection [1] - 37:2 interconnections [1] - 260:5 interconnectivity [3] - 32:23, 37:6, 39:16 interest [8] - 323:1, 323:2, 323:4, 328:6, 331:16, 342:17, 352:20, 367:2 interested [5] - 4:1, 9:9, 143:23, 285:25, 355:23 interesting [2] - 75:4, 342:16 interim [1] - 244:3 Interior [1] - 262:11 intermediate [7] - 74:8, 84:10, 84:11, 124:18, 124:19, 198:25, 235:11 intermittent [1] - 110:12 internal [2] - 76:16, 77:3 internally [2] - 77:3, 238:16 interpret [1] - 350:13 interpretation [2] - 111:2, 334:22 interpreting [1] - 39:10 interrupt [1] - 145:23 interrupting [2] - 264:5, 270:15 intersect [1] - 36:25 intersection [2] - 37:1, 47:17 intersections [1] - 116:18 interstate [3] - 10:5, 10:6, 117:4 interval [1] - 81:22 intervenor [2] - 5:1, 286:7 intervenor [3] - 4:7, 4:8, 342:19 interview [1] - 221:17 intoxicant [2] - 96:21,</p>	<p>245:11 introduce [5] - 7:22, 8:13, 8:17, 9:11, 249:21 introduction [2] - 193:25, 194:3 invasive [1] - 91:12 invertebrates [1] - 253:1 invest [1] - 295:25 invested [5] - 23:1, 350:21, 376:2, 377:16, 377:17 investigating [1] - 305:19 investigation [5] - 37:11, 46:10, 51:25, 179:24, 228:15 investigations [15] - 29:24, 30:1, 30:8, 30:17, 31:18, 33:1, 33:2, 33:11, 36:15, 36:19, 38:9, 41:5, 52:1, 180:13, 226:3 investment [3] - 294:21, 294:22, 297:10 invite [2] - 342:25, 363:24 involve [1] - 375:17 involved [8] - 48:17, 183:14, 194:9, 206:22, 217:14, 229:16, 255:8, 371:19 involves [1] - 191:4 iron [5] - 242:13, 242:16, 242:18, 242:20, 242:23 irregardless [1] - 231:5 irrelevant [4] - 279:18, 322:15, 322:17, 322:20 Island [4] - 305:16, 313:1, 313:3, 313:4 islands [1] - 313:4 isolated [2] - 43:15, 97:6 issue [22] - 86:25, 87:2, 124:4, 161:18, 164:8, 207:20, 210:14, 216:4, 216:24, 224:2, 226:6, 276:20, 304:5, 307:15, 329:7, 329:14, 332:3, 342:5, 344:10, 346:1, 359:3, 381:19</p>	<p>issued [15] - 13:18, 17:9, 17:10, 17:22, 17:24, 51:3, 92:22, 132:11, 157:6, 165:25, 221:20, 289:20, 292:20, 322:23, 331:12 issues [24] - 12:16, 12:17, 29:20, 30:23, 57:21, 75:21, 75:25, 91:18, 114:3, 144:13, 149:6, 158:17, 203:3, 217:4, 244:9, 320:13, 322:14, 322:17, 329:3, 330:21, 330:22, 335:17, 381:22, 384:7 items [6] - 75:14, 75:23, 78:11, 87:6, 298:21, 313:9 iterative [2] - 97:24, 239:18 itself [14] - 21:13, 45:1, 47:15, 94:16, 95:2, 95:15, 100:21, 105:6, 169:21, 179:24, 180:11, 188:6, 220:8, 330:22</p>	<p>285:7 job [18] - 47:17, 52:17, 54:22, 120:15, 167:5, 168:3, 216:23, 285:11, 298:12, 305:25, 308:12, 320:12, 363:19, 363:23, 364:24, 369:18, 380:11, 380:15 jobs [6] - 201:4, 308:6, 310:21, 311:11, 315:4, 367:19 Joe [2] - 221:5, 221:24 John [27] - 29:2, 29:3, 29:7, 29:17, 29:19, 46:21, 47:21, 50:4, 54:1, 56:7, 57:20, 58:20, 59:8, 71:2, 85:24, 87:24, 109:16, 179:4, 186:2, 191:23, 202:19, 212:2, 227:14, 314:1, 370:10, 372:8, 372:13 Johnson [1] - 8:6 joined [1] - 73:11 joining [1] - 188:13 joint [2] - 150:17, 167:11 Jonathan [4] - 1:17, 2:23, 284:18, 365:8 Jones [2] - 347:20, 347:21 JONES [3] - 347:21, 348:14, 348:16 Josh [3] - 377:3, 378:16, 378:17 JRL [40] - 12:12, 12:13, 29:25, 130:24, 131:17, 135:8, 162:8, 162:11, 170:18, 170:21, 171:9, 171:16, 172:4, 175:10, 184:20, 184:24, 185:7, 189:20, 192:21, 194:14, 194:16, 194:22, 200:16, 200:18, 200:20, 241:23, 244:17, 257:13, 259:5, 259:24, 266:13, 268:13, 276:5, 330:25, 331:6, 331:13, 331:21, 332:15, 334:14, 377:19</p>	<p>judged [3] - 40:15, 42:15, 45:17 judgment [3] - 217:12, 259:5, 325:7 judgments [1] - 217:11 judicial [1] - 277:18 Judkins [4] - 110:18, 110:19, 111:5, 111:9 July [1] - 17:10 jump [2] - 248:1, 322:17 June [3] - 11:17, 134:10, 243:11 Juniper [152] - 2:9, 6:24, 7:14, 7:17, 10:8, 13:5, 13:20, 14:3, 15:5, 21:12, 21:23, 21:24, 22:12, 23:4, 24:10, 24:12, 25:1, 25:18, 25:22, 26:5, 27:12, 27:19, 27:22, 28:3, 28:16, 28:23, 29:10, 29:20, 48:14, 50:13, 51:4, 51:6, 51:14, 52:3, 53:3, 68:10, 70:6, 70:7, 74:14, 83:15, 113:19, 114:8, 114:15, 115:12, 115:20, 119:2, 119:17, 121:2, 127:12, 129:3, 137:20, 138:24, 139:8, 139:15, 139:25, 152:17, 153:13, 154:17, 155:8, 155:11, 155:18, 155:25, 157:17, 161:25, 164:14, 164:18, 165:17, 168:10, 169:3, 172:23, 177:17, 185:3, 194:5, 200:17, 201:11, 202:16, 214:6, 221:9, 240:5, 267:14, 268:6, 284:12, 288:22, 295:20, 296:12, 298:13, 301:13, 303:5, 303:7, 303:9, 303:15, 304:19, 306:18, 307:10, 307:12, 307:22, 313:15, 315:18, 320:8, 322:7, 325:4, 325:19, 326:1, 326:7, 328:17, 335:14, 336:1,</p>
J				
<p>J.D [2] - 375:11, 375:16 Jake [1] - 8:8 JAMES [1] - 1:12 James [7] - 1:24, 2:17, 226:7, 268:22, 351:14, 369:7, 370:9 January [4] - 289:20, 300:5, 331:10, 342:5 jargon [1] - 35:25 Jay [2] - 313:24, 314:14 jeopardized [1] - 346:13 Jeremy [16] - 12:17, 16:18, 65:8, 113:14, 113:22, 114:2, 114:4, 129:22, 143:18, 179:5, 193:12, 200:12, 209:1, 236:5, 248:11 Jeremy's [1] - 114:1 Jim [5] - 3:10, 17:2, 284:13, 285:5, 370:11 Jim's [1] - 285:5 Joanne [2] - 3:12,</p>				

<p>336:19, 337:25, 338:4, 338:22, 338:23, 339:9, 339:22, 340:11, 341:11, 343:9, 343:14, 344:7, 345:5, 347:8, 347:12, 348:3, 348:5, 349:4, 349:12, 350:25, 352:19, 353:1, 353:13, 354:11, 354:14, 358:20, 363:15, 364:23, 365:20, 366:8, 366:17, 367:16, 368:20, 368:21, 369:4, 374:3, 374:25, 375:25, 376:6, 377:9, 378:14, 378:20, 379:19, 380:7</p> <p>JUNIPER [1] - 1:6 Juniper's [1] - 139:17 jurisdiction [3] - 290:1, 324:23, 346:23 jurisdictional [2] - 100:9, 103:4 justice [2] - 344:9, 344:14 justification [1] - 110:6</p>	<p>264:5, 264:6, 288:13, 292:6, 293:1, 300:2, 316:10, 355:4, 376:22</p> <p>keeping [1] - 376:15 keeps [1] - 216:1 Kendall [1] - 191:6 Kenny [3] - 308:19, 309:11, 312:14 Kent [1] - 114:17 kept [4] - 43:19, 67:22, 121:2 Kevin [1] - 363:10 key [2] - 183:5, 304:19 kick [1] - 306:20 kids [3] - 195:19, 299:10, 366:9 kind [40] - 14:2, 55:19, 55:20, 56:3, 61:17, 62:7, 62:20, 63:22, 64:5, 65:9, 65:19, 67:4, 71:2, 71:16, 72:7, 73:25, 75:16, 86:3, 87:13, 103:19, 117:19, 124:20, 174:24, 189:10, 209:14, 218:11, 221:17, 222:11, 223:21, 241:5, 280:4, 290:14, 338:7, 356:19, 356:20, 358:1, 369:20, 381:3</p> <p>kinds [1] - 318:19 King [16] - 15:1, 18:13, 132:25, 138:19, 141:17, 145:9, 146:19, 148:20, 152:8, 156:8, 161:8, 164:6, 172:11, 173:3, 174:19, 175:2 KING [53] - 19:3, 19:5, 139:1, 139:4, 139:17, 140:12, 140:18, 140:23, 141:2, 141:6, 141:22, 142:6, 142:18, 142:25, 143:4, 143:13, 145:14, 145:25, 148:22, 148:24, 151:5, 152:18, 152:25, 153:3, 153:8, 153:19, 157:2, 158:21, 160:24, 162:16, 163:5, 163:10, 164:19, 165:15, 166:4, 166:17,</p>	<p>166:19, 167:1, 167:12, 169:23, 172:19, 173:11, 175:12, 175:19, 176:3, 176:21, 177:10, 177:13, 178:2, 178:5, 178:8, 178:12, 178:18</p> <p>Kittery [1] - 114:17 kitty [1] - 242:14 kneaded [2] - 71:11, 71:15 kneeling [1] - 333:8 knowing [2] - 177:8, 295:23 knowledge [3] - 195:6, 205:16, 251:15 known [7] - 112:11, 112:24, 176:15, 263:23, 268:8, 350:17, 352:8 knows [4] - 144:16, 216:14, 307:5, 317:16 Kruger [1] - 151:19 KTI [3] - 155:13, 293:20, 337:21</p>	<p>laboratories [1] - 89:17 laboratory [1] - 33:13 laced [1] - 316:2 lack [1] - 97:3 laden [2] - 242:21, 334:12 laid [6] - 35:7, 62:9, 64:3, 69:3, 82:7, 82:24 Laite [5] - 4:11, 137:14, 202:7, 220:5, 282:18 LAITE [10] - 137:16, 138:2, 138:9, 138:13, 202:8, 203:6, 203:14, 203:19, 204:1, 282:19 Lake [1] - 267:7 lamprey [2] - 254:11, 267:12 land [32] - 15:8, 25:16, 26:12, 26:17, 31:14, 31:15, 47:15, 52:8, 107:23, 108:22, 146:6, 146:9, 146:12, 164:24, 164:25, 165:3, 165:8, 165:9, 165:16, 165:20, 189:3, 189:13, 189:18, 204:19, 204:20, 205:11, 220:1, 317:22, 372:19, 372:21, 373:17 landed [1] - 103:21 LANDFILL [1] - 1:6 landfill [412] - 3:24, 4:5, 7:19, 8:8, 10:2, 10:20, 11:3, 11:4, 11:5, 11:9, 12:3, 12:21, 12:23, 13:24, 14:1, 14:5, 14:6, 14:21, 18:22, 19:23, 22:3, 22:15, 23:19, 25:1, 25:6, 25:7, 25:19, 26:10, 27:24, 29:10, 30:2, 31:8, 31:10, 40:16, 41:23, 42:1, 42:9, 42:19, 43:3, 43:12, 44:9, 44:11, 44:24, 45:1, 45:5, 45:13, 45:15, 46:15, 46:19, 48:13, 48:20, 48:21, 48:25, 50:2, 50:6, 50:7, 51:18, 52:4, 52:19, 52:21, 53:19, 53:21,</p>	<p>53:25, 54:5, 54:8, 54:9, 54:15, 54:19, 54:20, 55:1, 55:6, 55:10, 55:15, 56:3, 56:22, 57:8, 57:14, 58:1, 58:2, 59:12, 60:3, 60:12, 61:23, 62:3, 62:10, 62:17, 63:6, 63:12, 63:16, 64:2, 64:14, 64:25, 65:2, 65:21, 66:12, 67:7, 67:14, 67:18, 71:1, 74:10, 75:19, 76:3, 78:9, 81:16, 82:3, 82:14, 82:23, 83:1, 84:22, 84:23, 86:4, 86:6, 86:10, 86:20, 87:16, 87:18, 87:21, 89:4, 93:24, 98:14, 98:15, 98:23, 103:25, 104:18, 108:4, 109:20, 110:25, 113:16, 113:18, 113:21, 118:22, 119:19, 120:6, 120:11, 120:23, 122:6, 122:20, 123:1, 123:2, 123:4, 124:4, 124:11, 125:2, 131:20, 133:6, 133:7, 133:13, 135:6, 135:10, 139:17, 139:25, 142:21, 143:11, 145:11, 145:21, 147:3, 147:7, 147:10, 148:1, 148:6, 149:9, 151:2, 152:1, 159:19, 160:16, 162:6, 162:9, 163:3, 163:9, 163:10, 164:21, 165:14, 166:10, 166:14, 168:19, 169:14, 169:21, 170:15, 173:24, 174:2, 174:5, 179:10, 180:15, 180:18, 180:22, 181:1, 181:9, 182:3, 182:4, 182:7, 183:4, 183:6, 183:8, 183:12, 183:15, 183:16, 183:20, 183:21, 184:11, 185:15, 185:20, 187:9, 188:8, 189:4, 190:15, 190:17, 190:20, 190:22, 190:23, 193:23,</p>
K		L		
<p>Karin [3] - 314:19, 314:21 Kathleen [1] - 1:15 kathy [1] - 6:20 Kathy [15] - 1:23, 2:22, 3:9, 4:19, 6:22, 145:7, 210:7, 284:17, 284:18, 285:4, 286:14, 288:15, 288:19, 385:20 Katsiaticas [2] - 136:9, 200:7 KATSIATICAS [3] - 136:10, 200:8, 282:14 keen [1] - 174:12 keep [24] - 59:6, 62:25, 63:11, 69:25, 72:20, 82:20, 98:23, 117:4, 117:10, 145:5, 175:1, 183:12, 211:15, 215:22, 243:4,</p>		<p>L-024251-TG-C-N [1] - 2:16 LABBE [31] - 114:5, 116:9, 121:9, 194:23, 195:16, 196:23, 197:20, 197:23, 198:3, 198:22, 199:19, 200:20, 201:9, 201:16, 202:2, 205:20, 212:5, 212:9, 220:25, 223:24, 236:17, 237:22, 238:20, 239:18, 240:7, 241:13, 241:18, 242:3, 243:18, 248:14, 248:20 labbe [6] - 194:4, 205:15, 241:22, 243:7, 244:15, 334:10 Labbe [9] - 12:17, 16:18, 113:14, 179:5, 193:12, 194:1, 220:16, 236:5, 248:11 labeled [1] - 127:9 labor [1] - 243:1</p>		

194:4, 194:19,
198:20, 199:5,
199:18, 200:2,
201:10, 201:12,
203:5, 204:13,
204:25, 205:5,
205:7, 207:7, 208:4,
211:2, 211:18,
213:7, 213:21,
215:21, 215:24,
216:15, 216:21,
226:4, 226:5, 226:9,
226:11, 228:24,
230:2, 230:5,
230:11, 231:5,
231:9, 231:16,
232:3, 232:7,
232:25, 233:6,
235:4, 235:8, 236:7,
238:17, 239:7,
239:8, 240:6,
242:24, 248:4,
251:22, 267:22,
267:24, 272:18,
276:23, 277:23,
285:23, 286:4,
286:5, 287:3, 289:7,
289:10, 289:17,
289:21, 290:9,
291:20, 295:7,
298:20, 299:2,
299:15, 300:7,
301:21, 302:13,
303:11, 305:23,
306:1, 306:11,
307:3, 307:8,
307:13, 307:14,
308:3, 308:12,
308:14, 308:22,
309:4, 309:5,
309:18, 309:19,
310:3, 310:12,
310:14, 310:17,
311:2, 311:4, 311:9,
311:14, 311:15,
312:2, 312:12,
313:13, 313:15,
314:2, 314:3,
317:22, 319:6,
319:21, 320:8,
322:3, 324:21,
324:22, 325:16,
325:17, 327:1,
327:6, 328:2, 328:4,
328:22, 329:2,
331:3, 331:22,
331:23, 332:10,
332:18, 333:3,
333:21, 333:24,
334:1, 334:2, 334:6,
335:19, 336:3,

336:9, 336:11,
336:16, 336:21,
337:14, 337:23,
338:14, 339:13,
340:1, 340:13,
341:15, 341:24,
342:8, 343:18,
343:24, 347:4,
347:14, 348:11,
349:3, 349:9,
349:19, 349:25,
350:3, 350:4, 350:9,
351:1, 351:2,
353:15, 358:24,
359:24, 360:1,
363:19, 363:22,
363:25, 364:22,
365:2, 365:4,
365:16, 366:23,
367:8, 367:21,
368:3, 370:6,
370:12, 370:19,
373:10, 373:18,
377:20, 377:24,
378:8, 380:2, 380:7,
380:8, 380:9,
380:11, 380:15,
380:20, 381:6,
381:11, 381:12,
383:1, 383:24,
384:1, 384:14,
384:15, 384:16,
384:21
Landfill [84] - 2:10,
4:6, 7:14, 7:17, 7:18,
9:24, 10:8, 13:20,
14:3, 15:5, 21:12,
21:23, 21:24, 24:10,
29:10, 29:21, 30:14,
40:12, 50:14, 51:4,
51:7, 51:14, 52:3,
68:10, 70:6, 70:8,
83:16, 114:9, 117:8,
119:8, 119:17,
125:24, 138:25,
139:9, 139:15,
153:14, 157:17,
164:14, 168:10,
169:4, 171:1,
177:17, 185:3,
194:5, 200:15,
240:5, 244:19,
268:6, 284:12,
288:22, 289:10,
296:12, 300:1,
301:13, 304:19,
315:19, 327:18,
327:19, 328:17,
335:15, 336:1,
336:19, 337:10,
337:25, 341:11,

343:9, 343:14,
344:7, 345:5, 347:8,
347:12, 348:3,
349:5, 360:13,
365:18, 366:8,
366:17, 369:4,
375:25, 376:6,
377:9, 378:20,
379:19, 379:20
Landfill's [1] - 378:14
landfill-related [1] -
119:19
landfilled [5] - 26:14,
28:10, 146:16,
163:23, 339:7
landfilling [11] -
14:17, 19:14, 26:22,
27:4, 139:21,
145:18, 162:22,
166:13, 323:6,
325:22, 372:23
landfills [34] - 8:20,
9:19, 9:20, 9:22,
12:8, 23:15, 48:19,
54:10, 57:11, 76:13,
90:4, 163:20,
193:13, 194:1,
194:10, 203:2,
300:11, 301:12,
303:8, 303:15,
306:3, 306:5,
306:17, 310:2,
312:1, 326:9, 328:4,
345:12, 345:13,
359:8, 362:14,
362:20, 371:19,
382:17
lands [1] - 345:20
landscape [4] -
206:21, 246:13,
253:19, 280:17
Lang [2] - 300:15,
301:5
LANG [6] - 300:17,
300:19, 300:21,
300:25, 301:4,
304:16
language [7] - 19:25,
108:15, 133:14,
258:5, 315:19,
315:25, 332:3
LAPCA [1] - 374:16
large [17] - 65:8, 89:9,
93:20, 99:20,
106:10, 110:21,
112:21, 128:16,
205:5, 209:1, 220:6,
234:20, 311:5,
326:6, 331:20,
373:22, 379:5

largely [1] - 200:19
larger [7] - 66:16,
97:7, 205:10,
220:10, 267:24,
330:22, 366:1
largest [4] - 23:11,
78:19, 257:5, 337:19
last [42] - 29:25,
31:17, 35:7, 46:4,
74:6, 77:7, 79:1,
79:24, 114:6,
114:21, 115:7,
115:10, 131:3,
147:16, 154:18,
163:9, 188:16,
188:18, 194:14,
214:5, 231:14,
257:2, 268:5, 270:6,
291:13, 311:25,
314:15, 324:16,
326:17, 326:21,
335:7, 341:13,
341:21, 347:19,
352:23, 361:15,
362:10, 366:11,
369:10, 375:8,
376:25, 379:13
lasting [1] - 214:18
lastly [4] - 117:5,
125:5, 125:25,
368:15
late [2] - 372:16,
373:22
lately [1] - 251:1
laterally [1] - 181:20
latest [2] - 34:25,
87:10
latter [2] - 14:17,
268:15
Laubenstein [2] -
7:20, 8:13
LAUBENSTEIN [1] -
8:15
laude [1] - 113:22
laughing [1] - 383:3
laundering [1] -
340:12
Law [1] - 2:14
law [4] - 21:9, 177:24,
302:2, 333:25
laws [3] - 252:2,
260:3, 341:4
layer [25] - 15:19,
16:1, 25:5, 45:3,
45:6, 64:15, 64:16,
64:20, 65:15, 65:16,
65:20, 66:2, 66:3,
66:17, 67:18, 68:13,
69:15, 69:17, 69:22,
70:5, 70:7, 70:8,

71:8, 172:12, 210:24
layers [6] - 58:17,
65:10, 66:16, 68:8,
70:19, 71:14
laying [1] - 369:14
laymen's [1] - 236:23
layout [8] - 49:24,
53:2, 53:15, 77:20,
77:25, 78:18, 82:22,
98:12
layouts [1] - 53:3
LD [1] - 301:25
leachate [109] - 35:15,
45:14, 60:10, 60:11,
60:16, 61:2, 62:23,
63:1, 63:25, 64:9,
65:1, 65:2, 66:2,
66:8, 66:11, 66:14,
67:19, 73:17, 76:8,
76:16, 76:25, 77:1,
77:4, 77:5, 77:17,
78:9, 78:15, 78:25,
79:2, 79:9, 80:2,
80:5, 80:12, 81:14,
120:20, 120:21,
122:11, 122:14,
124:2, 169:20,
169:21, 170:2,
182:9, 183:21,
183:24, 184:3,
187:3, 190:18,
190:20, 190:22,
190:23, 192:21,
231:22, 232:1,
232:11, 232:15,
232:18, 232:22,
233:1, 233:3,
233:21, 234:1,
234:14, 234:16,
234:24, 235:9,
235:13, 235:17,
257:21, 260:8,
262:21, 263:4,
263:11, 263:13,
263:15, 263:17,
263:22, 264:22,
268:1, 276:5,
276:22, 277:23,
279:8, 279:17,
287:4, 317:9,
317:10, 319:4,
319:6, 319:15,
323:9, 323:11,
336:10, 346:14,
352:23, 355:25,
356:2, 356:11,
357:3, 357:6,
357:12, 357:14,
357:22, 358:7,
358:8, 358:10,

<p>378:1, 378:4 leachate-related [1] - 120:20 lead [7] - 91:13, 224:1, 224:5, 263:25, 269:20, 334:12, 352:11 lead-laden [1] - 334:12 leads [1] - 269:22 leak [54] - 35:15, 41:18, 41:20, 44:17, 44:19, 45:1, 45:2, 56:9, 56:10, 59:14, 60:23, 65:1, 68:12, 68:16, 68:22, 69:2, 69:10, 69:12, 69:15, 70:8, 70:11, 70:20, 71:25, 72:4, 74:18, 75:10, 75:16, 76:20, 77:24, 78:7, 180:21, 181:8, 181:10, 182:4, 183:8, 184:3, 202:11, 208:8, 208:15, 208:21, 208:24, 214:4, 214:19, 227:16, 227:20, 228:6, 233:13, 247:14, 247:15, 247:18, 247:20, 319:24 leakage [15] - 42:12, 45:7, 45:9, 56:16, 76:6, 182:9, 182:15, 184:4, 184:9, 184:10, 184:13, 209:10, 247:22, 248:1, 317:9 leaking [4] - 42:1, 67:23, 183:12, 353:1 leaks [7] - 60:24, 68:21, 69:9, 76:17, 76:19, 215:4, 247:18 learn [3] - 305:16, 338:1, 383:11 learned [8] - 54:15, 250:11, 314:23, 344:5, 378:3, 383:6, 383:7, 384:3 learning [1] - 384:11 lease [1] - 294:2 least [17] - 14:13, 21:8, 32:2, 32:3, 32:9, 35:8, 109:1, 201:22, 213:6, 217:18, 219:12, 242:6, 269:7, 303:10, 323:16, 340:16, 357:11 leave [7] - 5:25,</p>	<p>158:17, 196:13, 306:7, 360:7, 385:14, 385:16 leaves [2] - 319:6, 319:7 leaving [2] - 324:20, 360:14 Lee [1] - 369:8 left [17] - 2:21, 3:4, 3:6, 5:24, 14:1, 114:19, 200:18, 278:22, 284:17, 284:24, 284:25, 290:14, 291:23, 302:22, 318:5, 320:16 left-hand [1] - 278:22 legal [4] - 158:13, 158:17, 252:4, 277:11 legally [2] - 156:19, 276:17 legislation [2] - 9:21, 330:25 legislative [1] - 349:17 Legislative [2] - 10:10, 342:11 legislators [2] - 3:25, 285:24 Legislature [3] - 9:19, 149:22, 168:16 legitimacy [1] - 197:1 legitimate [2] - 196:22, 196:24 Leithiser [3] - 332:22, 335:3, 335:6 LEITHISER [3] - 335:5, 339:3, 340:6 Leonard [1] - 351:16 Leslie [3] - 370:10, 372:8, 372:13 LESLIE [2] - 372:10, 375:5 less [28] - 26:2, 35:24, 36:18, 36:19, 36:22, 36:25, 38:20, 47:25, 63:14, 148:18, 153:25, 154:10, 157:15, 165:19, 165:20, 218:24, 230:19, 260:18, 275:13, 279:14, 292:14, 326:3, 337:20, 338:14, 338:20, 353:15, 373:23, 381:8 lethal [1] - 264:1 letter [5] - 259:9, 259:15, 262:10, 331:12, 331:14</p>	<p>letters [1] - 110:2 letting [2] - 220:19, 363:13 lettuce [1] - 302:17 level [36] - 45:18, 46:5, 66:11, 69:9, 69:11, 79:12, 81:12, 85:12, 96:10, 96:20, 99:2, 116:1, 117:16, 125:11, 125:17, 144:5, 191:10, 215:11, 218:18, 218:19, 220:14, 231:9, 231:23, 233:21, 239:25, 240:1, 245:19, 246:24, 247:1, 248:12, 248:15, 248:17, 249:2, 317:17, 322:9 levels [12] - 32:9, 32:22, 41:10, 41:15, 61:11, 116:19, 117:14, 129:12, 180:1, 192:1, 346:10, 363:16 Lewis [1] - 351:15 Lewiston [16] - 23:2, 24:20, 25:23, 151:8, 155:15, 293:17, 293:23, 293:24, 294:3, 294:5, 294:8, 295:18, 296:19, 332:12, 337:22, 359:7 Lewiston/Auburn [2] - 374:12, 374:15 liable [1] - 150:3 Libby [1] - 351:16 liberty [2] - 344:17, 344:23 License [1] - 278:13 license [27] - 51:3, 118:24, 119:1, 119:10, 124:15, 129:14, 131:2, 133:3, 156:17, 156:21, 157:6, 165:25, 198:1, 198:14, 242:5, 277:10, 278:8, 278:9, 278:20, 280:3, 280:12, 280:13, 280:16, 328:23, 329:7, 329:14, 331:1 licensed [12] - 18:21, 29:3, 29:17, 48:8, 113:14, 115:6, 126:6, 135:14,</p>	<p>176:22, 196:11, 304:6, 378:24 licenses [3] - 27:6, 132:6, 165:25 Licensing [3] - 3:20, 9:4, 285:19 licensing [10] - 19:6, 48:20, 193:23, 286:22, 286:24, 287:11, 288:17, 317:20, 328:20, 378:15 lie [3] - 185:22, 312:2 lieu [5] - 121:25, 134:14, 134:21, 134:25, 135:1 life [27] - 22:4, 51:10, 64:11, 77:22, 82:19, 88:11, 252:20, 253:13, 257:9, 258:14, 263:24, 300:9, 306:7, 317:7, 318:15, 322:19, 322:22, 328:23, 331:1, 344:22, 351:7, 352:13, 353:22, 354:3, 359:5, 365:17, 366:1 lifetime [1] - 370:1 light [2] - 194:21, 195:5 lighting [1] - 372:11 lights [1] - 195:10 likelihood [1] - 274:18 likely [3] - 191:20, 267:8, 273:11 limit [40] - 84:20, 142:9, 153:11, 153:15, 154:3, 154:4, 155:6, 155:7, 155:17, 156:1, 156:16, 156:20, 156:24, 157:1, 157:8, 157:9, 157:19, 158:1, 158:19, 158:21, 162:4, 162:23, 172:18, 172:19, 172:24, 187:4, 187:7, 190:8, 190:17, 212:12, 234:3, 234:12, 239:14, 248:13, 248:15, 288:4, 296:25, 297:12, 325:18 limitation [1] - 154:14 limited [19] - 15:15, 20:2, 34:2, 39:7, 39:25, 40:12, 46:16,</p>	<p>96:13, 96:20, 120:5, 146:8, 172:17, 173:11, 251:25, 286:22, 287:2, 296:4, 313:11 limiting [3] - 155:20, 163:11, 296:23 limits [4] - 72:16, 86:17, 222:15, 248:21 Lincoln [7] - 10:3, 10:6, 151:19, 151:23, 370:3, 381:14, 381:16 Lincolnvile [1] - 301:8 line [25] - 31:12, 31:13, 33:6, 43:23, 43:25, 50:7, 55:17, 57:14, 68:5, 76:25, 95:12, 99:25, 119:21, 179:19, 179:23, 180:5, 180:11, 221:3, 291:1, 291:2, 291:4, 321:9, 328:25, 360:14 lined [2] - 62:18, 77:3 liner [115] - 25:7, 44:17, 45:1, 45:2, 45:8, 45:10, 58:11, 58:15, 58:17, 59:9, 59:12, 59:15, 60:4, 60:9, 60:10, 60:15, 60:23, 60:24, 63:12, 63:17, 63:20, 64:17, 64:19, 65:1, 65:11, 65:20, 65:25, 66:13, 66:20, 66:21, 66:24, 66:25, 67:2, 67:8, 67:9, 67:17, 67:22, 68:2, 68:8, 68:17, 68:19, 69:14, 69:16, 69:25, 70:10, 70:11, 70:15, 71:14, 71:24, 72:1, 72:17, 72:22, 73:1, 73:10, 73:17, 73:20, 73:22, 74:24, 75:8, 76:1, 76:6, 76:8, 76:11, 76:17, 76:19, 76:24, 81:2, 81:3, 86:16, 86:17, 89:15, 126:11, 181:8, 182:3, 182:7, 182:10, 182:11, 182:14, 182:16, 182:18, 182:22, 183:1, 184:4, 184:12, 203:11, 203:12, 208:8,</p>
---	--	--	--	---

<p>208:18, 209:10, 210:20, 210:21, 211:3, 214:22, 215:4, 215:16, 215:21, 215:24, 217:6, 231:11, 233:6, 235:22, 247:17, 247:22, 248:2, 319:22, 323:13, 377:25, 378:2</p> <p>liners [14] - 45:5, 63:14, 64:18, 73:7, 75:1, 75:12, 75:15, 75:19, 75:20, 188:13, 210:15, 211:23, 235:22</p> <p>lines [11] - 55:19, 62:15, 77:16, 77:20, 77:21, 87:23, 179:18, 225:13, 234:14, 234:20, 234:22</p> <p>lining [3] - 210:10, 317:8, 324:15</p> <p>link [1] - 176:10</p> <p>Lippincott [4] - 324:5, 325:11, 325:14, 349:1</p> <p>LIPPINCOTT [1] - 325:13</p> <p>lipstick [1] - 323:12</p> <p>liquid [3] - 146:5, 243:23, 276:4</p> <p>liquids [1] - 377:22</p> <p>list [16] - 4:2, 96:6, 145:12, 151:16, 151:17, 261:14, 261:16, 262:13, 262:16, 262:19, 286:1, 286:23, 312:17, 357:4, 376:24, 385:3</p> <p>listed [13] - 101:13, 141:17, 172:13, 194:2, 258:20, 259:10, 261:7, 261:23, 262:24, 263:7, 330:5, 351:11</p> <p>listen [5] - 48:6, 144:8, 238:1, 278:2, 369:3</p> <p>listened [3] - 319:12, 369:19, 381:20</p> <p>listening [3] - 238:12, 332:25, 343:16</p> <p>lists [1] - 284:5</p> <p>liter [3] - 357:5, 357:7, 357:8</p> <p>literally [1] - 239:6</p> <p>literature [5] - 67:10,</p>	<p>111:11, 111:15, 237:13, 269:4</p> <p>Littell [1] - 331:11</p> <p>litter [1] - 242:15</p> <p>live [28] - 239:22, 243:23, 259:23, 294:7, 312:22, 315:6, 316:8, 318:10, 318:17, 318:22, 319:14, 320:7, 325:14, 333:2, 333:14, 341:2, 361:15, 362:3, 363:14, 370:11, 370:15, 372:13, 377:12, 378:8, 382:14, 384:9</p> <p>lived [1] - 361:7</p> <p>livelihoods [1] - 343:22</p> <p>liver [1] - 317:12</p> <p>lives [1] - 325:3</p> <p>living [5] - 316:9, 316:22, 344:7, 345:4, 347:7</p> <p>LLC [3] - 4:10, 278:17, 289:10</p> <p>load [25] - 127:16, 128:1, 128:13, 128:21, 128:24, 143:9, 194:25, 195:1, 195:4, 195:5, 195:14, 195:17, 195:25, 196:6, 196:14, 205:25, 222:9, 223:2, 223:12, 240:16, 240:19, 244:17, 267:18, 304:8, 384:18</p> <p>loaded [1] - 174:1</p> <p>loads [8] - 121:13, 154:24, 195:1, 196:17, 197:19, 220:16, 223:11, 334:12</p> <p>local [6] - 40:16, 128:20, 183:4, 213:21, 294:7, 353:6</p> <p>localized [1] - 118:14</p> <p>locally [2] - 38:4, 201:2</p> <p>locate [1] - 294:1</p> <p>located [30] - 7:2, 9:23, 10:5, 31:9, 31:21, 57:11, 63:6, 87:11, 88:5, 95:1, 95:15, 97:10, 98:19, 98:22, 99:24, 103:24, 110:19,</p>	<p>184:25, 225:12, 233:20, 257:14, 257:19, 267:25, 273:4, 289:7, 345:13, 353:1, 374:10, 378:23, 378:25</p> <p>locating [2] - 57:14, 98:16</p> <p>location [17] - 27:10, 74:18, 74:19, 76:21, 85:10, 139:20, 198:16, 199:25, 206:15, 219:13, 227:7, 237:7, 310:16, 356:3, 357:3, 365:2, 378:25</p> <p>locations [16] - 23:23, 33:9, 44:2, 55:21, 117:17, 117:18, 120:9, 123:16, 123:23, 125:7, 198:6, 198:7, 238:21, 238:23, 239:3, 239:4</p> <p>logging [2] - 33:4, 95:19</p> <p>logistics [1] - 20:20</p> <p>long-term [12] - 51:5, 82:6, 83:21, 86:7, 149:8, 216:4, 325:20, 328:1, 328:5, 331:9, 346:6, 352:24</p> <p>longest [2] - 48:5, 189:11</p> <p>look [56] - 14:14, 18:9, 41:9, 45:7, 55:5, 55:6, 56:2, 60:21, 61:1, 61:7, 75:7, 78:18, 79:3, 79:11, 81:6, 86:3, 86:15, 86:16, 86:20, 87:9, 88:22, 128:1, 147:1, 150:12, 156:10, 173:16, 176:3, 179:20, 185:13, 190:14, 190:16, 190:17, 190:18, 190:23, 196:2, 199:14, 209:13, 209:17, 214:22, 232:17, 232:19, 239:24, 241:6, 259:14, 270:16, 278:19, 289:6, 296:8, 308:10, 310:3, 310:9, 320:17, 362:13, 367:13, 382:6,</p>	<p>382:22</p> <p>looked [23] - 40:14, 50:21, 51:12, 51:13, 52:23, 53:1, 60:22, 79:16, 79:17, 80:22, 87:16, 170:25, 171:2, 174:4, 195:6, 219:19, 219:20, 235:8, 295:21, 305:22, 356:16, 357:4, 383:16</p> <p>looking [36] - 16:3, 16:10, 33:19, 42:9, 52:5, 53:2, 56:11, 86:2, 103:13, 104:6, 147:15, 151:17, 152:9, 156:9, 156:11, 160:9, 167:13, 190:10, 211:23, 214:11, 217:10, 228:12, 229:24, 245:4, 278:7, 295:4, 295:7, 295:11, 295:16, 299:1, 305:24, 307:24, 318:19, 324:12, 338:5, 357:10</p> <p>looks [5] - 106:4, 147:25, 152:14, 203:8, 338:7</p> <p>lose [1] - 308:6</p> <p>losing [1] - 368:19</p> <p>lost [3] - 139:6, 152:25, 219:12</p> <p>loud [3] - 225:20, 249:18, 381:3</p> <p>love [3] - 144:7, 373:7</p> <p>loved [1] - 143:22</p> <p>low [22] - 34:1, 35:12, 38:21, 38:23, 40:6, 40:10, 42:5, 43:16, 46:12, 85:15, 87:25, 88:2, 97:1, 145:18, 180:2, 226:13, 248:12, 248:14, 271:19, 318:13, 347:6</p> <p>low-lying [4] - 40:10, 87:25, 88:2, 226:13</p> <p>lower [12] - 35:14, 37:19, 37:21, 38:3, 40:2, 40:4, 180:17, 181:4, 217:20, 246:9, 266:8, 273:15</p> <p>lower-lying [1] - 37:21</p> <p>lowering [2] - 206:22, 207:8</p> <p>lowest [3] - 87:18, 87:20, 362:15</p>	<p>luckily [1] - 333:12</p> <p>lumber [2] - 152:13, 313:11</p> <p>LUNCH [1] - 130:4</p> <p>lunch [2] - 7:7, 130:1</p> <p>lying [6] - 37:21, 40:10, 87:25, 88:2, 180:2, 226:13</p> <p>Lynn [3] - 1:24, 3:11, 285:6</p>
M				
<p>MacDonald [1] - 327:18</p> <p>machinery [1] - 307:7</p> <p>machines [1] - 144:4</p> <p>magic [1] - 307:18</p> <p>magnitude [2] - 272:20, 274:23</p> <p>Maher [5] - 29:8, 48:10, 52:22, 54:18, 97:23</p> <p>mail [3] - 192:7, 192:11, 385:22</p> <p>mails [1] - 109:10</p> <p>main [9] - 61:2, 78:3, 78:4, 78:8, 120:10, 120:17, 298:12, 317:2, 352:6</p> <p>MAINE [2] - 1:1, 1:5</p> <p>Maine [170] - 1:10, 2:2, 2:8, 2:12, 3:15, 8:25, 9:2, 9:5, 18:18, 19:10, 19:16, 23:3, 23:5, 23:10, 23:12, 23:13, 23:15, 23:23, 23:25, 24:13, 27:4, 29:5, 29:16, 30:3, 48:9, 48:23, 51:6, 55:2, 73:23, 74:4, 76:22, 84:1, 91:25, 92:19, 94:9, 94:19, 97:5, 111:18, 111:22, 113:15, 113:23, 114:1, 114:14, 114:15, 114:16, 114:23, 136:18, 137:20, 139:20, 140:2, 140:7, 140:8, 145:19, 146:9, 147:17, 151:7, 155:7, 155:12, 155:22, 162:20, 164:10, 165:7, 171:15, 173:9, 176:1, 176:11, 177:16, 177:24, 186:8, 186:16,</p>				

186:23, 187:1,
193:14, 193:24,
195:12, 201:4,
203:12, 224:9,
224:10, 232:6,
240:2, 244:18,
248:22, 250:16,
250:17, 251:3,
257:2, 257:7,
259:12, 261:8,
263:1, 269:2,
278:11, 278:17,
284:10, 285:14,
286:3, 288:20,
289:14, 293:17,
293:18, 295:12,
301:8, 301:15,
301:18, 304:18,
304:23, 310:23,
310:25, 313:17,
315:11, 315:16,
318:17, 320:7,
321:19, 322:5,
322:24, 323:2,
323:7, 324:7,
324:25, 325:8,
325:17, 325:19,
327:12, 328:14,
334:21, 335:6,
335:20, 335:25,
336:20, 337:6,
337:17, 338:4,
338:13, 340:15,
343:16, 344:11,
344:13, 345:16,
345:19, 346:4,
347:4, 349:14,
350:21, 358:6,
359:3, 359:10,
360:5, 360:7, 361:3,
361:7, 362:18,
362:22, 363:14,
364:6, 365:5,
365:15, 367:15,
369:9, 372:13,
373:2, 373:5,
375:16, 376:1,
377:12, 378:23,
381:1
Maine's [15] - 27:15,
184:25, 185:1,
185:4, 186:17,
186:24, 261:9,
270:4, 301:23,
337:12, 337:18,
339:10, 340:12,
343:6, 354:11
Maine-based [1] -
23:5
Mainers [1] - 376:20
mainstem [8] -

112:12, 112:20,
257:19, 257:25,
263:3, 264:19,
266:4, 267:11
maintain [4] - 100:21,
128:12, 128:15,
242:3
maintained [1] -
128:14
maintaining [3] -
101:2, 315:9, 315:11
maintenance [1] -
304:5
major [8] - 27:18,
200:13, 201:7,
201:9, 221:13,
252:6, 268:5
majority [5] - 26:15,
27:2, 27:11, 151:5,
171:18
man [1] - 94:17
man-made [1] - 94:17
manage [11] - 19:20,
20:6, 21:15, 22:8,
119:19, 143:7,
206:6, 239:11,
293:16, 296:4,
373:12
managed [2] - 23:23,
170:18
Management [21] -
2:13, 2:14, 19:1,
19:16, 20:12, 23:17,
28:20, 84:2, 145:19,
159:7, 165:24,
166:21, 178:1,
178:3, 178:6,
178:14, 185:8,
287:9, 288:21,
301:24, 328:20
management [23] -
19:8, 21:22, 27:3,
27:16, 27:18, 27:21,
28:1, 30:3, 48:13,
49:7, 52:16, 65:3,
83:19, 84:7, 90:10,
91:12, 114:23,
243:9, 250:19,
268:14, 287:4,
287:5, 362:17
manager [17] - 6:24,
8:19, 18:22, 48:10,
91:5, 113:16,
113:18, 113:20,
128:5, 194:4,
212:17, 286:14,
288:21, 293:14,
301:5, 361:2, 361:19
manages [1] - 91:7
managing [7] - 12:7,

27:14, 84:6, 119:16,
119:25, 300:7,
320:12
mandate [1] - 160:12
mandated [1] - 352:14
manifest [7] - 13:2,
128:12, 222:10,
223:2, 223:4,
223:13, 223:14
manifests [3] - 13:10,
13:14, 128:17
manmade [9] - 95:16,
95:18, 95:22, 100:9,
102:9, 102:15,
103:2, 107:6, 219:4
Mann [1] - 191:6
Mann-Kendall [1] -
191:6
manner [6] - 115:21,
129:8, 290:11,
320:21, 363:4,
364:25
manual [2] - 92:18,
92:23
manufacture [1] -
373:3
manufactured [2] -
66:5, 306:23
manufacturer's [1] -
67:10
map [10] - 111:1,
193:10, 255:25,
273:14, 273:19,
273:20, 274:7,
290:13, 306:12
MAPES [5] - 169:19,
170:9, 212:3, 212:6,
213:2
Mapes [3] - 1:17, 2:23,
284:18
mapped [3] - 110:19,
185:22, 193:8
mapping [3] - 87:7,
245:21, 245:24
maps [5] - 87:10,
87:15, 245:22,
262:22, 273:3
marine [1] - 258:13
Marine [4] - 109:8,
109:13, 256:5, 261:9
Mark [5] - 1:15, 2:25,
8:6, 168:6, 284:20
market [4] - 295:9,
306:1, 361:2, 361:14
marketing [2] -
374:21, 374:22
markets [1] - 367:14
marsh [4] - 93:20,
105:7, 106:8, 246:12
marshes [1] - 105:12

Mary [3] - 1:19, 3:2,
284:22
mass [1] - 107:9
Massachusetts [10] -
174:7, 186:7,
186:14, 186:21,
293:19, 295:9,
351:9, 360:10,
360:12, 373:7
masses [3] - 95:21,
107:4, 107:6
massive [2] - 321:15,
324:9
master [1] - 9:8
master's [3] - 9:8,
29:13, 113:25
material [115] - 15:14,
21:22, 23:7, 23:9,
25:20, 25:24, 26:6,
28:1, 35:11, 66:5,
66:23, 67:3, 67:4,
67:5, 67:12, 71:13,
84:10, 114:15,
120:19, 121:1,
121:11, 121:14,
124:20, 127:8,
127:11, 127:19,
128:3, 128:9,
128:21, 128:22,
128:23, 138:24,
139:8, 139:13,
139:23, 140:5,
140:7, 140:11,
142:7, 142:16,
142:20, 143:11,
150:23, 155:8,
160:3, 164:21,
166:12, 166:23,
167:8, 167:11,
168:11, 172:12,
175:14, 175:17,
177:5, 185:20,
188:9, 190:2, 195:2,
195:4, 195:7, 195:8,
196:9, 196:12,
196:18, 200:22,
205:25, 206:4,
206:6, 206:9,
212:20, 221:12,
221:14, 221:15,
222:4, 222:6, 222:8,
222:24, 223:1,
223:8, 223:9,
223:12, 223:17,
223:24, 224:6,
224:7, 242:16,
242:20, 242:21,
244:17, 254:23,
254:24, 255:1,
255:3, 261:20,

264:4, 264:8,
294:16, 295:6,
296:11, 297:11,
302:22, 303:25,
309:1, 309:3,
332:12, 332:15,
333:23, 354:9,
356:21, 359:7,
379:17
materials [62] - 22:17,
22:19, 22:24, 23:1,
23:21, 24:15, 25:9,
26:15, 26:20, 27:23,
28:2, 30:21, 50:12,
58:5, 59:20, 62:7,
65:21, 65:22, 65:24,
72:1, 72:18, 75:24,
89:13, 89:15, 89:16,
89:18, 121:5,
121:21, 121:24,
122:1, 122:3,
127:25, 128:5,
138:21, 151:10,
163:6, 167:21,
170:24, 175:23,
176:6, 176:7,
177:15, 185:17,
186:6, 194:22,
200:23, 206:8,
211:19, 211:24,
221:21, 222:16,
223:19, 240:21,
334:20, 339:1,
339:4, 341:23,
359:25, 380:5
Materials [1] - 145:19
math [2] - 263:16,
279:12
Matt [8] - 299:17,
299:18, 300:16,
300:18, 300:21,
300:24, 301:1,
304:25
matter [9] - 7:1,
229:17, 248:12,
302:2, 322:2,
322:12, 339:19,
353:18
matters [8] - 6:7, 6:8,
252:4, 265:19,
276:17, 287:3,
287:10, 312:8
Matthew [1] - 353:4
mattress [5] - 173:13,
173:15, 173:16,
174:3, 295:8
mattresses [4] -
173:20, 173:22,
295:10, 296:6
maximize [2] - 19:19,

<p>21:18</p> <p>maximizes [1] - 26:19</p> <p>maximizing [3] - 19:13, 20:13, 28:21</p> <p>maximum [17] - 20:9, 20:18, 21:25, 22:11, 26:2, 26:13, 28:9, 98:1, 113:7, 146:14, 153:25, 154:6, 154:12, 157:14, 157:24, 185:14, 234:12</p> <p>MBA [1] - 18:20</p> <p>McDougal [1] - 377:2</p> <p>Meadow [1] - 318:23</p> <p>meager [1] - 323:17</p> <p>mean [24] - 36:14, 97:23, 137:11, 145:23, 147:11, 149:21, 149:24, 177:5, 181:7, 197:25, 207:3, 214:17, 215:3, 220:18, 220:19, 229:1, 229:15, 238:8, 364:7, 370:15, 370:20, 371:21, 380:22, 385:25</p> <p>meaning [3] - 27:24, 124:8, 246:25</p> <p>meaningful [1] - 191:22</p> <p>means [15] - 20:10, 20:11, 28:19, 34:2, 34:3, 44:14, 44:15, 82:6, 101:8, 116:19, 228:6, 281:1, 306:2, 334:24, 340:8</p> <p>meant [5] - 77:13, 82:18, 141:12, 245:18, 326:16</p> <p>measure [12] - 24:7, 28:8, 34:7, 36:2, 78:6, 118:4, 124:16, 125:5, 125:13, 144:17, 214:8, 234:1</p> <p>measured [6] - 33:23, 34:9, 123:17, 209:15, 247:25</p> <p>measurement [4] - 34:11, 125:20, 198:13, 239:21</p> <p>measurements [1] - 231:9</p> <p>measures [8] - 19:12, 21:18, 83:23, 83:24, 143:24, 184:5, 184:7</p> <p>measuring [2] - 34:13, 144:12</p>	<p>mechanism [1] - 162:2</p> <p>mechanisms [1] - 173:5</p> <p>media [1] - 241:24</p> <p>medium [1] - 27:24</p> <p>meet [35] - 19:6, 25:10, 26:21, 36:3, 44:13, 52:9, 55:10, 55:22, 56:2, 56:24, 61:10, 92:9, 94:20, 94:24, 98:2, 100:7, 100:10, 102:13, 102:16, 105:10, 105:13, 107:4, 107:7, 126:23, 127:4, 153:23, 162:20, 169:8, 169:13, 211:25, 222:18, 331:9, 331:24, 385:9</p> <p>meeting [13] - 102:19, 119:15, 142:13, 158:4, 161:16, 169:11, 169:15, 169:16, 292:13, 292:15, 342:6, 377:6, 385:9</p> <p>meetings [2] - 338:2, 385:8</p> <p>meets [7] - 30:2, 30:19, 36:4, 57:17, 88:4, 90:9, 325:20</p> <p>member [5] - 17:3, 164:6, 337:25, 368:15, 378:10</p> <p>Members [7] - 5:11, 6:22, 7:12, 9:14, 91:21, 136:10, 137:17</p> <p>members [21] - 2:20, 4:15, 5:17, 5:20, 14:10, 131:18, 138:15, 143:19, 169:18, 170:10, 282:20, 282:21, 284:15, 293:11, 328:11, 332:24, 341:1, 342:20, 352:5, 355:8, 355:17</p> <p>MEMBERS [2] - 1:13, 1:22</p> <p>membrane [11] - 64:17, 64:18, 64:20, 66:6, 67:17, 68:17, 72:9, 72:11, 74:22, 75:20</p> <p>mention [8] - 135:9, 262:20, 264:18, 281:17, 287:23,</p>	<p>290:12, 341:13, 362:10</p> <p>mentioned [31] - 37:11, 38:5, 40:19, 91:22, 95:16, 97:3, 99:4, 100:14, 105:3, 105:17, 122:18, 126:19, 145:9, 158:25, 165:23, 168:8, 168:9, 169:5, 192:5, 198:3, 208:7, 220:18, 224:16, 245:7, 260:3, 264:9, 287:13, 288:19, 315:7, 337:15, 362:4</p> <p>MERC [6] - 327:7, 327:9, 327:10, 327:12, 327:15, 337:18</p> <p>mercury [2] - 351:18, 352:11</p> <p>merge [1] - 316:18</p> <p>merged [1] - 103:19</p> <p>mess [1] - 320:3</p> <p>met [6] - 28:12, 61:12, 102:1, 108:23, 108:24, 226:8</p> <p>metabolic [1] - 275:22</p> <p>metabolize [1] - 316:24</p> <p>metabolized [1] - 316:22</p> <p>metal [4] - 24:15, 173:17, 174:13, 379:12</p> <p>metals [8] - 167:20, 167:23, 222:2, 222:16, 224:3, 264:16, 295:14, 302:22</p> <p>meter [2] - 144:16, 199:3</p> <p>meters [1] - 238:20</p> <p>methane [10] - 123:16, 125:3, 197:22, 198:17, 198:24, 199:6, 199:13, 199:14, 199:16, 311:16</p> <p>method [4] - 28:1, 94:12, 96:7, 233:11</p> <p>methodologies [1] - 211:21</p> <p>Methodology [5] - 96:3, 245:1, 245:7, 245:15, 246:19</p> <p>methodology [4] - 96:3, 96:5, 245:1, 245:8</p> <p>methods [8] - 20:22,</p>	<p>21:22, 27:21, 52:16, 92:18, 191:24, 192:3</p> <p>metric [6] - 143:24, 144:3, 144:10, 144:18, 210:5</p> <p>metrics [3] - 143:23, 191:8, 329:12</p> <p>MGD [1] - 279:4</p> <p>Michael [3] - 130:17, 184:19, 365:7</p> <p>Michaud [2] - 378:17, 380:24</p> <p>Michigan [1] - 183:15</p> <p>micro [1] - 323:11</p> <p>microbiology [1] - 9:7</p> <p>microphone [2] - 131:14, 204:5</p> <p>mid [1] - 10:4</p> <p>midcoast [1] - 301:18</p> <p>middle [6] - 62:21, 99:20, 99:21, 99:23, 183:16, 361:12</p> <p>Middle [1] - 351:16</p> <p>might [18] - 14:13, 47:4, 137:2, 144:8, 160:17, 167:4, 213:12, 236:16, 236:21, 253:3, 253:7, 274:20, 275:16, 310:19, 315:14, 316:2, 319:9, 383:12</p> <p>migrate [3] - 46:16, 63:2, 180:15</p> <p>migrates [1] - 181:20</p> <p>migrating [1] - 216:1</p> <p>migration [4] - 39:24, 40:11, 59:6, 183:20</p> <p>Mike [26] - 8:19, 8:21, 9:6, 9:11, 9:12, 44:5, 44:12, 45:3, 48:8, 48:10, 48:17, 48:24, 49:1, 90:19, 97:15, 97:20, 98:13, 99:3, 179:4, 233:16, 233:18, 247:23, 312:20, 313:24, 314:1</p> <p>mike [1] - 175:3</p> <p>mil [3] - 235:22, 235:24</p> <p>mile [7] - 35:8, 47:5, 47:6, 309:20, 361:8, 361:17</p> <p>miles [12] - 11:14, 47:8, 112:18, 112:19, 112:23, 303:5, 304:7, 304:11, 304:12, 320:8, 381:8</p>	<p>Milford [6] - 318:10, 318:18, 351:11, 365:15, 365:18, 368:8</p> <p>Mill [2] - 135:25, 361:16</p> <p>mill [15] - 136:5, 169:25, 257:22, 279:20, 334:7, 335:12, 356:5, 357:24, 365:18, 368:18, 368:19, 368:20, 368:24, 368:25</p> <p>mill's [3] - 170:4, 192:21, 334:13</p> <p>Milligan [1] - 365:8</p> <p>milligrams [2] - 357:5, 357:8</p> <p>Millinocket [3] - 9:23, 10:1, 10:2</p> <p>million [27] - 2:9, 11:19, 11:21, 16:4, 16:10, 18:7, 52:9, 53:4, 114:18, 115:4, 134:12, 137:23, 149:25, 183:18, 254:6, 254:7, 279:2, 279:5, 279:11, 279:23, 280:1, 280:2, 284:11, 289:21, 341:16, 341:18, 377:16</p> <p>millions [3] - 267:9, 321:9, 336:6</p> <p>mills [2] - 150:24, 351:14</p> <p>Mills [1] - 10:1</p> <p>mils [2] - 235:25, 236:2</p> <p>minable [1] - 58:6</p> <p>mind [5] - 31:4, 145:5, 212:24, 370:14, 370:18</p> <p>mine [2] - 250:11, 299:22</p> <p>minimization [5] - 92:2, 97:14, 98:13, 120:25, 121:22</p> <p>minimize [14] - 52:24, 58:6, 66:19, 97:18, 98:1, 98:11, 98:20, 113:7, 119:19, 121:16, 129:17, 147:9, 163:3, 191:12</p> <p>minimized [1] - 377:19</p> <p>minimizes [2] - 52:18, 377:10</p> <p>minimizing [5] -</p>
--	--	---	--	--

<p>20:13, 28:22, 98:24, 122:17, 191:13</p> <p>minimum [16] - 32:14, 86:1, 86:7, 102:24, 103:2, 104:7, 111:16, 112:8, 123:22, 128:14, 198:5, 203:23, 208:14, 208:15, 219:12, 220:12</p> <p>mining [1] - 355:10</p> <p>minion [1] - 322:15</p> <p>minor [1] - 91:4</p> <p>minus [3] - 35:24, 69:19, 71:21</p> <p>minute [22] - 38:5, 58:12, 75:9, 90:20, 104:5, 141:10, 158:24, 168:12, 178:22, 178:25, 288:5, 292:7, 318:5, 327:21, 339:2, 340:21, 347:1, 353:16, 353:17, 354:19, 356:22</p> <p>minutes [10] - 40:19, 174:24, 175:2, 248:7, 249:10, 283:3, 318:7, 340:21, 354:4, 361:5</p> <p>miscellaneous [1] - 26:25</p> <p>miserably [1] - 336:20</p> <p>misidentify [1] - 259:1</p> <p>misleading [2] - 274:15, 332:9</p> <p>missed [1] - 360:22</p> <p>missing [1] - 166:18</p> <p>misspeak [1] - 234:9</p> <p>misspoke [1] - 234:5</p> <p>misunderstanding [1] - 174:23</p> <p>misuse [1] - 268:4</p> <p>mitigate [1] - 239:11</p> <p>mitigated [1] - 317:25</p> <p>mitigation [7] - 91:10, 91:18, 92:5, 101:21, 101:24, 102:7, 204:19</p> <p>mix [7] - 105:4, 105:23, 106:12, 107:20, 146:20, 146:22, 246:10</p> <p>mixed [3] - 295:15, 323:23, 334:15</p> <p>mobile [2] - 144:18, 232:19</p> <p>mobilize [1] - 62:5</p> <p>model [6] - 39:18, 40:10, 79:13,</p>	<p>229:22, 230:17, 373:20</p> <p>model's [1] - 229:25</p> <p>modeling [8] - 84:25, 117:17, 179:9, 180:11, 225:15, 225:21, 229:20, 230:3</p> <p>models [1] - 269:17</p> <p>Modely [2] - 363:11, 365:7</p> <p>modern [1] - 302:19</p> <p>modest [1] - 295:2</p> <p>modify [4] - 52:20, 88:18, 98:6, 157:18</p> <p>moment [1] - 170:11</p> <p>money [10] - 10:22, 149:4, 152:5, 160:2, 293:25, 302:4, 309:22, 320:22, 322:3, 366:25</p> <p>monitor [17] - 40:23, 45:14, 46:7, 57:18, 120:4, 122:15, 122:21, 122:22, 123:12, 125:21, 190:2, 199:4, 212:10, 216:7, 233:21, 241:8</p> <p>monitorable [1] - 57:19</p> <p>monitored [7] - 30:4, 31:3, 45:6, 46:19, 57:21, 123:13, 208:24</p> <p>monitoring [43] - 30:13, 32:8, 32:10, 37:16, 40:25, 42:10, 44:18, 44:24, 44:25, 45:11, 45:13, 45:20, 45:21, 91:12, 120:8, 122:19, 123:20, 123:22, 123:23, 124:1, 125:2, 125:6, 125:15, 181:12, 190:19, 191:2, 191:5, 199:2, 214:9, 214:10, 216:7, 230:8, 231:1, 231:3, 231:13, 232:20, 232:23, 235:16, 247:16, 247:19, 287:6</p> <p>monitors [9] - 125:8, 125:12, 125:18, 126:1, 198:17, 238:15, 239:1, 239:2, 239:14</p> <p>monstrosity [1] - 321:8</p>	<p>month [3] - 128:25, 263:14, 351:21</p> <p>month's [1] - 12:23</p> <p>monthly [15] - 12:21, 13:4, 13:6, 117:7, 123:22, 125:23, 128:19, 131:17, 131:25, 137:22, 198:5, 198:11, 209:15, 244:20, 278:25</p> <p>months [14] - 17:10, 50:17, 77:10, 80:17, 121:4, 154:19, 228:2, 228:7, 228:9, 228:16, 228:17, 229:7, 229:18, 298:18</p> <p>moot [1] - 136:1</p> <p>Moreover [1] - 345:16</p> <p>morning [28] - 2:5, 4:23, 5:5, 6:21, 7:11, 8:15, 8:16, 9:13, 19:3, 19:4, 29:22, 49:3, 91:21, 113:13, 114:5, 115:25, 149:7, 178:11, 188:12, 190:6, 193:1, 233:19, 234:2, 286:8, 364:9, 385:10, 385:11</p> <p>Morrisette [2] - 3:13, 285:8</p> <p>Morrison [2] - 355:7, 355:13</p> <p>MORRISON [4] - 355:8, 355:15, 357:19, 357:21</p> <p>most [30] - 9:3, 22:3, 36:16, 53:18, 97:4, 123:3, 150:22, 169:12, 200:22, 202:15, 202:18, 203:11, 203:12, 211:25, 212:19, 227:6, 232:19, 232:25, 237:2, 238:24, 246:2, 254:2, 257:8, 266:8, 266:11, 291:2, 307:13, 337:18, 345:6, 361:23</p> <p>mostly [2] - 146:1, 294:7</p> <p>motorboating [1] - 366:3</p> <p>MOU [1] - 12:10</p> <p>Mount [1] - 313:2</p> <p>mountain [2] - 321:21, 355:21</p>	<p>mouth [1] - 302:4</p> <p>move [21] - 35:19, 36:3, 37:3, 37:8, 39:6, 40:4, 41:13, 73:22, 147:8, 163:6, 230:18, 239:2, 239:8, 280:6, 287:21, 288:12, 292:4, 293:3, 294:23, 296:17, 354:25</p> <p>moved [6] - 5:3, 34:10, 77:15, 343:16, 361:13, 377:14</p> <p>movement [8] - 31:1, 32:12, 35:17, 37:12, 37:15, 37:18, 40:9, 226:6</p> <p>moves [10] - 37:8, 37:20, 37:23, 37:24, 38:19, 38:24, 39:22, 40:2, 152:16, 181:23</p> <p>moving [9] - 38:25, 172:22, 181:25, 195:7, 231:4, 311:7, 339:6, 362:24, 366:1</p> <p>MR [496] - 7:11, 8:15, 9:13, 15:1, 16:17, 16:24, 17:13, 17:17, 17:24, 18:6, 18:12, 29:2, 29:22, 46:22, 46:25, 47:20, 47:22, 48:4, 49:2, 90:24, 91:20, 93:2, 93:5, 93:8, 113:13, 114:5, 116:9, 121:9, 129:22, 130:3, 130:13, 130:16, 131:4, 131:5, 131:8, 131:16, 131:25, 132:3, 132:10, 132:14, 132:19, 132:23, 132:25, 133:4, 133:8, 133:11, 133:12, 133:16, 133:20, 133:22, 133:23, 133:24, 134:6, 134:9, 134:18, 134:22, 134:24, 134:25, 135:4, 135:5, 135:13, 135:17, 135:21, 135:23, 136:3, 136:6, 136:10, 136:15, 136:23, 136:25, 137:4, 137:6, 137:10, 137:11, 137:16,</p>	<p>137:21, 138:2, 138:4, 138:9, 138:10, 138:13, 138:18, 139:2, 139:7, 140:10, 140:14, 140:21, 140:25, 141:4, 141:8, 141:10, 141:13, 141:16, 142:3, 142:10, 142:22, 143:1, 143:12, 143:14, 143:17, 144:20, 144:23, 145:2, 147:11, 147:19, 148:5, 149:20, 150:10, 159:3, 159:6, 159:13, 159:16, 160:1, 160:4, 161:1, 161:14, 162:7, 162:12, 166:7, 166:18, 166:25, 167:10, 168:5, 168:7, 168:14, 169:7, 169:10, 169:19, 170:9, 170:20, 172:9, 172:25, 174:22, 175:9, 175:15, 175:21, 176:13, 177:2, 177:11, 177:19, 177:22, 178:4, 178:7, 178:9, 178:15, 178:20, 179:7, 179:17, 181:3, 181:10, 181:14, 181:19, 182:2, 182:7, 182:17, 182:20, 183:2, 183:14, 183:22, 183:25, 184:2, 184:8, 184:18, 185:2, 185:6, 185:13, 185:21, 186:1, 186:5, 186:10, 186:13, 186:18, 186:20, 186:25, 187:2, 187:6, 187:15, 187:18, 188:1, 188:5, 188:12, 188:15, 188:16, 188:18, 188:22, 188:24, 189:2, 189:9, 189:19, 190:4, 191:3, 191:23, 192:4, 192:13, 192:18, 192:23, 192:25, 193:7,</p>
--	---	--	--	---

<p>193:12, 193:16, 193:17, 193:18, 193:21, 193:23, 194:3, 194:13, 194:23, 195:13, 195:16, 196:19, 196:23, 197:18, 197:20, 197:21, 197:23, 197:25, 198:3, 198:17, 198:22, 199:15, 199:19, 200:5, 200:8, 200:11, 200:20, 201:6, 201:9, 201:13, 201:16, 201:19, 202:2, 202:8, 202:17, 203:6, 203:10, 203:14, 203:18, 203:19, 203:22, 204:1, 204:7, 204:22, 205:20, 206:24, 207:3, 207:10, 208:5, 208:16, 209:24, 210:16, 211:8, 211:14, 212:3, 212:5, 212:6, 212:9, 213:2, 213:4, 213:11, 214:2, 214:7, 214:17, 214:21, 215:9, 215:14, 216:3, 216:5, 216:10, 216:16, 216:17, 216:19, 217:16, 217:23, 217:25, 218:5, 219:10, 219:16, 220:1, 220:3, 220:15, 220:25, 223:22, 223:24, 224:12, 224:14, 224:23, 224:25, 225:1, 225:5, 225:8, 225:17, 225:19, 226:2, 227:3, 227:6, 227:13, 228:1, 229:19, 230:10, 231:14, 232:13, 233:14, 233:15, 233:24, 234:5, 234:7, 234:8, 234:10, 234:13, 234:23, 235:5, 235:15, 235:19, 235:20, 235:24, 236:4, 236:12, 236:17, 237:19, 237:22, 238:14, 238:20, 239:13,</p>	<p>239:18, 240:3, 240:7, 241:9, 241:13, 241:14, 241:18, 241:21, 242:3, 243:18, 244:24, 245:6, 247:8, 247:11, 247:20, 248:5, 248:9, 248:11, 248:14, 248:16, 248:20, 249:6, 249:20, 249:24, 250:1, 250:2, 250:4, 250:24, 254:21, 255:2, 255:11, 255:18, 255:25, 256:4, 256:9, 256:12, 256:15, 256:19, 256:25, 261:19, 261:24, 262:1, 262:7, 264:3, 264:9, 264:14, 264:15, 264:18, 265:6, 265:10, 265:15, 265:18, 265:25, 270:7, 270:13, 270:21, 270:23, 271:1, 271:10, 271:16, 271:24, 271:25, 272:3, 272:6, 272:11, 273:17, 273:19, 273:20, 274:1, 274:5, 276:3, 276:11, 276:12, 276:13, 276:16, 276:18, 276:19, 276:25, 277:2, 277:6, 277:8, 277:15, 277:22, 278:4, 278:6, 278:7, 278:15, 278:18, 278:19, 278:24, 278:25, 279:2, 279:16, 279:21, 280:6, 280:11, 280:14, 280:15, 280:22, 280:24, 281:2, 281:4, 281:7, 281:9, 281:11, 281:14, 281:16, 281:21, 281:24, 281:25, 282:3, 282:5, 282:8, 282:14, 282:17, 282:19, 282:23, 293:7, 293:10, 297:18, 299:20, 299:22, 299:24, 300:17, 300:19, 300:21, 300:25,</p>	<p>301:4, 304:16, 305:3, 305:9, 305:11, 305:12, 305:13, 308:17, 308:20, 309:10, 312:15, 312:21, 313:25, 320:5, 325:13, 328:10, 332:20, 335:5, 339:3, 340:6, 340:25, 347:21, 348:14, 348:16, 355:8, 355:15, 357:19, 357:21, 358:15, 358:18, 360:22, 361:1, 363:7, 363:9, 363:12, 365:10, 365:13, 369:8, 370:11, 372:10, 375:5, 375:9, 377:5, 378:18, 385:25, 386:4 MRC [3] - 337:24, 338:16, 338:21 MRSA [3] - 3:17, 285:16, 332:4 MS [98] - 6:21, 17:2, 19:3, 19:5, 130:15, 139:1, 139:4, 139:17, 140:12, 140:18, 140:23, 141:2, 141:6, 141:22, 142:6, 142:18, 142:25, 143:4, 143:13, 145:8, 145:14, 145:22, 145:25, 146:17, 148:22, 148:24, 151:5, 152:7, 152:18, 152:20, 152:25, 153:1, 153:3, 153:5, 153:8, 153:9, 153:19, 156:5, 156:7, 156:8, 157:2, 158:7, 158:21, 160:24, 162:16, 163:5, 163:10, 164:2, 164:5, 164:19, 165:11, 165:15, 165:21, 166:4, 166:5, 166:17, 166:19, 167:1, 167:12, 169:23, 170:13, 172:19, 173:3, 173:11, 174:18, 175:12, 175:19, 176:3, 176:21, 177:10, 177:13,</p>	<p>178:2, 178:5, 178:8, 178:12, 178:18, 210:8, 211:5, 211:9, 212:1, 241:22, 243:7, 244:14, 288:18, 298:11, 314:21, 317:19, 318:8, 324:6, 332:23, 343:12, 345:24, 347:2, 350:15, 350:20, 353:18, 380:25, 385:14 MSGP [1] - 259:6 MSW [25] - 138:19, 139:19, 139:21, 140:20, 146:24, 147:2, 147:9, 147:12, 147:19, 147:22, 148:1, 148:6, 148:11, 148:12, 148:17, 154:24, 172:11, 172:16, 326:19, 326:25, 327:9, 327:15, 327:19, 329:2, 334:18 Mt [1] - 313:1 multi [1] - 25:15 multi-fuel [1] - 25:15 multiple [7] - 48:18, 97:20, 120:8, 125:3, 125:7, 229:5, 253:10 municipal [21] - 11:15, 15:15, 15:18, 23:12, 23:14, 24:4, 24:5, 24:22, 25:14, 26:11, 126:16, 139:9, 140:14, 145:15, 145:20, 165:18, 301:16, 321:21, 325:1, 335:16, 373:25 municipalities [5] - 3:25, 23:6, 285:24, 373:14 municipality [2] - 11:11, 15:9 must [9] - 5:22, 22:10, 56:2, 190:2, 323:24, 324:24, 325:2, 352:12, 354:3 mutual [3] - 249:24, 250:4, 344:15</p>	<p>name [40] - 2:17, 6:22, 130:16, 268:25, 284:13, 287:19, 287:20, 287:23, 288:11, 288:18, 292:24, 292:25, 293:13, 298:11, 299:24, 301:5, 305:3, 308:20, 309:11, 312:21, 314:1, 314:21, 318:9, 320:3, 325:13, 328:12, 333:2, 335:5, 341:1, 343:15, 347:21, 350:17, 361:1, 363:13, 372:12, 375:8, 375:10, 376:25, 377:6, 377:9 names [2] - 351:12, 385:3 narrowed [1] - 51:20 NASA [1] - 268:24 Nation [6] - 168:25, 315:13, 319:17, 350:24, 352:5, 352:17 National [1] - 256:5 national [1] - 346:18 nationally [1] - 266:2 nationally- recognized [1] - 266:2 nationwide [1] - 271:16 native [5] - 58:22, 70:17, 70:22, 253:23, 266:4 Native [2] - 254:13, 347:9 natural [22] - 9:9, 91:7, 91:16, 91:22, 92:8, 98:10, 113:4, 183:9, 202:10, 246:15, 251:23, 251:24, 252:1, 287:7, 316:25, 320:18, 320:25, 324:20, 344:18, 344:21, 346:4, 370:16 Natural [8] - 2:15, 49:12, 50:20, 92:10, 286:19, 289:23, 291:18, 328:13 naturally [3] - 94:20, 95:22, 107:8 naturally-occurring [1] - 107:8 nature [7] - 35:11, 37:7, 45:18, 46:13,</p>
N				
<p>Nadder [1] - 365:8 nail [3] - 67:11, 368:17, 368:21</p>				

<p>71:3, 254:17, 254:18 Naval [1] - 374:10 near [7] - 36:9, 274:18, 313:18, 330:8, 336:8, 362:3, 385:13 Near [1] - 348:23 nearby [6] - 32:21, 43:4, 44:1, 119:7, 274:22, 313:21 nearest [4] - 110:11, 112:9, 112:15, 125:21 nearly [4] - 27:22, 36:17, 266:3, 353:12 necessarily [1] - 147:5 necessary [7] - 117:25, 127:14, 135:7, 216:8, 301:14, 331:9, 371:4 need [48] - 20:1, 21:2, 80:17, 94:20, 114:24, 156:10, 204:8, 215:21, 224:7, 225:17, 228:10, 233:8, 234:11, 240:10, 240:11, 242:4, 243:24, 253:14, 253:15, 253:19, 263:15, 301:11, 302:6, 302:15, 303:14, 307:21, 309:3, 309:5, 310:2, 310:25, 312:6, 313:13, 313:19, 319:14, 338:14, 344:1, 349:22, 350:2, 354:8, 359:16, 359:25, 360:1, 364:22, 372:5, 373:17, 374:25, 381:2, 381:22 needed [19] - 13:19, 41:21, 50:17, 50:18, 51:5, 52:9, 79:19, 86:9, 92:20, 103:10, 170:15, 202:5, 207:21, 215:16, 244:12, 307:4, 339:14, 372:2 needing [1] - 339:7 needle [1] - 294:23 needs [23] - 83:17, 114:14, 124:8, 163:23, 217:12, 222:8, 223:19, 224:10, 309:16, 309:25, 310:18,</p>	<p>312:5, 313:14, 319:15, 325:20, 331:9, 331:24, 337:11, 349:17, 368:14, 369:15, 371:6, 372:7 negotiated [2] - 10:24, 11:13 neighbor [3] - 197:7, 213:1, 367:4 neighbors [2] - 121:17, 352:17 Nellie [1] - 383:21 nesting [1] - 267:13 nests [1] - 252:22 net [5] - 66:4, 66:12, 68:14, 163:17, 373:18 network [6] - 115:23, 116:3, 122:20, 129:11, 231:2, 251:3 neurotoxin [1] - 333:7 Neuse [1] - 353:7 neutral [3] - 10:21, 149:2, 149:17 neutralize [2] - 121:14, 356:21 never [13] - 42:1, 302:14, 333:5, 334:15, 335:13, 335:24, 350:13, 359:16, 360:7, 362:2, 381:9, 381:10, 382:10 New [13] - 171:17, 173:9, 173:12, 293:18, 305:15, 305:18, 306:12, 306:16, 306:20, 327:8, 332:11, 347:24 new [37] - 9:20, 15:19, 19:15, 19:18, 23:1, 54:16, 83:4, 84:17, 88:12, 88:17, 92:25, 123:19, 174:17, 198:4, 199:9, 211:10, 211:16, 217:1, 224:21, 224:23, 224:25, 225:21, 254:23, 306:3, 306:19, 306:25, 327:4, 327:6, 336:2, 338:19, 365:2, 372:18, 372:19, 374:8, 374:13, 384:3 newer [1] - 376:3 newly [2] - 25:6, 266:25</p>	<p>newly-accessible [1] - 266:25 newly-constructed [1] - 25:6 Newport [1] - 194:16 News [2] - 3:22, 285:21 NEWSME [11] - 4:6, 7:16, 9:10, 113:18, 114:8, 132:5, 132:7, 173:8, 176:13, 286:5, 289:9 newspaper [1] - 201:21 Next [4] - 136:8, 312:17, 347:19, 375:6 next [55] - 2:21, 2:22, 15:3, 18:12, 29:2, 34:6, 44:5, 47:22, 48:4, 63:25, 64:5, 72:4, 72:21, 77:15, 77:17, 77:18, 90:24, 93:23, 94:4, 95:5, 95:25, 99:10, 106:21, 110:17, 135:7, 136:13, 138:14, 144:22, 166:25, 170:16, 182:16, 196:14, 220:15, 229:19, 236:4, 262:21, 263:10, 270:2, 270:18, 297:19, 298:8, 299:17, 299:18, 300:16, 304:10, 305:1, 317:2, 318:22, 332:21, 355:6, 356:3, 370:10, 372:9, 376:24, 378:8 nice [6] - 33:4, 42:2, 87:3, 168:1, 250:16, 369:24 nicely [1] - 47:10 night [4] - 321:4, 354:5, 364:7, 364:8 NIMBY [1] - 306:8 nine [1] - 137:23 nineties [3] - 10:4, 51:16, 372:16 nitrogen [1] - 199:21 no-build [1] - 50:22 NOAA [1] - 256:5 NOAA's [1] - 352:20 nobody [3] - 137:4, 137:6, 364:7 noise [16] - 8:6, 117:13, 117:14, 118:11, 129:13,</p>	<p>143:22, 143:24, 143:25, 144:5, 144:7, 210:2, 210:4, 269:12, 287:6, 311:22, 354:1 non [2] - 258:7, 304:3 non-impact [1] - 258:7 non-processables [1] - 304:3 none [8] - 43:6, 84:11, 93:12, 100:6, 109:14, 172:23, 181:17, 310:23 nonhazardous [4] - 126:6, 126:23, 176:5, 176:7 nonimpact [2] - 259:22, 260:10 nonprofit [1] - 347:24 nonscientific [1] - 261:17 nonsensical [1] - 332:16 noon [1] - 7:6 noontime [1] - 385:12 normal [2] - 213:8, 294:12 normally [1] - 47:1 Norridgewock [4] - 135:9, 171:18, 171:19, 314:7 north [10] - 31:9, 31:13, 50:5, 103:24, 104:16, 106:5, 142:1, 239:7, 290:13 North [3] - 18:23, 113:17, 353:5 Northeast [1] - 194:2 northeast [4] - 36:22, 47:13, 47:16, 306:16 northerly [1] - 230:1 Northern [1] - 10:1 northern [5] - 229:24, 230:5, 301:17, 318:18, 361:3 northwest [3] - 47:15, 47:16, 230:19 Norwich [1] - 18:20 nosed [4] - 92:7, 112:10, 252:10, 263:6 notably [1] - 345:6 note [8] - 5:11, 115:11, 116:12, 166:6, 290:14, 296:21, 306:10, 329:21 noted [8] - 24:21, 26:15, 170:14, 173:4, 231:19,</p>	<p>241:23, 244:16, 272:23 noteworthy [1] - 261:6 nothing [10] - 6:14, 68:5, 75:8, 134:7, 260:11, 281:3, 282:5, 282:8, 298:4, 377:24 notice [9] - 3:21, 3:23, 198:18, 274:5, 277:18, 285:20, 285:22, 345:11, 345:12 noticeably [1] - 121:13 noticed [4] - 22:5, 189:21, 203:15, 276:8 notification [1] - 125:16 notified [3] - 124:5, 128:3, 209:4 notifies [1] - 125:10 notorious [1] - 76:13 November [1] - 373:24 NRCM [2] - 328:18, 331:19 NRPA [3] - 90:9, 93:17, 96:4 nuisance [14] - 329:20, 329:21, 330:1, 330:6, 330:10, 330:12, 330:14, 330:17, 354:2, 354:12, 370:6, 370:7, 378:10, 384:8 nuisances [2] - 381:7, 381:10 number [53] - 2:14, 2:16, 8:21, 13:2, 16:5, 16:13, 18:10, 24:12, 46:11, 49:18, 55:1, 55:8, 57:3, 68:1, 69:23, 72:21, 74:15, 76:14, 79:21, 103:21, 156:12, 158:11, 167:18, 168:9, 172:18, 172:19, 172:24, 187:13, 197:20, 202:2, 202:14, 207:6, 207:15, 209:4, 219:22, 219:24, 222:21, 223:1, 223:5, 223:11, 239:16, 243:12, 245:17, 246:21, 246:23, 277:25, 278:22,</p>
---	---	---	--	---

<p>288:1, 294:24, 327:21, 333:20, 342:1, 371:20 Number [1] - 334:17 numbers [6] - 88:14, 141:20, 148:21, 189:15, 279:17, 280:4 numerical [1] - 153:11 numerous [3] - 23:23, 25:11, 336:8 nurse [1] - 382:8 nursery [1] - 253:18 nursing [1] - 351:21 nutrient [3] - 26:18, 96:21, 105:20 nutrient-containing [1] - 26:18 nutrients [1] - 316:13</p>	<p>OBW [16] - 154:3, 155:22, 156:1, 156:16, 156:20, 157:16, 160:7, 160:21, 161:24, 162:4, 162:17, 162:23, 163:12, 173:9, 296:8, 325:25 occasional [1] - 369:11 occasionally [1] - 151:15 occupied [1] - 16:7 occur [10] - 14:18, 79:14, 82:11, 180:24, 181:13, 215:5, 263:3, 263:9, 271:21, 336:25 occurred [2] - 269:16, 378:3 occurrence [1] - 189:21 occurring [9] - 94:20, 95:23, 107:8, 120:3, 149:8, 184:10, 228:20, 257:17, 272:13 occurs [3] - 149:15, 252:21, 258:18 ocean [2] - 253:19, 321:20 oceanic [1] - 269:21 Oceanside [1] - 305:5 OCTOBER [1] - 1:9 October [5] - 2:3, 3:22, 109:18, 285:21, 355:19 odiferous [2] - 121:5, 121:13 odor [35] - 25:21, 119:17, 119:18, 119:20, 120:2, 120:13, 120:15, 120:16, 120:17, 121:14, 121:22, 122:17, 124:14, 124:17, 125:19, 129:17, 144:11, 196:20, 197:1, 197:13, 197:14, 197:16, 221:13, 238:18, 239:11, 239:12, 243:9, 243:10, 243:12, 243:14, 244:1, 335:16, 366:21, 366:25, 377:19 odor-causing [1] - 124:14</p>	<p>odor-related [2] - 243:10, 243:14 odors [13] - 119:16, 119:19, 120:1, 120:5, 120:10, 120:19, 120:20, 120:23, 121:1, 121:16, 121:19, 122:12, 197:4 OF [5] - 1:1, 1:2, 1:5, 1:5, 1:6 OFF [4] - 90:22, 179:1, 249:14, 354:21 offer [5] - 196:10, 322:19, 350:24, 368:1, 383:17 office [5] - 8:24, 54:21, 91:14, 216:24, 356:24 Office [5] - 10:13, 11:24, 12:1, 327:16, 342:12 officer [2] - 2:19, 284:15 offloaded [1] - 194:25 offloading [2] - 127:18, 355:22 offs [1] - 167:19 offset [6] - 59:10, 59:13, 210:18, 210:19, 210:20, 210:22 offsets [1] - 44:10 offsite [13] - 46:9, 120:2, 120:9, 125:7, 125:18, 125:21, 126:1, 150:4, 226:3, 238:10, 238:15, 239:12, 239:15 often [4] - 169:7, 198:8, 198:11, 261:17 oftentimes [1] - 373:16 oil [3] - 26:24, 138:21, 373:15 Old [49] - 2:10, 4:7, 5:4, 11:12, 11:20, 13:7, 51:17, 108:11, 108:12, 108:17, 116:25, 125:14, 131:18, 134:10, 134:19, 135:25, 136:5, 136:9, 168:24, 169:25, 170:4, 179:14, 192:21, 200:6, 244:20, 257:22, 257:23, 274:7, 276:5, 277:24,</p>	<p>278:17, 282:12, 284:12, 286:10, 289:8, 334:13, 335:7, 335:10, 335:12, 335:21, 340:15, 351:10, 351:15, 351:16, 356:6, 356:23, 365:19, 368:17, 368:23 old [11] - 76:9, 95:19, 214:24, 224:1, 272:12, 305:18, 356:5, 362:5, 366:15, 368:10, 368:12 older [1] - 20:25 Oliver [1] - 109:11 OLTARZEWSKI [1] - 324:6 Oltarzewski [2] - 320:3, 324:7 omission [1] - 268:9 once [42] - 71:17, 77:14, 78:2, 81:24, 82:2, 89:19, 89:20, 97:17, 98:12, 112:16, 121:3, 123:10, 124:9, 127:4, 127:17, 169:12, 202:5, 206:12, 208:17, 209:18, 214:13, 215:20, 215:23, 222:10, 222:11, 222:24, 227:23, 228:7, 228:20, 230:2, 271:17, 271:18, 271:20, 272:14, 274:25, 275:1, 299:12, 346:9, 379:8, 379:17 one [241] - 9:22, 11:21, 14:1, 14:5, 14:11, 17:2, 18:6, 19:18, 19:24, 30:18, 31:21, 33:17, 36:21, 37:13, 38:18, 38:25, 39:19, 39:23, 40:13, 41:3, 42:2, 42:8, 44:22, 46:12, 46:22, 47:3, 47:5, 47:6, 47:8, 50:21, 52:25, 53:7, 53:11, 53:12, 53:17, 57:9, 57:21, 58:15, 58:21, 60:7, 60:13, 62:13, 64:4, 65:6, 66:8, 68:2, 68:24, 69:17, 69:21, 69:23, 70:23, 71:22, 74:14,</p>	<p>74:22, 75:14, 76:5, 77:13, 78:11, 80:20, 80:25, 83:3, 84:13, 84:15, 84:18, 84:19, 85:22, 87:2, 87:6, 87:19, 88:13, 90:1, 90:3, 94:25, 95:17, 95:22, 98:20, 99:8, 99:20, 99:22, 99:23, 100:11, 100:13, 102:4, 102:6, 102:23, 102:25, 103:20, 105:11, 106:4, 106:6, 106:10, 106:14, 106:20, 108:5, 114:6, 119:2, 127:1, 136:15, 137:21, 143:7, 147:5, 150:23, 156:12, 156:19, 157:4, 158:5, 158:8, 160:9, 165:22, 166:25, 167:8, 167:12, 167:17, 168:2, 168:8, 168:24, 169:19, 175:6, 175:24, 175:25, 177:22, 178:12, 178:18, 184:21, 189:16, 190:1, 190:6, 194:7, 194:8, 195:3, 200:11, 201:9, 202:15, 203:10, 205:2, 205:9, 205:15, 207:6, 212:3, 214:21, 216:25, 217:20, 218:8, 220:4, 221:7, 221:9, 221:22, 225:4, 225:14, 229:12, 229:22, 235:24, 236:1, 236:3, 239:6, 239:7, 240:13, 241:19, 242:25, 245:12, 246:21, 247:11, 251:6, 253:3, 253:7, 257:21, 258:4, 258:8, 258:17, 260:6, 267:19, 278:23, 279:14, 288:21, 289:3, 293:17, 293:18, 297:20, 297:23, 298:1, 298:14, 300:13, 306:1, 306:10, 311:12, 313:7, 314:18, 318:5, 321:4,</p>
O				
<p>O'Neill [1] - 8:5 object [2] - 204:8, 279:16 objecting [1] - 254:22 Objection [1] - 264:3 objection [4] - 193:16, 193:18, 193:20, 194:10 objective [2] - 30:20, 207:25 objectives [3] - 30:18, 37:13, 267:21 obligated [2] - 26:1, 219:1 obligation [1] - 347:8 obligations [1] - 132:6 observations [1] - 369:17 observe [4] - 89:11, 127:18, 184:16, 184:17 observed [3] - 228:11, 231:25, 269:14 observing [1] - 13:13 obsolete [1] - 274:19 obtained [3] - 82:21, 90:17, 239:16 obtaining [3] - 131:2, 344:24, 345:9 obvious [3] - 57:7, 274:10, 357:16 obviously [13] - 57:10, 57:12, 68:21, 87:24, 88:20, 197:10, 199:8, 231:24, 240:8, 281:19, 346:14, 369:23, 382:1</p>				

323:25, 327:20,
331:2, 333:10,
333:20, 335:23,
336:14, 337:3,
338:2, 338:8, 339:2,
339:8, 339:17,
340:21, 341:12,
341:18, 341:21,
342:1, 342:20,
346:25, 347:1,
348:20, 349:22,
351:20, 351:21,
353:16, 353:17,
354:3, 355:24,
356:13, 356:16,
357:2, 361:21,
365:25, 367:5,
367:12, 368:25,
369:19, 370:1,
374:12, 376:16,
376:21, 380:20,
382:20
One [1] - 203:14
one-half [1] - 339:8
one-inch [1] - 80:25
one-mile [3] - 47:5,
47:6
one-minute [1] -
340:21
one-quarter [1] -
31:21
one-third [1] - 339:8
one-thousandths [3] -
235:24, 236:1, 236:3
ones [7] - 34:19,
212:24, 232:19,
239:4, 245:13,
256:23, 306:3
Ones [1] - 256:21
ongoing [1] - 301:14
online [5] - 266:7,
286:16, 300:5,
342:21, 374:17
onsite [17] - 51:25,
58:22, 59:5, 63:8,
83:8, 89:11, 125:7,
170:1, 194:24,
202:19, 216:11,
239:1, 239:10,
239:11, 258:21,
367:24
open [15] - 93:20,
199:1, 199:4,
199:11, 200:24,
235:11, 249:12,
253:18, 276:1,
298:22, 298:25,
355:19, 355:23,
363:23, 374:21
opening [1] - 364:17

operate [14] - 11:2,
82:18, 115:20,
117:22, 125:8,
129:6, 155:17,
193:13, 301:12,
312:24, 328:5,
363:2, 368:21, 377:7
operated [8] - 24:13,
114:10, 129:3,
129:17, 155:10,
158:6, 313:16, 362:9
operates [6] - 114:8,
128:10, 286:5,
289:10, 325:21,
363:22
operating [21] - 10:24,
11:6, 20:15, 21:3,
57:5, 122:16,
137:20, 146:14,
148:16, 170:6,
182:14, 199:8,
200:24, 232:2,
232:7, 238:11,
294:4, 325:19,
351:14, 363:19,
364:24
Operating [6] - 12:14,
130:25, 133:4,
133:9, 289:11,
337:10
operation [22] - 20:17,
25:9, 82:2, 83:24,
115:17, 117:5,
117:25, 129:4,
150:7, 157:7,
160:11, 182:8,
184:11, 227:25,
242:9, 242:12,
287:4, 290:23,
294:12, 305:8,
363:17, 366:7
operational [8] -
82:19, 114:3, 115:1,
235:1, 239:2, 240:4,
242:6, 303:21
operationally [1] -
239:9
operations [29] -
10:20, 12:12, 18:23,
22:10, 25:19, 48:14,
54:13, 90:17, 90:18,
113:16, 113:19,
113:22, 115:16,
116:11, 116:12,
120:11, 120:18,
122:15, 133:13,
235:15, 308:24,
308:25, 326:11,
365:22, 366:17,
369:13, 375:16,

375:19, 375:22
Operations [3] - 4:6,
7:17, 289:10
operator [18] - 4:6,
7:17, 10:15, 13:15,
67:15, 113:19,
133:21, 149:12,
149:15, 169:25,
197:10, 228:25,
286:5, 299:25,
321:10, 322:2,
331:4, 333:22
operator's [1] - 333:17
operators [6] - 118:12,
127:12, 127:16,
127:18, 127:22,
196:1
opinion [12] - 131:5,
133:6, 175:11,
177:2, 179:15,
180:14, 258:6,
259:2, 280:23,
281:19, 366:10,
368:16
opportunities [4] -
21:20, 25:8, 155:21,
371:13
opportunity [23] -
8:17, 115:3, 119:12,
122:7, 122:9, 158:9,
158:20, 237:17,
287:25, 292:12,
293:11, 296:20,
314:17, 318:9,
320:6, 324:8,
328:15, 347:22,
358:19, 375:10,
377:11, 377:15,
378:19
oppose [2] - 284:6,
347:11
opposed [9] - 35:18,
47:6, 59:25, 287:15,
287:16, 292:22,
315:18, 323:8, 333:3
opposing [1] - 384:16
opposite [1] - 230:6
opposition [8] -
314:17, 328:16,
343:13, 347:19,
348:2, 350:25,
364:16, 370:14
optimal [1] - 275:18
optimistic [1] - 275:5
optimize [1] - 98:14
option [1] - 26:23
options [12] - 27:14,
27:16, 27:18,
101:12, 101:25,
185:16, 186:15,

186:22, 221:9,
304:22, 338:6,
339:18
oral [3] - 262:3,
271:10, 341:7
orange [1] - 104:15
orange/red [1] -
291:15
order [17] - 2:6, 19:21,
33:22, 38:18, 42:16,
114:22, 114:25,
130:6, 217:9,
229:12, 230:25,
247:24, 277:19,
287:21, 317:13,
351:2
orderly [2] - 354:23,
385:5
organic [6] - 58:5,
302:16, 305:21,
339:1, 339:4, 356:21
organics [8] - 165:16,
222:2, 222:3, 302:7,
352:10, 372:14,
372:25, 373:11
Organics [6] - 26:17,
28:7, 164:19,
164:25, 327:8,
373:11
organization [1] -
347:23
orientation [2] -
290:12, 290:16
oriented [3] - 36:18,
36:21, 36:23
original [13] - 104:18,
204:13, 204:15,
204:16, 204:18,
204:24, 226:4,
226:5, 226:11,
254:12, 255:3,
255:21, 266:15
originally [2] - 51:13,
209:25
originate [1] - 164:9
originating [1] -
331:20
origins [1] - 321:2
Orono [1] - 341:2
Orrington [3] -
148:13, 301:7,
372:13
OSA [4] - 132:6,
132:16, 133:12,
136:3
OTHERS [1] - 1:18
otherwise [7] - 21:8,
166:13, 300:12,
301:20, 319:16,
331:23, 370:23

ought [2] - 210:3,
300:11
ourselves [4] -
190:21, 190:22,
344:16, 376:15
out-of-state [30] -
12:20, 130:23,
136:19, 137:7,
139:5, 139:18,
140:11, 140:16,
140:19, 140:22,
140:24, 150:20,
201:11, 201:23,
202:4, 294:17,
325:18, 327:17,
331:2, 332:8,
332:17, 334:23,
340:7, 347:5,
349:19, 349:23,
349:25, 350:1,
350:8, 360:3
outage [1] - 139:22
outcome [1] - 260:9
outcomes [1] - 341:9
outdated [1] - 322:24
outer [1] - 313:4
outfall [1] - 357:25
outlet [4] - 15:6, 84:4,
85:8, 151:3
outlets [3] - 163:16,
173:9, 174:14
outlined [7] - 93:25,
103:16, 104:15,
205:2, 278:21,
290:4, 331:14
output [2] - 39:20,
229:25
outright [2] - 264:2,
339:19
outs [1] - 364:2
outside [9] - 43:12,
63:2, 76:9, 98:19,
185:1, 232:22,
332:6, 337:12
outskirts [1] - 368:8
overall [5] - 20:21,
25:18, 181:15,
212:25, 238:18
overburden [1] -
187:10
overburdened [1] -
353:23
overconfidence [1] -
258:6
overfishing [2] -
255:14, 255:19
overflow [1] - 79:7
overlap [1] - 193:10
overlaps [2] - 95:4,
95:14

<p>overlie [1] - 185:22</p> <p>overlies [1] - 36:6</p> <p>overload [1] - 318:25</p> <p>overly [1] - 275:5</p> <p>oversaw [1] - 194:1</p> <p>oversee [1] - 306:23</p> <p>oversee [2] - 62:6, 217:9</p> <p>oversight [8] - 12:2, 12:13, 18:15, 108:20, 113:21, 129:19, 220:16, 336:21</p> <p>oversize [23] - 26:7, 126:15, 138:21, 153:12, 153:16, 154:16, 154:21, 154:23, 155:3, 155:14, 162:17, 173:6, 173:14, 296:1, 296:2, 296:16, 296:23, 296:25, 297:13, 303:18, 325:25, 337:13, 337:20</p> <p>overstory [1] - 99:13</p> <p>overtops [1] - 353:9</p> <p>overview [6] - 27:16, 49:21, 50:3, 288:16, 288:24, 291:22</p> <p>overweight [4] - 117:6, 212:5, 221:2, 241:11</p> <p>overzealous [1] - 67:15</p> <p>own [18] - 14:24, 155:16, 170:1, 193:13, 206:9, 211:12, 270:18, 270:21, 305:19, 312:23, 317:17, 317:23, 324:13, 324:24, 342:17, 370:8, 378:20</p> <p>owned [25] - 8:19, 11:8, 17:22, 17:23, 17:25, 24:13, 114:9, 131:20, 155:10, 155:12, 158:6, 160:16, 161:9, 168:18, 201:12, 317:22, 325:15, 327:8, 327:9, 328:4, 332:10, 334:2, 334:6, 349:18, 350:9</p> <p>owner [10] - 4:10, 133:17, 133:20, 133:21, 133:22, 134:1, 160:10, 305:4, 336:19,</p>	<p>378:21</p> <p>owner/operator [3] - 259:4, 308:21, 369:9</p> <p>owners [2] - 301:10, 301:25</p> <p>ownership [4] - 9:18, 10:12, 12:6, 297:3</p> <p>owning [3] - 3:24, 285:23, 340:1</p> <p>owns [1] - 161:10</p> <p>oxide [3] - 242:13, 242:17, 242:18</p> <p>oxidize [1] - 356:20</p> <p>oxygen [11] - 199:12, 199:22, 240:10, 240:20, 240:22, 243:24, 243:25, 316:12, 316:16, 352:9</p>	<p>Palmer [3] - 8:5, 115:24, 116:17</p> <p>Pamela [5] - 314:19, 318:2, 318:3, 318:7, 318:9</p> <p>PANEL [1] - 1:18</p> <p>panel [4] - 130:7, 144:22, 145:1, 179:3</p> <p>Paper [7] - 9:2, 10:1, 10:3, 135:25, 151:19, 151:23, 361:16</p> <p>paper [12] - 5:23, 13:12, 26:4, 111:13, 111:17, 249:4, 264:10, 272:7, 279:20, 334:7, 335:12, 365:18</p> <p>papers [2] - 249:1, 268:21</p> <p>paperwork [1] - 127:13</p> <p>parade [1] - 320:9</p> <p>paragraph [1] - 270:11</p> <p>parallel [1] - 355:11</p> <p>parameter [1] - 199:7</p> <p>parameters [10] - 33:20, 34:5, 34:18, 83:16, 123:18, 124:2, 125:3, 189:22, 200:1, 278:23</p> <p>paraphrasing [1] - 288:10</p> <p>parcel [3] - 94:7, 289:8, 291:14</p> <p>pardon [1] - 47:5</p> <p>parent [1] - 155:11</p> <p>parenthetically [1] - 259:5</p> <p>parents' [1] - 377:20</p> <p>Parizo [1] - 365:8</p> <p>park [2] - 327:14, 335:21</p> <p>Parker [14] - 2:17, 8:16, 9:14, 137:16, 179:7, 284:13, 325:11, 328:7, 328:10, 328:12, 328:25, 332:23, 341:1, 350:15</p> <p>PARKER [21] - 1:12, 2:5, 6:16, 7:5, 14:10, 15:23, 16:21, 16:25, 17:4, 17:14, 17:21, 18:1, 18:9, 19:4, 28:24, 46:21, 46:24, 47:21, 48:3, 90:19, 90:23, 93:1, 93:3, 93:6, 113:12, 116:8,</p>	<p>121:7, 129:21, 129:25, 130:5, 131:14, 136:8, 136:13, 137:14, 138:14, 141:9, 141:11, 143:15, 144:19, 144:21, 144:25, 145:6, 146:18, 147:15, 147:21, 148:20, 148:23, 148:25, 150:6, 150:11, 151:21, 158:23, 159:4, 159:9, 159:14, 159:23, 160:2, 160:5, 161:7, 162:2, 162:10, 162:14, 163:2, 163:8, 163:24, 164:3, 168:6, 169:18, 170:10, 173:1, 174:15, 174:21, 175:8, 177:20, 178:21, 179:2, 193:19, 193:22, 193:25, 194:6, 200:6, 200:10, 202:7, 204:2, 204:10, 205:14, 206:17, 207:1, 207:5, 208:2, 208:6, 209:21, 210:7, 212:2, 213:3, 224:13, 225:6, 233:22, 236:9, 247:9, 248:6, 248:10, 249:7, 249:15, 250:3, 250:23, 255:5, 255:17, 256:2, 256:7, 256:10, 256:13, 256:17, 256:21, 262:5, 264:12, 265:8, 265:13, 265:16, 265:22, 270:10, 271:13, 271:22, 272:1, 272:5, 272:9, 273:21, 274:3, 275:25, 277:13, 277:20, 278:2, 279:24, 282:7, 282:10, 282:16, 282:18, 282:20, 282:24, 284:3, 291:23, 293:8, 297:17, 297:19, 298:6, 299:17, 299:21, 299:23, 300:15, 300:18, 300:20, 300:23,</p>	<p>301:2, 304:15, 304:24, 308:16, 308:18, 309:8, 312:14, 312:16, 313:23, 314:14, 317:18, 318:2, 320:1, 324:4, 325:10, 328:7, 328:10, 332:19, 332:20, 332:21, 335:2, 339:2, 340:5, 340:19, 343:11, 345:22, 347:1, 347:16, 348:12, 348:15, 350:11, 350:19, 353:17, 354:18, 354:22, 355:13, 357:18, 357:20, 358:12, 358:16, 360:20, 360:24, 363:6, 363:8, 363:10, 365:6, 365:11, 369:6, 370:9, 372:8, 375:4, 375:6, 376:24, 378:16, 380:23, 385:2, 385:24, 386:2, 386:5</p> <p>Parker's [1] - 65:16</p> <p>part [70] - 4:14, 15:11, 16:9, 24:7, 25:18, 37:22, 37:23, 43:14, 45:12, 49:12, 50:19, 51:2, 52:11, 53:16, 57:1, 68:4, 74:13, 75:13, 80:14, 82:1, 83:21, 87:18, 91:23, 94:1, 96:4, 97:21, 109:21, 111:25, 147:14, 149:24, 190:13, 192:19, 197:25, 198:7, 198:14, 198:24, 199:19, 204:24, 207:6, 215:13, 216:6, 218:13, 229:3, 229:25, 237:22, 255:6, 260:6, 267:19, 272:3, 291:15, 291:17, 294:14, 296:17, 304:17, 315:16, 317:6, 317:7, 318:14, 318:18, 319:20, 319:24, 326:8, 329:6, 332:4, 337:17, 337:24, 369:15, 379:20</p> <p>partial [1] - 336:21</p> <p>partially [3] - 93:11,</p>
P				
<p>p.m [4] - 5:7, 118:1, 341:6, 348:25</p> <p>P.M [1] - 284:2</p> <p>Pacific [7] - 10:9, 10:16, 253:9, 356:5, 356:7, 356:10, 356:14</p> <p>package [1] - 280:8</p> <p>pad [1] - 240:18</p> <p>page [40] - 126:25, 130:22, 131:16, 131:20, 132:3, 133:10, 134:9, 135:6, 152:10, 152:21, 152:25, 153:1, 153:9, 157:3, 168:15, 179:8, 181:3, 183:2, 183:7, 184:2, 184:19, 185:6, 187:2, 221:17, 228:24, 244:15, 258:8, 259:3, 262:12, 263:11, 270:12, 271:14, 271:25, 272:5, 272:6, 272:10, 276:4, 278:8, 278:20, 280:16</p> <p>Page [2] - 185:21, 186:5</p> <p>pages [1] - 272:24</p> <p>paid [4] - 11:19, 137:19, 137:23, 138:3</p> <p>paint [4] - 196:5, 205:22, 224:1, 321:13</p>				

<p>99:8, 193:10</p> <p>participate [1] - 4:9</p> <p>participating [1] - 266:17</p> <p>particles [1] - 202:22</p> <p>particular [19] - 14:5, 31:4, 37:22, 43:18, 50:23, 53:5, 55:23, 57:1, 60:3, 67:17, 68:7, 169:13, 183:3, 191:2, 207:23, 226:8, 306:14, 337:16, 357:4</p> <p>particularly [5] - 53:7, 180:7, 226:6, 331:19, 373:10</p> <p>parties [6] - 3:23, 4:12, 6:10, 6:11, 255:8, 285:22</p> <p>partner [4] - 7:16, 333:12, 376:7, 376:10</p> <p>partners [1] - 376:14</p> <p>partnership [3] - 293:23, 295:17, 296:18</p> <p>parts [14] - 58:16, 58:19, 66:9, 85:22, 125:11, 193:4, 229:8, 239:15, 239:19, 239:24, 248:16, 248:19, 256:20, 267:15</p> <p>party [3] - 108:13, 108:19, 221:9</p> <p>pass [9] - 159:23, 179:10, 217:7, 217:8, 242:18, 324:12, 330:24, 363:7, 363:9</p> <p>passage [3] - 266:5, 266:10, 301:25</p> <p>passed [2] - 331:25, 372:17</p> <p>passes [4] - 127:17, 159:22, 321:12, 367:10</p> <p>passing [2] - 183:3, 324:17</p> <p>passion [2] - 366:2, 366:6</p> <p>passionate [2] - 345:25, 346:1</p> <p>past [10] - 54:15, 95:19, 97:8, 114:11, 172:14, 180:25, 273:10, 298:18, 334:12, 374:6</p> <p>path [3] - 112:17, 189:10, 189:12</p>	<p>pathogenic [1] - 353:6</p> <p>patience [1] - 332:25</p> <p>Patricia [1] - 336:24</p> <p>pattern [4] - 38:2, 62:20, 231:11, 326:8</p> <p>patterns [6] - 39:16, 39:19, 79:4, 230:16, 238:23, 275:2</p> <p>Paul [4] - 335:3, 340:19, 341:1, 360:21</p> <p>paved [1] - 238:9</p> <p>paving [1] - 379:16</p> <p>pay [2] - 293:24, 371:11</p> <p>paying [2] - 159:21, 342:4</p> <p>payment [3] - 134:21, 134:25, 135:1</p> <p>payments [4] - 134:11, 134:14, 135:2</p> <p>pays [1] - 149:17</p> <p>PBD [4] - 132:14, 153:20, 154:2, 172:2</p> <p>PCBs [1] - 263:25</p> <p>PCPs [1] - 351:18</p> <p>PDF [1] - 348:24</p> <p>peak [4] - 116:7, 116:10, 227:7, 263:14</p> <p>peatland [2] - 105:7, 106:4</p> <p>peatlands [2] - 93:19, 105:11</p> <p>pellets [2] - 242:14, 305:22</p> <p>penalize [1] - 117:9</p> <p>penalizing [2] - 162:23, 163:21</p> <p>penalties [4] - 220:18, 220:21, 221:1, 241:11</p> <p>penetration [1] - 76:10</p> <p>penetrations [3] - 76:7, 76:23, 182:12</p> <p>Pennsylvania [1] - 193:14</p> <p>Penobscot [45] - 24:23, 112:12, 112:20, 168:25, 251:2, 252:11, 252:12, 252:16, 253:25, 257:1, 257:4, 257:6, 257:8, 257:12, 257:25, 260:24, 263:8, 266:1, 266:6, 267:11, 267:25,</p>	<p>276:7, 280:19, 301:6, 315:13, 318:11, 319:1, 319:17, 321:17, 321:18, 325:2, 336:10, 336:11, 346:13, 350:23, 351:8, 351:19, 352:4, 352:6, 352:13, 352:17, 353:2, 353:8, 357:23, 365:25</p> <p>Penobscots [1] - 315:17</p> <p>people [74] - 14:19, 74:1, 75:22, 136:21, 137:1, 145:1, 160:20, 175:5, 180:25, 197:3, 206:1, 212:19, 216:23, 223:18, 237:2, 249:18, 260:13, 288:4, 288:6, 288:13, 292:3, 292:9, 293:2, 294:6, 298:19, 299:3, 299:8, 299:14, 307:19, 307:25, 309:18, 310:4, 310:17, 311:7, 311:21, 312:1, 312:2, 312:6, 314:23, 315:4, 315:8, 315:10, 316:1, 319:13, 319:17, 320:17, 322:6, 322:10, 322:12, 322:24, 323:2, 323:8, 340:23, 343:19, 344:7, 344:19, 351:6, 352:6, 352:14, 353:21, 354:6, 354:13, 355:21, 360:3, 365:21, 367:7, 368:9, 370:22, 371:14, 371:23, 375:22, 379:21, 384:16</p> <p>people's [3] - 325:3, 343:22, 345:8</p> <p>per [37] - 35:24, 36:1, 38:18, 38:25, 62:12, 69:20, 69:21, 71:22, 71:23, 78:17, 114:12, 115:9, 115:13, 116:6, 116:10, 116:13, 116:15, 125:11, 141:25, 142:1,</p>	<p>239:15, 239:19, 239:24, 248:16, 248:19, 254:6, 254:7, 277:4, 279:3, 279:5, 279:9, 279:11, 351:21, 357:5, 357:7, 357:8, 374:8</p> <p>PERC [14] - 135:19, 148:13, 154:19, 155:24, 162:18, 200:25, 201:1, 301:16, 301:24, 302:15, 303:6, 304:16, 338:17, 338:21</p> <p>perceived [1] - 260:16</p> <p>percent [53] - 22:1, 24:5, 24:24, 24:25, 26:3, 27:23, 28:1, 65:17, 74:16, 75:11, 86:8, 86:10, 86:12, 100:16, 100:21, 101:2, 114:13, 145:10, 145:13, 145:14, 148:18, 152:15, 154:1, 154:11, 157:15, 157:21, 161:21, 166:9, 171:24, 191:11, 201:22, 212:13, 242:6, 242:10, 263:19, 264:13, 272:14, 279:14, 294:18, 294:24, 295:1, 301:22, 316:1, 316:2, 316:7, 332:11, 332:15, 340:8, 340:9, 340:10, 359:13, 373:4, 373:6</p> <p>percentage [7] - 16:18, 16:20, 16:22, 154:9, 181:15, 182:24, 215:5</p> <p>percentages [3] - 141:18, 142:5, 142:6</p> <p>perennial [2] - 110:15, 111:4</p> <p>Perfect [1] - 358:15</p> <p>perfect [1] - 336:3</p> <p>perfectly [2] - 210:6, 357:16</p> <p>perforated [1] - 187:4</p> <p>perform [2] - 89:12, 105:25</p> <p>performance [10] - 42:8, 49:8, 55:25, 56:2, 79:23, 123:19,</p>	<p>198:4, 268:13, 272:18, 275:22</p> <p>Performance [2] - 90:12, 189:25</p> <p>performed [8] - 22:19, 91:23, 92:9, 92:16, 94:4, 94:8, 98:4, 106:24</p> <p>perhaps [4] - 138:20, 158:12, 164:12, 236:14</p> <p>perimeter [8] - 41:23, 45:12, 45:15, 50:9, 62:17, 98:22, 183:19</p> <p>perimeters [1] - 32:13</p> <p>period [18] - 35:8, 38:20, 50:15, 60:20, 61:3, 69:6, 77:23, 79:2, 134:10, 143:20, 150:2, 182:5, 212:16, 228:3, 228:14, 235:1, 292:7</p> <p>periodic [1] - 120:6</p> <p>periodically [1] - 6:2</p> <p>periphery [1] - 267:13</p> <p>permanent [3] - 77:8, 77:9, 223:15</p> <p>permanently [2] - 111:7, 242:22</p> <p>permeabilities [1] - 39:2</p> <p>permeability [18] - 33:15, 33:23, 33:25, 34:2, 34:3, 35:12, 35:13, 35:14, 35:19, 35:22, 35:23, 36:1, 36:4, 38:23, 43:16, 46:13, 69:22, 71:20</p> <p>permission [1] - 226:18</p> <p>Permit [4] - 100:19, 101:3, 102:13, 278:12</p> <p>permit [11] - 48:16, 49:12, 50:20, 126:24, 153:16, 162:11, 222:6, 322:23, 342:8, 348:9, 350:4</p> <p>permits [6] - 6:4, 221:19, 221:20, 221:23, 222:5, 286:20</p> <p>permitted [13] - 10:4, 14:2, 55:2, 104:19, 126:18, 146:10, 182:4, 277:24, 279:10, 279:15, 289:16, 290:17,</p>
---	--	--	--	---

<p>335:15 permitting [3] - 18:16, 51:2, 265:5 Perry [1] - 109:16 person [17] - 4:18, 130:8, 216:13, 216:14, 216:20, 217:4, 224:18, 286:13, 287:22, 287:24, 293:4, 293:5, 298:1, 298:8, 330:1, 355:6, 371:2 personally [3] - 67:13, 307:14, 378:11 personnel [2] - 62:6, 89:11 persons [8] - 3:24, 4:1, 4:2, 5:13, 285:23, 285:25, 286:1, 288:1 perspective [5] - 230:11, 251:17, 251:20, 362:11, 376:7 pertains [1] - 218:3 pertinent [1] - 322:13 Pete [1] - 365:7 Peter [5] - 318:3, 320:1, 320:2, 320:4, 320:6 Pharmaceutical [1] - 323:14 phase [3] - 341:18, 341:19, 341:21 phased [2] - 290:10, 313:20 phenols [1] - 352:11 phenomenal [1] - 237:18 photo [1] - 111:2 photogrammetry [1] - 179:20 photograph [1] - 80:18 photographs [1] - 245:22 phrase [2] - 22:6, 329:20 phrasing [1] - 276:9 physical [7] - 53:1, 72:10, 72:13, 72:14, 72:15, 215:21, 321:10 physically [1] - 162:4 physics [2] - 29:16, 269:17 physiological [1] - 253:5 physiology [2] - 253:11, 315:25</p>	<p>pick [10] - 74:24, 74:25, 173:21, 182:5, 184:16, 195:22, 307:19, 368:6, 369:20, 379:4 picked [4] - 58:11, 58:12, 63:3, 173:25 picking [1] - 313:11 pictorial [1] - 256:23 picture [8] - 61:18, 65:11, 67:9, 71:12, 72:3, 73:17, 128:17, 189:3 pictures [6] - 65:6, 65:13, 67:3, 106:2, 217:2, 255:4 piece [8] - 52:8, 72:14, 80:25, 123:3, 195:4, 227:1, 228:8, 303:10 pieces [3] - 41:3, 65:24, 196:3 Pierce [2] - 7:15, 342:13 Pike [1] - 379:15 piled [1] - 336:6 piling [1] - 309:21 pill [1] - 371:13 Pine [10] - 196:10, 200:15, 200:23, 201:10, 201:24, 202:4, 300:1, 327:17, 327:19, 361:17 pink [2] - 95:7, 291:7 pipe [25] - 67:19, 67:21, 68:23, 76:8, 76:12, 77:13, 78:4, 78:5, 78:7, 78:8, 81:25, 83:4, 83:6, 187:5, 187:9, 187:21, 187:22, 229:4, 234:20, 317:12, 369:16 pipes [22] - 45:14, 62:21, 62:25, 63:25, 66:8, 68:16, 72:5, 77:1, 77:19, 80:22, 80:23, 81:4, 81:13, 82:1, 82:9, 82:11, 82:13, 82:16, 82:17, 83:3, 187:8 pipng [2] - 77:25, 187:4 pits [8] - 31:24, 32:2, 33:10, 51:25, 52:2, 368:4, 368:12, 370:20 placard [1] - 369:13 place [26] - 11:23, 21:15, 47:3, 77:19,</p>	<p>81:10, 89:23, 116:25, 125:15, 131:9, 151:7, 152:1, 155:17, 175:16, 202:25, 208:3, 287:20, 302:14, 303:20, 309:19, 321:6, 339:24, 351:19, 371:17, 372:6, 373:17, 382:6 placed [12] - 71:9, 73:6, 73:19, 73:20, 74:9, 81:11, 81:20, 86:22, 183:16, 187:21, 219:19, 324:11 placement [4] - 81:10, 121:11, 121:22, 240:17 places [12] - 73:11, 74:14, 165:6, 258:24, 260:7, 271:8, 306:6, 306:16, 307:21, 324:11, 325:22, 367:16 placing [4] - 72:19, 121:23, 162:22, 182:13 plan [28] - 7:6, 21:11, 27:16, 27:20, 92:5, 101:21, 101:24, 102:2, 102:15, 103:22, 107:12, 109:1, 113:9, 119:19, 119:20, 129:3, 135:11, 135:14, 166:21, 209:10, 243:9, 291:16, 291:17, 348:9, 349:14, 350:7, 353:10, 381:1 plane [1] - 36:18 planet [1] - 344:3 planner [1] - 8:23 Planning [5] - 10:12, 11:24, 12:1, 327:16, 342:12 planning [4] - 9:9, 91:8, 91:10, 268:15 plans [4] - 89:2, 89:6, 89:7, 338:3 plant [36] - 26:12, 28:4, 126:16, 145:16, 145:21, 146:2, 165:18, 170:1, 170:5, 192:22, 257:23, 257:24, 258:11, 263:5, 277:10,</p>	<p>277:25, 279:10, 279:25, 300:5, 301:5, 304:4, 317:11, 319:7, 323:21, 327:7, 334:19, 338:17, 338:19, 338:21, 338:23, 356:8, 356:10, 356:11, 358:4, 359:7 Plant [1] - 300:1 plants [9] - 146:12, 246:11, 257:22, 276:6, 323:15, 349:24, 353:21, 354:13, 359:11 plastic [5] - 72:15, 74:21, 124:25, 230:13, 299:12 plastics [2] - 295:16, 384:19 play [1] - 25:18 plays [1] - 64:9 plea [1] - 342:25 pleasant [1] - 318:21 pleased [2] - 301:9, 318:15 pleasure [2] - 8:16, 9:11 plug [1] - 311:17 plus [5] - 77:22, 103:12, 107:17, 170:25, 269:15 podium [1] - 287:20 point [46] - 16:3, 43:24, 57:9, 62:13, 63:5, 69:21, 71:22, 86:23, 88:21, 94:17, 99:10, 120:12, 133:10, 135:22, 136:1, 149:3, 155:19, 157:19, 173:19, 174:2, 174:9, 175:18, 177:5, 189:11, 195:9, 219:2, 228:9, 231:13, 248:18, 261:1, 268:6, 269:25, 271:21, 292:8, 306:1, 309:13, 311:25, 325:15, 327:24, 329:4, 334:5, 337:12, 359:3, 360:8, 360:15 pointed [4] - 148:16, 239:6, 277:2, 325:24 pointing [2] - 109:7, 111:5 points [11] - 33:17,</p>	<p>49:16, 214:10, 252:6, 253:13, 294:11, 333:19, 333:24, 354:6, 364:21 poison [1] - 382:18 poker [1] - 356:8 policies [4] - 303:18, 341:4, 343:5, 345:2 policy [17] - 111:22, 117:2, 117:6, 117:7, 117:9, 117:12, 149:24, 149:25, 212:14, 212:23, 212:24, 213:1, 241:19, 241:20, 325:6, 325:22, 328:13 Pollutant [1] - 278:11 pollute [2] - 353:20, 354:11 polluted [1] - 353:14 pollution [8] - 255:13, 255:18, 267:18, 267:20, 345:2, 347:14, 348:1, 377:10 Pollution [1] - 374:16 polyethylene [3] - 66:22, 68:17, 80:25 pond [11] - 84:18, 84:19, 85:16, 85:20, 85:21, 106:11, 106:12, 356:7, 356:13, 357:25 Pond [1] - 312:22 ponds [11] - 50:10, 53:9, 84:14, 84:16, 84:18, 84:19, 85:1, 85:7, 85:10, 98:18, 290:8 pool [35] - 91:10, 91:17, 92:3, 94:4, 94:5, 94:10, 94:11, 94:21, 94:23, 94:24, 94:25, 95:3, 95:10, 95:11, 95:15, 95:18, 95:20, 96:17, 100:8, 100:14, 100:20, 100:22, 100:23, 101:2, 102:11, 102:12, 104:3, 106:9, 106:15, 106:16, 106:19, 106:21, 106:24, 219:1, 291:19 pools [52] - 94:15, 94:17, 94:18, 94:19, 94:22, 95:7, 95:16, 95:18, 96:16, 100:5,</p>
---	--	--	--	--

<p>100:6, 100:9, 100:11, 100:13, 102:9, 102:15, 102:18, 103:3, 103:4, 103:5, 103:7, 103:9, 103:11, 103:17, 103:18, 104:2, 104:4, 104:22, 104:23, 104:25, 105:2, 105:9, 106:19, 106:25, 107:1, 107:2, 107:3, 217:17, 217:24, 218:2, 218:20, 218:24, 219:4, 219:5, 219:8, 267:15, 280:10, 291:8, 317:23, 336:9</p> <p>poor [1] - 321:5</p> <p>pop [2] - 188:14, 251:6</p> <p>pops [1] - 222:21</p> <p>populated [1] - 222:25</p> <p>population [3] - 257:3, 263:1, 352:21</p> <p>populations [2] - 267:6, 275:13</p> <p>pore [2] - 39:5, 39:7</p> <p>pores [1] - 39:9</p> <p>porosity [2] - 39:4, 39:5</p> <p>porous [1] - 37:9</p> <p>portion [12] - 7:3, 37:10, 64:1, 140:4, 146:5, 198:20, 208:4, 230:1, 230:5, 258:17, 289:19, 380:3</p> <p>portions [2] - 21:1, 257:13</p> <p>Portland [2] - 359:22, 360:5</p> <p>pose [1] - 274:16</p> <p>posed [1] - 267:3</p> <p>poses [1] - 354:12</p> <p>position [9] - 8:20, 12:7, 132:1, 132:12, 134:7, 156:19, 163:25, 279:25, 288:11</p> <p>positions [1] - 8:21</p> <p>positive [1] - 149:18</p> <p>possessing [1] - 344:23</p> <p>possibility [2] - 227:14, 274:17</p> <p>possible [16] - 20:11, 20:12, 28:19, 28:21, 121:12, 156:23,</p>	<p>184:9, 190:16, 240:15, 241:2, 309:6, 344:6, 375:19, 376:14, 376:16, 379:10</p> <p>possibly [2] - 326:10, 335:20</p> <p>post [10] - 77:23, 84:20, 85:3, 128:15, 131:11, 131:12, 131:19, 150:2, 158:13, 158:18</p> <p>post-closure [4] - 77:23, 131:11, 131:12, 150:2</p> <p>post-development [2] - 84:20, 85:3</p> <p>post-hearing [2] - 158:13, 158:18</p> <p>posted [1] - 309:19</p> <p>posterity [1] - 344:17</p> <p>posters [1] - 348:20</p> <p>potential [22] - 43:5, 56:11, 72:16, 119:16, 122:17, 145:16, 145:18, 149:8, 157:22, 158:1, 183:5, 190:25, 192:19, 228:13, 239:12, 240:5, 240:22, 264:22, 267:5, 267:9, 287:5</p> <p>potentially [6] - 128:2, 143:11, 163:13, 173:21, 241:5, 352:6</p> <p>pound [1] - 212:12</p> <p>pounds [2] - 323:21, 323:22</p> <p>pouring [1] - 60:10</p> <p>power [4] - 80:9, 191:19, 301:19, 302:24</p> <p>powerful [1] - 191:21</p> <p>practicable [13] - 20:9, 20:18, 21:25, 22:12, 26:2, 26:14, 113:8, 153:25, 154:6, 154:12, 157:14, 157:24, 185:14</p> <p>practical [3] - 28:9, 119:3, 142:14</p> <p>practice [7] - 48:12, 48:21, 111:25, 115:19, 118:23, 142:19, 340:11</p> <p>practices [7] - 115:17, 120:2, 120:4, 120:16, 120:24, 129:4, 176:19</p>	<p>Practices [1] - 84:2</p> <p>practicing [2] - 327:25, 351:6</p> <p>pre [18] - 4:13, 4:16, 4:20, 8:3, 85:2, 234:23, 252:7, 254:24, 261:5, 261:20, 261:22, 262:5, 264:4, 271:14, 276:20, 286:10, 286:15, 351:4</p> <p>pre-development [1] - 85:2</p> <p>pre-existing [1] - 351:4</p> <p>pre-filed [16] - 4:13, 4:16, 4:20, 8:3, 234:23, 252:7, 254:24, 261:5, 261:20, 261:22, 262:5, 264:4, 271:14, 276:20, 286:10, 286:15</p> <p>preamble [1] - 344:14</p> <p>preceded [1] - 320:14</p> <p>precedent [2] - 343:25, 349:9</p> <p>precious [1] - 324:19</p> <p>preciously [1] - 152:6</p> <p>precipitation [12] - 213:8, 213:12, 214:1, 230:14, 269:20, 270:5, 271:2, 271:3, 271:18, 273:8, 275:3, 374:2</p> <p>precisely [1] - 36:19</p> <p>precluded [1] - 65:22</p> <p>predetermined [1] - 238:21</p> <p>predict [1] - 60:19</p> <p>predictability [1] - 269:23</p> <p>predicted [1] - 269:17</p> <p>predicting [1] - 229:23</p> <p>prediction [1] - 272:18</p> <p>predictions [2] - 56:20, 235:18</p> <p>predicts [1] - 230:4</p> <p>predominant [3] - 238:22, 239:4, 246:5</p> <p>predominantly [2] - 199:1, 200:24</p> <p>prefer [1] - 138:17</p> <p>preferred [2] - 26:23, 250:7</p> <p>pregnant [2] - 351:21, 351:22</p> <p>preliminary [1] -</p>	<p>108:25</p> <p>premise [2] - 259:22, 339:25</p> <p>preparation [1] - 48:16</p> <p>prepared [5] - 73:3, 80:1, 89:2, 259:4, 342:21</p> <p>preparing [1] - 296:20</p> <p>preponderance [1] - 261:15</p> <p>prescribe [2] - 59:10, 59:16</p> <p>prescriptive [1] - 222:7</p> <p>presence [2] - 144:16, 321:10</p> <p>PRESENT [2] - 1:18, 1:22</p> <p>present [8] - 8:1, 37:4, 107:18, 197:14, 197:16, 273:12, 280:3, 303:7</p> <p>presentation [13] - 7:9, 30:7, 47:1, 49:3, 52:23, 53:24, 129:23, 190:6, 193:1, 249:16, 256:14, 285:10, 288:5</p> <p>presentations [1] - 262:2</p> <p>presented [4] - 16:3, 149:9, 234:24, 268:19</p> <p>presenters [2] - 168:9, 250:10</p> <p>presenting [2] - 44:5, 321:22</p> <p>Preservation [1] - 358:6</p> <p>preservation [47] - 101:8, 101:11, 101:12, 101:14, 101:17, 102:3, 102:4, 102:24, 103:1, 103:24, 104:1, 104:9, 104:13, 104:17, 104:21, 105:3, 106:3, 106:23, 107:10, 107:16, 107:18, 107:20, 107:22, 108:5, 108:10, 111:7, 203:20, 204:24, 205:3, 205:9, 218:22, 219:6, 219:8, 219:17, 219:24, 224:15,</p>	<p>247:4, 280:8, 280:18, 280:21, 280:25, 281:2, 281:5, 281:12, 281:14, 281:22, 291:14</p> <p>preserve [5] - 103:23, 220:6, 220:9, 325:16, 328:1</p> <p>preserved [4] - 101:15, 107:24, 219:13, 219:14</p> <p>preserving [2] - 103:23, 280:17</p> <p>presiding [2] - 2:19, 284:14</p> <p>pressure [10] - 78:6, 143:25, 144:3, 144:9, 160:14, 210:5, 226:22, 233:20, 233:24, 246:14</p> <p>pressures [6] - 187:11, 199:23, 215:25, 227:10, 227:11, 236:22</p> <p>presumably [4] - 225:12, 329:23, 358:1, 358:2</p> <p>pretend [2] - 300:25, 301:1</p> <p>pretending [1] - 300:23</p> <p>pretty [14] - 65:9, 154:13, 169:10, 189:4, 203:8, 220:20, 268:8, 292:10, 318:23, 320:12, 320:16, 349:6, 371:12</p> <p>prevent [7] - 120:2, 139:14, 147:2, 324:17, 331:5, 348:1, 366:18</p> <p>preventing [1] - 331:2</p> <p>prevents [1] - 378:1</p> <p>previous [7] - 16:12, 51:2, 104:17, 228:5, 250:9, 257:10, 349:4</p> <p>previously [5] - 24:21, 28:7, 205:8, 205:12, 342:14</p> <p>Price [1] - 11:7</p> <p>priceless [1] - 328:2</p> <p>prices [1] - 310:20</p> <p>pricing [1] - 308:5</p> <p>pride [1] - 376:15</p> <p>primarily [17] - 9:25, 12:13, 15:4, 15:9, 22:20, 25:23, 30:9,</p>
---	---	--	---	---

93:12, 96:16, 97:2, 99:20, 126:12, 137:25, 313:11, 316:11, 356:8, 375:14

primary [15] - 27:25, 44:25, 45:4, 45:8, 68:8, 70:11, 82:6, 116:17, 184:4, 208:18, 216:2, 242:7, 243:4, 247:22, 248:2

principal [8] - 30:18, 36:21, 48:12, 96:8, 96:15, 96:19, 96:24, 246:25

principles [1] - 260:2

printed [1] - 68:6

printout [1] - 205:1

priorities [2] - 14:16, 119:17

prioritizing [1] - 135:12

priority [2] - 19:21, 135:19

private [3] - 8:22, 302:10, 304:22

privilege [1] - 249:22

privy [1] - 361:19

proactive [4] - 118:4, 125:5, 125:12, 363:20

probability [5] - 191:12, 271:17, 271:19, 272:13, 272:15

problem [16] - 42:7, 42:14, 56:9, 66:1, 146:8, 173:23, 214:14, 229:14, 229:17, 248:19, 306:22, 307:10, 312:1, 312:15, 316:23, 355:12

problematic [1] - 332:3

problems [11] - 65:7, 76:13, 108:21, 306:15, 330:3, 335:17, 342:23, 349:21, 371:8, 381:11, 383:6

procedure [5] - 6:17, 206:8, 206:9, 287:11, 288:17

Procedures [2] - 3:15, 285:14

procedures [5] - 115:17, 125:16, 182:11, 191:5, 240:4

proceed [1] - 121:6

proceeding [3] - 4:8, 7:2, 265:19

process [60] - 10:14, 21:14, 25:2, 27:8, 49:4, 61:25, 80:15, 97:16, 97:25, 102:1, 108:23, 108:24, 109:21, 110:2, 121:15, 125:13, 126:13, 126:21, 127:2, 127:6, 129:18, 135:18, 139:23, 145:10, 146:2, 146:3, 150:22, 154:19, 157:12, 161:20, 161:23, 162:18, 172:3, 200:25, 205:17, 221:3, 221:17, 222:11, 223:7, 223:19, 223:21, 239:18, 243:1, 243:5, 243:6, 243:20, 244:10, 244:11, 247:1, 302:22, 309:24, 321:5, 339:25, 341:10, 343:1, 352:4, 362:13, 363:25, 364:2, 380:10

processables [1] - 304:3

processed [16] - 22:2, 26:16, 140:12, 150:23, 151:1, 151:2, 162:5, 162:15, 163:19, 177:25, 178:16, 186:25, 257:21, 276:13, 327:12, 338:21

processes [1] - 252:1

processing [43] - 20:3, 20:8, 24:18, 25:3, 25:4, 25:22, 25:24, 26:8, 26:9, 28:15, 126:15, 135:20, 140:4, 140:5, 140:9, 153:23, 154:5, 155:24, 157:11, 157:16, 157:20, 161:3, 161:4, 161:15, 163:13, 163:21, 164:7, 164:10, 166:24, 167:6, 167:7, 167:9, 174:1, 175:10,

175:13, 176:12, 176:16, 177:15, 186:8, 186:16, 186:23, 289:25, 332:14

produce [4] - 254:17, 302:25, 309:15, 337:19

produced [8] - 22:9, 26:3, 199:6, 199:13, 201:2, 254:6, 337:21, 373:24

producer [1] - 221:25

produces [4] - 165:7, 175:13, 309:24, 358:5

producing [1] - 374:19

product [2] - 73:5, 175:14

production [2] - 96:21, 305:20

productive [2] - 7:8, 292:14

products [3] - 122:1, 321:2, 354:9

professional [6] - 18:21, 29:3, 29:18, 48:8, 113:15, 259:2

professionalism [1] - 361:25

professionally [2] - 350:18, 363:3

professionals [2] - 54:12, 90:16

Professor [1] - 323:18

professor [2] - 250:15, 268:22

profile [9] - 13:2, 127:1, 221:16, 222:20, 222:21, 222:25, 223:1, 223:4, 223:11

profits [1] - 323:5

program [17] - 23:8, 30:14, 89:10, 117:7, 123:14, 126:22, 127:5, 181:12, 198:7, 198:25, 216:7, 221:11, 222:23, 222:24, 230:8, 238:19, 295:8

Program [1] - 351:17

programs [12] - 20:4, 21:4, 21:7, 21:15, 23:20, 27:13, 28:15, 132:19, 165:16, 295:15, 296:8, 375:1

progresses [1] - 251:19

progression [1] - 235:7

progressively [1] - 88:10

prohibit [3] - 142:20, 337:11, 340:11

prohibited [3] - 130:24, 219:24, 219:25

Prohibitive [1] - 90:11

prohibitive [1] - 49:6

prohibits [1] - 219:21

project [45] - 4:2, 6:23, 7:14, 48:10, 49:15, 49:22, 51:1, 51:3, 56:1, 74:13, 83:10, 84:5, 91:5, 91:19, 91:24, 92:4, 94:5, 95:14, 95:15, 95:20, 98:2, 98:21, 99:4, 99:12, 101:6, 104:23, 109:15, 111:23, 113:3, 113:5, 167:18, 217:15, 218:13, 227:25, 247:3, 262:14, 262:17, 286:1, 286:14, 286:22, 288:21, 321:2, 321:24, 322:14, 323:6

Project [4] - 252:13, 266:1, 266:7, 318:16

project's [1] - 97:22

projected [2] - 83:13, 359:4

projections [1] - 83:14

projector [1] - 126:25

projects [4] - 18:17, 55:1, 91:8, 202:14

prominent [1] - 232:25

promised [1] - 335:11

promote [2] - 21:17, 344:15

promotes [1] - 280:18

promoting [1] - 19:11

promptly [1] - 249:11

promulgated [1] - 211:21

pronounce [1] - 375:7

pronounced [1] - 3:10

proof [1] - 271:6

propagation [1] - 346:19

proper [3] - 121:2, 127:15, 128:7

properly [13] - 31:2, 40:23, 122:16, 127:8, 127:20,

148:13, 196:15, 206:16, 232:8, 233:6, 234:15, 301:11, 370:23

properties [5] - 42:22, 43:7, 89:18, 211:24, 211:25

property [22] - 3:24, 4:10, 31:14, 43:23, 43:25, 55:17, 55:18, 103:25, 104:16, 110:10, 112:15, 220:2, 257:13, 257:16, 257:17, 259:25, 267:14, 285:23, 294:2, 330:8, 336:10, 344:24

proponent [1] - 251:10

proportional [1] - 330:11

proposal [4] - 290:6, 290:21, 341:15, 341:17

proposals [1] - 10:17

propose [1] - 227:5

Proposed [1] - 6:24

PROPOSED [1] - 1:6

proposed [39] - 21:5, 28:2, 30:14, 32:14, 52:20, 66:24, 92:3, 99:2, 100:8, 126:8, 148:21, 156:14, 205:3, 225:21, 229:25, 233:19, 235:1, 258:2, 280:18, 286:20, 286:23, 288:24, 290:2, 290:19, 290:25, 291:1, 291:13, 291:16, 291:20, 328:16, 328:18, 330:10, 330:23, 336:23, 337:8, 342:9, 342:11, 353:15, 354:10

proposes [1] - 280:8

proposing [4] - 53:16, 102:22, 103:23, 148:10

protect [18] - 25:7, 30:5, 46:8, 49:9, 65:19, 67:7, 67:8, 72:9, 81:1, 108:6, 108:7, 323:24, 345:17, 346:11, 346:23, 347:3, 347:9, 352:13

<p>protected [20] - 102:5, 104:18, 104:19, 108:3, 108:10, 111:8, 193:6, 204:24, 205:6, 205:8, 205:11, 252:9, 257:17, 258:3, 262:9, 262:18, 263:2, 287:7, 325:3, 351:7</p> <p>protecting [2] - 40:17, 344:23</p> <p>Protection [17] - 2:2, 2:7, 2:15, 2:18, 3:17, 9:6, 49:12, 50:20, 55:4, 92:10, 101:10, 284:9, 285:16, 286:20, 289:23, 291:18, 328:12</p> <p>protection [11] - 57:6, 72:25, 84:3, 84:4, 111:19, 112:7, 112:8, 127:10, 183:9, 220:14, 346:19</p> <p>PROTECTION [1] - 1:2</p> <p>protective [2] - 119:5, 320:22</p> <p>protects [1] - 73:19</p> <p>protest [1] - 321:4</p> <p>protocol [3] - 94:10, 94:12, 196:21</p> <p>protocols [2] - 92:21, 92:25</p> <p>proud [3] - 167:13, 298:18, 309:11</p> <p>proven [4] - 57:4, 304:20, 353:13, 376:20</p> <p>proverbial [1] - 321:13</p> <p>provide [56] - 11:9, 12:21, 13:6, 19:10, 20:1, 21:2, 27:6, 32:7, 51:5, 53:4, 55:22, 68:3, 69:24, 76:1, 80:13, 90:5, 92:6, 96:6, 96:9, 96:23, 97:11, 101:8, 101:15, 102:8, 103:13, 105:14, 105:19, 106:2, 106:22, 110:6, 111:18, 131:17, 136:4, 140:15, 156:14, 176:1, 187:14, 201:13, 201:17, 203:24, 205:10, 211:4, 218:10, 220:10, 220:14, 220:23,</p>	<p>246:24, 258:22, 271:4, 293:25, 301:14, 304:20, 313:6, 331:13, 344:15, 346:18</p> <p>provided [20] - 12:17, 34:11, 35:1, 94:22, 96:12, 96:17, 96:20, 100:19, 106:17, 107:12, 109:23, 126:1, 133:12, 156:16, 168:14, 218:7, 220:11, 255:7, 256:23, 321:8</p> <p>provider [1] - 374:8</p> <p>provides [23] - 26:17, 27:15, 32:22, 33:7, 34:14, 34:21, 35:10, 62:25, 63:19, 64:20, 68:2, 72:10, 72:15, 81:12, 95:23, 105:5, 200:18, 200:21, 227:12, 233:5, 246:22, 246:23, 246:25</p> <p>providing [11] - 25:19, 72:24, 104:8, 104:11, 107:9, 107:19, 108:19, 111:8, 160:20, 326:15, 376:15</p> <p>proving [1] - 353:16</p> <p>provision [1] - 20:25</p> <p>provisions [3] - 21:9, 21:10, 28:11</p> <p>proximity [6] - 263:4, 264:20, 267:12, 267:25, 333:3, 347:7</p> <p>PRRP [1] - 267:21</p> <p>prudent [1] - 211:2</p> <p>PTL [1] - 200:18</p> <p>PTL's [1] - 326:18</p> <p>public [47] - 5:7, 5:8, 5:9, 5:20, 7:12, 8:22, 13:16, 17:3, 17:5, 18:7, 51:1, 117:11, 121:17, 132:9, 132:10, 152:22, 152:24, 153:10, 155:5, 156:11, 156:15, 157:3, 158:14, 164:6, 249:12, 283:1, 283:2, 289:19, 289:22, 292:16, 296:21, 326:18, 331:13, 332:1, 333:1, 336:22, 337:9, 338:13, 339:23, 341:14,</p>	<p>342:6, 342:7, 358:21, 363:20, 378:10, 386:1, 386:2</p> <p>Public [1] - 8:25</p> <p>publicly [2] - 245:23, 305:25</p> <p>publicly-available [1] - 245:23</p> <p>publicly-traded [1] - 305:25</p> <p>published [3] - 3:21, 88:19, 285:20</p> <p>pull [6] - 151:10, 167:20, 167:21, 167:23, 188:20, 355:14</p> <p>pulled [1] - 77:16</p> <p>pulling [4] - 240:25, 241:1, 241:3, 241:4</p> <p>pulls [1] - 242:20</p> <p>Pulp [4] - 9:2, 10:3, 151:19, 151:23</p> <p>pulp [3] - 77:16, 351:14, 365:18</p> <p>pump [24] - 32:19, 41:7, 75:9, 77:8, 77:9, 77:11, 78:23, 80:6, 80:11, 81:5, 81:6, 122:21, 206:21, 207:6, 207:11, 207:12, 207:14, 207:21, 214:5, 214:16, 357:3, 357:6</p> <p>pumped [7] - 41:8, 41:17, 78:3, 79:10, 81:14, 183:11, 208:23</p> <p>pumping [16] - 32:20, 32:21, 41:11, 41:13, 41:14, 41:20, 80:2, 183:19, 184:6, 184:15, 206:18, 208:20, 208:23, 215:13, 227:21, 229:1</p> <p>pumps [8] - 77:15, 81:4, 81:5, 81:9, 188:16, 188:21, 207:15, 207:16</p> <p>puncture [1] - 67:9</p> <p>punt [1] - 236:21</p> <p>purchase [3] - 10:23, 17:7, 17:11</p> <p>purchased [1] - 372:16</p> <p>purple [4] - 104:17, 205:2, 224:20, 225:2</p> <p>purpose [8] - 5:24, 98:2, 154:3, 181:11,</p>	<p>216:2, 316:7, 333:22, 344:12</p> <p>purposes [5] - 20:7, 172:15, 175:25, 239:17, 288:25</p> <p>pursuant [5] - 3:15, 10:10, 11:5, 11:25, 285:14</p> <p>pursuing [2] - 344:24, 345:9</p> <p>Pushaw [4] - 110:16, 267:6, 267:7, 267:10</p> <p>pushed [1] - 74:11</p> <p>pushing [1] - 47:14</p> <p>Put [1] - 292:2</p> <p>put [85] - 21:24, 34:8, 41:22, 56:5, 58:18, 59:24, 60:17, 62:21, 64:12, 64:14, 65:15, 65:19, 66:3, 66:5, 67:1, 67:25, 68:13, 69:8, 69:18, 69:22, 69:25, 70:12, 72:8, 72:23, 74:21, 76:9, 76:10, 76:12, 76:23, 77:13, 80:24, 85:18, 87:12, 89:21, 125:15, 133:2, 143:1, 149:23, 156:1, 160:14, 162:4, 162:5, 162:8, 163:13, 182:24, 187:9, 188:10, 194:18, 195:3, 196:6, 207:13, 214:25, 215:24, 216:17, 222:12, 222:19, 222:22, 223:15, 226:19, 229:2, 231:3, 234:19, 235:23, 242:24, 244:5, 244:6, 244:7, 277:25, 285:11, 298:24, 302:4, 309:3, 317:1, 317:3, 317:12, 319:15, 351:25, 355:25, 366:25, 371:16, 372:6, 379:22, 383:13</p> <p>putting [9] - 63:20, 77:13, 90:6, 124:20, 297:12, 317:15, 355:17, 369:14, 369:15</p> <p>pyrite [1] - 242:23</p>	<p style="text-align: center;">Q</p> <p>QA [1] - 59:22</p> <p>QA/QC [2] - 75:13, 76:20</p> <p>QC [1] - 59:22</p> <p>quad [1] - 274:7</p> <p>qualified [1] - 129:6</p> <p>qualitative [3] - 27:17, 53:22, 245:16</p> <p>quality [46] - 45:24, 59:23, 61:6, 67:21, 75:24, 89:9, 118:21, 119:6, 119:15, 182:10, 190:3, 190:10, 190:12, 190:14, 190:18, 191:1, 191:8, 191:14, 191:18, 209:8, 209:17, 215:16, 216:8, 228:4, 231:16, 231:18, 231:22, 231:25, 232:10, 232:15, 232:24, 233:4, 245:14, 257:9, 267:13, 287:6, 336:14, 346:11, 346:18, 346:22, 350:22, 352:12, 352:15, 366:10</p> <p>quantitative [2] - 53:22, 245:17</p> <p>quantity [2] - 22:9, 295:15</p> <p>quarter [3] - 31:21, 66:15, 66:18</p> <p>quarterly [2] - 198:2, 198:23</p> <p>Quebec [1] - 151:20</p> <p>questioning [3] - 17:6, 174:19, 328:25</p> <p>questions [66] - 5:13, 5:15, 6:1, 6:2, 6:4, 6:17, 8:11, 8:12, 14:8, 14:11, 17:1, 18:3, 18:4, 18:5, 28:25, 29:1, 49:19, 68:24, 70:23, 130:18, 136:11, 137:15, 137:18, 138:15, 138:16, 146:19, 152:7, 156:6, 164:1, 164:3, 170:12, 173:1, 175:4, 179:6, 180:25, 189:19, 200:8, 202:9, 204:3, 204:4, 206:18,</p>
--	--	--	---	--

207:9, 209:22,
220:15, 223:16,
225:6, 225:9, 230:7,
231:17, 247:10,
267:3, 267:23,
282:15, 297:16,
300:14, 308:15,
312:13, 329:12,
342:10, 350:2,
350:10, 360:18,
375:3, 385:21
quick [7] - 9:15,
150:14, 193:1,
248:9, 255:10,
255:17, 358:22
quicker [2] - 59:14,
69:9
quickly [11] - 31:5,
35:20, 42:4, 45:9,
46:2, 124:8, 287:25,
288:12, 292:5,
305:17, 331:22
quite [16] - 47:2,
77:25, 82:15,
104:24, 242:12,
250:12, 251:14,
260:19, 269:1,
288:2, 303:6,
303:10, 306:24,
322:18, 359:17
quote [40] - 22:6, 22:8,
130:20, 130:22,
131:1, 131:16,
131:20, 132:3,
132:7, 133:5, 133:6,
134:9, 134:13,
160:10, 179:8,
179:9, 179:12,
181:3, 181:7, 183:2,
183:6, 183:7,
183:10, 184:2,
184:6, 184:21,
184:24, 185:6,
185:9, 185:21,
185:23, 186:6,
186:12, 190:1,
190:3, 258:8, 259:2,
330:1, 330:3, 330:18
quoted [1] - 133:15
quotes [1] - 130:19

R

Rackliffe [1] - 314:15
rain [4] - 78:24, 79:2,
189:5, 318:12
rainfall [1] - 272:19
raise [5] - 6:12, 8:4,
298:2, 305:9, 318:5
raised [8] - 14:19,

16:11, 17:16, 49:20,
68:24, 180:25,
226:9, 361:10
raising [2] - 17:16,
362:5
rambling [1] - 372:1
rampant [1] - 306:9
ran [1] - 355:19
Rand [2] - 314:1,
351:15
random [1] - 187:17
randomly [1] - 13:10
range [8] - 22:24,
112:11, 112:24,
245:9, 260:11,
263:8, 275:12, 313:6
ranking [2] - 27:24,
28:3
rankings [1] - 27:20
rapidly [1] - 272:22
rare [4] - 218:11,
218:14, 218:17,
271:17
rate [20] - 34:9, 36:2,
39:1, 42:18, 43:2,
60:25, 62:11, 64:10,
85:8, 114:22, 115:9,
157:15, 157:21,
159:19, 161:21,
171:25, 253:3,
253:8, 297:9, 328:22
rates [17] - 30:25,
32:12, 37:14, 56:16,
78:25, 79:3, 80:2,
115:12, 116:5,
116:14, 123:16,
129:8, 129:9, 158:4,
234:25, 331:7, 345:7
rather [7] - 23:4,
24:16, 26:14,
305:17, 355:1,
356:8, 372:1
ratio [6] - 102:4,
102:5, 102:6, 102:7,
102:23, 102:25
rationale [1] - 212:8
ratios [1] - 102:17
RAYBACK [39] -
254:21, 255:25,
261:19, 262:1,
264:3, 264:15,
265:6, 270:7,
270:13, 270:23,
271:10, 273:17,
273:20, 276:3,
276:12, 276:16,
276:19, 277:2,
277:8, 277:15,
277:22, 278:4,
278:7, 278:16,

278:19, 278:25,
279:4, 279:21,
280:6, 280:12,
280:15, 280:24,
281:4, 281:9,
281:14, 281:21,
281:25, 282:5, 282:8
Rayback [1] - 7:16
Rayfield [3] - 372:9,
375:6, 375:11
RAYFIELD [1] - 375:9
Raymond [3] - 365:7,
375:11, 375:17
RE [1] - 1:5
Re [1] - 332:14
re [2] - 157:18, 275:9
Re-Energy [1] -
332:14
re-evaluate [2] -
157:18, 275:9
reach [3] - 138:24,
313:18, 327:2
reached [3] - 82:3,
108:12, 123:10
reaches [1] - 266:9
react [2] - 45:9, 209:20
reacts [1] - 242:19
read [11] - 17:5, 147:1,
153:20, 154:6,
168:20, 279:1,
323:10, 342:25,
348:24, 375:7,
376:25
reading [4] - 154:2,
189:20, 198:18,
207:2
reads [3] - 329:6,
329:13, 344:18
ready [4] - 89:7,
141:15, 204:9,
297:22
real [6] - 16:12,
160:17, 191:22,
322:18, 322:22,
346:6
realistically [2] -
229:9, 229:13
reality [6] - 13:19,
87:23, 260:11,
302:19, 322:17,
359:17
realize [2] - 31:11,
344:2
realized [1] - 24:6
realizing [1] - 343:21
really [6] - 13:25,
15:6, 16:21, 34:19,
40:23, 53:19, 53:20,
58:19, 69:11, 72:13,
88:3, 98:9, 143:21,

145:25, 146:4,
155:20, 161:11,
161:17, 167:13,
176:14, 184:16,
191:14, 206:10,
207:16, 210:2,
210:3, 215:19,
223:20, 238:1,
238:7, 238:12,
239:9, 239:10,
244:5, 246:2, 246:3,
251:18, 254:1,
254:3, 287:16,
314:25, 315:20,
318:15, 342:16,
342:18, 343:22,
344:1, 344:3,
345:25, 348:16,
348:21, 349:8,
349:14, 355:23,
364:1, 365:3, 370:6,
370:18, 374:13,
374:25, 380:17
realtime [4] - 80:7,
124:1, 125:6, 125:25
rearing [1] - 266:12
reason [18] - 39:1,
154:3, 177:10,
177:14, 181:1,
182:15, 193:19,
196:12, 199:3,
210:11, 210:16,
217:20, 234:16,
259:6, 292:12,
294:8, 308:11,
376:16
reasonable [1] -
261:13
reasonably [2] -
115:8, 334:22
reasoned [1] - 343:17
reasoning [2] - 96:25,
153:18
reasons [7] - 40:13,
68:1, 69:23, 69:24,
220:4, 251:9, 255:12
rebuilding [1] - 183:1
rebuttal [16] - 12:18,
49:17, 133:1, 153:4,
153:6, 153:7, 153:9,
165:23, 176:3,
250:11, 261:5,
261:24, 271:3,
271:12, 281:8,
281:18
receipt [1] - 195:2
receive [10] - 4:3,
13:3, 119:3, 119:24,
125:19, 125:21,
126:12, 126:18,

139:22, 169:3
received [14] - 4:15,
24:11, 25:17, 25:22,
27:11, 108:25,
110:1, 110:3,
118:24, 134:11,
154:17, 154:23,
184:20, 196:20
receives [2] - 25:1,
244:21
recent [4] - 40:20,
253:21, 291:2, 353:3
recently [2] - 165:25,
239:3
receptor [2] - 43:19,
56:10
receptors [15] - 42:10,
42:20, 43:1, 43:3,
43:4, 43:22, 44:9,
44:23, 49:10, 56:14,
60:13, 60:18, 61:5,
61:7
RECESS [3] - 130:4,
283:4, 386:7
recharge [3] - 213:15,
230:14, 231:20
recognize [2] -
281:23, 292:2
recognized [4] -
76:14, 266:2, 281:5,
333:12
recognizing [1] -
138:19
recolonization [1] -
266:25
recommend [1] -
156:23
recommendations [4]
- 336:25, 337:3,
339:23, 342:1
recommended [6] -
92:19, 111:15,
111:20, 111:23,
111:24, 132:14
recommending [1] -
158:16
recommends [1] -
96:4
reconvene [2] -
282:25, 286:8
record [13] - 4:14, 6:7,
6:19, 7:1, 10:25,
12:10, 119:22,
244:21, 288:11,
291:25, 292:1,
320:11, 329:16
RECORD [4] - 90:22,
179:1, 249:14,
354:21
recorded [4] - 3:11,

<p>125:9, 208:25, 285:7 recorder [1] - 291:24 recordkeeping [3] - 12:19, 13:11, 123:21 records [3] - 13:10, 357:10, 358:7 recourse [4] - 142:11, 142:12, 142:17, 143:3 recover [3] - 267:17, 295:13, 297:11 recovery [4] - 22:19, 23:2, 336:13, 350:22 Recovery [2] - 24:23, 301:6 recreation [1] - 346:20 recross [1] - 248:10 recyclable [3] - 22:17, 143:8, 151:10 recycle [29] - 19:22, 21:21, 23:18, 25:13, 26:1, 140:6, 142:24, 145:12, 150:22, 153:24, 157:12, 163:15, 167:11, 184:23, 185:16, 296:9, 298:20, 310:1, 324:14, 354:9, 363:21, 371:4, 373:5, 379:9, 379:10, 379:13, 380:1, 380:5, 384:12 recycled [20] - 15:7, 22:25, 23:7, 23:20, 142:16, 145:17, 146:7, 163:19, 174:8, 185:12, 185:15, 302:15, 302:20, 302:23, 313:9, 333:23, 379:14, 379:17, 380:3, 382:22 recycler [2] - 23:11, 173:23 recyclers [2] - 173:16, 174:3 recycling [92] - 15:7, 19:2, 19:7, 20:3, 20:8, 20:24, 21:4, 21:6, 21:10, 22:2, 22:16, 23:10, 24:3, 24:4, 24:6, 24:16, 24:19, 26:9, 27:13, 28:3, 28:5, 28:9, 28:11, 28:14, 142:14, 151:6, 153:24, 154:5, 154:9, 155:9, 157:21, 157:23, 158:4, 161:16,</p>	<p>161:19, 161:21, 162:18, 162:21, 162:24, 162:25, 163:11, 163:23, 165:6, 165:10, 166:12, 166:15, 166:16, 167:25, 173:6, 173:9, 173:13, 173:15, 174:10, 176:24, 178:13, 186:15, 186:22, 293:15, 293:17, 294:20, 294:23, 295:1, 295:5, 295:8, 295:11, 296:5, 297:8, 297:9, 302:6, 303:3, 303:20, 309:15, 309:16, 309:20, 309:23, 309:24, 312:7, 312:9, 315:1, 331:7, 349:21, 359:5, 359:6, 359:9, 372:14, 374:4, 374:5, 382:2, 384:11 Recycling [2] - 2:14, 305:6 red [7] - 63:5, 63:9, 93:25, 103:15, 104:21, 291:2, 291:4 Red [1] - 278:16 redacted [1] - 268:16 redefine [1] - 231:11 redirect [9] - 79:16, 170:11, 174:15, 174:16, 177:21, 177:22, 247:10, 247:11, 248:8 redirected [1] - 294:15 reduce [23] - 19:19, 19:22, 21:20, 22:11, 23:17, 25:12, 145:12, 145:22, 145:24, 148:3, 161:5, 295:6, 297:4, 298:20, 299:14, 302:10, 324:14, 328:22, 329:1, 339:13, 354:8, 372:4, 376:5 reduced [15] - 16:8, 21:25, 28:8, 145:24, 145:25, 146:4, 176:18, 185:9, 185:11, 198:12, 231:20, 297:2, 301:20, 352:18, 374:19 reduces [4] - 24:24,</p>	<p>302:12, 330:25, 339:6 reducing [5] - 20:7, 120:15, 162:21, 163:23, 217:18 reduction [15] - 19:12, 20:2, 21:7, 21:18, 22:22, 22:23, 27:13, 28:10, 28:14, 52:15, 147:23, 173:6, 186:15, 186:22, 234:25 reductions [1] - 377:12 redundancy [3] - 182:23, 211:4, 215:12 redundant [4] - 33:19, 34:16, 45:12, 377:25 ReEnergy [17] - 24:20, 25:23, 151:8, 152:9, 154:8, 154:17, 155:15, 159:20, 162:19, 293:14, 294:19, 311:2, 332:12, 337:21, 340:4, 340:7 ReEnergy's [2] - 151:16, 349:24 reference [11] - 35:3, 218:21, 259:19, 264:12, 265:9, 265:14, 271:1, 272:4, 272:7, 273:5, 280:11 referenced [4] - 255:21, 256:4, 264:11, 266:18 references [5] - 255:3, 256:7, 256:15, 259:20, 268:20 referred [1] - 213:18 referring [5] - 186:12, 208:16, 214:23, 218:21, 274:1 reflect [2] - 83:17, 88:18 reflected [1] - 148:21 reflecting [1] - 227:10 reflective [1] - 54:6 refraction [1] - 33:3 Refuge [1] - 318:23 refusal [1] - 344:6 refuse [3] - 305:21, 321:21, 322:4 regard [15] - 14:24, 115:22, 117:13, 118:21, 120:25, 122:11, 123:1, 144:11, 144:12,</p>	<p>210:1, 221:2, 260:15, 260:17, 338:12, 376:8 regarding [10] - 136:18, 152:22, 192:5, 192:15, 252:4, 281:12, 322:23, 325:24, 329:1, 329:12 regardless [2] - 140:10, 323:23 regards [2] - 218:6, 218:20 regenerable [2] - 243:1, 243:5 regime [2] - 272:12, 275:16 Region [1] - 18:14 region [4] - 18:17, 213:17, 377:13, 377:15 Regional [1] - 351:17 regional [7] - 18:13, 38:1, 40:17, 43:14, 45:25, 92:22, 259:15 regionally [1] - 46:17 registered [1] - 382:8 Registry [2] - 352:2, 352:3 regrets [1] - 366:1 regs [1] - 234:9 regular [4] - 125:2, 137:1, 197:21, 218:25 regularly [6] - 23:16, 127:24, 132:4, 169:8, 356:12, 358:9 regulated [1] - 378:6 regulates [2] - 103:7, 118:24 regulating [1] - 337:6 regulations [9] - 176:5, 186:3, 194:22, 313:17, 314:4, 339:11, 355:11, 372:18, 372:19 regulatory [6] - 12:16, 26:21, 146:10, 252:4, 277:12, 364:2 rehabilitating [1] - 266:14 reignited [1] - 194:16 Reilly [1] - 8:8 rein [1] - 334:18 reject [5] - 195:14, 195:17, 324:21, 325:8, 330:24 rejected [5] - 133:18, 134:2, 196:17,</p>	<p>197:19, 220:17 relate [2] - 251:23, 323:18 related [16] - 29:20, 49:19, 61:14, 76:19, 90:13, 91:19, 119:19, 120:19, 120:20, 120:23, 122:11, 227:14, 231:22, 243:10, 243:14, 246:20 relates [1] - 164:7 relating [1] - 114:3 relationship [2] - 293:22, 376:17 relationships [1] - 167:15 relative [7] - 30:23, 38:8, 39:2, 39:4, 164:16, 213:18, 296:23 relatively [16] - 19:18, 35:12, 35:19, 38:21, 38:23, 40:16, 43:15, 46:12, 96:13, 97:1, 97:6, 97:9, 184:13, 205:24, 213:20, 247:24 relax [1] - 48:6 release [5] - 56:12, 227:24, 232:1, 232:11, 378:5 released [3] - 85:9, 263:5, 263:18 releases [2] - 56:12, 231:23 releasing [1] - 268:1 relegated [1] - 266:8 relevance [3] - 6:3, 277:20, 279:21 relevancy [2] - 193:21, 193:22 relevant [7] - 41:17, 90:9, 269:10, 280:5, 286:23, 287:2, 378:15 relocate [1] - 53:8 relocated [1] - 50:10 rely [4] - 22:10, 140:15, 169:10, 329:24 relying [1] - 177:4 remain [3] - 40:16, 99:15, 213:20 remainder [1] - 146:16 remaining [5] - 26:20, 170:21, 171:9, 257:3, 337:24 remains [1] - 183:4 remedial [12] - 44:21,</p>
---	---	--	--	--

44:22, 184:5, 184:7, 184:17, 214:3, 214:4, 214:7, 227:17, 227:25, 228:21, 228:23 Remediation [1] - 288:20 remediation [3] - 42:14, 206:24, 247:13 remember [11] - 52:6, 130:10, 141:24, 174:16, 217:25, 218:1, 240:12, 350:12, 355:1, 370:1, 381:12 reminded [1] - 346:9 reminds [1] - 372:12 remote [1] - 227:14 remotely [1] - 122:24 removal [12] - 96:21, 105:20, 128:7, 174:10, 205:17, 241:24, 242:1, 243:15, 251:2, 266:4, 266:9, 377:8 removals [1] - 266:19 remove [4] - 119:9, 124:12, 207:23, 302:22 removed [5] - 24:16, 334:15, 339:4, 362:17, 362:21 removing [1] - 377:22 render [1] - 275:4 renewable [2] - 301:19, 311:17 Renewal [1] - 278:13 repair [1] - 184:12 repeat [4] - 121:15, 182:22, 186:18, 188:25 rephrase [1] - 194:11 replaced [2] - 188:17, 188:21 replacement [2] - 192:11, 313:19 replaces [1] - 118:6 replacing [1] - 219:12 replenished [1] - 254:16 reply [2] - 271:12, 327:18 Report [1] - 166:22 report [9] - 24:1, 128:19, 152:10, 170:24, 171:3, 179:17, 332:18, 348:22, 351:25 reported [3] - 34:24,	154:15, 294:24 REPORTER [1] - 255:15 reporting [5] - 128:11, 129:19, 131:24, 239:14, 239:17 Reporting [2] - 3:13, 285:8 reports [23] - 12:22, 13:4, 13:6, 117:7, 125:23, 131:17, 131:19, 131:22, 131:25, 137:22, 151:14, 154:7, 154:8, 161:19, 169:6, 170:21, 170:25, 171:3, 177:1, 189:21, 231:18, 244:16, 244:22 reprehensible [1] - 347:5 represent [1] - 7:16 representation [1] - 168:21 representative [2] - 168:22, 342:13 representatives [1] - 168:23 represented [3] - 4:11, 33:9, 168:13 representing [3] - 7:21, 342:14, 365:14 represents [1] - 346:6 reproduce [1] - 385:17 reproduction [1] - 266:23 reputable [1] - 314:3 request [5] - 10:17, 142:19, 169:15, 212:9, 342:22 requested [4] - 149:22, 197:6, 259:11, 327:16 requesting [2] - 110:3, 259:9 requests [1] - 337:4 require [18] - 52:11, 55:9, 55:17, 60:8, 71:21, 72:20, 80:12, 86:12, 87:9, 104:9, 121:1, 123:21, 161:4, 208:9, 211:25, 223:4, 227:21, 331:3 required [23] - 10:19, 27:5, 89:20, 91:24, 101:6, 102:17, 104:10, 113:6, 116:22, 123:23,	127:1, 157:10, 176:23, 192:9, 192:17, 200:3, 203:17, 203:21, 203:24, 217:5, 222:4, 224:3 requirement [9] - 20:24, 102:25, 139:19, 158:5, 167:10, 177:24, 211:13, 211:15, 224:17 requirements [27] - 19:16, 21:2, 25:10, 26:21, 51:19, 55:8, 55:9, 55:11, 56:1, 86:1, 88:4, 101:22, 101:23, 102:20, 108:9, 126:24, 146:10, 195:12, 200:4, 220:12, 221:4, 221:24, 224:5, 329:5, 329:10, 330:19 requires [8] - 11:8, 86:7, 102:3, 102:6, 153:11, 163:19, 198:5, 242:5 requiring [5] - 22:18, 24:25, 26:10, 157:12, 211:24 research [7] - 249:1, 250:21, 250:25, 253:22, 266:16, 271:7 reserve [3] - 149:13, 149:14, 198:10 reserved [1] - 345:21 reside [4] - 3:1, 253:3, 264:25, 294:8 resided [1] - 10:12 residence [1] - 287:21 residences [3] - 120:7, 238:25 resident [7] - 4:9, 267:2, 301:8, 335:6, 361:5, 361:25, 384:5 residential [1] - 173:20 residents [7] - 134:16, 330:8, 330:12, 330:17, 335:10, 340:15, 354:12 resides [3] - 12:8, 333:23, 334:16 residual [7] - 22:2, 26:8, 162:17, 166:23, 167:9, 303:2, 313:14 residuals [9] - 23:2,	25:2, 26:12, 26:18, 140:3, 140:9, 140:13, 164:9, 167:8 residue [8] - 25:3, 25:4, 25:24, 126:13, 135:18, 157:12, 200:25, 332:5 residues [2] - 175:13, 302:12 Residues [1] - 338:22 resilience [2] - 252:15, 280:19 resilient [1] - 275:14 resistivity [2] - 33:3, 33:6 resolve [1] - 324:24 Resolve [10] - 10:10, 10:11, 10:19, 11:25, 17:18, 17:20, 168:17, 342:11, 342:15 resolved [1] - 179:16 Resource [5] - 49:12, 50:20, 298:12, 328:14, 372:15 resource [10] - 9:9, 19:8, 91:7, 91:16, 91:23, 92:8, 113:4, 167:14, 328:2, 368:14 Resources [7] - 2:15, 92:10, 109:9, 109:13, 286:20, 289:23, 291:18 resources [13] - 98:10, 109:20, 110:22, 112:2, 112:22, 245:20, 245:21, 254:15, 287:7, 320:25, 346:4, 368:25, 370:16 respect [1] - 382:3 respectful [1] - 385:5 respectfully [1] - 156:18 respectively [1] - 134:12 RESPOND [2] - 6:15, 298:5 respond [10] - 8:11, 17:5, 49:18, 124:8, 141:23, 160:24, 255:2, 262:2, 262:3, 271:11 responded [1] - 197:17 responder [1] - 366:20 responders [1] - 197:5 responding [1] -	261:24 response [6] - 109:5, 119:18, 243:9, 259:13, 326:21, 333:11 responses [1] - 110:4 responsibilities [3] - 12:2, 18:15, 113:20 responsibility [4] - 128:6, 205:18, 322:10, 324:24 responsible [7] - 54:12, 90:16, 131:10, 150:1, 315:8, 315:15, 364:24 rest [2] - 169:4, 267:20 resting [1] - 188:2 Restoration [4] - 252:12, 266:1, 266:7, 318:16 restore [3] - 266:3, 268:3, 352:20 restoring [1] - 266:15 restrict [2] - 146:11, 297:13 restricted [1] - 55:7 restriction [7] - 104:20, 108:11, 108:14, 108:15, 108:19, 205:6, 219:18 restrictions [1] - 303:18 restrictive [1] - 49:6 rests [1] - 188:5 result [13] - 9:21, 15:20, 53:10, 94:14, 96:16, 105:21, 148:8, 163:17, 232:1, 263:13, 289:22, 330:11, 338:20 resulting [4] - 20:12, 23:7, 28:21, 345:2 results [8] - 22:14, 93:9, 157:10, 208:11, 208:13, 224:4, 225:22, 357:2 resume [7] - 9:10, 18:24, 29:18, 48:24, 91:15, 114:2, 130:1 retails [1] - 35:16 retention [3] - 96:21, 105:20, 245:11 return [1] - 267:8 returned [2] - 267:6, 346:8 reuse [13] - 19:22, 20:3, 21:20, 23:18,
---	--	--	---	--

<p>25:7, 25:12, 28:14, 173:6, 184:23, 298:21, 302:6, 324:14, 354:9 reused [8] - 23:20, 25:5, 26:5, 145:17, 146:8, 152:18, 302:13, 302:20 reusing [3] - 20:8, 162:21, 312:7 revealing [1] - 326:12 reveals [1] - 24:3 revenue [7] - 10:21, 149:2, 149:17, 149:18, 159:1, 159:24, 167:23 revenues [2] - 11:3, 11:4 review [20] - 6:2, 13:9, 27:19, 62:4, 89:22, 109:8, 109:11, 109:21, 111:11, 111:15, 126:4, 132:4, 177:1, 192:12, 222:14, 245:20, 259:3, 259:9, 261:3 reviewed [10] - 13:3, 85:4, 89:3, 108:16, 109:17, 111:13, 111:17, 157:22, 273:1 reviewing [1] - 179:19 RFP [3] - 17:8, 17:22 Rich [3] - 285:3, 293:4, 293:13 Richard [3] - 1:24, 3:8, 314:15 rid [4] - 359:2, 368:9, 371:12, 382:1 ridge [7] - 31:12, 37:20, 37:22, 88:5, 230:12, 230:15 RIDGE [1] - 1:6 Ridge [158] - 2:10, 6:24, 7:14, 7:18, 10:8, 13:5, 13:20, 14:3, 15:5, 21:12, 21:23, 21:24, 22:13, 23:4, 24:10, 24:12, 25:1, 25:18, 25:22, 26:5, 26:18, 27:12, 27:19, 27:22, 28:3, 28:16, 28:23, 29:10, 29:20, 48:14, 50:13, 51:4, 51:7, 51:14, 52:3, 53:3, 68:10, 70:6, 70:7, 74:14, 83:16, 113:19, 114:8, 114:15,</p>	<p>115:13, 115:20, 119:2, 119:17, 121:2, 127:12, 129:3, 137:20, 138:24, 139:8, 139:15, 139:25, 146:13, 152:17, 153:13, 154:17, 155:8, 155:11, 155:18, 155:25, 157:17, 161:25, 164:14, 164:18, 164:23, 165:1, 165:17, 165:19, 168:10, 169:3, 172:23, 177:17, 185:3, 194:5, 200:17, 201:11, 202:16, 214:6, 221:9, 240:5, 267:14, 268:6, 284:12, 288:22, 295:20, 296:12, 298:13, 301:13, 303:6, 303:7, 303:9, 303:15, 304:19, 306:18, 307:10, 307:12, 307:22, 313:16, 315:18, 320:8, 322:7, 325:4, 325:19, 326:1, 326:7, 328:17, 335:15, 336:1, 336:19, 337:25, 338:4, 338:22, 338:23, 339:9, 339:22, 340:11, 341:11, 343:9, 343:14, 344:7, 345:5, 347:8, 347:12, 348:3, 348:5, 349:5, 349:12, 350:25, 352:19, 353:1, 353:13, 354:11, 354:14, 358:20, 363:15, 364:23, 365:20, 366:8, 366:17, 367:16, 368:20, 368:21, 369:4, 374:3, 374:24, 374:25, 375:25, 376:6, 377:9, 378:14, 378:20, 379:19, 380:7 Ridgely [3] - 340:20, 343:11, 343:15 right-hand [1] - 274:6 rights [9] - 11:2, 315:14, 344:18,</p>	<p>344:21, 345:9, 345:18, 345:21, 347:6, 347:9 rigid [1] - 295:15 ripping [1] - 174:12 riprap [1] - 84:3 rise [1] - 213:25 riser [1] - 80:23 risk [7] - 191:16, 260:13, 260:15, 260:18, 260:20, 274:11, 275:6 risks [3] - 272:21, 273:9, 275:9 risky [1] - 274:15 River [35] - 112:12, 112:19, 226:7, 251:2, 252:11, 252:12, 252:16, 253:25, 257:1, 257:4, 257:6, 257:8, 257:12, 257:25, 260:25, 263:8, 266:1, 266:6, 268:1, 276:7, 318:11, 318:15, 319:1, 321:17, 325:2, 336:10, 336:12, 351:8, 351:19, 352:6, 353:2, 353:7, 353:8, 357:23, 365:25 river [36] - 112:23, 253:19, 253:24, 254:1, 254:3, 254:4, 257:5, 263:3, 264:19, 264:25, 266:15, 266:22, 267:2, 268:2, 268:4, 301:7, 317:2, 317:14, 318:11, 318:14, 318:20, 319:3, 319:14, 319:16, 319:17, 319:19, 320:25, 323:10, 323:16, 336:14, 336:16, 358:5, 358:8, 358:10, 366:3, 366:7 river-specific [1] - 257:5 rivers [7] - 110:9, 112:14, 252:21, 253:15, 257:7, 316:11, 316:18 Road [4] - 179:12, 312:22, 361:16, 379:1 road [4] - 11:14, 144:15, 304:13,</p>	<p>309:21 roads [7] - 50:9, 98:18, 98:21, 290:7, 324:9, 368:12, 370:20 roadway [2] - 115:23, 129:11 roadways [4] - 117:11, 121:17, 121:20, 180:18 Rob [1] - 8:5 Robert [1] - 355:6 robust [12] - 59:15, 63:19, 66:25, 68:19, 69:8, 71:7, 113:9, 123:6, 129:19, 203:11, 203:12, 215:4 robustness [2] - 68:3, 214:22 rock [4] - 30:21, 33:12, 227:9, 227:10 rocks [1] - 70:1 rocky [1] - 253:2 role [2] - 6:23, 247:17 roles [2] - 48:18, 288:21 roll [4] - 167:17, 167:19, 168:3, 195:23 rolled [3] - 72:2, 73:4, 73:5 rookie [1] - 216:18 room [7] - 7:4, 122:25, 128:16, 287:1, 287:14, 307:16, 365:21 rotation [1] - 356:17 roughly [5] - 115:4, 115:7, 123:13, 237:21, 373:2 round [1] - 228:5 route [1] - 194:14 Route [9] - 117:2, 117:3, 179:11, 180:8, 180:16, 226:7, 239:8 Routes [1] - 179:22 routine [1] - 45:6 Rubbish [1] - 305:5 rule [11] - 19:7, 19:15, 19:23, 20:23, 69:7, 176:24, 177:23, 178:8, 178:15, 194:10, 254:23 Rule [4] - 100:19, 101:3, 102:13, 178:14 rules [48] - 14:24, 30:3, 42:21, 44:14,</p>	<p>49:8, 49:9, 51:19, 53:23, 55:8, 55:15, 55:17, 55:25, 57:8, 58:19, 58:24, 59:1, 59:10, 59:15, 59:16, 60:8, 66:9, 66:23, 68:18, 69:1, 78:17, 80:12, 85:25, 86:11, 87:9, 88:4, 90:10, 143:4, 176:11, 177:16, 178:18, 190:5, 190:7, 190:14, 210:17, 212:6, 217:4, 255:5, 265:22, 281:6, 282:1, 313:16, 317:20, 341:5 Rules [3] - 3:19, 162:21, 285:18 rumbling [1] - 324:9 rumors [1] - 384:14 Run [1] - 109:12 run [20] - 41:7, 45:15, 56:17, 56:23, 76:8, 76:11, 108:22, 131:11, 214:1, 252:10, 254:2, 266:8, 268:2, 307:3, 307:8, 344:3, 349:5, 356:16, 371:17 runaway [1] - 269:25 rung [4] - 303:16, 362:15, 371:3 rungs [1] - 362:16 running [8] - 77:2, 122:23, 230:17, 243:21, 248:7, 249:8, 314:3, 356:12 runoff [5] - 84:8, 84:9, 273:8, 275:6, 275:18 runs [5] - 31:13, 78:8, 131:12, 189:5, 267:12 rut [1] - 95:19 Ruth [3] - 1:20, 3:6, 285:1 Ryan [4] - 325:11, 328:12, 349:3, 363:11</p>
S				
<p>S-020700-WD-BI-N [1] - 2:15 saddened [1] - 343:21 sadly [1] - 340:17 safe [10] - 115:21, 117:11, 118:17, 128:7, 129:7, 185:19, 309:6,</p>				

<p>310:11, 351:20 safely [1] - 304:6 safer [1] - 182:19 safest [1] - 383:14 safety [12] - 86:8, 86:15, 86:18, 127:11, 182:24, 229:10, 240:8, 249:2, 344:24, 345:10, 373:18 sags [1] - 82:14 salamanders [6] - 107:15, 107:17, 107:18, 218:22, 218:25, 219:3 salar [1] - 258:20 sales [1] - 221:8 salmo [1] - 258:20 salmon [37] - 92:6, 109:4, 109:15, 110:8, 110:20, 111:10, 111:22, 192:6, 192:15, 193:6, 252:9, 252:19, 253:9, 253:12, 254:1, 254:4, 254:9, 254:19, 255:23, 257:2, 257:3, 257:12, 258:1, 258:20, 258:23, 259:18, 259:19, 259:23, 260:16, 260:17, 260:19, 261:7, 263:24, 275:10, 336:13, 350:23, 352:21 salt [2] - 34:9, 34:10 Samantha [1] - 365:9 sample [2] - 33:8, 358:10 sampled [1] - 208:10 samples [6] - 33:11, 71:18, 89:15, 357:2, 357:3 sampling [7] - 198:5, 199:10, 208:10, 208:12, 208:13, 209:6, 228:1 Sanborn [2] - 8:7, 82:24 sand [20] - 42:23, 43:14, 45:3, 45:6, 57:9, 57:11, 64:16, 66:3, 66:7, 67:16, 67:18, 68:13, 72:6, 72:19, 72:23, 73:18, 73:22, 75:5, 185:23, 186:3 sandblast [2] -</p>	<p>185:17, 223:25 sandblasting [2] - 224:1, 224:2 sandwiched [1] - 45:4 sandy [4] - 43:10, 43:13, 44:2 SAPPI [1] - 151:18 Sarah [2] - 312:18 Sargent [2] - 363:14, 371:18 satisfies [2] - 329:9, 330:19 saturate [1] - 66:11 Saucier [2] - 313:24, 314:15 SAUER [3] - 156:5, 156:8, 158:7 Sauer [3] - 1:19, 3:2, 284:22 savings [1] - 304:9 saw [7] - 74:9, 77:10, 80:21, 143:8, 209:1, 209:18, 219:5 scale [13] - 13:13, 13:15, 50:10, 65:10, 65:11, 66:17, 68:5, 127:12, 212:11, 223:5, 223:6, 310:9, 312:9 scaled [1] - 121:3 scales [11] - 53:8, 65:8, 98:18, 127:18, 127:21, 127:22, 128:13, 212:21, 222:22, 222:24, 290:7 scans [1] - 198:24 scape [1] - 253:20 Scarborough [2] - 2:25, 284:20 scenario [1] - 206:6 scenarios [3] - 60:22, 190:16, 335:24 scene [1] - 194:20 schedule [5] - 48:7, 129:24, 248:7, 250:6, 385:13 scheduled [2] - 5:5, 130:8 scheme [1] - 42:15 School [4] - 351:15, 351:16 school [1] - 305:14 schools [2] - 298:24, 351:10 SCHROEDER [1] - 340:25 Schroeder [4] - 335:4, 340:20, 340:24, 341:2</p>	<p>science [12] - 9:7, 9:8, 18:19, 48:22, 91:3, 91:4, 171:7, 251:13, 251:18, 252:5, 261:15, 268:19 scientific [5] - 35:25, 111:14, 185:25, 307:13, 351:12 scientifically [2] - 310:6, 352:22 scientist [5] - 90:25, 91:6, 251:12, 265:19, 350:21 scientists [2] - 269:24, 383:5 Scientists [1] - 91:1 Scientists' [1] - 94:10 scope [1] - 251:8 score [1] - 245:17 Scott [6] - 297:20, 298:8, 298:9, 298:10, 299:18, 299:24 Scouts [2] - 298:23 screen [1] - 178:10 screened [1] - 174:1 screening [1] - 51:20 scrub/shrub [3] - 99:17, 246:6, 246:11 scrub/shrubs [1] - 105:8 Sea [1] - 109:12 sea [7] - 252:10, 253:6, 253:7, 254:2, 254:10, 266:8, 267:11 Sea-Run [1] - 109:12 sea-run [3] - 252:10, 254:2, 266:8 seal [1] - 67:13 sealing [1] - 67:21 seam [1] - 73:10 seamed [2] - 72:3, 73:7 seaming [1] - 73:7 seams [2] - 73:13, 188:13 Sean [1] - 365:8 season [1] - 71:5 seasonal [2] - 294:10, 373:19 seasonally [1] - 373:21 seat [1] - 292:1 secluded [1] - 310:14 second [25] - 35:25, 36:1, 53:25, 58:23, 69:20, 71:22, 120:20, 122:11, 124:16, 142:10,</p>	<p>152:20, 179:3, 179:23, 182:18, 182:21, 184:21, 195:9, 211:5, 211:6, 241:15, 253:15, 287:23, 292:25, 293:5 secondary [11] - 45:5, 45:10, 69:16, 69:25, 70:12, 70:13, 71:24, 176:6, 176:7, 211:3, 242:8 seconds [5] - 304:15, 317:18, 357:18, 357:20, 357:21 secretly [1] - 382:18 Section [3] - 329:6, 329:13, 330:5 section [7] - 20:7, 133:12, 190:5, 273:15, 329:22, 344:18, 346:16 sections [2] - 199:1, 199:2 Sections [4] - 3:16, 3:18, 285:15, 285:17 sector [2] - 8:22 secure [2] - 122:13, 344:16 securely [1] - 377:21 sediment [3] - 96:20, 105:19, 245:10 sedimentation [1] - 290:8 see [96] - 16:2, 16:22, 22:14, 32:20, 41:9, 45:7, 65:9, 67:10, 71:2, 71:6, 72:7, 72:19, 73:18, 73:21, 75:1, 75:10, 80:7, 80:19, 86:14, 86:18, 95:6, 95:11, 101:7, 104:13, 104:24, 112:6, 112:7, 114:7, 117:18, 117:19, 117:20, 119:12, 119:22, 120:13, 122:7, 122:9, 123:16, 126:25, 128:17, 128:18, 142:7, 150:14, 152:11, 153:6, 155:23, 181:1, 182:14, 182:20, 195:17, 196:16, 204:25, 209:6, 219:2, 233:2, 233:10, 244:9, 246:3, 247:24, 250:16, 251:5,</p>	<p>266:20, 266:22, 266:25, 267:2, 271:9, 278:13, 278:22, 289:5, 289:18, 290:5, 291:7, 291:9, 291:10, 297:5, 299:10, 303:9, 303:11, 306:22, 311:12, 312:17, 320:18, 339:18, 341:9, 349:14, 349:15, 353:16, 356:10, 359:16, 366:13, 367:3, 367:22, 368:4, 368:11, 382:18 seeing [11] - 141:20, 142:8, 142:15, 168:3, 231:21, 232:21, 264:8, 289:4, 366:16, 367:15, 380:9 seeks [1] - 317:16 seem [3] - 118:16, 212:24, 322:18 Seepage [1] - 324:14 segment [1] - 263:1 segregate [2] - 173:22, 295:10 seismic [1] - 33:3 select [1] - 13:10 selected [3] - 40:13, 59:19, 97:18 selecting [1] - 183:5 selection [3] - 49:22, 83:16, 97:15 selective [1] - 117:24 selectively [1] - 117:22 sell [1] - 384:19 semi [2] - 222:3, 222:17 send [12] - 13:4, 89:16, 151:12, 151:15, 154:21, 224:4, 303:24, 304:2, 310:19, 327:24, 373:6, 385:20 sending [1] - 338:17 senior [2] - 8:23, 48:9 sense [14] - 59:3, 95:17, 106:3, 163:1, 180:22, 180:24, 197:1, 215:6, 304:13, 328:21, 336:13, 359:14, 380:6, 380:7 sensitive [19] - 42:9,</p>
---	---	---	---	---

42:19, 42:20, 42:25,
43:2, 43:4, 43:19,
43:22, 44:9, 44:23,
49:10, 56:10, 56:13,
60:13, 60:18, 61:5,
61:7, 197:3, 333:4
sent [9] - 3:23, 109:8,
110:2, 125:23,
157:16, 285:22,
305:15, 332:14,
338:23
sentences [1] - 192:6
separate [5] - 99:7,
106:11, 167:2,
167:19, 287:14
separated [2] - 151:1,
173:19
separation [6] - 22:18,
72:14, 72:16, 168:4,
305:21, 307:2
Septage [1] - 2:12
September [4] - 3:22,
79:24, 285:21, 290:2
sequence [1] - 63:22
series [6] - 50:15,
211:6, 229:22,
246:17, 260:5, 357:1
serious [2] - 170:16,
349:21
serve [7] - 163:12,
192:11, 302:10,
304:3, 311:7, 313:1,
313:3
served [3] - 8:22, 8:24,
184:24
serves [1] - 313:20
Service [6] - 192:9,
192:15, 256:6,
261:4, 262:11,
289:12
service [3] - 116:19,
355:9, 376:16
services [5] - 10:24,
11:6, 20:20, 313:7,
366:21
SERVICES [1] - 1:5
Services [26] - 2:8,
2:11, 4:5, 7:19, 7:22,
12:5, 12:15, 114:10,
130:25, 132:21,
133:5, 133:9,
244:19, 284:11,
286:4, 286:18,
289:15, 336:18,
337:2, 337:10,
338:3, 338:5,
339:15, 372:15,
378:22
servicing [2] - 360:5,
375:15

session [6] - 249:12,
283:1, 284:8,
292:17, 386:1, 386:3
SESSION [1] - 284:1
set [20] - 14:15, 19:6,
89:5, 89:7, 101:20,
127:5, 131:21,
132:1, 153:16,
154:3, 169:2,
191:10, 204:12,
204:19, 205:4,
205:12, 214:9,
219:17, 249:7,
308:14
setback [5] - 55:7,
55:8, 55:11, 55:16,
55:18
setbacks [5] - 55:10,
55:22, 55:24, 193:2,
193:4
sets [2] - 343:25,
349:9
setting [3] - 90:15,
154:4, 240:2
settle [1] - 86:21
settlement [4] - 85:23,
86:20, 86:25, 203:3
settles [1] - 82:12
Sevee [14] - 29:3,
29:7, 48:10, 52:22,
54:18, 97:23, 179:4,
179:8, 189:20,
191:23, 202:9,
213:4, 225:9, 247:12
SEVEE [18] - 29:22,
47:20, 179:17,
181:10, 181:19,
182:7, 182:20,
183:14, 183:25,
184:8, 191:23,
213:11, 226:2,
227:6, 228:1,
230:10, 232:13,
247:20
seven [10] - 32:14,
43:4, 69:20, 71:21,
119:21, 172:3,
294:18, 340:8,
366:14, 377:16
seventies [1] - 370:3
several [13] - 13:8,
14:17, 48:16,
149:25, 194:2,
194:9, 228:16,
229:7, 266:5, 330:4,
331:15, 367:18,
371:9
severe [1] - 260:12
sewers [1] - 374:1
shad [2] - 254:8,

266:22
shaley [1] - 36:8
shaley-type [1] - 36:8
shall [4] - 133:5,
317:25, 329:7,
329:14
shallow [4] - 31:25,
184:13, 189:14,
210:25
shape [2] - 304:17,
371:10
shaping [1] - 26:5
share [4] - 310:7,
325:1, 349:2, 361:22
shear [1] - 33:14
sheath [1] - 81:1
sheds [1] - 368:10
sheet [4] - 18:10,
189:15, 236:18,
364:11
sheets [9] - 72:1,
284:7, 287:13,
287:15, 292:16,
310:9, 312:9, 314:16
shelf [2] - 291:24,
371:21
shellfish [1] - 346:20
Sherry [2] - 347:20,
350:11
Shield [1] - 278:16
shifts [2] - 267:2,
272:20
shingles [4] - 368:6,
368:10, 379:11,
379:14
ship [4] - 155:2,
310:21, 349:6, 371:7
shipping [2] - 155:1,
311:1
shocking [2] - 366:13,
366:24
shoddy [1] - 371:23
Shorey [2] - 363:11,
363:13
SHOREY [1] - 363:12
short [8] - 26:4, 92:7,
112:10, 247:24,
252:10, 263:6,
304:8, 308:3
short-nosed [4] -
92:7, 112:10,
252:10, 263:6
shorten [1] - 51:10
shortest [1] - 189:11
shoulders [1] - 356:19
shovel [1] - 75:6
show [28] - 30:1, 31:5,
36:16, 36:20, 67:3,
95:4, 99:18, 103:5,
103:6, 110:14,

111:1, 176:23,
198:23, 257:15,
262:21, 262:22,
270:2, 270:3, 270:8,
270:17, 270:24,
271:22, 277:8,
277:9, 312:17,
369:13, 378:12
showed [4] - 179:25,
221:16, 226:20,
235:6
showing [6] - 43:21,
70:25, 73:2, 73:15,
77:1, 128:21
shown [10] - 31:20,
31:23, 32:10, 41:14,
46:10, 50:4, 68:5,
146:22, 193:10,
273:2
shows [33] - 30:4,
31:16, 31:17, 31:18,
39:24, 55:11, 63:22,
63:25, 64:13, 71:14,
71:24, 80:15, 82:22,
93:23, 100:23,
103:15, 104:12,
107:13, 110:14,
110:23, 146:23,
214:14, 230:1,
253:22, 265:18,
266:18, 270:6,
273:14, 290:24,
291:1, 291:2, 291:13
Shri [3] - 350:18,
350:19, 354:18
shrinkage [1] - 294:17
shrubby [1] - 246:11
shrubs [1] - 106:6
shrugged [1] - 356:19
shut [3] - 214:15,
310:22, 323:17
sic [1] - 272:6
side [27] - 5:24, 7:3,
31:9, 43:25, 62:22,
83:5, 87:19, 95:9,
99:25, 124:19,
180:17, 181:24,
182:1, 226:15,
226:17, 226:18,
227:1, 238:2, 239:5,
274:6, 347:25,
372:25, 381:21,
382:2, 382:15
sides [7] - 40:5, 189:6,
308:10, 336:8,
368:11, 370:19,
385:7
sight [2] - 116:21,
116:22
sign [5] - 284:5, 284:7,

287:13, 364:11,
373:12
sign-in [1] - 364:11
sign-up [2] - 284:5,
287:13
signal [2] - 269:11,
274:9
signed [8] - 287:17,
287:18, 289:12,
292:10, 292:16,
300:21, 347:19,
364:10
significance [4] -
93:14, 93:15,
105:11, 106:7
significant [31] -
27:25, 37:10, 46:3,
94:25, 95:10,
100:11, 100:14,
101:16, 102:12,
104:3, 104:25,
105:2, 105:9,
106:16, 106:19,
106:20, 107:1,
185:23, 185:24,
186:3, 191:7,
191:17, 258:10,
278:1, 291:8,
333:13, 351:3,
356:1, 357:9,
357:11, 378:9
significantly [5] - 9:3,
105:14, 107:10,
231:20, 270:5
signing [2] - 286:25,
338:19
signs [2] - 116:25,
309:19
silicic [2] - 36:6, 36:7
silos [1] - 358:7
similar [17] - 38:24,
42:24, 54:25, 64:17,
77:9, 77:25, 81:5,
110:4, 129:9,
138:11, 146:21,
155:5, 207:12,
215:6, 226:23,
263:9, 288:9
similarities [1] -
200:13
Similarly [1] - 26:7
simple [7] - 205:24,
206:20, 207:6,
207:10, 207:11,
229:14, 367:1
simply [6] - 21:23,
30:16, 43:21, 265:4,
303:6, 347:5
simulate [1] - 229:21
simulations [5] -

39:12, 39:13, 39:20, 229:22, 230:21
simultaneously [1] - 336:15
sincere [1] - 354:8
single [6] - 128:25, 182:3, 229:5, 319:22, 359:8, 382:20
sister [1] - 312:23
sit [4] - 80:24, 143:10, 228:10, 297:21
site [167] - 3:25, 10:4, 11:22, 12:7, 29:9, 29:21, 29:25, 30:2, 30:4, 30:10, 30:12, 30:19, 31:2, 31:7, 31:11, 32:13, 32:15, 35:6, 35:16, 35:22, 36:4, 36:16, 38:10, 39:25, 40:3, 40:14, 46:4, 46:12, 46:17, 46:18, 46:19, 49:9, 49:22, 50:3, 50:14, 51:11, 51:14, 51:18, 52:2, 52:3, 52:4, 52:6, 52:13, 52:14, 52:25, 53:3, 54:1, 54:6, 54:8, 54:9, 57:16, 57:17, 57:18, 57:19, 59:2, 59:7, 60:13, 61:15, 63:7, 64:3, 64:7, 64:10, 67:14, 71:4, 77:6, 77:8, 77:10, 81:14, 83:16, 84:21, 84:22, 85:3, 85:25, 86:23, 87:1, 87:5, 88:3, 90:15, 90:18, 92:14, 95:20, 97:10, 97:15, 97:18, 101:15, 105:2, 105:14, 106:3, 106:11, 106:13, 107:23, 110:12, 110:14, 115:3, 115:16, 117:18, 117:20, 118:8, 119:12, 122:6, 122:7, 122:10, 124:22, 126:24, 128:4, 150:5, 155:2, 167:5, 167:11, 168:3, 179:10, 179:24, 180:4, 180:10, 181:4, 183:4, 183:5, 183:6, 185:21, 190:3, 190:10, 190:15, 197:5, 202:16, 203:4,

206:19, 214:24, 221:5, 223:23, 224:7, 224:8, 224:15, 226:11, 228:1, 230:19, 235:5, 235:8, 236:25, 237:20, 238:19, 238:24, 238:25, 239:6, 259:9, 263:16, 273:3, 285:24, 294:7, 294:13, 295:24, 296:14, 296:18, 306:3, 306:5, 306:17, 324:18, 328:3, 330:9, 330:10, 336:1, 378:7, 378:11
sited [1] - 104:19
sites [22] - 51:13, 51:16, 51:19, 51:20, 51:21, 51:24, 53:5, 76:22, 88:17, 108:5, 146:9, 208:10, 215:7, 224:10, 256:8, 290:9, 294:22, 306:14, 351:5
siting [12] - 30:2, 30:19, 35:23, 36:3, 36:5, 42:8, 48:25, 51:15, 57:8, 204:25, 287:3, 345:12
Siting [2] - 90:11, 189:25
sits [2] - 67:1, 94:8
sitting [2] - 65:18, 188:8
situated [1] - 50:5
situation [6] - 67:15, 180:3, 180:6, 189:8, 214:6, 330:2
situations [1] - 229:16
six [20] - 17:10, 42:15, 44:13, 47:24, 50:15, 50:17, 60:20, 61:12, 61:22, 75:4, 82:13, 103:3, 112:18, 112:19, 211:7, 228:16, 327:3, 361:14, 361:15, 366:14
six-inch [1] - 82:13
six-year [3] - 44:13, 60:20, 61:12
sixties [1] - 370:3
sixty [1] - 236:2
size [10] - 43:17, 79:17, 84:25, 99:21, 105:13, 107:13,

202:22, 242:14, 348:6, 349:9
sized [2] - 80:12, 85:16
sizing [1] - 84:3
skepticism [2] - 251:13, 251:20
skew [1] - 38:8
ski [1] - 349:13
skidder [1] - 95:19
skimmer [1] - 358:1
skip [3] - 331:15, 351:12, 354:7
slid [1] - 81:4
slide [22] - 19:15, 19:24, 20:23, 55:10, 58:10, 63:22, 64:12, 72:4, 93:23, 95:5, 99:10, 235:6, 254:25, 255:6, 270:2, 270:8, 270:18, 277:3, 289:18, 290:4, 290:24, 291:13
slides [9] - 53:18, 70:25, 254:24, 255:8, 256:10, 256:12, 262:22, 263:10, 289:2
slight [5] - 263:12, 263:20, 263:21, 276:23, 277:1
slightly [3] - 165:19, 251:17, 263:15
slope [3] - 188:23, 189:17, 189:18
slopes [1] - 124:19
Slow [1] - 250:23
slow [11] - 93:3, 116:8, 116:9, 121:7, 130:10, 249:18, 255:15, 321:5, 345:22, 348:12, 350:12
slower [2] - 233:23, 236:10
slowly [3] - 282:11, 285:10, 355:1
sludge [9] - 145:21, 146:1, 164:8, 165:18, 264:10, 327:7, 334:19, 335:12, 373:3
sludges [5] - 15:7, 26:12, 28:4, 126:16, 145:16
small [21] - 16:17, 22:8, 65:10, 73:21, 75:10, 84:15, 97:9, 99:9, 99:23, 121:12,

215:5, 220:9, 244:3, 252:21, 253:17, 275:17, 311:5, 323:14, 333:16, 336:8, 366:21
smaller [2] - 52:14, 115:5
smell [3] - 306:21, 333:9, 384:8
smelled [2] - 197:15, 381:9
smelling [1] - 381:16
smells [2] - 144:14, 144:15
smile [1] - 299:10
smoltification [1] - 253:6
smoothly [1] - 243:21
SMRT [1] - 8:6
snowboarding [1] - 349:12
snowman [2] - 136:14, 200:10
Snowman [2] - 4:10, 282:16
SNOWMAN [9] - 136:15, 136:25, 137:6, 137:11, 200:11, 201:6, 201:13, 201:19, 282:17
society [6] - 260:13, 300:10, 302:19, 303:14, 309:7, 344:2
Society [2] - 91:1, 358:7
soft [10] - 15:19, 16:1, 16:7, 25:5, 65:15, 65:16, 65:20, 172:12, 202:25
soil [26] - 32:3, 33:23, 33:25, 35:16, 36:3, 37:9, 39:9, 45:19, 52:1, 59:3, 63:15, 69:22, 71:17, 86:6, 121:25, 124:24, 138:21, 190:2, 190:8, 203:1, 203:2, 219:23, 222:1, 226:24
soils [47] - 26:24, 30:21, 31:1, 31:25, 32:4, 33:12, 35:5, 39:23, 43:16, 51:18, 54:7, 57:22, 57:24, 58:3, 58:6, 58:7, 58:22, 58:25, 59:1, 59:5, 60:17, 61:4, 61:15, 63:8, 70:2, 70:17, 70:22, 71:2,

71:3, 71:15, 71:18, 85:14, 85:25, 86:11, 86:17, 87:1, 87:3, 89:14, 105:22, 122:3, 126:17, 201:3, 202:10, 202:18, 202:20, 221:7, 221:21
sold [2] - 155:15, 379:15
Solid [11] - 2:13, 9:4, 28:20, 113:17, 159:7, 162:20, 286:19, 287:8, 301:24, 328:19
solid [49] - 14:15, 14:25, 15:15, 15:18, 19:16, 20:11, 21:5, 21:6, 23:13, 23:14, 24:4, 24:6, 24:22, 25:14, 27:15, 30:3, 48:12, 49:7, 57:2, 90:10, 114:13, 117:24, 118:3, 126:17, 137:19, 139:9, 140:14, 162:19, 163:22, 170:14, 176:7, 176:23, 177:17, 289:7, 289:16, 289:24, 301:17, 304:1, 312:24, 317:20, 325:22, 329:7, 329:14, 329:16, 335:16, 348:7, 362:17, 377:21, 378:24
solids [3] - 146:3, 352:9, 358:3
solution [8] - 22:4, 243:3, 243:4, 339:18, 347:3, 352:24, 365:3, 365:4
solutions [2] - 19:11, 167:14
Solutions [1] - 298:12
someone [14] - 17:16, 43:7, 131:22, 144:16, 195:3, 197:1, 201:18, 221:8, 237:6, 288:8, 291:23, 319:8, 328:3, 355:3
someplace [4] - 181:21, 300:13, 364:22, 372:7
sometime [1] - 198:21
sometimes [13] - 146:6, 149:17, 169:16, 212:20,

229:13, 233:7,
233:8, 310:9,
357:11, 364:8,
366:24, 373:12
somewhat [2] -
294:10, 385:13
somewhere [20] -
13:23, 15:22, 17:15,
118:10, 162:1,
168:11, 171:13,
187:12, 292:8,
300:10, 303:3,
303:5, 309:3,
309:16, 309:25,
310:18, 310:19,
366:16, 371:6,
383:13
soon [2] - 175:3,
359:4
sooner [2] - 199:6,
319:24
sorry [30] - 55:18,
59:23, 82:23, 88:9,
93:8, 116:9, 141:6,
144:24, 153:6,
153:7, 178:24,
222:1, 234:6,
250:24, 251:6,
261:13, 264:5,
265:6, 268:25,
270:14, 274:1,
278:9, 281:11,
281:16, 299:20,
320:3, 345:24,
346:1, 348:15, 377:4
Sorry [2] - 141:12,
240:12
sort [28] - 9:17, 16:19,
22:21, 23:5, 31:12,
34:16, 35:3, 36:7,
40:8, 40:11, 45:11,
45:23, 97:24,
111:12, 150:17,
161:6, 207:5,
227:23, 228:15,
229:6, 229:8,
230:16, 240:12,
256:21, 259:17,
295:18, 359:8
sorted [1] - 24:15
sorting [1] - 22:18
sorts [1] - 305:20
sound [23] - 21:21,
115:21, 117:16,
118:5, 118:14,
129:7, 143:24,
144:3, 144:5, 144:6,
144:9, 193:15,
210:5, 220:8,
236:15, 236:20,

236:21, 236:22,
237:10, 304:21,
352:22, 362:2, 363:3
sounding [1] - 169:4
source [26] - 21:7,
22:16, 22:18, 25:19,
27:13, 28:10,
123:19, 167:19,
168:4, 170:19,
173:19, 175:11,
175:12, 176:18,
177:5, 185:12,
198:4, 205:21,
221:14, 228:13,
231:6, 240:11,
307:1, 307:4, 340:9,
346:5
sources [12] - 24:12,
76:17, 119:7,
119:16, 120:17,
155:22, 200:14,
200:15, 240:15,
245:23, 255:21,
341:24
south [3] - 31:13,
239:5, 360:5
southeast [5] - 43:11,
43:12, 47:15, 47:16,
230:18
Southeast [1] - 313:2
Southern [1] - 29:16
southern [4] - 147:17,
171:15, 275:11,
293:18
southwest [6] - 36:22,
47:13, 47:16,
110:15, 205:4,
225:12
Southwest [2] -
312:22, 312:25
space [14] - 16:14,
79:12, 147:7, 148:2,
152:4, 159:14,
188:13, 188:14,
308:3, 322:4, 329:2,
331:5, 338:15,
339:13
Space [2] - 268:24,
268:25
spaced [2] - 78:1,
207:20
spaces [3] - 37:9,
39:5, 39:7
spacing [2] - 81:22,
81:23
sparkly [1] - 323:12
spawn [1] - 267:8
spawned [1] - 254:7
spawning [4] -
252:21, 253:9,

253:18, 266:11
speaker [2] - 251:4,
358:21
speaking [8] - 206:25,
217:23, 237:6,
282:11, 336:2,
348:1, 358:19, 381:1
spec [1] - 236:18
special [17] - 15:5,
26:25, 93:14, 93:15,
105:11, 106:7,
126:17, 126:19,
126:20, 126:21,
127:3, 137:25,
138:6, 138:8, 159:1,
201:3, 334:1
Special [1] - 351:17
specialist [1] - 381:25
Species [6] - 192:10,
258:21, 261:9,
261:10, 263:2, 263:7
species [43] - 91:12,
94:23, 106:13,
106:17, 107:20,
110:5, 111:21,
112:12, 112:24,
113:3, 217:21,
218:11, 218:15,
218:17, 218:23,
218:24, 219:1,
219:7, 232:25,
233:1, 245:14,
252:19, 253:23,
254:1, 254:10,
254:20, 259:8,
259:11, 261:8,
261:14, 261:16,
261:23, 262:12,
262:14, 262:16,
262:17, 262:23,
262:24, 266:23,
267:1, 351:6
specific [19] - 54:5,
58:16, 62:2, 120:24,
126:24, 135:14,
187:13, 201:14,
201:17, 206:7,
207:25, 210:19,
217:6, 222:6,
240:16, 257:5,
264:16, 290:21,
345:4
specifically [9] - 6:7,
59:11, 94:19,
124:18, 157:5,
183:17, 196:19,
264:10, 268:12
specifications [2] -
89:2, 89:19
specifics [1] - 289:1

specified [1] - 139:21
spectrum [1] - 23:22
speculate [1] - 133:2
spencer [1] - 249:17
SPENCER [72] -
130:13, 130:16,
131:5, 131:16,
132:3, 132:14,
132:23, 133:4,
133:11, 133:16,
133:22, 133:24,
134:9, 134:22,
134:25, 135:5,
135:17, 135:23,
136:6, 174:22,
175:9, 175:15,
175:21, 176:13,
177:2, 177:11,
177:19, 179:7,
181:3, 181:14,
182:2, 182:17,
183:2, 183:22,
184:2, 184:18,
185:6, 185:21,
186:5, 186:13,
186:20, 187:2,
187:15, 188:1,
188:12, 188:16,
188:22, 189:2,
189:19, 191:3,
192:4, 192:18,
192:25, 193:12,
193:17, 194:13,
195:13, 196:19,
197:18, 197:21,
197:25, 198:17,
199:15, 200:5,
248:9, 248:11,
248:16, 249:6,
249:20, 271:25,
279:16, 332:23
Spencer [20] - 4:7,
5:2, 5:4, 49:20,
78:13, 109:6, 130:9,
130:16, 174:15,
174:19, 176:4,
179:6, 231:17,
261:1, 286:7, 286:9,
325:23, 328:9,
332:21, 333:2
Spencer's [3] - 68:25,
225:9, 279:25
spend [4] - 13:12,
64:24, 293:2, 312:5
spending [1] - 364:4
spewing [1] - 324:10
spill [6] - 15:13, 26:24,
35:15, 42:12,
138:21, 373:15
spirit [1] - 354:16

Spitfire [2] - 314:19,
314:22
SPITFIRE [2] - 314:21,
317:19
split [1] - 100:1
SPO [1] - 132:22
spoken [5] - 209:1,
227:17, 292:15,
314:23, 320:15
spotted [6] - 107:15,
107:17, 107:18,
218:21, 218:25,
219:3
spray [6] - 121:10,
121:16, 122:5,
196:4, 196:5, 196:12
spread [4] - 71:10,
85:12, 88:1, 379:23
spreader [1] - 85:12
spreading [1] - 183:13
spring [4] - 106:8,
319:24, 370:21,
373:25
springs [1] - 173:17
springtime [1] -
252:25
Springvale [2] - 2:23,
284:19
spruce [1] - 106:5
spun [1] - 67:16
square [1] - 105:13
squeeze [1] - 249:9
squished [1] - 336:7
SSR [1] - 4:10
stability [9] - 35:10,
85:23, 86:1, 86:13,
87:2, 367:9, 367:11,
367:12, 367:15
stable [3] - 46:14,
46:15, 69:24
staff [25] - 3:8, 5:12,
5:14, 6:1, 6:18,
40:21, 98:4, 109:10,
109:19, 115:19,
124:5, 124:6,
125:10, 127:6,
127:24, 129:5,
138:16, 169:16,
170:12, 173:2,
219:20, 225:7,
282:21, 285:2, 313:8
STAFF [1] - 1:22
Stagecoach [1] -
179:12
stages [2] - 184:10,
257:9
stand [2] - 6:11,
297:25
standard [18] - 19:2,
20:24, 22:6, 50:24,

56:11, 57:7, 57:22,
58:1, 59:25, 60:5,
94:11, 103:1,
161:16, 178:10,
178:14, 330:7,
330:14, 357:8
standardly [1] - 192:1
standards [41] - 19:6,
48:20, 48:21, 49:8,
53:23, 55:13, 56:1,
56:2, 57:15, 57:16,
57:17, 61:8, 61:12,
88:20, 88:25, 90:9,
90:10, 92:9, 92:25,
94:21, 100:19,
102:13, 102:16,
117:15, 119:4,
119:6, 119:16,
123:19, 123:20,
127:5, 129:13,
153:24, 176:10,
178:13, 185:13,
198:5, 211:17,
211:21, 346:22,
352:12, 352:16
Standards [2] - 90:12,
189:25
standby [1] - 242:4
standing [1] - 238:9
standpoint [4] -
202:13, 202:17,
202:23, 304:14
stands [1] - 303:12
Stantec [7] - 8:9,
52:22, 91:5, 91:6,
91:23, 92:12, 97:24
Stantec's [1] - 91:14
stapled [1] - 223:14
Staples [5] - 309:9,
312:16, 365:12,
369:7, 369:8
STAPLES [1] - 369:8
Starr [1] - 259:16
start [16] - 2:20, 30:15,
49:21, 92:8, 130:17,
146:19, 179:3,
204:5, 222:23,
225:11, 249:11,
278:9, 288:3,
292:21, 292:23,
339:25
started [12] - 9:18,
75:20, 139:5,
226:11, 243:19,
270:19, 284:5,
306:11, 361:6,
361:10, 372:14,
385:11
starting [2] - 22:15,
365:2

starts [1] - 221:11
startup [3] - 243:19,
243:20, 300:4
STATE [2] - 1:1, 1:5
state [203] - 7:13, 8:19,
9:18, 9:21, 10:3,
10:11, 10:13, 10:15,
10:21, 10:22, 10:23,
11:8, 12:8, 12:20,
13:25, 14:1, 14:15,
14:23, 17:9, 17:19,
17:22, 17:23, 17:25,
21:4, 21:9, 21:11,
24:6, 27:16, 27:20,
30:16, 117:8,
125:23, 126:7,
128:20, 128:25,
130:23, 131:20,
131:22, 132:15,
133:5, 133:7,
133:17, 133:19,
133:20, 133:22,
134:1, 134:3, 134:5,
135:6, 135:13,
136:19, 137:7,
137:24, 138:7,
138:20, 139:5,
139:13, 139:16,
139:18, 139:19,
140:2, 140:8,
140:11, 140:13,
140:16, 140:19,
140:22, 140:24,
142:12, 147:2,
147:4, 147:8, 149:3,
149:13, 149:16,
149:21, 150:20,
152:3, 159:11,
160:3, 160:8,
160:12, 160:20,
161:4, 164:9,
166:20, 167:16,
168:18, 170:17,
171:13, 171:14,
176:16, 177:3,
177:7, 177:16,
185:3, 186:6, 186:9,
186:10, 200:22,
201:11, 201:12,
201:23, 202:4,
202:15, 203:9,
212:6, 212:12,
224:11, 245:21,
261:7, 261:17,
268:19, 269:8,
280:16, 289:9,
289:11, 294:17,
310:20, 310:22,
314:4, 314:8,
317:21, 317:22,
317:24, 320:16,

320:20, 322:8,
324:23, 325:15,
325:18, 325:21,
325:22, 327:13,
327:17, 327:20,
328:4, 328:6,
328:21, 329:17,
331:2, 331:10,
331:21, 332:5,
332:6, 332:7, 332:8,
332:10, 332:13,
332:16, 332:17,
333:25, 334:2,
334:3, 334:20,
334:21, 334:23,
337:3, 337:5,
337:23, 339:12,
339:21, 340:1,
340:7, 340:10,
345:2, 346:7,
346:12, 347:5,
347:10, 349:18,
349:19, 349:23,
349:25, 350:1,
350:8, 350:9,
351:17, 352:12,
352:15, 354:15,
354:16, 360:3,
360:13, 360:14,
360:16, 360:17,
367:19, 371:7,
372:17, 374:14,
377:7, 380:21
State [55] - 2:8, 10:12,
11:24, 11:25, 18:18,
19:9, 23:12, 29:4,
48:9, 51:6, 55:2,
73:23, 74:3, 76:22,
113:15, 114:14,
114:16, 137:19,
155:21, 165:6,
187:1, 195:12,
201:4, 203:12,
224:8, 224:10,
232:6, 248:22,
251:5, 284:10,
286:3, 287:8,
289:13, 295:12,
310:23, 310:25,
313:17, 315:10,
315:16, 322:5,
323:2, 323:7,
327:16, 328:19,
336:20, 342:12,
344:13, 359:3,
360:7, 362:18,
362:22, 364:5,
365:5, 375:16,
375:25
state's [9] - 14:14,
48:19, 149:3,

158:25, 159:24,
325:16, 331:7,
340:14, 353:20
state-of-the-art [1] -
377:7
state-owned [11] -
8:19, 11:8, 131:20,
168:18, 201:12,
325:15, 328:4,
332:10, 334:2,
349:18, 350:9
statement [7] - 75:19,
76:4, 109:14,
152:23, 179:17,
261:5, 385:15
statements [1] -
261:11
States [4] - 74:17,
75:12, 255:24,
315:12
states [11] - 29:18,
94:19, 239:22,
262:12, 263:12,
273:2, 331:24,
332:4, 339:11,
346:21, 352:2
statewide [1] - 308:8
station [14] - 5:23,
77:8, 77:9, 77:17,
77:18, 121:16,
122:21, 123:6,
195:21, 286:25,
305:7, 312:24,
361:18, 379:9
Station [1] - 196:11
stations [13] - 23:11,
24:14, 77:11, 80:6,
140:1, 201:3,
378:24, 379:3,
379:4, 379:6, 379:8,
379:23
statistical [1] - 191:5
statistics [1] - 250:20
statute [8] - 11:8,
136:23, 136:24,
137:10, 137:12,
186:11, 281:12,
334:20
statutes [4] - 3:17,
281:20, 285:16,
345:16
stay [9] - 77:19,
130:11, 255:8,
262:5, 269:3,
282:11, 340:20,
345:23, 385:13
stays [2] - 174:16,
333:8
Steady [1] - 251:5
steady [2] - 27:1,

320:9
steam [1] - 302:24
steep [1] - 189:6
Steinhauser [1] - 8:7
stenographer [5] -
38:20, 93:6, 285:12,
347:18, 355:2
step [4] - 127:2, 233:8,
323:1, 356:22
Stephen [3] - 5:1,
249:21, 286:6
steps [9] - 23:16,
97:17, 113:6, 209:5,
303:14, 336:25,
355:3, 366:18, 367:3
Steve [5] - 1:23, 3:9,
250:14, 285:3, 365:7
stew [2] - 321:12,
321:15
stick [2] - 252:5,
271:14
still [31] - 95:23, 98:2,
99:1, 104:10, 107:8,
114:6, 131:9,
131:10, 148:15,
150:23, 151:1,
151:3, 170:5,
180:14, 205:23,
213:19, 213:20,
225:10, 309:15,
309:23, 309:24,
310:1, 310:18,
319:23, 334:15,
340:8, 359:25,
371:5, 372:5, 380:3
Stillwater [1] - 112:19
stipulated [2] - 10:11,
10:13
stipulations [1] -
219:22
stock [1] - 257:5
stocked [1] - 237:14
stockpiling [1] -
154:22
stocks [1] - 257:6
stone [8] - 73:20,
81:11, 187:25,
188:2, 188:3, 188:5,
188:9
stop [4] - 142:23,
334:25, 348:11,
353:1
stopped [2] - 154:22,
213:6
storage [6] - 78:10,
80:13, 80:15, 81:15,
235:13, 312:25
store [1] - 79:13
stories [1] - 349:2
storm [16] - 78:14,

78:15, 79:5, 79:11, 79:20, 79:23, 79:24, 79:25, 85:17, 88:15, 88:19, 272:11, 272:15, 273:5, 353:3 storms [6] - 79:14, 88:19, 272:15, 272:21, 274:23, 275:1 stormwater [18] - 50:10, 53:9, 78:16, 83:19, 83:22, 84:6, 84:7, 84:13, 84:18, 84:21, 88:14, 98:18, 188:23, 189:9, 189:24, 259:8, 287:4 straight [4] - 139:24, 163:17, 167:3, 329:11 straightforward [3] - 40:25, 42:5, 354:23 strategically [1] - 116:25 Strategies [1] - 145:19 strategy [2] - 184:17, 343:8 stream [23] - 15:12, 110:10, 110:11, 110:13, 110:15, 110:17, 110:22, 110:23, 111:4, 111:9, 111:16, 112:2, 112:7, 112:9, 112:15, 112:22, 151:11, 201:8, 296:9, 324:25, 339:5, 359:24 Stream [3] - 110:16, 111:9, 267:7 streams [31] - 24:9, 25:11, 27:1, 27:19, 27:21, 97:10, 109:14, 109:15, 110:9, 111:19, 111:24, 112:1, 112:5, 112:7, 112:14, 112:16, 112:17, 126:8, 132:17, 185:8, 193:3, 252:21, 253:2, 253:3, 253:17, 258:22, 259:24, 324:13, 336:8, 346:12, 353:3 street [1] - 295:18 strength [5] - 33:15, 85:24, 86:5, 86:9, 86:12 strengths [1] - 187:8 stress [1] - 354:2	stressed [1] - 312:6 stressors [3] - 275:15, 275:20 stricter [1] - 220:21 strictly [1] - 246:8 strike [2] - 241:18, 241:19 strikes [1] - 241:16 string [1] - 41:22 stringent [1] - 123:20 strip [1] - 58:5 striped [1] - 254:11 strive [2] - 120:1, 359:19 strong [5] - 87:4, 188:15, 293:22, 301:23, 376:17 stronger [1] - 68:19 structure [4] - 85:7, 85:8, 358:5, 361:20 structures [5] - 85:19, 98:17, 274:22, 316:9 struggling [1] - 310:24 students [1] - 250:7 studies [3] - 111:14, 192:23, 212:8 study [5] - 51:15, 116:3, 207:22, 248:21, 319:5 stuff [16] - 89:20, 150:25, 299:7, 300:22, 309:1, 311:8, 319:25, 368:10, 383:4, 384:3, 384:13, 384:15, 384:20, 384:22, 384:25 stunk [1] - 381:15 sturgeon [9] - 92:7, 112:11, 252:9, 252:10, 254:10, 262:25, 263:6, 264:19 stymying [1] - 156:2 subject [14] - 10:7, 20:5, 21:6, 26:9, 27:12, 28:17, 123:19, 124:24, 166:12, 166:16, 195:11, 212:25, 288:13, 345:20 subjected [2] - 176:18, 185:10 subjective [1] - 260:14 submersible [1] - 207:12 submit [6] - 5:22, 62:3, 170:22, 225:21, 341:7,	385:18 submitted [13] - 89:3, 89:21, 101:3, 109:5, 157:15, 231:19, 244:18, 262:19, 289:23, 290:22, 291:17, 330:13, 337:1 submitting [2] - 109:1, 331:17 subsequent [1] - 228:8 Substances [2] - 352:1, 352:2 substances [2] - 352:10, 353:19 substantial [3] - 156:14, 329:15, 377:18 subsurface [2] - 30:17, 228:15 success [6] - 173:15, 303:16, 304:20, 311:4, 367:10, 375:21 successful [4] - 118:16, 119:25, 173:23, 212:23 successfully [2] - 129:2, 183:11 suck [1] - 382:15 sudden [3] - 171:19, 327:14, 345:25 suddenly [1] - 319:9 suffering [1] - 343:19 sufficient [6] - 26:22, 42:11, 42:16, 43:17, 44:16, 220:1 sufficiently [3] - 20:5, 22:7, 28:17 sugar [1] - 316:3 suggest [2] - 158:21, 271:13 suggested [1] - 351:23 suggesting [1] - 351:20 suggests [1] - 273:10 suitable [2] - 29:9, 51:17 suite [1] - 232:18 Sulfa [3] - 241:24, 242:8, 242:13 sulfide [23] - 119:9, 120:8, 124:12, 125:4, 125:6, 125:17, 125:20, 144:12, 197:22, 199:2, 199:4, 199:5, 199:16, 199:25,	238:15, 239:14, 239:21, 242:19, 248:13, 248:15, 248:22, 333:5, 377:8 sulfur [9] - 198:12, 198:13, 241:23, 242:1, 242:21, 243:6, 243:15, 244:1, 377:10 sum [1] - 107:22 summaries [1] - 262:4 summarize [4] - 30:10, 253:11, 256:9, 256:25 summarizes [1] - 97:12 summary [9] - 9:16, 12:23, 46:2, 113:4, 255:10, 269:9, 341:7, 347:6, 354:8 summer [3] - 101:4, 244:8, 373:22 sump [10] - 65:2, 78:22, 78:23, 79:17, 79:18, 81:11, 188:16, 206:21, 207:6, 207:10 sumped [1] - 235:12 sumps [9] - 62:23, 76:16, 77:5, 77:6, 78:3, 79:5, 80:21, 81:3, 188:20 Sunkhaze [1] - 318:23 super [1] - 324:18 superimposed [1] - 87:14 supervision [2] - 216:11, 313:10 supervisor [1] - 128:4 supplement [1] - 92:22 supplemented [1] - 32:25 supplied [2] - 28:13, 128:24 supplier [2] - 141:1, 142:13 suppliers [2] - 140:15, 220:22 supplies [1] - 384:19 supply [4] - 43:24, 128:19, 308:1, 308:3 supplying [1] - 220:24 support [17] - 24:8, 109:24, 216:11, 271:5, 284:6, 292:22, 292:23, 293:12, 300:14, 301:11, 305:23, 314:16, 358:20,	364:20, 365:5, 369:4, 380:16 supported [2] - 216:22, 216:23 supporters [1] - 301:23 suppose [1] - 297:24 supposed [5] - 127:23, 251:6, 262:3, 319:18, 339:12 supposedly [1] - 337:22 supposition [1] - 230:20 sur [1] - 271:11 surface [38] - 30:6, 31:14, 31:15, 35:5, 36:9, 40:5, 42:23, 43:9, 44:1, 46:1, 46:10, 51:23, 57:25, 58:4, 58:8, 61:9, 65:3, 85:10, 85:11, 85:13, 97:6, 125:3, 180:2, 181:6, 181:9, 181:24, 182:1, 190:9, 198:24, 213:25, 226:14, 226:22, 242:17, 242:18, 260:23, 353:6, 353:10, 353:12 surges [1] - 353:3 surprise [2] - 230:7, 230:10 surprised [3] - 338:1, 381:7, 381:18 surprisingly [1] - 381:10 surrendered [1] - 175:3 surrounded [1] - 40:3 surrounded [2] - 43:16, 188:3 surrounding [13] - 30:5, 41:10, 46:8, 51:23, 103:5, 134:16, 135:3, 181:4, 246:13, 273:3, 321:16, 343:20, 376:6 surrounds [2] - 95:3, 107:23 survey [16] - 74:19, 74:20, 75:3, 76:1, 76:21, 94:10, 95:25, 104:3, 104:23, 106:9, 218:15, 245:18, 290:25, 291:3, 291:5
--	--	--	---	--

<p>surveys [18] - 33:5, 91:11, 91:16, 91:17, 91:23, 91:24, 92:9, 94:4, 94:5, 94:8, 94:11, 94:15, 97:12, 106:24, 111:3, 113:5, 120:5, 120:7</p> <p>susceptible [2] - 87:4, 275:14</p> <p>suspended [2] - 352:9, 358:3</p> <p>sustain [3] - 279:24, 323:24, 375:23</p> <p>sustainable [1] - 254:15</p> <p>sustainably [2] - 254:13, 319:18</p> <p>sustains [1] - 323:3</p> <p>sustenance [5] - 345:17, 346:24, 347:9, 351:7, 352:13</p> <p>sustenant [1] - 315:14</p> <p>swallow [1] - 371:13</p> <p>Swan's [1] - 313:4</p> <p>swell [2] - 67:6, 67:13</p> <p>swells [1] - 353:8</p> <p>swift [1] - 253:2</p> <p>swim [1] - 366:9</p> <p>swimming [1] - 366:3</p> <p>switch [1] - 99:16</p> <p>sworn [2] - 4:12, 6:11</p> <p>SWPPP [1] - 259:4</p> <p>syndrome [1] - 306:8</p> <p>synthetic [2] - 124:19, 240:21</p> <p>System [1] - 278:12</p> <p>system [156] - 13:11, 22:16, 34:11, 37:16, 38:5, 38:14, 41:2, 42:2, 42:3, 42:11, 45:2, 45:5, 45:8, 45:10, 45:16, 45:22, 57:2, 58:11, 58:17, 59:12, 59:15, 60:1, 60:2, 60:4, 60:10, 60:15, 63:10, 63:17, 64:14, 64:19, 65:1, 65:12, 66:20, 66:21, 66:25, 67:8, 67:9, 68:8, 68:9, 68:20, 69:2, 69:4, 69:8, 69:16, 70:4, 70:9, 70:10, 70:11, 70:12, 70:14, 70:15, 71:14, 71:24, 71:25, 72:4, 75:11, 76:2, 76:24, 77:24, 80:7, 80:8, 85:21, 90:5, 117:4, 121:10, 122:12, 122:19, 123:2,</p>	<p>123:3, 123:25, 124:2, 124:10, 124:12, 124:17, 124:18, 125:9, 126:11, 126:12, 128:10, 131:21, 184:3, 184:4, 187:3, 203:5, 203:7, 203:13, 207:19, 207:22, 207:25, 208:3, 208:7, 208:18, 208:19, 208:22, 208:23, 208:24, 209:1, 210:10, 210:22, 210:23, 211:4, 213:16, 213:17, 214:15, 214:16, 214:23, 214:25, 215:4, 215:11, 215:13, 215:14, 215:16, 215:17, 215:18, 215:19, 222:13, 223:8, 226:21, 229:4, 233:6, 235:23, 240:24, 241:8, 241:24, 241:25, 242:2, 242:5, 242:7, 242:9, 242:11, 242:13, 243:15, 243:22, 244:3, 244:8, 244:13, 247:14, 247:17, 247:18, 247:21, 247:22, 269:16, 294:15, 304:18, 316:25, 359:6, 362:17, 362:21, 377:8, 377:10, 377:21, 377:25</p> <p>System's [1] - 18:14</p> <p>systems [18] - 44:25, 45:14, 63:20, 71:7, 72:22, 97:7, 122:6, 129:16, 203:9, 203:11, 211:16, 214:18, 214:23, 215:8, 215:13, 231:1, 246:16, 251:21</p> <p>Systems [2] - 10:19, 289:13</p>	<p>141:17, 172:11, 172:14, 179:5, 189:5, 213:25, 215:22, 278:21, 286:24, 287:13, 292:3, 297:21, 323:22</p> <p>Table [2] - 141:17, 141:22</p> <p>tables [1] - 209:14</p> <p>tad [1] - 295:22</p> <p>talks [2] - 209:11, 371:2</p> <p>tank [13] - 78:10, 80:12, 80:13, 80:16, 81:15, 122:13, 122:22, 170:8, 235:14, 355:24, 356:1, 356:3</p> <p>tankers [1] - 122:13</p> <p>tanks [1] - 169:22</p> <p>TARBUCK [2] - 6:21, 288:18</p> <p>Tarbuck [8] - 1:23, 3:9, 4:19, 6:23, 285:4, 286:15, 288:16, 288:19</p> <p>Tarbuck@maine.gov [1] - 385:21</p> <p>target [1] - 294:25</p> <p>tarps [1] - 121:2</p> <p>task [2] - 264:6, 340:3</p> <p>taxes [5] - 134:14, 134:17, 134:21, 135:1, 293:25</p> <p>teach [3] - 250:18, 269:5, 299:14</p> <p>teaching [1] - 250:6</p> <p>team [1] - 98:10</p> <p>teamed [1] - 302:8</p> <p>tech [1] - 42:5</p> <p>technical [6] - 203:8, 216:11, 237:13, 290:21, 330:21, 356:9</p> <p>technicality [1] - 297:23</p> <p>technically [1] - 356:18</p> <p>technique [4] - 73:7, 75:13, 79:21, 155:24</p> <p>techniques [6] - 21:16, 27:3, 57:4, 75:22, 118:21, 227:18</p> <p>Technologies [1] - 305:7</p> <p>technologies [3] - 20:19, 294:21, 372:4</p> <p>technology [17] -</p>	<p>156:3, 184:15, 210:13, 211:10, 217:1, 234:18, 260:22, 295:13, 297:10, 305:20, 306:19, 306:25, 307:2, 359:1, 359:12, 359:17, 383:10</p> <p>teetering [1] - 321:13</p> <p>televisions [1] - 195:24</p> <p>temperature [4] - 111:18, 111:20, 275:19, 275:21</p> <p>temperatures [2] - 123:17, 199:23</p> <p>temporarily [1] - 304:4</p> <p>temporary [5] - 77:6, 77:11, 77:18, 352:24</p> <p>ten [28] - 35:24, 38:18, 38:25, 63:15, 69:19, 71:21, 94:16, 94:22, 175:2, 178:22, 178:25, 188:19, 224:20, 224:21, 237:24, 248:7, 249:10, 266:17, 304:15, 341:18, 341:20, 348:22, 349:10, 354:19, 362:5, 369:10, 375:13, 384:2</p> <p>ten-minute [3] - 178:22, 178:25, 354:19</p> <p>ten-year-old [1] - 362:5</p> <p>tend [3] - 36:20, 195:17, 195:25</p> <p>tends [1] - 36:8</p> <p>tenth [2] - 99:11, 100:1</p> <p>term [23] - 51:5, 82:6, 82:18, 83:21, 86:7, 130:24, 143:25, 149:8, 175:16, 181:14, 185:25, 186:1, 186:2, 201:23, 216:4, 268:14, 325:20, 328:1, 328:5, 331:9, 346:6, 352:24</p> <p>termed [1] - 107:2</p> <p>terminology [1] - 210:2</p> <p>terms [20] - 11:23, 12:12, 40:17, 40:25, 132:8, 132:15, 147:11, 177:25,</p>	<p>182:13, 182:24, 210:4, 219:22, 227:2, 231:1, 235:23, 236:23, 246:13, 289:11, 320:15, 341:17</p> <p>terrestrial [2] - 95:3, 100:15</p> <p>Terri [4] - 358:17, 360:20, 360:25, 363:6</p> <p>territories [1] - 252:25</p> <p>territory [2] - 10:7, 193:14</p> <p>test [22] - 31:24, 32:2, 33:10, 34:7, 51:25, 52:2, 56:3, 89:13, 89:15, 191:21, 199:20, 199:22, 199:23, 199:24, 200:1, 217:7, 222:1, 224:3, 233:9</p> <p>tested [4] - 33:14, 70:9, 73:12, 180:23</p> <p>testified [4] - 247:23, 298:1, 322:6, 334:10</p> <p>testifies [1] - 7:23</p> <p>testify [7] - 287:12, 287:18, 297:25, 354:10, 354:25, 355:6, 369:12</p> <p>testifying [2] - 5:13, 270:9</p> <p>testimonies [1] - 4:12</p> <p>Testimony [1] - 5:3</p> <p>testimony [125] - 4:14, 4:16, 4:20, 4:22, 4:25, 5:6, 5:8, 5:9, 5:19, 6:6, 6:13, 8:3, 9:15, 12:18, 15:3, 28:25, 31:7, 48:5, 49:16, 49:17, 49:18, 49:21, 68:25, 74:15, 75:15, 78:12, 79:16, 87:7, 104:14, 109:5, 130:19, 145:10, 151:14, 152:21, 152:22, 153:2, 165:23, 168:15, 170:14, 173:4, 175:20, 175:22, 176:4, 184:19, 198:2, 198:4, 233:18, 234:24, 241:23, 243:8, 244:15, 244:25, 250:10, 251:8, 251:25, 252:8, 255:7, 255:9, 255:22, 256:3,</p>
	T			
	<p>T.J [1] - 358:13</p> <p>TABLE [1] - 1:18</p> <p>table [21] - 6:1, 7:3, 27:15, 40:7, 59:16, 63:7, 63:11, 107:11,</p>			

<p>256:8, 256:14, 257:10, 257:20, 258:24, 260:4, 261:5, 261:6, 261:12, 261:13, 261:21, 261:22, 261:25, 262:3, 262:4, 262:6, 264:5, 265:11, 265:13, 265:24, 266:18, 267:4, 268:17, 268:20, 269:13, 270:9, 270:11, 270:16, 270:24, 271:4, 271:11, 271:12, 271:14, 271:23, 273:18, 273:22, 273:25, 274:9, 276:4, 276:21, 277:14, 277:16, 280:16, 281:8, 281:10, 282:22, 283:2, 286:2, 286:6, 286:9, 286:11, 286:15, 287:10, 288:6, 288:7, 292:23, 298:3, 325:24, 330:13, 350:24, 354:20, 369:3, 385:11</p> <p>testing [11] - 62:6, 67:20, 71:19, 89:13, 90:2, 180:24, 211:19, 221:23, 222:7, 222:13, 222:14</p> <p>tests [6] - 32:19, 41:7, 41:14, 191:6, 197:21, 199:17</p> <p>thankful [1] - 333:6</p> <p>THE [2] - 1:6, 255:15</p> <p>theirs [1] - 367:18</p> <p>themselves [4] - 100:13, 140:6, 154:25, 167:19</p> <p>therefore [8] - 25:10, 36:24, 48:19, 96:18, 115:16, 177:24, 195:11, 331:25</p> <p>they've [12] - 15:7, 85:5, 137:23, 154:21, 154:22, 174:4, 220:23, 300:8, 314:5, 314:11, 376:12</p> <p>thick [7] - 47:5, 47:7, 64:16, 66:18, 80:25, 90:1, 236:2</p> <p>thicker [1] - 211:3</p>	<p>thickness [2] - 39:17, 68:3</p> <p>thinking [5] - 356:1, 381:3, 381:14, 382:12, 385:1</p> <p>Thiopaq [9] - 119:11, 124:10, 242:1, 242:5, 242:10, 242:11, 243:6, 243:15, 377:9</p> <p>third [10] - 59:8, 108:13, 108:19, 120:23, 123:1, 152:10, 180:5, 221:8, 254:25, 339:8</p> <p>third-party [2] - 108:13, 108:19</p> <p>thirds [1] - 341:18</p> <p>Thomas [2] - 1:16, 1:16</p> <p>Thornton [2] - 365:9, 365:14</p> <p>THORNTON [2] - 365:10, 365:13</p> <p>thorough [2] - 202:12, 221:4</p> <p>thoroughly [2] - 195:6, 241:8</p> <p>thoughts [1] - 252:18</p> <p>thousand [4] - 55:16, 196:3, 323:21, 323:22</p> <p>thousands [4] - 194:15, 194:18, 267:8, 272:24</p> <p>thousandths [4] - 235:24, 235:25, 236:1, 236:3</p> <p>threat [2] - 321:22, 352:24</p> <p>threaten [1] - 274:21</p> <p>threatened [4] - 218:14, 258:11, 261:7, 262:25</p> <p>threatens [1] - 336:8</p> <p>three [55] - 9:22, 12:7, 30:17, 39:12, 47:25, 48:1, 53:12, 53:19, 53:20, 58:19, 59:17, 68:8, 69:6, 79:18, 84:17, 86:23, 86:24, 104:3, 105:1, 106:25, 114:11, 114:18, 114:20, 114:21, 115:10, 116:11, 119:4, 120:10, 120:17, 120:24, 173:16, 184:20, 187:24, 204:3, 206:18,</p>	<p>208:8, 208:20, 210:22, 228:2, 228:7, 241:18, 253:4, 254:7, 263:25, 267:1, 293:21, 295:21, 295:22, 331:5, 334:5, 362:6, 374:6, 381:8</p> <p>three-day [1] - 69:6</p> <p>three-dimensional [1] - 39:12</p> <p>threshold [1] - 197:2</p> <p>thresholds [1] - 107:4</p> <p>threw [1] - 168:2</p> <p>throughout [17] - 48:17, 94:6, 202:15, 203:9, 213:17, 257:12, 266:22, 268:10, 291:10, 304:23, 306:8, 306:12, 354:4, 367:19, 375:16, 375:21, 375:25</p> <p>throw [5] - 144:9, 299:7, 299:15, 312:3, 384:23</p> <p>throwing [2] - 310:13, 322:10</p> <p>thrown [5] - 177:6, 177:9, 195:22, 369:16, 384:25</p> <p>thrus [1] - 299:6</p> <p>thumb [2] - 225:18, 225:19</p> <p>thumbed [1] - 356:25</p> <p>thumbing [1] - 357:1</p> <p>ticketed [1] - 13:14</p> <p>ticking [1] - 322:1</p> <p>tie [2] - 215:18, 252:11</p> <p>tied [3] - 77:16, 153:22, 158:3</p> <p>tight [8] - 71:14, 71:17, 73:14, 202:19, 202:20, 202:22, 349:6</p> <p>tightening [1] - 339:11</p> <p>tighter [2] - 59:5, 372:20</p> <p>tightness [1] - 61:14</p> <p>tile [1] - 37:25</p> <p>timber [2] - 108:4, 219:23</p> <p>timeframe [4] - 14:7, 170:19, 182:6, 227:19</p> <p>timeframes [1] - 229:9</p> <p>timeline [2] - 249:3, 342:20</p> <p>tiny [1] - 220:9</p>	<p>tip [2] - 134:13, 269:1</p> <p>tippling [4] - 11:4, 269:25, 379:22, 380:21</p> <p>tired [2] - 130:11, 335:23</p> <p>tires [2] - 67:16, 306:21</p> <p>Title [4] - 3:16, 3:17, 285:15, 285:16</p> <p>today [30] - 2:20, 4:17, 5:21, 8:1, 10:8, 130:12, 230:24, 251:8, 271:11, 276:8, 286:2, 294:6, 314:24, 341:13, 342:19, 348:2, 348:4, 348:18, 355:18, 378:3, 381:2, 382:25, 383:2, 383:13, 383:18, 383:19, 383:20, 383:22, 384:25</p> <p>today's [2] - 296:20, 309:6</p> <p>Today's [1] - 4:22</p> <p>together [12] - 56:6, 71:11, 72:3, 73:8, 87:12, 89:21, 103:19, 229:4, 235:12, 244:5, 244:6, 369:17</p> <p>tolerance [1] - 275:19</p> <p>tolerant [2] - 260:18, 260:20</p> <p>tolerate [1] - 253:6</p> <p>tom [2] - 144:19, 224:13</p> <p>Tom [25] - 2:21, 2:22, 2:25, 7:15, 8:4, 18:5, 19:3, 29:22, 49:2, 91:20, 91:21, 114:5, 141:9, 141:11, 141:12, 143:16, 143:18, 177:20, 179:4, 209:23, 284:16, 284:20, 385:24</p> <p>tomatoes [2] - 302:17, 335:18</p> <p>tomcod [1] - 254:11</p> <p>Tomorrow [1] - 286:8</p> <p>tomorrow [12] - 5:5, 5:10, 250:8, 292:17, 292:20, 341:6, 348:25, 385:10, 385:11, 385:19, 386:1, 386:3</p> <p>ton [3] - 159:19,</p>	<p>374:8, 379:14</p> <p>tongue [1] - 269:1</p> <p>Toni [12] - 15:1, 18:13, 18:18, 19:2, 52:16, 145:9, 161:2, 166:7, 169:20, 174:19, 177:23</p> <p>Toni's [2] - 18:14, 18:24</p> <p>tonight [19] - 285:3, 288:2, 292:5, 292:11, 292:15, 292:19, 298:2, 301:10, 318:9, 319:5, 328:15, 331:15, 338:25, 345:25, 354:24, 358:19, 361:22, 375:10, 385:7</p> <p>tonnage [7] - 12:25, 14:4, 136:4, 138:5, 142:4, 148:18, 159:21</p> <p>tonnages [2] - 135:25, 165:15</p> <p>tons [43] - 13:23, 23:7, 23:21, 114:12, 115:9, 115:13, 116:5, 116:13, 116:14, 141:25, 142:1, 146:23, 148:7, 152:12, 155:3, 164:20, 164:22, 164:25, 165:1, 165:2, 165:18, 171:4, 171:12, 171:20, 172:13, 172:22, 223:12, 304:1, 326:1, 326:2, 326:3, 326:4, 326:15, 326:23, 326:24, 327:19, 336:6, 373:2</p> <p>took [8] - 11:24, 103:18, 113:6, 161:10, 165:2, 182:13, 290:1, 326:22</p> <p>tool [1] - 230:24</p> <p>top [34] - 53:11, 63:12, 64:13, 65:19, 67:1, 72:6, 72:8, 73:3, 73:6, 73:20, 73:22, 74:12, 74:22, 81:9, 121:22, 125:1, 128:16, 152:4, 166:11, 182:14, 188:5, 210:24, 229:11, 243:25, 244:1, 249:5, 272:6,</p>
--	---	---	--	---

<p>278:10, 278:14, 317:1, 335:18, 336:6, 355:21, 371:21 topic [1] - 269:5 topics [2] - 8:1, 109:3 topographic [1] - 40:6 topography [10] - 37:21, 38:13, 39:15, 40:1, 40:7, 40:15, 179:25, 180:3, 213:6, 227:8 Topsham [1] - 91:14 tope [1] - 67:16 total [17] - 50:8, 61:21, 100:17, 103:4, 103:9, 107:25, 108:1, 142:4, 148:17, 148:18, 164:20, 198:12, 225:4, 277:23, 279:15, 279:19, 323:20 totaled [1] - 294:3 totaling [1] - 134:11 totally [2] - 382:3 touch [3] - 49:16, 306:21, 342:24 touched [1] - 354:7 touches [1] - 330:23 tough [2] - 95:6, 371:12 toward [9] - 40:5, 41:13, 179:21, 179:22, 180:16, 226:6, 343:7, 343:8 towards [9] - 118:18, 118:20, 150:21, 237:4, 237:8, 238:3, 238:4, 344:1, 359:19 towed [1] - 194:19 Town [52] - 2:10, 4:7, 5:4, 11:12, 11:20, 13:7, 51:17, 108:11, 108:12, 108:17, 116:25, 125:14, 131:18, 131:19, 134:10, 134:19, 135:25, 136:5, 136:9, 168:24, 169:25, 170:4, 179:14, 192:21, 200:6, 244:20, 257:22, 257:23, 274:7, 276:5, 277:24, 278:17, 282:13, 284:12, 286:10, 289:8, 334:13, 335:7, 335:11, 335:12,</p>	<p>335:21, 340:15, 351:11, 351:15, 351:16, 356:6, 356:23, 365:19, 368:17, 368:23, 370:12 town [13] - 135:1, 177:8, 180:20, 324:23, 344:8, 356:23, 366:22, 379:2, 379:3, 379:23, 381:16, 384:6 towns [3] - 114:16, 194:2, 337:19 Toxic [2] - 352:1, 352:2 toxic [4] - 275:18, 318:25, 351:5, 351:11 toxicant [1] - 105:20 toxicity [2] - 263:23, 264:9 Toxics [1] - 347:23 toxins [8] - 264:24, 316:6, 317:4, 317:15, 321:12, 323:22, 323:23, 324:15 tracer [1] - 34:7 track [3] - 154:20, 155:2, 223:10 tracking [1] - 228:18 tractor [1] - 379:18 tractor-trailers [1] - 379:18 Tracy [6] - 293:5, 297:19, 297:20, 298:8, 298:11, 312:8 trade [1] - 377:8 traded [1] - 305:25 traditional [3] - 118:7, 118:15, 124:24 traffic [5] - 8:5, 115:22, 115:25, 129:10, 354:1 trail [2] - 341:23, 358:4 trailer [1] - 196:13 trailers [2] - 376:4, 379:18 trained [5] - 124:6, 127:24, 197:5, 197:10, 216:14 tranquility [1] - 344:15 transcribed [1] - 3:12 transducers [2] - 233:20, 233:25 transfer [17] - 23:10, 24:14, 140:1, 174:6,</p>	<p>195:21, 201:2, 305:7, 312:24, 361:17, 378:24, 379:2, 379:3, 379:4, 379:6, 379:8, 379:9, 379:23 Transfer [1] - 196:10 transferred [4] - 12:3, 132:20, 173:25, 217:2 transformation [1] - 253:5 transition [2] - 126:5, 365:19 transmit [3] - 34:1, 34:3, 34:4 transmitted [1] - 192:7 transplant [2] - 383:19, 383:21 transport [3] - 60:6, 61:10, 122:13 Transport [1] - 375:12 transportation [4] - 20:20, 116:3, 127:13, 128:8 trash [20] - 267:24, 299:7, 300:9, 305:21, 307:16, 309:14, 309:21, 310:18, 312:4, 312:11, 335:17, 338:17, 339:16, 340:12, 343:6, 354:15, 359:11, 370:8, 371:15, 384:23 travel [32] - 42:9, 42:15, 42:19, 43:2, 43:20, 44:8, 44:10, 56:7, 58:9, 58:13, 58:20, 58:25, 59:2, 59:18, 60:16, 61:4, 61:13, 63:18, 70:18, 70:21, 118:14, 208:19, 208:21, 208:22, 236:15, 236:19, 237:10, 238:6, 258:13, 301:8, 321:17 traveling [2] - 117:10, 121:16 travels [1] - 307:11 treat [1] - 214:5 Treat [3] - 241:24, 242:9, 242:13 treated [11] - 119:9, 124:10, 124:11, 149:11, 183:23, 184:1, 276:23, 319:15, 323:11,</p>	<p>358:8, 378:4 treaties [3] - 315:13, 315:16, 315:17 treatment [36] - 26:10, 26:12, 28:4, 83:8, 119:3, 122:14, 123:2, 123:25, 124:11, 126:16, 145:16, 145:21, 146:2, 146:3, 146:12, 164:8, 165:18, 170:1, 170:5, 192:22, 198:15, 242:7, 257:22, 257:23, 263:5, 276:6, 277:9, 277:24, 279:10, 317:11, 319:7, 323:15, 323:20, 327:7, 334:19, 378:4 treatments [1] - 323:13 Tree [10] - 196:10, 200:15, 200:23, 201:10, 201:24, 202:4, 300:1, 327:17, 327:19, 361:17 tree [1] - 311:8 trees [1] - 99:14 tremendous [5] - 47:8, 66:18, 308:12, 368:18, 368:23 Tremont [1] - 313:3 trenches [1] - 81:19 Trenton [1] - 313:3 triangle [2] - 240:9, 240:13 tribal [1] - 347:7 tribes [1] - 345:18 tributary [1] - 110:16 tricky [1] - 104:13 tried [2] - 174:13, 333:10 triggered [1] - 127:6 trips [2] - 116:10, 298:24 trivial [1] - 260:12 Troiano [1] - 358:14 TROIANO [2] - 358:15, 358:18 trouble [2] - 289:4, 330:2 troubleshoot [1] - 122:24 troubling [1] - 273:6 trout [2] - 112:1, 254:12 TRS [1] - 198:11 truck [15] - 116:10,</p>	<p>117:6, 144:13, 194:13, 194:21, 212:4, 212:7, 212:10, 304:12, 309:12, 310:8, 311:6, 354:1, 369:9 trucked [1] - 170:7 truckers [7] - 117:1, 117:2, 117:9, 117:10, 212:23, 241:12, 308:5 trucking [1] - 375:17 trucks [22] - 117:4, 121:1, 121:5, 121:10, 121:15, 121:18, 127:19, 196:9, 212:5, 212:11, 212:14, 212:15, 221:2, 241:11, 324:9, 327:14, 335:17, 356:4, 376:3, 379:4, 380:9 true [4] - 65:11, 167:24, 322:19, 335:24 true-scale [1] - 65:11 truly [2] - 191:18, 299:2 trust [1] - 305:16 Trust [1] - 8:25 truth [5] - 6:13, 6:14, 298:4, 322:2 try [31] - 56:22, 97:25, 98:23, 102:2, 130:22, 137:2, 149:13, 163:15, 174:25, 192:25, 211:15, 240:15, 249:9, 249:18, 255:8, 269:5, 277:22, 288:12, 292:4, 292:6, 292:7, 315:21, 336:13, 340:20, 341:3, 354:25, 356:21, 363:10, 373:20, 376:22, 380:1 trying [24] - 15:25, 49:18, 98:14, 101:20, 104:6, 149:4, 149:5, 164:24, 166:22, 207:23, 208:1, 237:3, 264:21, 265:19, 266:13, 267:19, 270:16, 285:11, 323:18, 328:1, 358:4, 364:4, 366:4</p>
---	---	--	---	---

tumbling [1] - 362:22
tuning [1] - 199:20
turbine [1] - 302:24
turbines [1] - 311:22
turn [7] - 8:12, 18:10, 122:23, 141:14, 280:7, 302:11, 334:24
turned [5] - 131:6, 134:5, 223:24, 301:18, 335:22
turning [2] - 302:24, 347:4
Turnkey [1] - 360:13
turtles [1] - 352:5
TV [4] - 195:22, 196:2, 196:4, 196:6
TVs [2] - 195:18, 195:19
twenties [1] - 361:12
Twenty [1] - 317:18
twice [3] - 104:11, 116:22, 204:19
two [93] - 2:24, 12:11, 35:21, 36:21, 44:1, 44:25, 46:4, 47:8, 49:13, 53:2, 53:13, 53:14, 56:5, 60:21, 60:22, 61:21, 61:24, 62:8, 62:10, 63:20, 73:10, 73:13, 74:16, 75:11, 75:25, 77:7, 81:17, 84:14, 100:2, 119:3, 123:11, 135:7, 135:14, 150:17, 151:8, 156:3, 156:5, 158:5, 167:1, 170:16, 170:19, 174:11, 188:13, 188:19, 192:2, 192:6, 198:9, 203:16, 203:19, 204:23, 205:5, 207:5, 207:7, 208:3, 210:20, 212:13, 224:16, 224:20, 224:22, 229:11, 229:12, 230:8, 238:16, 239:1, 239:3, 241:16, 246:23, 251:9, 253:7, 254:10, 257:21, 262:23, 263:10, 266:4, 280:22, 293:18, 305:4, 309:20, 324:19, 327:22, 331:3, 338:15, 341:19, 341:25, 347:17, 347:19,

351:20, 353:3, 378:21
two-fold [1] - 123:11
two-year [2] - 62:8, 170:19
type [24] - 36:8, 54:23, 67:4, 69:5, 81:9, 83:10, 84:5, 90:7, 97:5, 99:16, 99:17, 123:8, 191:16, 191:20, 205:21, 214:7, 214:11, 215:4, 220:20, 223:8, 237:9, 246:5, 273:6
Type [1] - 191:12
types [25] - 23:22, 26:1, 27:2, 31:20, 42:24, 50:12, 54:7, 61:14, 69:4, 74:3, 75:24, 98:19, 120:10, 126:18, 192:2, 200:14, 200:16, 202:18, 207:15, 210:19, 215:8, 220:13, 245:15, 334:9
typical [12] - 64:14, 67:9, 81:8, 84:5, 86:13, 95:22, 203:1, 209:16, 211:18, 216:22, 227:20, 236:24
typically [22] - 26:7, 26:25, 41:12, 50:24, 82:20, 86:25, 102:3, 121:24, 140:1, 145:15, 173:17, 173:25, 174:9, 196:16, 198:8, 198:9, 199:5, 199:21, 200:2, 211:15, 232:17, 296:2

U

U-Maine [1] - 250:17
U.S [7] - 192:8, 192:14, 257:4, 261:3, 262:10, 262:11, 345:16
ugly [1] - 322:2
ultimate [2] - 37:13, 163:4
ultimately [5] - 83:9, 163:2, 163:5, 232:8, 295:6
Um-hum [2] - 241:13, 278:24

unable [2] - 164:15, 165:12
unacceptable [3] - 127:25, 128:3, 128:5
unalienable [1] - 345:9
unanticipated [1] - 260:22
uncertainty [1] - 192:1
uncontrolled [1] - 215:7
uncovered [1] - 199:17
under [39] - 14:14, 46:15, 63:6, 66:14, 68:15, 68:16, 69:18, 80:19, 81:3, 100:18, 102:7, 132:6, 149:12, 149:15, 150:6, 177:25, 178:16, 182:3, 192:9, 194:21, 210:17, 229:23, 258:20, 261:14, 261:16, 263:2, 263:7, 271:5, 272:12, 275:15, 275:18, 281:6, 289:11, 313:10, 330:5, 336:3, 346:22, 351:22, 372:19
underdrain [11] - 63:10, 70:9, 208:9, 208:12, 208:19, 208:20, 209:14, 209:17, 216:2, 216:6, 216:7
underdrains [1] - 215:10
underestimate [1] - 275:5
undergo [1] - 253:4
underlies [1] - 37:25
undermine [1] - 345:7
underneath [10] - 36:9, 63:10, 66:21, 67:19, 81:2, 85:25, 86:6, 231:5, 231:10, 248:4
understandable [1] - 47:3
understood [1] - 172:14
undeveloped [1] - 10:5
undisturbed [2] - 110:21, 112:21
unfettered [1] - 303:20
unfolding [1] - 266:20

unforeseen [1] - 304:5
unfortunately [7] - 71:3, 104:25, 118:9, 236:18, 237:12, 367:14, 369:22
unheard [1] - 195:16
unique [4] - 13:2, 211:24, 217:21
unit [1] - 220:8
United [4] - 74:17, 75:12, 255:24, 315:12
uniting [1] - 344:13
units [1] - 176:9
Unity [4] - 26:19, 146:13, 373:1, 374:24
universal [4] - 195:10, 195:11, 195:18, 195:20
University [12] - 18:20, 29:15, 29:16, 48:23, 91:2, 113:23, 114:1, 250:16, 268:23, 269:2, 335:20, 351:9
unjust [1] - 345:15
unknowns [1] - 264:21
unless [4] - 146:4, 212:24, 279:17, 351:21
unlike [1] - 253:9
unlikely [5] - 41:18, 88:6, 113:2, 183:8, 377:14
unload [4] - 121:10, 356:4, 356:6
unloading [1] - 356:3
unmapped [2] - 110:12, 110:25
unnecessary [1] - 303:20
unorganized [1] - 10:6
unpredictable [1] - 272:22
unprocessed [2] - 15:16, 15:18
unreasonable [4] - 20:15, 20:16, 117:14, 129:12
unreasonably [1] - 258:9
unseen [1] - 321:14
UNTIL [1] - 386:7
unwanted [1] - 144:6
unweathered [1] - 36:11
up [173] - 5:24, 14:12, 15:3, 15:25, 24:25,

30:13, 35:18, 36:14, 40:4, 44:15, 54:4, 58:16, 61:20, 62:2, 63:3, 64:3, 65:14, 65:20, 66:1, 67:13, 70:23, 74:12, 74:25, 75:6, 75:14, 78:11, 79:3, 80:3, 80:10, 81:12, 81:24, 82:13, 84:16, 86:6, 86:9, 86:11, 87:6, 88:25, 89:25, 98:8, 100:3, 101:21, 106:9, 107:22, 109:4, 111:1, 115:13, 123:21, 131:14, 131:21, 132:1, 148:2, 152:6, 152:13, 152:16, 156:5, 156:9, 162:9, 163:6, 164:13, 164:18, 165:12, 165:13, 169:3, 169:7, 171:16, 173:21, 173:25, 175:7, 178:10, 181:9, 181:24, 181:25, 187:15, 188:4, 188:10, 190:25, 195:20, 195:22, 197:18, 205:1, 206:5, 209:5, 211:15, 211:17, 217:4, 226:13, 228:11, 228:14, 228:16, 228:21, 228:22, 234:16, 237:1, 237:25, 242:10, 243:19, 251:6, 252:17, 260:12, 263:18, 263:19, 265:11, 265:13, 276:1, 284:5, 284:7, 286:25, 287:13, 287:17, 287:18, 287:22, 288:8, 290:13, 291:4, 291:15, 291:24, 292:10, 292:16, 293:1, 297:25, 299:18, 300:21, 301:9, 301:21, 302:8, 302:13, 305:9, 307:19, 309:9, 310:20, 311:15, 312:17, 314:7, 318:20, 320:3, 322:19, 323:16, 328:8, 329:2, 331:5,

333:12, 333:21, 336:4, 336:11, 337:11, 340:10, 340:13, 348:1, 349:18, 355:3, 355:4, 355:20, 360:3, 364:10, 364:14, 364:16, 365:16, 365:25, 366:10, 367:21, 368:6, 368:12, 369:20, 370:3, 372:4, 379:4, 380:21, 382:15, 384:22, 385:22 update [2] - 47:23, 211:22 upgradient [1] - 274:21 upholding [2] - 315:12, 315:15 upland [4] - 98:17, 108:7, 246:16, 258:12 uplands [3] - 101:15, 105:4, 108:2 upper [4] - 183:1, 234:3, 361:12, 362:16 upset [1] - 373:15 upstream [4] - 112:24, 220:22, 223:23, 266:24 uptick [1] - 297:5 upward [1] - 215:25 upwards [6] - 181:5, 181:15, 181:17, 181:18, 254:8, 375:14 urbanization [2] - 255:14, 255:20 urethane [1] - 205:22 urge [2] - 322:25, 330:13 US [1] - 351:8 usage [1] - 116:1 useful [7] - 30:16, 33:17, 34:20, 39:14, 227:6, 316:21, 343:4 users [3] - 40:18, 46:9, 179:11 uses [5] - 81:17, 185:19, 243:5, 333:22, 346:24 USGS [2] - 111:1, 245:22 Utilities [1] - 9:1 utilization [1] - 25:8 utilize [6] - 59:5, 59:21, 117:1,	122:12, 123:8, 360:9 utilized [3] - 28:6, 33:18, 119:14 utilizing [1] - 59:20 Utopia [1] - 370:15	verify [6] - 92:15, 92:24, 177:7, 177:12, 177:14, 332:17 Vermont [3] - 18:22, 29:15, 91:2 vernal [66] - 91:10, 91:17, 92:3, 94:4, 94:5, 94:10, 94:11, 94:15, 94:17, 94:18, 94:19, 94:21, 94:23, 94:24, 94:25, 95:7, 95:10, 95:18, 96:16, 96:17, 100:5, 100:6, 100:8, 100:11, 100:14, 100:23, 102:9, 102:11, 102:12, 102:18, 103:2, 103:11, 103:17, 104:2, 104:3, 104:4, 104:22, 104:23, 104:25, 105:2, 105:9, 106:9, 106:15, 106:16, 106:19, 106:20, 106:24, 106:25, 107:1, 217:17, 217:24, 218:2, 218:20, 218:24, 219:1, 219:4, 219:8, 267:15, 280:9, 291:8, 291:19, 317:23, 336:9 Verrill [3] - 347:20, 350:12, 350:17 VERRILL [3] - 350:15, 350:20, 353:18 versus [3] - 164:16, 246:11, 260:10 vertical [7] - 36:17, 36:18, 81:22, 82:3, 82:5, 123:9, 187:16 vetted [1] - 223:17 via [2] - 192:7, 244:23 viable [1] - 173:5 vicinity [1] - 231:16 Victoria [3] - 1:23, 3:9, 285:4 video [1] - 272:8 view [5] - 149:3, 251:22, 267:14, 279:22, 281:23 viewing [1] - 260:4 Village [1] - 374:23 Viola [1] - 351:14 violate [2] - 119:3, 119:5 violated [1] - 314:4 violating [1] - 354:15	violation [1] - 344:25 virgin [2] - 25:8, 121:25 visit [15] - 64:3, 71:4, 77:10, 80:19, 115:4, 119:12, 122:7, 122:10, 124:22, 197:6, 239:6, 246:1, 247:5, 378:11 visited [1] - 307:10 visual [2] - 8:6, 245:13 visualize [2] - 115:3, 124:22 visually [1] - 127:16 vital [1] - 303:16 VOCS [1] - 222:2 voices [2] - 350:13, 355:2 volatile [2] - 222:2, 222:3 volatiles [2] - 222:16, 222:17 Volume [6] - 187:11, 258:8, 259:3, 262:12, 263:11, 273:2 volume [16] - 16:6, 22:23, 24:6, 24:25, 26:22, 28:8, 65:17, 115:12, 147:23, 148:4, 160:22, 164:16, 301:20, 302:12, 338:20, 374:20 volumes [4] - 171:10, 209:2, 264:23, 302:11 voluntarily [1] - 248:25 voluntary [1] - 21:7 volunteer [1] - 194:20 volunteers [1] - 315:24 vote [1] - 372:2 voted [1] - 108:18 vulnerable [3] - 275:12, 324:21, 345:15	wander [1] - 271:15 wandering [1] - 288:14 wants [5] - 40:4, 265:23, 292:11, 358:24, 364:7 warm [1] - 121:4 warmer [1] - 275:15 warming [12] - 252:17, 268:8, 269:11, 269:14, 269:18, 269:21, 272:25, 274:10, 274:14, 275:4, 275:8, 275:13 warn [1] - 269:24 warned [1] - 212:15 warning [4] - 45:22, 241:15, 247:22, 340:22 waste [370] - 9:25, 12:24, 13:1, 13:21, 13:22, 14:2, 14:15, 14:16, 14:21, 14:25, 15:12, 15:16, 15:18, 15:21, 16:2, 16:7, 19:12, 19:13, 19:19, 19:20, 20:4, 20:9, 20:11, 20:13, 20:14, 20:22, 21:5, 21:6, 21:15, 21:17, 21:18, 21:21, 21:24, 22:9, 22:11, 23:13, 23:14, 23:21, 23:22, 24:1, 24:4, 24:6, 24:9, 24:22, 24:25, 25:7, 25:11, 25:14, 26:7, 26:25, 27:1, 27:2, 27:7, 27:9, 27:11, 27:15, 27:18, 27:21, 28:8, 28:16, 28:19, 28:21, 28:22, 30:3, 48:12, 48:7, 50:12, 50:22, 51:8, 52:15, 52:19, 64:21, 64:22, 65:14, 65:17, 65:21, 65:25, 80:19, 81:20, 81:21, 81:23, 82:5, 82:12, 84:12, 86:16, 86:22, 89:24, 90:7, 90:10, 114:14, 114:21, 114:23, 115:2, 115:8, 116:5, 117:24, 118:3, 120:19, 120:22, 120:25, 121:11, 121:23, 122:8, 123:10, 124:21, 126:5, 126:6, 126:8, 126:21, 127:4, 127:5, 127:9,
	V			
	Vacationland [1] - 320:19 vacuum [2] - 124:3, 199:24 valid [2] - 213:19, 281:6 value [14] - 91:9, 93:16, 96:1, 104:4, 105:5, 105:16, 217:19, 217:20, 218:8, 218:14, 218:19, 260:16, 260:17, 260:19 values [9] - 96:7, 96:14, 105:15, 218:9, 245:2, 245:5, 245:9, 245:13, 260:14 vanadium [1] - 352:11 variability [2] - 60:1, 269:12 variable [1] - 275:16 varieties [1] - 318:22 variety [6] - 27:14, 91:7, 246:10, 253:16, 255:12, 326:22 various [14] - 20:22, 21:15, 25:17, 37:5, 50:1, 61:8, 64:25, 89:12, 117:20, 126:18, 191:8, 229:8, 245:23, 363:16 vary [2] - 54:7, 207:24 vast [2] - 152:14, 171:17 Veazie [2] - 3:1, 284:13 vegetation [2] - 105:23, 105:24 vegetative [1] - 64:15 vein [1] - 328:24 velocities [4] - 33:21, 33:22, 34:15, 38:15 velocity [6] - 34:6, 34:8, 34:12, 188:22, 189:7, 189:17 vendor [2] - 303:24, 367:18 verbatim [1] - 273:22 verified [1] - 92:20	W		
		wade [1] - 315:21 wait [1] - 75:9 waiting [1] - 321:14 walk [2] - 246:19, 277:10 walking [2] - 75:4, 206:2 walled [1] - 78:4 wand [1] - 307:18		

127:17, 127:18,
129:8, 129:9,
129:18, 131:23,
132:17, 135:8,
135:16, 137:19,
138:6, 138:8,
138:22, 139:5,
139:10, 139:16,
139:18, 139:19,
140:2, 140:8,
140:13, 140:15,
140:16, 140:18,
140:22, 140:24,
141:3, 146:20,
147:6, 147:19,
148:10, 153:12,
153:16, 154:16,
154:22, 154:23,
155:4, 155:14,
157:11, 157:13,
159:1, 160:13,
161:22, 162:17,
162:19, 163:1,
163:6, 163:22,
167:24, 170:15,
170:17, 171:10,
171:18, 172:7,
173:7, 173:14,
173:21, 175:11,
175:17, 176:23,
177:17, 182:13,
184:20, 184:21,
185:2, 185:4, 185:8,
186:6, 186:9,
186:11, 186:14,
186:16, 186:17,
186:22, 186:24,
186:25, 187:17,
188:8, 195:10,
195:11, 195:19,
195:20, 199:6,
199:9, 200:14,
200:21, 200:22,
201:7, 201:11,
201:12, 202:4,
215:1, 221:2,
221:10, 224:8,
224:9, 240:14,
240:17, 240:23,
241:4, 242:22,
244:16, 244:17,
254:17, 268:14,
289:7, 289:16,
289:24, 294:17,
294:20, 296:1,
296:2, 296:4, 296:8,
296:16, 296:24,
297:1, 297:13,
301:6, 301:17,
301:20, 302:5,
302:11, 302:12,

302:16, 303:2,
303:14, 303:19,
304:1, 304:8,
304:18, 304:21,
305:14, 308:7,
309:2, 309:15,
309:16, 309:24,
309:25, 312:24,
312:25, 313:8,
316:16, 316:18,
316:20, 316:24,
317:20, 321:8,
322:7, 322:11,
323:6, 324:13,
324:25, 325:1,
325:17, 325:18,
325:22, 325:25,
326:9, 327:5,
327:11, 327:12,
327:13, 327:14,
327:17, 329:7,
329:14, 329:16,
331:2, 331:20,
332:4, 332:8,
332:16, 332:18,
334:8, 334:9,
334:21, 334:23,
335:16, 336:6,
337:12, 337:14,
337:20, 337:23,
338:3, 338:12,
338:19, 338:21,
338:25, 339:3,
339:5, 339:7, 339:8,
339:9, 339:12,
340:7, 340:13,
341:4, 343:7,
343:23, 344:2,
347:5, 348:7,
349:15, 349:19,
349:20, 349:23,
349:25, 350:1,
350:8, 354:8,
354:16, 358:25,
359:10, 359:13,
359:23, 360:3,
360:4, 360:6,
360:10, 362:17,
369:1, 370:22,
371:6, 371:12,
372:5, 372:6,
377:22, 377:23,
378:24, 379:2,
379:4, 379:7, 379:8,
379:10, 379:11,
379:25, 380:3,
380:12, 380:14,
380:18, 381:24,
381:25, 382:1,
382:20, 382:21,
383:13, 384:2,

384:10
Waste ^[34] - 2:12,
2:13, 9:4, 10:19,
18:14, 18:23, 19:1,
19:16, 20:12, 23:17,
28:20, 113:17,
159:7, 162:20,
165:23, 166:21,
178:1, 178:2, 178:5,
178:14, 185:7,
278:12, 286:19,
287:9, 288:20,
289:13, 301:24,
305:6, 328:19,
378:21, 378:22,
378:25
waste-related ^[1] -
120:19
wastes ^[27] - 12:20,
15:4, 15:6, 126:10,
126:15, 126:17,
126:18, 126:19,
126:20, 127:3,
130:23, 135:10,
135:12, 137:25,
160:15, 172:3,
175:9, 176:7,
176:14, 176:17,
185:10, 185:14,
200:16, 201:3,
205:15, 302:17
wastewater ^[20] -
26:11, 28:4, 126:16,
145:15, 145:21,
146:2, 146:11,
164:8, 165:18,
170:1, 170:5, 170:6,
192:21, 257:23,
276:6, 317:11,
323:20, 327:7,
334:19, 378:4
WasteZero ^[1] - 302:8
watch ^[2] - 128:1,
355:21
watched ^[1] - 323:17
watching ^[3] - 240:24,
326:11, 363:17
Water ^[5] - 92:11,
264:11, 315:11,
346:17, 352:14
water ^[129] - 5:23,
32:20, 41:11, 42:23,
43:9, 43:24, 44:2,
60:15, 61:6, 61:8,
61:9, 61:12, 62:16,
62:21, 63:7, 63:11,
65:3, 66:6, 67:6,
67:11, 67:20, 69:14,
70:15, 70:16, 70:20,
74:12, 78:1, 78:2,

78:20, 79:13, 79:25,
81:5, 81:8, 81:12,
81:13, 82:10, 82:15,
84:7, 84:12, 85:9,
85:13, 85:18, 85:19,
93:20, 97:6, 105:20,
111:21, 120:21,
180:23, 183:11,
183:23, 183:25,
189:6, 190:3,
190:10, 190:12,
190:14, 190:18,
191:1, 191:8,
191:14, 191:18,
194:15, 207:24,
208:17, 209:7,
209:16, 213:23,
213:24, 213:25,
215:15, 215:16,
215:18, 215:22,
216:1, 216:8, 228:4,
231:17, 231:21,
231:25, 232:10,
232:24, 233:4,
253:6, 253:14,
260:23, 269:19,
286:25, 287:5,
287:6, 299:12,
315:5, 316:1, 316:2,
316:6, 316:7, 316:8,
316:11, 317:16,
317:17, 317:21,
323:23, 329:17,
336:7, 336:14,
336:16, 345:1,
346:12, 346:18,
346:21, 346:22,
347:13, 350:22,
351:5, 352:12,
352:15, 353:10,
353:12, 353:22,
366:10, 382:5, 384:7
waterbodies ^[1] -
181:6
Waterbodies ^[1] -
101:10
waters ^[17] - 30:6,
46:1, 46:10, 51:23,
181:9, 181:24,
182:1, 324:15,
336:5, 345:19,
345:20, 352:25,
353:7, 353:8,
353:20, 354:12,
382:19
watershed ^[12] -
193:8, 252:16,
257:13, 260:4,
260:6, 267:16,
267:19, 268:3,
275:17, 280:20,

319:1, 325:2
Watershed ^[1] - 251:2
watershed-wide ^[1] -
268:3
watersheds ^[1] -
258:15
waterskiing ^[1] -
366:4
waterways ^[1] -
346:15
wave ^[1] - 307:18
waves ^[1] - 236:16
Wayne ^[1] - 353:5
ways ^[9] - 81:18,
299:9, 328:22,
351:8, 352:13,
360:6, 361:20,
363:21, 372:4
wearing ^[1] - 299:11
weather ^[4] - 79:4,
121:4, 260:22,
322:22
weathered ^[1] - 36:9
weathering ^[2] -
36:10, 124:25
web ^[2] - 131:20,
256:8
website ^[4] - 4:21,
244:23, 256:5,
286:17
wedge ^[2] - 73:9
wee ^[1] - 321:3
weeding ^[1] - 333:9
week ^[2] - 79:1,
119:22
weeks ^[2] - 198:9,
247:25
weight ^[8] - 24:24,
27:23, 86:4, 86:10,
86:11, 86:21, 212:7,
212:12
weights ^[3] - 212:4,
212:7, 212:10
welcome ^[2] - 7:12,
378:10
weld ^[2] - 73:9
welfare ^[3] - 323:25,
329:19, 344:16
well-operate ^[1] -
301:12
well-run ^[1] - 307:8
well-trained ^[1] -
216:14
wellbeing ^[2] - 320:24,
321:23
Wellman ^[2] - 377:4,
378:17
WELLMAN ^[1] -
378:18
wells ^[32] - 32:8,

32:10, 41:7, 41:9,
41:22, 42:22, 43:6,
43:25, 44:18, 45:11,
45:13, 45:20, 45:22,
82:4, 82:5, 82:23,
82:24, 83:2, 123:22,
183:18, 183:19,
184:15, 187:16,
187:18, 187:19,
190:19, 214:10,
229:6, 231:3,
231:13, 232:21,
232:23

Wells [2] - 2:22,
284:18

West [1] - 37:24

west [5] - 31:15,
43:25, 181:20,
181:25, 182:1

Westbrook [1] -
151:18

western [2] - 117:23,
118:2

wet [4] - 82:15,
205:23, 226:13,
241:6

wetland [58] - 49:14,
51:23, 52:24, 53:10,
53:14, 90:25, 91:6,
91:8, 91:9, 91:13,
91:17, 92:2, 92:13,
92:15, 92:20, 92:23,
92:24, 94:2, 97:5,
97:7, 97:22, 97:23,
98:8, 99:8, 99:10,
99:17, 99:20, 99:21,
99:22, 100:3, 101:9,
101:16, 102:22,
104:4, 205:5,
220:13, 245:2,
245:4, 246:6, 246:7,
246:8, 246:9,
246:20, 246:22,
247:2, 247:5,
255:13, 255:19,
258:10, 290:25,
291:5, 291:16,
291:19, 324:19,
350:20

Wetland [2] - 91:1,
94:9

wetlands [69] - 53:7,
92:17, 92:20, 93:10,
93:12, 93:13, 93:15,
93:16, 93:18, 93:19,
94:1, 96:6, 96:9,
96:12, 96:15, 96:17,
96:23, 97:2, 97:4,
97:10, 98:20, 99:6,
99:7, 99:12, 99:15,

99:19, 99:23, 100:2,
101:14, 103:12,
104:1, 105:4, 105:5,
105:8, 105:9,
105:10, 105:14,
105:18, 106:7,
106:14, 108:6,
108:7, 204:12,
217:17, 217:24,
218:2, 218:7,
218:10, 218:12,
218:19, 245:25,
246:4, 246:15,
246:17, 253:21,
258:21, 267:15,
280:9, 287:8, 291:6,
316:14, 316:17,
317:23, 321:16,
346:16

Wetlands [1] - 101:10

wettest [1] - 80:17

whatnot [1] - 311:22

Wheelerabrator [1] -
360:9

whereas [1] - 107:15

white [3] - 104:21,
118:5, 118:11

whole [16] - 6:13,
64:7, 68:20, 69:11,
106:16, 111:6,
167:17, 181:11,
230:12, 239:21,
254:9, 298:4,
325:15, 339:25,
357:1, 384:18

wholly [2] - 93:11,
99:7

wide [5] - 72:2,
253:16, 263:8,
268:3, 347:24

widespread [2] -
136:17, 137:1

width [1] - 112:6

wife [1] - 362:4

wild [1] - 257:3

Wildlife [8] - 94:14,
109:10, 109:17,
192:8, 192:14,
259:12, 261:4,
262:11

wildlife [11] - 91:11,

96:14, 96:18,
105:17, 245:9,
258:10, 259:16,
275:10, 346:15,
346:20

Wilkinson [1] - 111:17

Willey [2] - 380:24,
380:25

WILLEY [1] - 380:25

Williams [1] - 377:3

willig [3] - 322:1,
369:2, 376:13

win [1] - 314:10

wind [1] - 238:22

winter [2] - 228:3,
252:24

Winterport [1] -
378:23

wired [2] - 80:6, 80:7

wisdom [1] - 75:17

wise [1] - 367:5

wisely [1] - 16:15

wish [1] - 187:14

wishes [2] - 156:25,
158:10

withstand [2] -
187:10, 275:17

withstanding [1] -
272:19

witness [18] - 5:1,
5:22, 7:8, 8:14, 8:18,
18:12, 29:2, 47:22,
48:5, 90:24, 113:13,
191:4, 265:9,
282:15, 286:7,
320:10, 320:14

witnesses [9] - 4:24,
6:10, 7:23, 47:24,
136:12, 194:8,
200:9, 264:6, 286:11

WITNESSES [2] -
6:15, 298:5

woman [1] - 351:22

wondered [1] - 357:13

wonderful [5] -
230:20, 319:23,
322:8, 322:11,
363:23

wondering [2] -
142:23, 225:16

wood [14] - 24:15,
25:16, 107:5,
107:15, 122:2,
151:12, 151:17,
173:17, 174:8,
176:1, 218:25,
367:24, 368:10,
379:11

woods [1] - 368:22

Worcester [3] -
312:19, 312:21

WORCESTER [1] -
312:21

word [5] - 317:10,
329:21, 329:23,
336:2, 376:15

words [12] - 16:10,
38:2, 134:1, 134:3,
135:17, 142:14,

149:3, 160:16,
226:21, 226:24,
319:3, 320:19

workings [1] - 361:20

works [3] - 61:24,
79:21, 251:6

world [8] - 55:19,
299:5, 305:19,
307:12, 320:20,
321:23, 322:18,
323:25

worry [2] - 382:4,
382:5

worse [2] - 321:25,
368:24

worth [3] - 109:7,
111:5, 152:4

wrap [2] - 30:13,
252:17

write [1] - 197:14

writing [4] - 5:23,
331:18, 351:13,
376:12

written [14] - 117:2,

143:5, 233:18,
250:10, 252:7,
257:20, 261:20,
262:4, 268:21,
276:20, 325:24,
341:7, 370:13,
385:15

wrote [3] - 204:11,
281:9, 348:22

X

XYZ [1] - 142:15

Y

yard [7] - 2:9, 16:4,
152:4, 284:11,
289:21, 341:16,
367:24

yards [8] - 16:10, 18:8,
52:9, 53:4, 62:11,
114:18, 115:5, 373:4

Yarmouth [2] - 2:24,
284:20

year [65] - 11:7, 11:18,
13:9, 23:25, 38:18,
38:21, 44:13, 50:16,
50:17, 60:20, 61:12,
62:8, 62:12, 63:18,
63:24, 63:25, 64:4,
64:5, 69:21, 71:23,
79:24, 85:17, 87:14,
114:12, 115:9,
115:13, 116:6,
116:13, 116:15,

120:13, 141:25,
142:2, 154:8,
154:16, 155:3,
169:12, 170:19,
172:3, 172:22,
194:14, 197:19,
211:20, 213:13,
229:9, 254:6, 254:7,
267:6, 271:20,
295:4, 295:11,
304:2, 326:15,
342:20, 343:1,
362:5, 373:3,
373:25, 374:8,
379:13, 383:6, 383:7

years [101] - 29:5,
29:17, 29:25, 31:17,
34:25, 44:8, 47:9,
48:11, 48:15, 54:20,
57:12, 61:21, 61:24,
62:10, 75:18, 76:7,
76:15, 76:16, 79:22,
114:11, 114:20,
114:21, 115:7,
115:11, 116:15,
128:15, 130:25,
131:13, 135:7,
147:16, 148:6,
149:11, 150:13,
170:16, 182:5,
182:8, 182:16,
188:19, 210:20,
210:22, 229:12,
230:25, 253:4,
253:8, 266:7,
266:17, 266:24,
270:6, 274:13,
293:21, 295:21,
295:22, 301:16,
302:1, 303:24,
304:18, 305:13,
305:17, 307:11,
309:2, 314:5,
324:16, 326:16,
326:24, 327:3,
327:22, 335:8,
338:15, 340:17,
342:9, 342:22,
348:22, 349:10,
361:7, 361:9,
361:14, 361:16,
363:16, 366:11,
366:15, 369:10,
371:20, 374:6,
375:13, 375:14,
376:2, 376:9,
376:22, 380:4,
383:2, 383:3, 383:9,
383:10, 383:12,
383:19, 383:23,
383:25, 384:2

years' [1] - 42:15

yellow [1] - 218:25

York [3] - 305:15,
306:12, 306:16

young [2] - 252:24,
370:2

youngster [1] - 305:24

yourself [2] - 232:6,
287:20

yup [4] - 16:24,
204:22, 384:15

Z

zero [19] - 22:16,
22:21, 23:5, 86:24,
116:16, 271:21,
294:20, 295:18,
303:13, 343:7,
343:8, 344:1, 351:1,
351:24, 359:8,
359:13, 366:7, 372:6

zigzag [1] - 62:20

zinc [1] - 352:12

Ziploc [1] - 124:21

zone [4] - 43:10,
43:11, 44:3, 236:14