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NOTICE OF PUBLIC INFORMATIONAL MEETING

IN RE NORDIC AQUAFARMS, INC.

Public Meeting At The Hutchinson Center

Reported by Robin J. Dostie, a Notary Public and  
court reporter in and for the State of Maine, on  
March 26, 2019, at the Hutchinson Center, 80 Belmont  
Avenue, Belfast, Maine, commencing at 6:00 p.m.

LEE WOODWARD, ESQ. - MODERATOR

REPRESENTING NORDIC AQUAFARMS, INC.

- ERIK HEIM, NORDIC AQUAFARMS
- ED COTTER, NORDIC AQUAFARMS
- ELIZABETH RANSOM, RANSOM CONSULTING
- MARK JOHNSON, SMRT
- DAVID NOYES, NORDIC AQUAFARMS
- MAUREEN MCGLONE, RANSOM CONSULTING
- MIKE MOBILE, MCDONALD MORRISSEY ASSOCIATES

1 MR. WOODWARD: Welcome, I would say everyone  
2 take their seat, but that's kind of physically  
3 impossible. My name is Lee Woodward. I've agreed to  
4 act as the moderator here, which means I'll be  
5 working for about the first two minutes and then  
6 watching the presentation for two hours and then  
7 there will be a question and answer period when we  
8 will try to get as many intelligent questions asked  
9 as possible. We're going to have approximately one  
10 hour at the end for that and I think the way we'll  
11 measure the success of the meeting from that point of  
12 view is both the quality of the questions and the  
13 quality of the answers.

14 This is part of a rather extensive public  
15 process. Nordic in going forward with this project  
16 is going to have to seek permits at three different  
17 levels; federal, local and state. What you have here  
18 today is the public information meeting, which is  
19 required before they file four state permits dealing  
20 with site location, Natural Resources Protection Act,  
21 air emissions and pollution discharge. It's kind of  
22 counter intuitive that they have to have the public  
23 meeting before they even file their applications, but  
24 that's what state law requires.

25 When it comes to the format of the meeting,

1 Nordic will be presenting information on all four of  
2 the permit applications they will be submitting.  
3 There is a court reporter here and both during the  
4 two hour presentation and during the question and  
5 answer period, it's important that everyone before  
6 they speak recites their name and also that you speak  
7 into a microphone. During the presentation, I'm  
8 going to be sitting over as near to the court  
9 reporter as I can and I'm going to figure that if I  
10 can't hear what's going on, she cannot hear what's  
11 going on and I'll signal to whoever is speaking to  
12 come to the microphone and to announce their name and  
13 to do it as loudly as possible.

14           So without any further adieu, I'll have Erik  
15 come forward.

16           MR. HEIM: Good evening. Thank you all for  
17 coming and spending your evening with us. I believe  
18 we have a lot of good information to share tonight.  
19 It's been quite a journey also for me personally. I  
20 remember I was three years old when I caught my first  
21 fish and I was scared to death. And, in fact, over  
22 the years I have normalized sort of my relationship  
23 to fish also and in the end that's part of the reason  
24 why we are here today.

25           So this company, I'm going to just recap a

1 little bit about the background for why we are here  
2 because there may be new people who have not attended  
3 our meetings before. Part of the reason we are here  
4 is that we live in a world with rapid change all  
5 around us and also a growing population and we have  
6 major environmental challenges to confront and they  
7 affect our food systems and will for decades to come.  
8 And our company has been founded to address some of  
9 these issues in the future, it's not the only  
10 solution, but it's a part of the solution and that's  
11 why we'll also be seeing across the U.S. a rapidly  
12 growing interest for the potential of the type of  
13 production we are working on.

14           So I am going to just see if -- do we have a  
15 pointer or the laser because we slip -- we are  
16 skipping some slides here. Okay. We are a pure-play  
17 land-based producer. What you're seeing here is  
18 actually our latest facility now finished in Norway.  
19 This has been funded in part by grants from the EU  
20 and Norwegian government, environmental grants, and  
21 this is the third project we've done. This will be  
22 the fourth.

23           I want to recap a little bit what this is  
24 all about. We have previously presented our  
25 discharge applications showing how we have gone

1 further down the industry in terms of treating for  
2 nutrients and discharge and so on. The systems we  
3 are having developing over years and are looking to  
4 propose here in Maine is a new generation of food  
5 systems and also ocean protection standards when you  
6 look at the value of treatment that we are  
7 introducing into this industry. And it's interesting  
8 to look at the U.S. as the single largest consumption  
9 market in the Western World of salmon, which we are  
10 looking at here. A 30-acre footprint will produce 7  
11 percent of U.S. consumption in a multi-stage  
12 development project. That tells you something about  
13 the potential in the U.S. and the future also to  
14 develop food systems on low carbon footprints. It's  
15 also interesting to see that we are connecting our  
16 European and U.S. interests. We are working -- we  
17 have had a very good relationship with UNE. We are  
18 developing one with UMaine. There is connections to  
19 academic institutions in the Nordics as well and I  
20 see a lot of interesting potential for institutions  
21 also to connect as a consequence of what's happening.

22           We have been consistently promoting Maine as  
23 a seafood state because we believe in Maine and the  
24 potential in the state. And we are also working with  
25 many initiatives to protect the environment and wild

1 salmon populations. That's also why, for example,  
2 the Atlantic Salmon Federation is supporting this  
3 project. We are trying to do good in the communities  
4 we work in as we do in Europe. We are working to  
5 conserve lands here in town. We are working with the  
6 lobster industry to provide bait and also we've been  
7 working with various community support projects.

8           What is land-based production? Just a few  
9 words about that in case not everybody knows that.  
10 Everything is happening indoors, so from egg to  
11 harvest size fish is all indoors in one site and that  
12 gives complete traceability. I read an article  
13 lately that up to 30 percent of the fish being served  
14 in North America can actually end up being a  
15 different product than what's on the menu. So  
16 traceability is going to be increasingly important in  
17 the future for this country and also other countries  
18 in terms of knowing what we are actually eating and  
19 where it's from and its full history.

20           Ideal conditions for fish. What we are  
21 doing is we are basically enclosing these fish in  
22 barriers of water coming in, so we're removing  
23 parasites, pathogens, so we are protecting the fish  
24 from this. This has been a major challenge for the  
25 fish farming industry so far and now new solutions

1 are coming on the table. We are also introducing a  
2 new industry standard for nutrient discharge. We  
3 have already done this in Europe and we're taking it  
4 further here. And this was a part of our application  
5 where we had two meetings last fall presenting that  
6 information. We will recap that today as well.

7           What we are doing with this project is we're  
8 recapturing and recycling and creating new business  
9 opportunities from waste resources. What we're  
10 doing -- proposing to do with the lobster industry is  
11 one example and there are many other examples also.  
12 And that also shows as additional farms or companies  
13 are looking at operations like this in Maine we will  
14 see more opportunities for businesses to emerge  
15 downstream from this kind of industry. We have no  
16 commingling with live species in these systems.  
17 They're all in the tank systems. We have a  
18 significantly lower Co2 footprint than the several  
19 hundred thousand metric tons of salmon being  
20 airfreighted into the U.S. today. And as we said  
21 many times, our production does not use GMO, no  
22 growth hormones and antibiotics and so on in our  
23 daily productions. These are key points that are  
24 important to impress.

25           We have served our fish a number of times in

1 the U.S. as recently as Boston last week at the  
2 Seafood Expo there. We have been up at Sunday  
3 River's Resort and served a crowd of 250 people and  
4 also in Portland in an arrangement down there. And  
5 last we had the pleasure of serving our fish to Janet  
6 Mills, the Governor. So we've been busy.

7           Let's see. Just about -- shortly about the  
8 permit applications for Belfast. This is a rigorous  
9 process. We permitted in Denmark and Norway before.  
10 This is the third country we've done it in and we  
11 also learned all of the requirements there. And as  
12 our applications show, we have gone above and beyond  
13 many of the requirements here in Maine in terms of  
14 the environmental requirements. And a process like  
15 this is extensive, months and months of data  
16 collection, engineering and integrations to optimize  
17 and always try to seek the best solutions on any  
18 given site that we work on, in this case Belfast. So  
19 we have solved many, many challenges along the way to  
20 make sure that this project works for this community.  
21 And we have taken in large amounts of input along the  
22 way and some of it has been very constructive. And  
23 it's like this -- a project like this always leads to  
24 many adjustments along the way, but we had our  
25 guiding stars to be true to our commitment in terms



1 of setting environmental standards for this industry  
2 and our documentation will also show that. And this  
3 is also been recognized by a number of leading  
4 environmental organizations in Maine who we subjected  
5 our applications to peer reviews; among those,  
6 Conservation Law Foundation, the Atlantic Salmon  
7 Federation and the Resource Institute of Maine, GMRI  
8 in Portland.

9           This is our U.S. team as we are here. We  
10 have as of today six U.S. employees, one Norwegian  
11 and sort of a mix of the two. We also have an Irish  
12 gentleman moving into the area this summer. And so  
13 this is the organization that we have invested in and  
14 built up in Maine before we have permits. And this  
15 is just showing our commitment to doing economic  
16 development in Maine. Also of interest may be that  
17 we have behind us a world class engineering team.  
18 They have built facilities for Grieg Seafood, Marine  
19 Harvest, Cooke, all over the word. We have a total  
20 of 14 specialized engineers behind this effort here  
21 in Maine. Some of them are shown here. And a part  
22 of this team is also the U.S. employees were Ed  
23 Cotter, John Hessler, again, David Noyes have been  
24 the people driving the engineering effort with local  
25 vendors here in Maine. And you see some of their

1 names here of the vendors here, well-known vendors in  
2 Maine, solid companies.

3           So undertaking engineering for a 30-acre  
4 footprint is a large effort and engineering drafts  
5 for the applications are now complete and today we  
6 are presenting the final details of our proposal and  
7 taking questions also from all of you. So, again,  
8 thank you for coming. And I'm going to leave this  
9 now to the next person in line.

10   (Applause.)

11           MR. COTTER: Thank you, Erik. Thank you  
12 everybody for being here. It's a pleasure to see  
13 such a great turnout. I know that there is obviously  
14 a lot of interest in the information and the best  
15 thing we can do is to present what you're going to  
16 see in the applications so that we can give you a  
17 chance for questions now, we can be clear, and  
18 anything that isn't clear enough we have an  
19 opportunity to clarify and to improve in our  
20 application so that when you see it you'll have good  
21 solid information that you have seen before and that  
22 you'll be able to follow along.

23           Just a quick review of the timetable of this  
24 project, both how we've gotten here and where we're  
25 going to be going from here. So we've been going on

1 this for, as Erik might have mentioned, over a year  
2 now. Now, we're to the point where we are in the  
3 midst of our permitting and engineering effort. Even  
4 though we are now ready to submit our permits it's  
5 really just the, you know, the mid-point of that  
6 process. We expect there will be a lot more review,  
7 a lot more questions and more public input  
8 opportunities through that. We'll also continue  
9 through our engineering. We're not done with that  
10 yet. We're going to be getting to final design  
11 details. We've got to meet with the city planning  
12 and that public input process, so there is still more  
13 work to do. Finally, as you see here the start of  
14 the construction right now we anticipate to be end of  
15 second quarter, beginning of third quarter 2019. So  
16 that's the beginning of site work as we see the  
17 schedule right now.

18 I'll give you a quick run down on the  
19 project layout. What we've got here is a very  
20 compact design. Although the site does seem like a  
21 large site considering the amount of output and  
22 product that we're able to develop on this site it is  
23 extremely efficient and compact. The site that  
24 you'll see that I'll go through in more detail  
25 minimizes impacts to the public and through --

1 through significant buffers and visual buffers as  
2 well as requirements and other code compliant site  
3 selection and site layout. Architectural details are  
4 still in progress as I mentioned. What we have here  
5 is a site layout design, which is required for the  
6 state at this point. The architectural details that  
7 are being developed will be submitted shortly through  
8 the city planning board and you'll see those coming  
9 up shortly.

10           So the project layout, I just want to go  
11 through the buildings really quickly. We've got here  
12 nine buildings, 10 buildings including the gate  
13 house. So Building 1 and 2 are the largest buildings  
14 on this footprint. Those are the modules, the  
15 production modules that we call them, and you can see  
16 those at the top here on the northern end of the site  
17 and the southern end of the site. Those are our  
18 production modules. In the middle of the building --  
19 in the middle of the site is our smolt building.  
20 This is our hatchery and our pre-smolt stage where  
21 the first life stages of the fish are before they're  
22 transported to the production modules. That's  
23 Building 3 is Phase 1. Sorry, 3 is Phase 1 and 2  
24 together. Building 4 is fish processing. That's  
25 where we process our final product and ship it out to

1 our local vendors. Building 5, central utility  
2 utilities plant includes back-up generation,  
3 chillers, boilers for the building and our electrical  
4 systems. Building 6 is our oxygen generation --  
5 building might be a little bit of a misnomer, it's  
6 really a series of oxygen generation facilities and  
7 tanks. Building 7 is our office and administration  
8 building. We'll get into that a little bit more.  
9 That's going to be right in front of Building 1. And  
10 then Building 8 is our water treatment plant. That's  
11 the closest building to Route 1 down near the  
12 entrance to the site. And you'll see more of these  
13 buildings both renderings and details on the  
14 following slides. Finally, Building 9 is a small  
15 gate house. And Building 10 is the existing Belfast  
16 Water District building, which is going to be  
17 renovated and used as an information space and public  
18 space.

19           This is the rendering that's created of the  
20 most recent design. You see it very closely  
21 resembles the layout that I just showed you and what  
22 you can see here is what we call the 3+1 modular  
23 design. This is based on engineering efforts in  
24 Norway and Denmark that have been tried and we're  
25 looking at process improvement at all times. What

1 we've got is our smolt units are designed and  
2 maximized for the modules that we're going to be  
3 building. The smolts are sized to produce enough  
4 fish for three grow-out modules and that's why the  
5 3+1. The three modules maximizes efficiencies and  
6 maximizes the output of those smolt units and  
7 maximizes the investment in the infrastructure as  
8 well.

9           On the site -- we've got a 54-acre site.  
10 Included in that is our regulatory required 40 foot  
11 vegetated buffers and 50 foot zoning setbacks. What  
12 you'll see in the design is that we have not only met  
13 those in all cases but also exceeded them in almost  
14 every case. Our minimum setback -- building setback  
15 is 100 feet from the property line, which means that  
16 on the Little River side between the 250 foot  
17 shoreland zone buffer that's being transferred to the  
18 city and deeded to the city for protection, we also  
19 have another 100 feet, so 350 feet minimum to the  
20 building from the river. It's also important to note  
21 that the vegetative buffer that is there is going to  
22 be left in tact where possible. At all times it will  
23 be replanted where needed because of impacts and  
24 we'll also supplement what's there. If there is an  
25 area that's got gaps in it we'll supplement that with

1 future plantings to maximize that buffer.

2           Project phasing I want to talk about because  
3 of the importance to soil erosion during  
4 construction. Our soil -- sorry. Our construction  
5 phasing plan has been designed to minimize areas of  
6 disturbed soil. We know that we have a lot of silty  
7 soils in the area, so what we're going to be doing is  
8 impacting only areas that we're ready to protect and  
9 build on and leaving all other areas that are not  
10 ready for construction with vegetation and other  
11 stabilization measures so that we don't create a  
12 situation where there is over -- an excessive amount  
13 of silt and soils to protect. We're going to defer  
14 removal of vegetation as long as possible and we've  
15 also got multiple layers of soil erosion sediment  
16 control protections. We're not just relying on a  
17 silt fence and a couple of hay bales. We're going to  
18 have a tool box of other items including retention  
19 basins and other tools at our disposal as-needed to  
20 make sure that erosion is not a problem. Finally,  
21 we'll have a third-party soil erosion control monitor  
22 that will report to the DEP on a regular basis.

23           The first couple building blocks of the  
24 project is the smolt building. Smolt 1 is our Phase  
25 1 smolt building. We're going to excavate that out.

1 You see that magenta/purple line really represent  
2 what's being opened up at this time. Only Smolt 1 at  
3 this phase is under construction and that's really  
4 all that's being disturbed as well as roads in and  
5 out. Other areas we're going to keep vegetated.

6 Then as we move along, Smolt 1 foundation  
7 gets built. We no longer have a soil erosion problem  
8 there. We'll move into the support building area  
9 where we'll open that area up, provide more soil  
10 erosion around it and start building there. All  
11 areas of open excavation once it's -- once we're done  
12 with the excavation we're going to treat the areas  
13 with gravel to make sure that we have a stable pad.

14 And then we expand the site in further  
15 phases. Once the foundation for smolt and support  
16 buildings are started we get into the modules.  
17 Module 1 on the Building 1 is our first expansion of  
18 the site. We'll then again expand the soil erosion  
19 control measures and start digging out the unsuitable  
20 soils bringing in structural fill and build Module 1  
21 and then move on to Module 2 and 3 as Phase 1  
22 continues.

23 Again, it's important to maintain soil  
24 erosion sediment control measures along the perimeter  
25 as well as the interior ones and then once the



1 buildings are brought into production and the  
2 production staff occupies the buildings, we'll remove  
3 those soil erosion control measures only once final  
4 finishes and stabilization are in place.

5           Phase 2 starts only once Phase 1 is fully  
6 completed with the modules in Building 1 and then  
7 we'll expand the site at that point. And at that  
8 time, Phase 1 will be completed and all of the  
9 finishes and stabilization material will be in place.  
10 And then, again, we just move along Building 2, going  
11 through Module 4, 5 and 6 and then install final site  
12 finishes.

13           So we're talking about the seawater intake  
14 pipe. Most people in the room have seen this now.  
15 What you see is our final determination as far as  
16 having all of the proper TRI and engineering  
17 completed. It was obviously a very complicated  
18 process with a lot of complex and legal and  
19 engineering issues to be considered. What you see  
20 here is the shortest route that's available to us.  
21 This minimizes construction impacts and what we've  
22 determined is that any additional length in pipe just  
23 does not provide any environmental gain. The  
24 discharge point that you see represented here at  
25 the -- right at the peak of the bend there represents

1 the discharge point that's been consistent throughout  
2 the project. This is what everybody saw in the  
3 October 2018 DEP submission. We have not changed  
4 that discharge point. Final permit applications will  
5 address all of the DEP requests for information that  
6 were provided to us in January. We have met with DEP  
7 and explained our responses to those. They  
8 understand that those will be provided officially  
9 through our final submission in a couple weeks.

10 Pipe installation details. The first point  
11 I just want to mention here is that the top slide  
12 shows the installation method on the upland  
13 intertidal and shallow waters of the surf zone. The  
14 key part here is that, as you can see, the depth  
15 varies depending on where we are. This pipe will  
16 always be buried. I know some people were concerned  
17 that they might see the pipe sitting on the  
18 intertidal. That won't be the case. We will bury  
19 the pipe. And the only time that the pipe submerges  
20 from the -- from underground will be in approximately  
21 35 feet of water and at that point we'll switch over  
22 to the bottom detail, which is where we lay the pipe  
23 on the seabed and protect it with a series of rip rap  
24 and other protections and to weigh it down from storm  
25 waves and currents. Coastal work out on the water to

1 be completed during regulatory time frame so the Army  
2 Corps of Engineers selects November through April as  
3 the time for this kind of work to minimize the  
4 environmental impacts and that's the window we will  
5 be using. And then upland we're going to be using  
6 the time frame to integrate with our construction  
7 schedule but also looking at traffic impacts and  
8 making sure that we have minimal impacts and mitigate  
9 all impacts on traffic crossing Route 1. It's not in  
10 this slide, but you'll see in the application that we  
11 are rerouting traffic and maintaining the full  
12 traffic route so that there won't be big traffic  
13 problems in that area.

14           Finally, the pipe installation at the  
15 termination of the pipes. We've got the intake  
16 structure. We've got two intake pipes, 30 inch pipes  
17 and both of those will have this assembly that you  
18 see here, which is provided to mitigate impingement  
19 risks. We're going to maximize the surface area and  
20 reduce the velocity of the flow there. And then down  
21 at the bottom you see the discharge pipe with  
22 baffles, which are designed to improve the diffusion  
23 of the effluent coming out of those pipes.

24           So that's the construction methodology and  
25 phasing. I'm going to pass it over to SMRT for

1 visual impacts. Thank you.

2 (Applause.)

3 MR. JOHNSON: Good evening. Thank you, Ed.  
4 My name is Mark Johnson. I'm with SMRT architects  
5 and engineers. We're based in Portland. I am a  
6 landscape architect and I have been practicing in  
7 Maine since 1986, so I've had the pleasure of doing  
8 products throughout the state in my time here. My  
9 role on this project has been multifaceted. I've  
10 been involved with site planning and design  
11 throughout and what I'd like to speak to you tonight  
12 about is my role with the visual impact assessment  
13 for the project.

14 The diagram -- well, let me first start by  
15 saying I want to outline what the actual purpose of a  
16 visual impact assessment is relative to this process,  
17 the methodology that is used for such an assessment  
18 and our findings of course. Per state law, and as  
19 you know, we are submitting for Site Location of  
20 Development Act with the state as well as Natural  
21 Resource Protection Act and those are the two arenas  
22 within with I am working primarily. Chapter 315 of  
23 state law mandates that we perform an assessment to  
24 evaluate whether a new facility will have an  
25 unreasonable adverse effect on existing uses and

1 scenic character and specifically whether it will be  
2 unreasonably interfere with views from established  
3 public viewing areas, again, in accordance with  
4 Chapter 315 Assessing and Mitigating Impacts to  
5 Existing Scenic and Aesthetic Uses.

6           Well, what does that really mean? The  
7 chapter goes on to define a scenic resource as public  
8 natural resources or public land visited by the  
9 general public in part for the use, observation,  
10 enjoyment and appreciation of natural or cultural  
11 visual qualities. The attributes, characteristics  
12 and features of the landscape of a scenic resource  
13 provide varying responses from and varying degrees of  
14 benefits to humans.

15           So what we -- what we had to do and in  
16 getting into the methodology is to first canvas the  
17 area, assess the area surrounding the site to  
18 determine even if these public resources exist. And  
19 we have to be careful about the definition here  
20 because the public resource that I just defined is  
21 different from a place from which you can actually  
22 view the project and I'll get into that distinction  
23 here in a minute. So what we had to do -- and  
24 hopefully can I kind of beam over here. This is the  
25 project site and Route 1 is right along here.

1 Perkins Road is around here. This is the Belfast  
2 Reservoir Number 1 of the water district. So what we  
3 did was to traverse that area to determine where  
4 potentially the project could be seen. And indeed we  
5 all know that the McLellan-Poor Preserve over in  
6 Northport exists on the south side of the reservoir  
7 and the Little River Community Trail on now city land  
8 lies on the north shore. We know that these are  
9 public resources. We also know that the views are  
10 potential from Route 1 looking across below the  
11 church here and from Perkins Road.

12           What we do then is take digital images from  
13 these -- from these locations, digital camera like  
14 many of you have with a, quote, unquote, normal lens,  
15 50 millimeter or so, to establish a -- what would be  
16 viewed as a normal -- a normal view. We did these  
17 two times back last fall with leaf-on and in January  
18 with leaf-off to simulate a worst case condition.  
19 Computer models of the -- of the buildings were  
20 generated using building information modeling  
21 software including Auto CAD, Revit, et cetera, to  
22 create models of the buildings, place them in  
23 relation to proposed topography, calibrate viewpoints  
24 for our visual simulations and generate views. These  
25 views from that software were then integrated into

1 the photographic representation from the various  
2 viewpoints using Photoshop and the like to create  
3 what's known as a photo montage mixing that model  
4 with what is viewed out in the landscape.

5           As a check, we took weather balloons, 5 1/2  
6 foot diameter weather balloons and floated them at  
7 these four corners of Building 1. Why just those  
8 four corners? Well, we know that that's in an open  
9 cleared area existing already and so if -- if the  
10 building is going to be seen it's going to be seen  
11 there and -- number one; and number two, what those  
12 allowed us to do was to create a data in the  
13 landscape. Those locations were surveyed by a  
14 surveyor. We set the balloons to the projected  
15 height of the building and then used that to  
16 coordinate our imagery. What you see here is an  
17 existing view. This is a before view from the  
18 existing Belfast Water District entrance. This will  
19 show where the bidding will be and then this is the  
20 modeling. Now, you can see here the lines of the  
21 building beyond, these are the grow modules beyond,  
22 this is the waste water treatment plant. We are  
23 necessarily showing basic boxes for the buildings at  
24 this point. They are -- they are based on the  
25 general footprints that are shown for the buildings

1 and the allowable heights.

2           This is shown from Route 1 below the church.  
3 You can see the Matthew's Brothers Plant up here.  
4 This line here shows the elevation of the balloons  
5 and that line was calibrated right to them. This is  
6 a view in there and you can see how this is setting  
7 within the context of existing trees. This is from  
8 Perkins Road, again, before shot. This is on the  
9 east end. You can see the level of the balloons and  
10 the level of the building is relative to that.

11           As we move west on the site, we're up and in  
12 a denser break of trees here. And we also have grade  
13 advantage too so the building is essentially settling  
14 down into the landscape there and you can see the  
15 line beyond. This gives you an indication from the  
16 community trail of the density of vegetation in  
17 between user of the trail. And the this was done --  
18 we had a safety yellow vest that we hung about 100  
19 feet up from the trail here and you can barely --  
20 barely see that.

21           So just to wrap up, the conclusions are,  
22 number one, the proposed development, number one,  
23 meets city requirements for space in bulk. The city  
24 land, the Belfast reservoir land, the 250 feet,  
25 provides a minimum of 250 feet of vegetated buffer



1 between the public viewing sources and indeed because  
2 of city requirements of a 40 foot undisturbed buffer  
3 within the property we have at a minimum 290 feet of  
4 existing vegetation between a potential trail user  
5 and the development. The views past 100 feet, again,  
6 are extremely dense and will be -- it will be all but  
7 occluded. So the conclusion is -- is that indeed  
8 there would be no unreasonable adverse effect to  
9 public viewing sources. And with that, we have  
10 Alternatives Analysis. Thank you.

11 (Applause.)

12 MS. RANSOM: Good evening. My name is  
13 Elizabeth Ransom with Ransom Consulting. Many of you  
14 have been in this room listening to me previously.  
15 I've presented at a number of the other Nordic  
16 Aquafarms meetings -- public meetings we've had. As  
17 you've heard from the previous speakers, we are  
18 speaking about several applications tonight and I'm  
19 going to take a little bit of a step backwards and  
20 just run through a little bit of what those  
21 applications are.

22 The first application we are going to be  
23 speaking about is -- quite extensively is the site  
24 law or Site Location of Development Act, sometimes  
25 abbreviated SLODA application. And just to give you

1 an idea there are between 25 and 30 sections to the  
2 SLODA application and obviously we're trying to give  
3 you the most information we can in a two hour meeting  
4 about those sections, so we've tried to highlight a  
5 lot of the ones that we think are, A, integral to  
6 that application or, B, things that we think the  
7 community is going to have a lot of interest in. In  
8 addition, we're trying to present information to you  
9 about National Resources Protection Act or NRPA. And  
10 the alternatives analysis that I'm going to start  
11 with is a big component of the NRPA application. In  
12 addition, we're go to touch briefly on the air  
13 permitting and also just quick refresher on the  
14 MEPDES or discharge permitting that we've presented  
15 in previous meetings.

16           So with that, so what exactly is an  
17 Alternatives Analysis? Well, an Alternatives  
18 Analysis is a document that the applicant has to put  
19 together to state his proposal because remember at  
20 this point in time we're talking about a proposal.  
21 It's not an actual project until that application has  
22 been finalized and approved by the appropriate  
23 agencies. So in this proposal and in our  
24 Alternatives Analysis the project applicant has to  
25 analyze whether or not there is a practicable

1 alternative that can meet their project purpose, and  
2 we'll talk in a minute about what that project  
3 purpose is, but we have to define whether or not we  
4 could have done this by either utilizing or expanding  
5 on or managing some other site that would avoid the  
6 impacts to wetlands; whether it is way to reduce or  
7 change the project density as we propose and  
8 therefore reduce our impacts to wetlands; and is  
9 there some other sort of design we could have  
10 considered that would still meet our project purpose  
11 but avoid or lessen the impacts to wetlands; and then  
12 also we obviously need to define, you know, do we  
13 really need this project and why do we have to do the  
14 proposed alterations to the land.

15           So what is Nordic's project purpose? Why  
16 are we here? I think you've been hearing pretty  
17 consistently the message that we're here because  
18 there is a strong need for safe, high quality,  
19 traceable and sustainable seafood. We can accomplish  
20 that goal with a lower carbon footprint if we do it  
21 here in the U.S. versus shipping it from overseas.  
22 By doing it here, we can improve our traceability, we  
23 can understand what's going into the fish, we can  
24 understand the genetic origin of those fish and we  
25 have better control of the environmental impacts of

1 the growing of those fish and what we put in  
2 ourselves when we eat them. So this facility's  
3 project purpose is to provide up to 7 percent of the  
4 U.S. salmon consumption from a single and grow 33,000  
5 metric tons of fish and to provide that to consumers  
6 within a day's drive of the facility and serve the  
7 northeast markets. And in order to do that, we need  
8 certain things like the clean, clear seawater and  
9 fresh water that we have in the Belfast area and a  
10 number of other criteria that we'll be talking about  
11 later.

12 As a part of our Alternatives Analysis we  
13 also go in and define what the project benefits are,  
14 what are we bringing along with this project besides  
15 seafood and in this case it's the direct creation of  
16 over 100 jobs as well as the ancillary industries.  
17 Erik spoke about it earlier some of the things that  
18 will come up from the additional products that will  
19 be produced besides fish including things like  
20 lobster bait and other things from our cuttings.  
21 There is work force development opportunities with  
22 some of the Maine universities. There is a \$500  
23 million investment in the local Maine economy. There  
24 will be long-term, non-residential tax revenue in the  
25 City of Belfast and a significant cash influx to the

1 Belfast Water District from the purchase of their  
2 land to be used for infrastructure developments. And  
3 obviously there is the safe, high quality seafood  
4 that will improve U.S. food security and, you know,  
5 promote a lower environmental footprint from the fish  
6 we're consuming. And obviously I already mentioned  
7 that there is the potential for a lot of these salmon  
8 cuttings to be used as lobster bait, which most  
9 people in this room probably are aware is a real need  
10 in the State of Maine.

11           So how do we evaluate the criteria for the  
12 projects and what are we doing when we do that?  
13 Well, the state establishes basically four large  
14 criteria by which all projects are evaluated and then  
15 within that we break it into subcategories to look at  
16 those things in more details. So the first one is,  
17 you know, can we meet site requirements. Do we have  
18 the legal title, right and interest to acquire the  
19 land or the rights to the land or the rights to the  
20 development? Can we do it in a way that meets  
21 existing zoning or existing fire code? So what are  
22 some of these siting requirements and legal  
23 requirements and can we meet those for our project in  
24 the location we're looking at?

25           Another big one is what are the

1 environmental impacts and are they reasonable  
2 impacts? So in that we evaluate what are the  
3 wetlands? What are the streams? What is the use of  
4 ground water and surface water? A third criteria or  
5 group of criteria is about the engineering  
6 feasibility of the proposed project. So that  
7 includes not only can we build it, but also can we  
8 operate it. So we look at things like what are the  
9 geotechnical considerations of the site? Can we put  
10 our layout and design in a way that's functional?  
11 You know, if you're building -- if you're building  
12 furniture you're not going to build half the chair in  
13 a building on one side of the site and then truck it  
14 across town to build the rest of the chair. It's the  
15 same way with growing fish. We need to find a place  
16 where we can actually have the logistics and  
17 operations work out for our facility as well. And  
18 lastly, one of the criteria that the state has that  
19 we can evaluate projects on is what's the financial  
20 impact of that alternative. So does a proposed  
21 project have the capacity to absorb that financial  
22 impact of a particular decision and still move  
23 forward.

24           So what are the different things that we  
25 looked at in the Alternatives Analysis? For a

1 complex project like this we felt it was necessary to  
2 break things down into sort of three different key  
3 analyses. One is on-site selection. Why are we  
4 here? Why did we choose Belfast? The other piece is  
5 site layout. Is there a different way of looking at  
6 the site layout that would perhaps be less impact?  
7 How many buildings do we need? What are those  
8 buildings and how do we arrange them on the available  
9 site? And then the third thing was the piping  
10 layout. You know, how do we access seawater? There  
11 is obviously a lot of different ways you can get from  
12 the Belfast Water District property and out to sea.  
13 And in all cases everything gets evaluated against a  
14 no action alternative. What if we didn't do it? And  
15 in some cases it's pretty obvious. If there is no  
16 pipe there is no way to get water to and from the  
17 site so it can't meet our project purpose, but in all  
18 cases we take a look at what happens if we didn't do  
19 it that the way at all.

20           So I'm not going to go through every last  
21 detail of the Alternatives Analysis tonight because  
22 if I did you'd still be here in three hours, but we  
23 do this by looking at decision matrix. We group the  
24 criteria under legal and environmental and  
25 engineering feasibility and so forth that I talked

1 about. We weight those criteria. Obviously some  
2 things are completely non-starters for the project  
3 and other things are areas where there is more or  
4 less importance attached to them. So we give those  
5 things a numerical score and we give them some  
6 supporting information as to why we score things in  
7 the way that we do and in our applications you'll be  
8 able to read those details if you're interested.

9           So with site selection, how did we get to  
10 Belfast? I think a number of you in the room have  
11 heard us talk about this before, so I'm not going to  
12 go into extreme detail, but as you've probably heard  
13 before we've gone through a process, it took many  
14 months where we looked at the coastline from Canada  
15 to Washington DC and we used geospatial analysis,  
16 state online databases, real estate searches and  
17 field visits to ultimately find locations that  
18 provide a clean, cold, fresh and seawater, nearby  
19 access to three-phase power, an attractive community,  
20 a suitable place to build what we needed to build and  
21 centrally located. These were a few of the criteria  
22 that we were looking at.

23           This is a map that shows all of the coastal  
24 towns in Maine as well as all of the communities in  
25 pink where we identify potential sites in our initial



1 geographic search. At the end of the day, we kind of  
2 narrowed that down to four locations and put those  
3 four locations through more rigorous analyses and at  
4 the end of the day Belfast was the one that was our  
5 preferred alternative and because it can provide all  
6 of the things that we were looking for in a project  
7 site. So Belfast is the one out of all those red  
8 sites on the previous map that actually met our  
9 project purpose.

10           For the site layout we actually looked at a  
11 variety of different options as well. Many of you  
12 will remember at probably our first public meeting we  
13 only had the Belfast Water District property. That  
14 water district property was 39 acres. We looked at  
15 that and said it was also -- for those of you who  
16 aren't familiar with it it's somewhat of an L-shaped  
17 property, so it's quite narrow in places and we  
18 looked at those and said how are we going to put  
19 these six modules that we want to grow the 33,000  
20 metric tons of fish onto that land and we found that  
21 we couldn't. It was physically impossible to get six  
22 modules onto 39 acres of land and have the buildings  
23 fit. So then we looked at can we do something  
24 smaller. What happens if you make three modules on  
25 39 acres of land? So number one, that didn't, again,

1 meet our project's purpose because it wouldn't supply  
2 us with the same amount of fish. It wouldn't allow  
3 us to do the same 3+1 modular design that Ed showed  
4 you earlier. And in spite of the fact we had fewer  
5 buildings it still didn't fit without hanging over  
6 lot lines. So in terms of the setback requirements  
7 that Ed was showing you earlier with 40 foot setback  
8 and 50 foot setbacks and 75 foot setback from  
9 wetlands we couldn't even get three modules to do  
10 that because of the configuration of the land. So at  
11 that point in time we needed to look at are there  
12 larger sites available and can we acquire more land  
13 to make this work. And ultimately that answer was  
14 yes and we got this up to a 54-acre site and we  
15 evaluated whether or not six modules or five modules  
16 could ultimately meet the project purpose. And  
17 ultimately due to the configuration of what we need  
18 and the 3+1 modular design only six modules  
19 ultimately meets the project purpose and so it also  
20 meets the siting requirements, it reduces our impacts  
21 to the natural resources and preserved the eastern  
22 stream because of the ability now that we have a  
23 little bit more land to condense the buildings into  
24 the center of that land and maximize the buffers to  
25 our neighbors and to the Little River Trail. It will

1 also allow us to have process piping and other  
2 engineering components fit within the buffer zones,  
3 so, you know, for a -- for process piping and getting  
4 fish from building to building we needed to have  
5 things centralized and having the 54 acres allows us  
6 to do that. And that, again, using that 3+1 modular  
7 design helps offset the cost for the needed  
8 infrastructure and piping. So six modules is our  
9 preferred alternative and that's what we'll be  
10 putting in our Alternatives Analysis as part of the  
11 NRPA application.

12           The other thing that we were evaluating as  
13 part of our Alternatives Analysis is what are the  
14 different ways to get a pipeline out to sea and for  
15 this we looked at, again, five options that we  
16 compared to the no action alternative and these  
17 include direct from the site property, so the site  
18 into the Little River does abut the site and in  
19 theory one could take a pipe straight from where the  
20 water district's building is right now and go down  
21 the Little River and out to sea. I think it's not  
22 hard for everyone in this room to understand that  
23 that alternative as shown here in yellow would be  
24 quite long and with quite long comes the potential  
25 for environmental impacts, but that was one of the

1 alternatives we felt important to evaluate because we  
2 had the right, title and interest with the land  
3 ownership to consider that.

4 I'm going to go back a slide here. The  
5 other route we looked at is the southern route that  
6 leaves shoreland from an area where we have a  
7 property owner who is working with us for rights to  
8 go through their land and we looked at that. It's  
9 also a fairly long route. I'm going to talk about  
10 that a little bit later. We also looked at a  
11 straight route. What happens if you kind of come  
12 straight out the coast? We looked at going up off of  
13 Tozier Road. And then we looked at sort of a curved  
14 alternative. And, again, these are all shown on this  
15 map and I'm going to kind of go through them briefly  
16 one by one.

17 So as I said, Option 1 was straight from the  
18 property shown in yellow. It's the longest route and  
19 with that comes a long area to have environmental  
20 impacts. Obviously as you construct you are at least  
21 temporarily disturbing the biota that are there and  
22 the longer you're doing the construction the more  
23 opportunity you have to cause an impact, so we felt  
24 that this was not favorable from the ecological  
25 perspective. In addition, right, title and interest

1 is a complicated question and it's difficult to make  
2 sure you have that when your route is going right  
3 down a town line. So the right, title and interest  
4 considerations for this would have gotten tricky. In  
5 addition, the engineering feasibility and operations  
6 would be challenging with the longer pipe route as  
7 well as the fact that the Little River itself has got  
8 a fair bit of bedrock in it and so for that reason  
9 this just didn't seem like a favorable alternative,  
10 so we were looking for others. It's also the most  
11 expensive given its length.

12           So another route that was considered is the  
13 southerly route shown in blue. It's still quite a  
14 long route with environmental impacts. We were able  
15 to obtain right, title and interest for this route  
16 through the intertidal zone, but due to the bends in  
17 the pipeline we think from an engineering and  
18 operation standpoint it's not ideal and it is still  
19 costly so we have a number of strikes that -- against  
20 it that we keep it from being something we would  
21 prefer.

22           We looked at the straight route. Obviously  
23 the straight route is the shortest and has the --  
24 therefore the most desirability from an ecological  
25 point of view. It's also, you know, easier to

1 engineer and to operate when something is a straight  
2 pipe, but we didn't have the intertidal rights that  
3 we needed to make this option work.

4           We looked at the option of what happens if  
5 you go further up and look at Tozier Road. Part of  
6 the perspective there is that, you know, there have  
7 been properties for sale, perhaps it would have been  
8 a possibility to look at acquiring the right, title  
9 and interest there. You get into deep water quite  
10 quickly up there. The water depth changes more  
11 rapidly. There is not as much of a mud flats to go  
12 through, so we thought that might be something  
13 favorable to look at. And what we ultimately figured  
14 out, however, is that there is an increased height of  
15 land on Tozier Road. It's higher than the elevation  
16 of the water treatment plant that's planned on the  
17 site, so we would have had to pump the water up hill  
18 for a longer run and, you know, down the street  
19 toward the waste water treatment plant and what that  
20 does is it means you have to create a pump station.  
21 Because of that long run there would have been a need  
22 for a pump station in a residential neighborhood,  
23 which isn't really something that's appropriate in a  
24 residentially zoned neighborhood. So we looked at  
25 that and said although it's feasible from an

1 engineering standpoint and an operations standpoint  
2 it's not desirable, so it also has, you know, a  
3 moderate cost associated with it because you have a  
4 longer distance to take a pipe on land.

5           So where did that leave us? That left us  
6 with the curved route, Option 5. It has a lower  
7 ecological impact in both the intertidal and subtidal  
8 because it is reasonably shorter. It's it a route --  
9 it's a route for which we have a right, title and  
10 interest. The engineering is straightforward. The  
11 construction timeline will be minimized and helps us  
12 meet our project purpose. And then just for  
13 everybody's benefit I'm going to put that up there  
14 one more time. So the green route is our preferred  
15 alternative.

16           I'm going to take a brief break and I'm  
17 going to introduce Maureen McGlone, who is going to  
18 talk to you a little bit about our stormwater  
19 planning and then I'm going to come back up.

20    (Applause.)

21           MS. MCGLONE: Hi, there. As Elizabeth  
22 mentioned, I'm Maureen McGlone. I'm with Ransom  
23 Consulting also. I am going to talk very briefly  
24 about stormwater. Stormwater doesn't appear to be  
25 nearly as sexy as the rest of the things on the

1 agenda.

2           This is a real rudimentary diagram of the  
3 site kind of just showing the buildings, some of the  
4 access roads around the buildings, but what it also  
5 shows are some of the treatment methods that we're  
6 looking at using on the site to treat any of the  
7 impervious surfaces and landscaped areas. First and  
8 foremost, Ed showed a diagram earlier of the erosion  
9 control and actually multiple diagrams of the erosion  
10 control. The first part of the erosion control is to  
11 sort of cutoff the stormwater from more upland areas,  
12 mainly from Perkins Road and beyond. So in -- oh,  
13 there we go. They usually don't give me a pointer  
14 that actually works. This is great.

15           So right along this border up in here we'll  
16 be having what I like to call an interceptor channel,  
17 which is essentially we're capturing the stormwater  
18 from upland areas and we're going to reroute it  
19 around the site so it doesn't become an erosion  
20 issue. Treatment of the impervious surfaces, which  
21 is the pavement and rooftops as well as any grassed  
22 landscaped areas will be done at every storm. It's a  
23 DEP requirement and it's something that we're very,  
24 very prone to doing here. We've got four different  
25 types of treatment methodologies that we're using on



1 the site. We're going to try and keep them local to  
2 where the stormwater has been generated.

3           First, I'm going to identify -- oh, jeez,  
4 wrong button. All right. The green roofs here are  
5 exactly that, green roofs. So on some of the flatter  
6 roofs that don't have as many penetrations or as many  
7 mechanical units on top we've proposed using  
8 vegetated roof cover and that provides us an  
9 opportunity to treat the stormwater before it  
10 actually gets to the ground surface. We looked into  
11 using it also on the much larger buildings here, but  
12 those buildings, and I don't know that Erik has  
13 mentioned it, but those buildings are going to be  
14 supporting some solar panels so it became another --  
15 we came up with another option for treatment of  
16 those. And in these buildings here, each one of  
17 these different modules because they're being built  
18 in separate -- in succession, we've come up with  
19 these subsurface sand filter locations. Now, a  
20 subsurface sand filter is basically going to take the  
21 roof runoff and it's going to put it through a filter  
22 system that is below grade. You're not even going to  
23 see it.

24           In these areas here, this gray, this is what  
25 we call our vegetated or grassed underdrain filter.

1 We're going to take some of the impervious area,  
2 which is your pavement, as well as some of the  
3 landscaped area, we're directing it to these soils,  
4 if you will, with filter systems in them, we'll treat  
5 the water there and pipe it around. In blue, there  
6 we go, these are in mostly parking areas but also  
7 around the perimeter of some of -- some of the other  
8 areas where we have more pavement we're putting  
9 impervious pavers. An impervious paver system is a  
10 means to take water that will filter down through the  
11 pavers rather than collect on top, filters down  
12 through, we have a filter system below it, we collect  
13 it and then transport it.

14           These are some pretty pictures. This here  
15 is a snapshot really of what the porous pavers or  
16 impervious pavers will look like. We're proposing to  
17 use those primarily around the outer edges of many of  
18 the parking areas as well as in the parking stalls  
19 themselves. This is a simulation of what a green  
20 roof will look like. We're looking at different  
21 vegetated options. And this is more like what your  
22 grass underdrain filter will look like. I don't have  
23 a system -- I don't a picture for the subsurface sand  
24 filters because they're, well, subsurface.

25           Okay. Key points that you really want to

1 take away from this. There is a DEP requirement to  
2 treat 95 percent of your impervious surfaces. We're  
3 exceeding that. There is also a DEP requirement to  
4 treat 80 percent of your developed areas, which is  
5 all of your landscaped area and all of your  
6 impervious surfaces. We're far exceeding that.  
7 We're at 86 percent currently. Any of the stormwater  
8 treatment methodologies that we're looking at are  
9 tried and true methods and they're all approved by  
10 DEP.

11 I guess if there are any questions you can  
12 hit me up later. I hope you enjoyed your break,  
13 Elizabeth.

14 (Applause.)

15 MS. RANSOM: Thank you, Maureen. Yeah, you  
16 guys are going to get tired of hearing my voice, so  
17 I'm happy to give her a chance to talk for a little  
18 while and we'll have somebody else coming in a little  
19 bit as well.

20 So I'm going to speak briefly about noise,  
21 odor and air. They are important, but I'm going to  
22 give them a pretty quick summary that I think will  
23 tell you what you are interested in hearing.

24 So noise. Everybody wonders, there is a new  
25 thing coming to town, what kind of noise is it going

1 to make? As part of the SLODA permit we are required  
2 to look at that. The -- in addition, during the city  
3 permitting process there are city regulations  
4 governing sound. One of the things that is an easy  
5 way to think about sound is we're all familiar with  
6 the typical noise level of some of the things that  
7 are listed on the bar chart here. So we're required  
8 in the state to keep below 55 decibels during the  
9 daytime and below 45 decibels at night and lower in  
10 certain protected areas. And we've done a noise  
11 evaluation that will be a piece of our application to  
12 study what is going to be the impact of the facility,  
13 where does the sound that's generated go and what are  
14 the resources in the area that might be receiving  
15 those sounds and what we want to emphasize with this  
16 slide is that Nordic's project is going to meet the  
17 state and local regulations for the permissible noise  
18 thresholds. In, general, just to give you an idea,  
19 I'm probably talking at something that's around 60  
20 decibels, maybe louder because I've got the  
21 microphone. So I'm talking at a volume that's louder  
22 than what their operation it going to be permitted to  
23 emit during the course of the daytime. And at night  
24 it would drop to something like this.

25 One of the other things that people are

1 obviously concerned about when you hear that  
2 something related to fish is coming to town is is  
3 this going to smell? What's the odor? So the first  
4 point I think we all want to understand is in  
5 Nordic's case everything they generate is a product  
6 and when we think of odor and fish we're usually  
7 thinking about waste. The thing that's causing that  
8 odor is some product is out -- some moist product is  
9 out where bacteria can grow outside in the sunshine  
10 and it makes that odor. Their product is going to be  
11 indoors. They have potential sources of odor, but  
12 it's how you manage that odor that keep it from being  
13 an issue. So the potential sources, they're required  
14 to identify what those sources are in their  
15 application and the potential sources are the  
16 wastewater treatment plant, fish feed, fish  
17 processing and mortalities. Fish sometimes die  
18 unexpectedly. So those are all things that could  
19 cause an odor.

20           What are the control measures? How do they  
21 keep that from being an issue to the neighborhood?  
22 Well, first of all, everything is indoors, so right  
23 there you have a barrier that keeps the odors from  
24 getting outside where people in the general public  
25 might smell them. But beyond that, they are taking

1 additional measures to make sure that odor doesn't  
2 become a problem. So their wastewater treatment  
3 plant, for example, they're dewatering it, so they're  
4 taking right away one of the steps that would  
5 potentially lead to bacteria growing and making that  
6 odor. And they are -- they're dewatering it and then  
7 they're taking that and sealing it in the tank and  
8 transporting it off-site because, again, that  
9 filtrate is a product. It's a product that there is  
10 need for. It's got agricultural applications, for  
11 example. So that's something that they're not going  
12 to allow it to sit there and develop odor.

13           In addition, the feed that they bring in is  
14 going to be stored in enclosed silos inside their  
15 buildings, so there will be multiple barriers to  
16 something that you might smell so it's not like it's  
17 going to be sitting outside their facility on a  
18 pallet. Mortalities, should they occur, they're  
19 going to, again, remove those from the tanks,  
20 preserve them and ship them off-site. So, again,  
21 everything that they do, their processing, fish  
22 processing, the cuttings that they take, those are  
23 going to be sealed and vacuum packaging, frozen and  
24 transported off-site because that's valuable product  
25 as well.

1           So the way that we avoid odors is through  
2 best management practices, good employee training,  
3 the fact they have staff with decades of industry  
4 experience, they're doing this in other facilities,  
5 and then we have trusted local partners who want  
6 these products and are going to remove and recycle  
7 those potential sources of odor.

8           Air is a real brief one. In Maine, there is  
9 a licensing requirement for certain thresholds of use  
10 of different equipment and those fall under Chapter  
11 115, the Minor Source Air Emissions Application is  
12 what we're going to be submitting. Our application  
13 will cover two things that might require air  
14 permitting and air licensing and that's the fact that  
15 should the power go out, which it tends to do here on  
16 the coast of Maine, there will be a back-up generator  
17 that will need to come on to provide life support for  
18 the fish and those generators will be fueled by  
19 diesel and so that it something that could ultimately  
20 require air emissions permitting. In addition, there  
21 will be a 6 million BTU, British Thermal Unit, per  
22 hour boiler. And those pieces of equipment when  
23 operated to meet the needs of the facility or the  
24 potential needs of the facility during a power outage  
25 would require some air licensing. So each piece of

1 equipment is going to be designed to meet the best  
2 available control technologies as specified by the  
3 Maine regulations, that includes particulate control  
4 measures, but in, general, the air licensing  
5 requirements for the facility are quite simple.

6           So we're now going to go into a little bit  
7 of a discussion about the water supply. I'm going to  
8 talk briefly about how we initiated a field program  
9 to look at the water resources for the project and  
10 then I'm going to introduce Mike Mobile to come up  
11 and talk a little bit about our modeling efforts to  
12 look at that in greater detail.

13           So why did we do this? Well, first of all,  
14 a project like this does need water. We've done a  
15 significant amount of engineering since the last time  
16 Nordic has been up here talking about water and we've  
17 looked at different ways to reduce the project's  
18 needs for why we need to take fresh water and we have  
19 looked at what the available sources of water in the  
20 project site are and those include what the state  
21 terms significant groundwater wells and there is an  
22 application that goes in as part of SLODA for the  
23 significant groundwater wells. The project will also  
24 be a Belfast Water District customer. They will be  
25 acquiring a certain amount of their fresh water



1 through the city's supply and then they'll be looking  
2 at a surface water withdrawal as a back-up source.  
3 And what our project was designed to do is look at  
4 can we use these water resources assignability and  
5 what is the appropriate way to study the water  
6 resources today so that we can demonstrate whether or  
7 not our future use is going to cause harm.

8           So how did we do that? Well, it's been  
9 nearly a year of studying it to stand up here and  
10 tell you about it and to put this application in and  
11 have it be complete. We did a series of different  
12 testing out there. We started with geophysical  
13 physical testing. The diagram you see here on the  
14 right is looking at the resistivity of the rock and  
15 we look for variations of the resistivity of the rock  
16 to point out where we might have more fractured rock  
17 versus we have more competent rock. And it's those  
18 fractures in the rock that are telling us where we  
19 might see water because we don't want to just put  
20 holes and look for water arbitrarily. We want to go  
21 where we think that we have a good chance of finding  
22 fresh water, so we started that with that geophysical  
23 survey.

24           From there, we started to drill and we  
25 drilled wells, we drilled small diameter multi-level

1 piezometers designed to look at some of the more  
2 superficial features, but we looked at both the  
3 overburden and the bedrock. We looked at the  
4 interaction between the shallow water and the streams  
5 the surface water features on-site. We measured the  
6 surface water features on-site. We had staff gauges  
7 and other ways of measuring what was actually moving  
8 through the Little River and in the reservoir itself.  
9 We conducted four pumping tests over the span of a  
10 year. We started with one last April and we  
11 concluded with one in January/February of this past  
12 winter. So that's a significant amount of time and a  
13 significant amount of datapoints to measure and  
14 inform our conceptual site model and set up the  
15 groundwater modeling for the project.

16           With that, Mike is going to come up and talk  
17 about that model.

18                                   (Applause.)

19           MR. MOBILE: Good evening, everyone. My  
20 name is Michael Mobile of McDonald Morrissey  
21 Associates and it's really -- I appreciate the  
22 opportunity to be here tonight and to describe the  
23 numerical or mathematical groundwater modeling we  
24 performed for Ransom and Nordic -- the proposed  
25 Nordic facility in Belfast. I realize we're running

1 a little bit late on time, so I'm going to shorten a  
2 couple of my slides. I'm happy to answer more  
3 questions on the stuff I skip through a little bit,  
4 but I want to make sure there is ample time to answer  
5 your questions at the end of this.

6           So I'm going to start off with a quick  
7 executive summary to touch on kind of the key take  
8 away's from my presentation tonight. As Elizabeth  
9 just alluded to there has been a significant volume  
10 of information and data gathered through a detailed  
11 hydrogeologic investigation that's been conducted  
12 over the past year or so. With that volume of  
13 information and data we've created a mathematical  
14 model to support estimates of aquifer responses,  
15 particularly the bedrock aquifer below the site to  
16 propose withdrawals meaning pumping from bedrock  
17 soils on-site. What the model results indicate is  
18 that proposed withdrawals are not anticipated to  
19 influence current use of domestic wells to  
20 neighboring properties meaning domestic private wells  
21 located on properties abutting the site. Going  
22 forward there is data gathering to do to help  
23 establish baselines and to help in the form of a  
24 proposed monitoring program that will accompany the  
25 permit applications.

1           Subjectives and approach. It's interesting  
2 the color change on that slide, but number one is to  
3 construct a groundwater flow model, right. And to  
4 construct a model we need to demonstrate it's  
5 consistent with the data that have been collected and  
6 adequately represents the responses that were  
7 observed during hydraulic testing. With that model  
8 in hand, we want to ask questions of the mode, right.  
9 What if. What if Nordic pumps -- what happens in  
10 off-site locations. What we're going to look at  
11 changes in terms of is going to be a term called  
12 drawdown, so that's a change, a decrease in water  
13 level due to that pumping.

14           In performing our assessment approach-wise  
15 we used common modeling software MODFLOW USG. That's  
16 a software that's publicly available from the  
17 U.S.G.A. survey. We also followed common modeling --  
18 a common modeling approach that the diagram on the  
19 right-hand side describes. So we start off with a  
20 conceptualization of a system, we build that's called  
21 a conceptual model. With that model in hand, we use  
22 it to guide how we actually build a computer model.  
23 Then we enter a phase called calibration and  
24 verification. In calibration you're basically  
25 anchoring the model using data. You want to, excuse

1 me, you want to alter or you want to modify the  
2 values of key hydraulic parameters to develop  
3 agreement between what the model is predicting and  
4 what the data that are collected at the site say.  
5 And then in verification you're basically taking that  
6 calibrated model and running it versus an independent  
7 or different dataset to ensure that similarity is  
8 maintained. And then in application, that's the what  
9 if phase, right. So you can test the model, test  
10 different pumping scenarios to see how the model  
11 responds.

12           So I'm going to shorten it here. The one  
13 thing to touch on here in terms of conceptualization  
14 is that what we know about the site is that it's  
15 about 50 acres in area, but the area that influences  
16 groundwater flow at the site is really much greater  
17 so we had to look at a much broader area. And one  
18 key kind of feature of the study area is the recharge  
19 and that's defined as water that occurs at the  
20 surface, infiltrates and ultimately becomes  
21 groundwater so the main driver is precipitation,  
22 right. What we know about the site, again, is that  
23 the nature of the superficial deposits here are such  
24 that they don't convey water easily. If you think  
25 about a sand and water gravel deposit that conveys

1 easily, you can get up to 50 percent of your annual  
2 recharge of coming -- or annual precip becoming  
3 recharge. In this area we have a silt and clay  
4 dominated glacier marine deposit called the  
5 Presumpscot Formation that really limits the amount  
6 of recharge and we've accounted for that in terms of  
7 our conceptualization.

8           So model representation. This is that step  
9 of converting our conceptual model to the actual  
10 mathematical model. On the right-hand side you see  
11 lines basically breaking the area up in blocks,  
12 that's actually a finite difference grid. That's  
13 what we call a finite difference grid. It's breaking  
14 up space and actually the volume into finite volumes  
15 where governing equations are being solved by  
16 MODFLOW. It's calculating the water level or  
17 hydraulic head at each location and groundwater flow  
18 is being calculated between each one of these cells,  
19 so it's a complicated process, but we're good at it.

20           So calibration and verification. When we  
21 build our calibration run, we build it around the  
22 first three pumping tests that were conducted at the  
23 site. We take those data and we feed them into the  
24 model and we build the model to represent the pumping  
25 steps that occur during those tests. The three

1 tests, March/April of 2018, August/September of 2018  
2 and November of 2018. All different forms of tests  
3 that we built into the calibration run. When we run  
4 the verification period, we take a fourth pumping  
5 test, so four pumping tests during this hydrogeologic  
6 investigation. We take that fourth pumping test  
7 worth of data and we build the verification run  
8 around that.

9           When we perform calibration we start with  
10 manual parameter adjustments. We make small changes  
11 and make sure the model is reacting the way we expect  
12 it to and then we use a process called automated  
13 brand parameter estimation. It's actually supported  
14 by a separate utility and we use a network system of  
15 computers that runs the model comparatively, actually  
16 running the model thousands of times to reduce that  
17 difference between measured conditions and simulated  
18 conditions, so a really powerful tool that we apply.

19           And then the final two notes just talk about  
20 the fact that we really considered a large number of  
21 hydraulic parameters in this process and more  
22 meaningful is that we considered a tremendously  
23 robust dataset, so a lot of data collected during the  
24 hydrogeologic investigation, pressure transducers in  
25 wells collecting water levels at a high frequency

1 route, we rolled that into the model so overall  
2 comprehensively between the calibration run and the  
3 verification run we considered more than 200,000  
4 individual datapoints, so a really robust dataset  
5 that we used.

6 I'll be somewhat short here, but what do the  
7 calibration and verification results look like. In  
8 one word, they're good. There is good agreement  
9 between what we collected in the field in terms of  
10 water levels and what the model predicts. Flow rates  
11 agree well where we have gauging data in the Little  
12 River stretch between the upper and lower reservoirs,  
13 good agreement there and good agreement in terms of  
14 verification, so that consistency was maintained in  
15 the verification step.

16 So then we go into model application. What  
17 we do is we take the model and we feed in what's  
18 called a pumping scenario. That means pumping rates  
19 and location in terms of pumping wells on the  
20 proposed site. The pumping scenario that we tested,  
21 it was 455 gallons per minute distributed amongst  
22 three bedrock supply wells at the site and then we  
23 performed two forms of simulation. On one side of  
24 this graphic you see transient, that's the time  
25 during the simulation and what that simulation gives



1 us in terms of an answer is an idea of the rate of  
2 change, the rate that drawdown develops. Results on  
3 that end are that the model suggests that drawdown is  
4 relatively slow at off-site locations. So locations  
5 that coincide with private supply wells and adjoining  
6 properties we see that it takes several to many years  
7 for that condition to really develop and start to  
8 stabilize. Then we run what's called a steady state  
9 simulation. That's an unvarying condition and really  
10 what it does is it projects the results out that  
11 maximum change condition. We wanted to be  
12 conservative. We didn't want to just put out the end  
13 of the transient results as results because we knew  
14 there was still room to change and that's what the  
15 steady state simulation gets us to is that stabilized  
16 result. And on that end what we see in terms of our  
17 results is that it varies by location, so, you know,  
18 areas west of the site show a different result than  
19 areas to the south or to the north. The range of  
20 results is really from no change, no measurable  
21 change, zero drawdown up to an overall maximum of 15  
22 feet. In areas of the highest density of the  
23 public -- or private supply wells, so areas west of  
24 the site, we see around 10 feet of stable drawdown in  
25 that area.

1           So those are just numbers, right, no  
2 context. So what we did is we put this slide  
3 together to give you some context. So what we know  
4 about wells in this area, private supply wells, is  
5 that the average well is approximately 150 feet deep  
6 from land surface. So that's the graphic you see  
7 here, that well penetrating into the fractured  
8 bedrock aquifer. We also know from available  
9 information that the depth to water in these wells  
10 ranges from approximately 5 feet to approximately 30  
11 feet, so if you do the math there and subtract those  
12 numbers you get a standing water column, ambient  
13 water column in that well approximately 120 feet to  
14 145 feet, okay. So that's the level you see in that  
15 graphic.

16           On the right-hand side is something else we  
17 know, that when you pump these wells, as an  
18 individual pumps their own supply well the water  
19 level changes. So that water level in that bore hole  
20 is drawn down by the pump that's inside the well. So  
21 what you're seeing is real data. This is data that  
22 was collected during the hydrogeologic investigation  
23 from one of the private supply wells adjacent to the  
24 site and you see that domestic use cycling, changing  
25 the water level and that signature. And you can

1 basically think about that blue line as being  
2 coincident with this level in this graphic, okay. So  
3 we see about 5 feet of change in this example. We  
4 have other examples where we've collected data where  
5 it's a bit more up to 10 or a little bit more feet,  
6 but that's a fluctuation around that ambient water  
7 level. What I'm talking about in terms of steady  
8 seeing results from the model is that really what  
9 we're talking about is a shift down depending on  
10 location by a relatively small amount in this well,  
11 so it could be up to 15 feet and the maximum overall  
12 case areas west of the site we're talking more about  
13 like 10 feet under average annual recharge  
14 conditions, but it's a relatively small change.  
15 There is still ample water column left in that well.

16 Now, there is still more information to  
17 collect, baselines to set and monitoring programs to  
18 be proposed as part of a permit application, but the  
19 results of this modeling and the data that we have  
20 suggests that there would be no impact from the  
21 proposed pumping to private supply wells in the area.

22 So to summarize, we successfully created our  
23 groundwater model, common techniques were supplied  
24 and we used a significant amount of field data that  
25 was collected during hydrogeologic investigation.

1 Calibration and verification were also successful  
2 indicating the models were a reasonable  
3 representation of hydraulic responses and site  
4 withdrawals. As I just mentioned, the model results  
5 indicate that a proposed withdrawal scenario of 455  
6 gallons per minute at the site is not anticipated to  
7 influence the current use of domestic wells at  
8 adjoining properties. And to wrap up, still data  
9 gathering, we're going to establish thresholds and a  
10 monitoring program will accompany the permit  
11 application and Elizabeth will talk about that a in  
12 little bit. Thank you.

13 (Applause.)

14 MS. RANSOM: Thank you. I'm just going to  
15 go back to one of Mike's slides briefly in case the  
16 point wasn't clear. One of the things that you're  
17 looking at here on this graph to the right, those  
18 are -- those fluctuations you're looking at are daily  
19 fluctuations in the use -- typical use of a private  
20 well. So when you turn on your washing machine or  
21 faucet or take a shower, that's when you see the  
22 downward dip on that graph and it comes back up again  
23 as your well responds to you turning off the faucet.  
24 So in case that wasn't clear, some of the  
25 fluctuations you're seeing there are what occur

1 during the daily use of a private well. I would -- I  
2 do want to also thank the neighbors who participated  
3 in our study so far and for their continued  
4 willingness to participate in monitoring going  
5 forward. It's really helpful to have your  
6 participation so that we can better understand the  
7 aquifer as it's being changed around the site.

8           So now I'm going to give you a very brief  
9 overview of the monitoring plan. We will be as part  
10 of our application submitting a monitoring plan and  
11 that monitoring plan will be to cover a couple of  
12 different things. One is obviously to cover the  
13 groundwater withdrawal and make sure that we continue  
14 to withdraw groundwater in a way that doesn't affect  
15 the neighbors. But it is also there to monitor water  
16 quality in the area surrounding the site, so we  
17 obviously are -- as we develop and as we do  
18 construction we want to make sure that we're not  
19 affecting the water quality or the habitat in the  
20 areas adjacent to the property.

21           So we identify as part of our monitoring  
22 program what are the sensitive receptors that might  
23 be monitoring, that includes things like those  
24 private water supply wells that we were just talking  
25 about, which is primarily located to the west of the

1 site in the direction of Herrick Road, it includes  
2 wetlands, streams, the lower reservoir in the Little  
3 River. And we'll be evaluating those through a  
4 series of different monitoring points, those include  
5 our own production wells on-site, bedrock monitoring  
6 wells, overburden monitoring wells, the private water  
7 supply wells in the neighborhood, those narrow  
8 diameters, small multi-level piezometers adjacent to  
9 the surface water features. It will include surface  
10 water stages so we can actually measure what's going  
11 on in the Little River and the reservoir. And we'll  
12 be looking at precipitation data for the Belfast area  
13 as a whole as well as biological monitoring.  
14 We'll be looking at not just water levels, as I  
15 mentioned, water quantity but also water quality. So  
16 we'll be looking at things like conductivity,  
17 nitrogen, phosphorus, bacteria, common drinking water  
18 parameters that some of you might be familiar with if  
19 you have a home well, things like hardness and pH and  
20 dissolved solids. We'll be looking at vegetation,  
21 aquatic macroinvertebrates, insects and, as I  
22 mentioned, precipitation records. And that ongoing  
23 monitoring program is something that not only is it a  
24 state requirement but it's helpful for Nordic as  
25 well, so we're going to be trying to establish a

1 baseline and get some monitoring done prior to  
2 operations and they'll be keeping that monitoring  
3 going as they ramp up because remember they're not  
4 going to start with 33,000 metric tons on day one,  
5 they're going to start this slowly. So as they get  
6 going, we'll be able to look at that impact of the  
7 start of their operations to better influence how  
8 they operate during the latter stages of their  
9 operations

10           So how do we -- how do we do that? Well,  
11 first, as I mentioned, we do a -- we do have some  
12 data that we've started to collect and we're going to  
13 look at what are some things we can do now to  
14 establish baseline conditions and develop a robust  
15 monitoring program and in an ongoing basis do data  
16 evaluation. What is that data telling us? What are  
17 we learning about the site conditions? What are we  
18 learning about the neighbors' wells and the various  
19 surface water features around the site? We're going  
20 to have established performance criteria. Some of  
21 those are things that are regulatory thresholds, but  
22 some of those might be thresholds we set ourselves  
23 where we say, you know what, we get to this condition  
24 we want to take some sort of an action and then we're  
25 going to develop that action plan.

1           So what might that action be? Well, if we  
2 understand that we're having impact of something it  
3 might be as simple as, jee, we need to do something  
4 to address an erosion issue that we're developing on  
5 the corner of the site now that we've had a storm or  
6 erosion control measure didn't grow in the way we  
7 expected it to we need to replant. It might be as  
8 simple as addressing a need for a different type of  
9 water use at the facility. So we're going to have  
10 threshold levels and action plans and that will all  
11 be part of our application submittal.

12           So you've heard me reference on a few  
13 occasions the natural resources on the site. I'm now  
14 going to take a little bit of time to help people  
15 understand where those resources are located, how we  
16 went about identifying those resources and how we  
17 intend to, you know, modify and move forward with the  
18 project and compensate for anything that we might be  
19 doing.

20           So we looked a variety of different things.  
21 One thing we looked at is wetlands, a review of the  
22 wetlands was conducted during May, July and August of  
23 2018. Normandeau, who is here in the audience,  
24 conducted wetland delineation according to the  
25 applicable US Army Corps of Engineers delineation



1 manuals. And the determination the jurisdictional  
2 limits of the wetlands were completed using a three  
3 parameter approach in accordance to the guidance  
4 manuals.

5           They also conducted vernal pool studies.  
6 Those are also done May 3 and 4 with a return visit  
7 on May 18. There were no vernal pools, that's why I  
8 don't have a picture on this slide.

9           They also conducted a review of drainages.  
10 So not every drainage with flowing water is, in fact,  
11 a stream. They conducted a review of the drainages  
12 on site in May, July, August and February to observe  
13 flows and aid in the determination of whether or not  
14 they are, in fact, NRPA jurisdictional streams.

15           So what is a jurisdictional stream? This is  
16 a long definition, I'm not going to read the whole  
17 thing, but in order to be a stream that is  
18 jurisdictional that has a defined channel in two or  
19 more of the characteristics listed below. I'll give  
20 you a second to take a look at that. But when we  
21 look at that -- I'm going to go back to this. When  
22 we look at the bottom slide here, I think most of you  
23 can see from that bottom slide that has a clearly  
24 defined channel. It's not hard for you to find it  
25 out in the woods. It clearly stands out to you. It

1 has a mineral bottom. You can see that there is soil  
2 on the bottom of that stream and you can see that it  
3 has flowing water and we verified whether or not  
4 streams out there had running water for six months or  
5 more of the year.

6           So with that, we created a map that shows  
7 what are the natural resources on the site and from  
8 this you can see those sort of lighter green areas  
9 are the actual wetland features that were mapped and  
10 the blue areas are what we consider to be NRPA  
11 jurisdictional streams. And the one that I want to  
12 point out in particular is the one that kind of forms  
13 the eastern boundary of the site. It's the one that  
14 most of you maybe come out and use the trails will be  
15 familiar with that kind of cuts down sort of behind  
16 the garage buildings for the Belfast Water District  
17 and flows out through the grassy swale on the front  
18 of the property and then out under Route 1 and  
19 through the culvert. That is the mapped resource  
20 that if you all kind of looked at a U.S. Geological  
21 Survey topographic map you would be able to pick out  
22 that stream. And so that's the stream we've done our  
23 best in our site layouts and our evaluation of how  
24 best to use the site that's a resource we've tried to  
25 steer clear of and enhance as a part of the project.

1           So I'm going to talk to you a little bit  
2 about that enhancement. In the State of Maine if  
3 your development is causing alteration to the wetland  
4 resources there are ways to go about making up for  
5 that and we will as part of our application have a  
6 proposal for how we intend to compensate for or the  
7 things that we couldn't avoid. So if you look at a  
8 series of can I avoid it? If I can't avoid it, can I  
9 minimize it? If I can't minimize it, how do I  
10 compensate for it? So some of the compensation that  
11 we're going to be proposing include a culvert -- some  
12 culvert upgrades to enhance aquatic passage on the  
13 wetland features that are on-site. We will be  
14 creating a new riparian buffer of approximately 4 1/2  
15 to 5 acres and restoring approximately an acre of  
16 wetland vegetation in the process. Nordic is working  
17 with the city to try and acquire and conserve a  
18 section of land located adjacent to the upper  
19 reservoir and then they'll also be participating in  
20 the state and federal in lieu fee programs where they  
21 will write a check to assist with the conservation of  
22 land in other locations.

23           So I'm going to show you a little bit of  
24 what those look like. This is an existing culvert in  
25 the project site that you can see isn't probably in

1 the best shape to convey water nor is it in the best  
2 shape to help aquatic life survive in this stream.  
3 So one of the things that we're proposing is to take  
4 that existing structure and build a span that would  
5 go over the top and allow natural vegetation to grow  
6 on the bottom and water to flow more naturally  
7 through the feature and provide connectivity to the  
8 existing groundwater and so it will enhance this as  
9 part of our wetland mitigation.

10           In addition, the area shown here in  
11 yellow -- on the these yellow features here those  
12 yellow areas will be planted and restored with  
13 appropriate native wetland vegetation. The picture  
14 on the right shows you sort of the front of the  
15 Belfast Water District driveway, that drainage area  
16 will also be enhanced with plantings and we'll be  
17 deed restricting that so that anything within 75 feet  
18 of that stream on the site property will be deed  
19 restricted to keep from having future alterations.  
20 In addition, there will be a portion of Mr. Cassida's  
21 property that will enhance the vegetation there as  
22 well, so in total the project will gain close 5 acres  
23 of riparian buffer.

24           And then just briefly, this is a -- I  
25 apologize, there is a lot of information on this.

1 This is how it prints out from the State of Maine  
2 geographic database, but the conservation parcel is  
3 outlined in blue. The large brown area you see to  
4 the north of that is actual deer habitat, deer  
5 wintering area, but there is a large plot of land  
6 there that Nordic is working with the city to try and  
7 find a way to help preserve and should the state be  
8 amenable to that as well it will be considered as  
9 part of our wetland compensation.

10 I'm now going to very briefly give a quick  
11 overview of our MEPDES application. So I'm not going  
12 to spend a lot of time on this. I think many of the  
13 people in this room have attended previous public  
14 meetings and know probably as much or more than you  
15 want to know about a discharge application. This one  
16 slide is intended to provide the details quickly. I  
17 will say if you do have questions about the MEPDES  
18 application it is available online. It's available  
19 on the City of Belfast web page as well as I believe  
20 through the Maine DEP and I'm happy to answer  
21 questions that you might have about the MEPDES  
22 permit. It's -- in Maine the state administers all  
23 discharge permits, not the EPA, and the Maine DEP  
24 reviews these permit applications. We have that for  
25 the facilities discharge and the summary of that

1 application is that it uses proven wastewater  
2 treatment technologies. These are not something that  
3 Nordic is inventing for their process. They're just  
4 taking well-proven processes and applying them to a  
5 new industry. The discharge will meet or exceed all  
6 applicable water quality standards. There will be a  
7 monitoring program both to establish a baseline and  
8 to monitor through the life of their facility to  
9 ensure compliance with their permit and that data  
10 will be submitted through third-party peer reviews,  
11 so not just that Nordic and the DEP but people out  
12 here in the audience will have an opportunity to  
13 understand if they're truly doing what they say  
14 they're going to do.

15 Okay. With that, I think Lee is going to  
16 come back up, set the stage for some question and  
17 answer.

18 (Applause.)

19 MR. WOODWARD: Just to let you know, we only  
20 have this location until 9 o'clock, so we do have an  
21 hour and 15 minutes for questions. I want to go over  
22 some very brief ground rules. If when you approach  
23 the microphone, and some already have, if you would  
24 state your name and speak directly into the  
25 microphone out of respect for our court reporter. If

1 everyone would keep background noise to a minimum so,  
2 again, the court reporter can take down the various  
3 questions that are being asked. And so that we can  
4 address as many as questions as possible, I'm going  
5 to give you two minutes to get your questions out, if  
6 you would limit the commentary and get right to the  
7 question at hand it would maximize the amount of  
8 questions that can be asked. The only weapon they've  
9 given me up here is a mute button and I can think of  
10 most city fathers here who would just as soon have  
11 used that on me on more than one occasion.

12 So, again, we will start off, I see that  
13 people have started to line up. First question.

14 AUDIENCE MEMBER: Hi. My name is Jason Ron  
15 and I just wanted to thank everybody, I'm not going  
16 to take two minutes, thank everybody for being here  
17 tonight. Some of us are paid to be here, but most of  
18 us are here because we care about our homes and  
19 that's really important. All of us could be at home  
20 drinking beer and watching Netflix or whatever, but  
21 we're here and we're participating in democracy and  
22 that really matters, so thank you.

23 (Applause.)

24 AUDIENCE MEMBER: I'm Sid Block and I'm from  
25 Northport. And I thank the presenters this evening,

1 you have presented a very impressive survey of your  
2 plans and expectations, albeit necessarily  
3 superficially, and I accept your sincerity and your  
4 goodwill. Still, I have not made up my mind about  
5 the merits of your proposal and I'll tell you why and  
6 then get to the question. The reason is that many  
7 knowledgeable people at your prior public sessions  
8 online and various newspapers have voiced what seem  
9 to be reasonable questions about the validity of the  
10 information you have presented and to date there has  
11 been no independent, objective analysis of your data,  
12 including right, title and interest, scientific data,  
13 environmental projections and economic projections.  
14 I am reassured, however, that the Maine Board of  
15 Environmental Protection will be holding formal  
16 public hearings to review your scientific studies and  
17 claims.

18           Pending these hearings, I must tell you that  
19 I remain especially concerned about our aquifers and  
20 your and your discharge, which will amount to 100  
21 million gallons of standing effluent only one-half  
22 mile of the mouth of the Little River into 40 or 50  
23 feet depth of water less than a mile from the beaches  
24 and the swimming dock along the northern shore of  
25 Northport directly into the path of migrating elver



1 population, a potential harm to lobster and then down  
2 the bay towards other profitable smaller agriculture  
3 including oyster farms. And though I have some  
4 worries about the effectiveness of our regulatory  
5 agencies one only need be reminded of how the FAA did  
6 not thoroughly investigate and deferred to Boeing's  
7 data for the 737 Max 8 jetliners. And now, I'm not  
8 implying at all that the NAF fish farm will result in  
9 any immediate or disastrous loss of human life,  
10 rather I am implying the NAF fish farm might result  
11 in a long-term substantial environmental harm.

12           Those worries aside, I will await the  
13 results of the DEP hearings before coming to any  
14 further personal conclusions and I urge the  
15 population here to do the same.

16           My question is that you are presenting  
17 information about four permits tonight, all of which  
18 are quite complicated, and I am asking whether you  
19 will give the citizens the opportunity to carefully  
20 read and fully digest all of the information by  
21 extending time for a public commentary by continuing  
22 this meeting after 9 o'clock and extending this so  
23 that there can be another section at which point the  
24 citizens who will have had the opportunity to  
25 carefully review your data will be able to ask you

1 more intelligent and pointed questions. Thank you.

2 (Applause.)

3 MS. RANSOM: Thank you, Sid. I'll try to  
4 answer that as best I can. What we -- obviously  
5 we've tried to put a lot of information into this  
6 meeting and some of what may be lost in there is some  
7 procedural details. First of all, I will encourage  
8 anyone who has a question about either tonight's  
9 session or following reading our application, the  
10 application itself, to submit written questions. We  
11 will be reviewing written questions. We'll be -- no  
12 doubt some of those questions will be the same  
13 questions that your neighbor has, so feel free to do  
14 that. In addition, the application is going to  
15 ultimately once submitted be available online through  
16 the Maine DEP. I have no doubt the City of Belfast  
17 will post a copy of it as well. You're welcome to  
18 review the application and post questions at that  
19 time and we will do our best to answer those  
20 questions. So there will be also, just so people  
21 know, when we submit that application the DEP staff  
22 will have a period of time where they are reviewing  
23 it and looking at it in great detail before it goes  
24 to the Board of Environmental Protection, so there  
25 will be time between application submittal and that

1 Board of Environmental Protection hearing for the  
2 public to develop their opinions and understand what  
3 the contents of the application are. So I hope that  
4 answers some of the questions there.

5 AUDIENCE MEMBER: Thank you, Elizabeth. I'm  
6 Larry Theye and I live with my wife, Betty, at 286  
7 Northport Avenue. Our driveway is directly across  
8 the road from the driveway of 285 Northport Avenue,  
9 which is, as you probably know, the water district  
10 and the future home of Nordic Aquafarms.

11 We have attended all of the previous  
12 meetings that have been called by Nordic, but we have  
13 never spoken because we don't wish to be perceived as  
14 newbees. Now that the Nordic Aquafarms project has  
15 extended not only into our back yard but also to our  
16 front yard and our side yard it's becoming  
17 increasingly difficult for us to sit quietly on the  
18 sidelines. While we have many concerns regarding  
19 this project, others have addressed these concerns,  
20 so tonight I am going to focus only on one that  
21 affects us directly; the ravine and the stream that  
22 serves as the property line between our lot and the  
23 neighboring lot to the north which holds Nordic's  
24 permit and easement.

25 When we built a rock seawall to replace the

1 decaying wooden wall, we purchased a temporary  
2 easement to cross that same property in order to  
3 access the shore. When Nordic's purchase of the  
4 easement was announced it made a lot of sense to us  
5 because it would follow an already established lane  
6 to the shore, but we learned just recently that the  
7 route of the pipes will not follow that lane but will  
8 instead be located to the south of the property's  
9 driveway. That will place the construction trench on  
10 the steep grade right next to the stream that serves  
11 as our property line. It will also involve the  
12 removal of numerous mature trees whose roots now  
13 serve as a stabilizing force that holds the bank and  
14 prevents erosion. We've already been concerned about  
15 erosion along the stream as increased run-off has  
16 caused several trees to collapse into the ravine.  
17 The stream drains the run-off at snow melt from the  
18 water district and it was mentioned by Elizabeth as  
19 their main focus. When the woods are replaced by  
20 impervious structures, very large buildings and paved  
21 lots that greatly increased run-off will create  
22 serious erosion problems in that ravine. Nordic has  
23 promised to address this problem on the north side of  
24 the stream, but my question is would you also address  
25 the erosion problems that will be occurring on the

1 south side of the stream on our side of the stream?

2           Moving the piping further south than  
3 originally planned also apparently moves the water  
4 treatment plant, which was tentatively sited in the  
5 middle of the pine grove next to Route 1. It will  
6 now be sited apparently on the south edge of the  
7 grove, which I think will be in full view of Route 1  
8 and Erik earlier assured the public that we would see  
9 no changes from Route 1. Apparently that no longer  
10 holds. In the future, the public on entering Belfast  
11 will immediately gaze upon a water treatment plant  
12 across the street from a Welcome to Belfast sign.

13   (Applause.)

14           MR. COTTER: Thank you, Mr. Theye. As we  
15 have talked about today, there are significant  
16 wetland issues to understand and be part of our  
17 application. The ravine and the stream that you  
18 discuss is obviously a valuable area that we are  
19 looking at very hard. The path that the pipeline is  
20 going to take will be through -- will not be through  
21 the stream, it will be on the north side of the  
22 stream. And we've walked that area with DEP  
23 through -- during pre-application meetings, they have  
24 noted the concern for that bank and the current  
25 erosion as well as the potential future erosion. Our

1 application will certainly address those through  
2 stabilization measures, plantings, rip rap and any  
3 other tools that are available to make sure that that  
4 area of the ravine is not only as good as it is now,  
5 but, in fact, better because it is currently not an  
6 acceptable condition in DEP's eyes, so we will be  
7 looking at that.

8           As far as quantity of water, we will have a  
9 solid understanding and presentation in our  
10 application about the amount of run-off that's  
11 expected and our design will anticipate that and deal  
12 with that appropriately. We're more than happy to  
13 continue discussions with you about your side of the  
14 stream and if we feel -- and we discuss it and it  
15 seems like there will be an issue, I'm sure there is  
16 a way we can solve that and make sure it does not  
17 become an issue in the future after construction.

18           AUDIENCE MEMBER: (Larry Theye.) Thank you.

19           MR. COTTER: I think I got everything there.  
20 Oh, and the wastewater building. I'm going to just  
21 look -- go back in the slides a bit here. So the --  
22 I'm not -- maybe I'm not going to be able to go that  
23 fast, but the visual impact study that SMRT provided  
24 actually had a very good view of the waste treatment  
25 plant. The waste treatment plant is -- the location

1 has really not shifted. What has probably been added  
2 is that we understand that there is going to be some  
3 work in that area because the pipe does need to come  
4 out of that building and across Route 1, so the area  
5 will be impacted, however, this view is really  
6 standing at the wooden Belfast Water District sign  
7 right now and as you can see the tree stand to the  
8 right is substantially impacted. We will have  
9 impacts to it and we will also be providing new  
10 plantings, not only young saplings but also whatever  
11 size mature tree we can responsibly produce and ship  
12 to the site and plant so that at day one you won't  
13 just have a couple tiny little saplings you'll have  
14 some cover day one and it's only going to get better  
15 from there. But this is a true or a best effort of a  
16 true rendering of what that site is going to look  
17 like not far after completion of construction, so we  
18 do feel that the visual impacts are pretty well  
19 mitigated.

20           Finally, just so you know, the front face of  
21 that building is an area that we're going to give  
22 very -- a lot of attention to. You'll get a chance  
23 to see what that's going to look like in the Belfast  
24 Planning Board sessions and we understand the impacts  
25 of that building and we're focusing on it greatly for

1 that reason. Thank you.

2 (Applause.)

3 AUDIENCE MEMBER: Hello. Thank you very  
4 much for having us all here. My name is Garrett  
5 Willsednas (phonetic). I'm a resident of resident of  
6 Belfast. I am an information architect and I work on  
7 conservation technology projects. I appreciate your  
8 openness and your willingness to include us Belfasts  
9 in a noisy and lively decision-making process.

10 We are building in Northport and we will be  
11 about as close to swimming distance to your effluent  
12 pipe as you could get and I am comfortable with the  
13 figures I've seen so far. I appreciate very much  
14 what your project will do for the tax base in the  
15 area as well as tying the various educational  
16 programs in the state to an actual place where you  
17 can work on aquaculture projects here in Waldo  
18 County.

19 My question for you is really with regards  
20 to the energy usage for your recirculating  
21 aquaculture system. Growing fish is a lot cheaper  
22 carbon-wise than beef or say mutton, but  
23 recirculating systems, as you guys know better than I  
24 do, use a lot more energy than say most other forms  
25 of raising fish or fishing from vessels. My question



1 to you is how much of that energy do you intend to  
2 offset and is it possible, if at all, to make this  
3 project carbon neutral or carbon negative, net zero?

4 MR. HEIM: Yes. So generally a project like  
5 this like we are working with it is to look for any  
6 source of renewable energy and that's an  
7 incorporative part of the project, solar and heat  
8 exchangers are key components to that, and those are  
9 really the main renewable resources for energy  
10 recapture purposes that we have locally for this kind  
11 of a project.

12 The alternative if you want to look at a  
13 totally energy neutral solution would be to fish wild  
14 salmon off the coast of Maine. Unfortunately, that's  
15 forbidden because of endangered populations, so if we  
16 can choose a very best alternative that would be the  
17 one. The next best alternative in terms of that will  
18 be net pens in the ocean in the area and that doesn't  
19 seem like a very likely solution either. So the  
20 remaining solution you have is basically the  
21 remaining wild salmon populations in Alaska, which is  
22 the majority of your salmon population in the U.S. or  
23 airfreighting the fish, which is the remaining. And  
24 when you add up the energy equation for airfreighting  
25 fish into the U.S. it gets pretty messy to put it

1 that way. And that's also when you look at the  
2 research airfreighting fish into the U.S. has about  
3 15 kilos Co2 emissions per kilo of fish, so that's an  
4 issue there. So we are about one-third of that. So  
5 in the end, we are implementing all kinds of energy  
6 reduction mitigating measures we can with the tools  
7 we have available and leaving a significantly reduced  
8 footprint compared to what most of the fish in the  
9 market today has and that's where we're at right now.

10 Getting into energy neutral is virtually  
11 impossible with this scenario, but we are doing  
12 everything we can to lower it compared to what you  
13 are seeing. I don't know if that answers your  
14 question.

15 AUDIENCE MEMBER: (Garrett Willsednas.)  
16 (Phonetic.) It does. Thank you.

17 (Applause.)

18 AUDIENCE MEMBER: Hi. My name is Trudy  
19 Miller. I live in Northport. I just want to start  
20 by saying I am not an expert in marine biology or  
21 hydrology or aquaculture or wastewater treatment  
22 systems or most other things in the world, but I did  
23 spend a career working in high technology. I know a  
24 lot about the sorts of decision-making processes you  
25 go through when you're producing cutting edge

1 technology. I understand the planning,  
2 considerations, trade-offs. I don't know your  
3 specific field, but I know the sorts of things you  
4 have to do and I have a lot of respect for it. I  
5 also understand because I worked on the development  
6 of the internet what comes with things making  
7 something scalable, so I find that quite interesting  
8 about what you're doing. It's been a pleasure for me  
9 to hear your presentations, to hear you talk about  
10 your systems and your facility as I enjoy hearing  
11 people talk about their fields of expertise even if  
12 they're unfamiliar to me. It reminds me of working  
13 in high tech and how exciting that was. And it's  
14 also a big treat for me to see younger people coming  
15 to Belfast to work on this and I hope there will be a  
16 lot more of them.

17 I think a lot of what the -- I do have a  
18 question actually. It's coming. A lot of the  
19 discussions that we've gone through in the last year  
20 really I think has to do with trust and because I'm  
21 not an expert in something I have to decide who I am  
22 going to trust and why to feel comfortable about  
23 what's going on. It's part of what education is  
24 about. I trust right now, I trust Nordic Aquafarms  
25 to know what you're doing based on both my

1 observations of these presentations and even more so  
2 on the common sense fact that if you don't know what  
3 you're doing you're going to lose a butt load of  
4 money. I don't understand why that isn't obvious to  
5 people. So and then I have to trust our local  
6 government, which I do because I think they know  
7 what's good for Belfast in the terms of balancing  
8 growth and stewardship of the environment and I think  
9 this has been demonstrated to date. I haven't been  
10 here very long, but I've seen this. And I have to  
11 trust the state and federal permitting agencies to  
12 know how to ensure that our environment can be kept  
13 safe while the state grows and thrives. Maine is  
14 going to die if it doesn't grow and I think we all  
15 know that.

16           So, I mean, basically that's what I have to  
17 say. And if something comes up in permitting that  
18 shows this is really going to be a real detriment to  
19 our local environment of course I'm not going to be  
20 in favor of it, but I have nothing to date that would  
21 prove that's the case. I'll leave out my snarky  
22 tweet I was going to read and then I'll get to my  
23 question, which is I have read somewhere not too long  
24 ago that you are prohibited from selling byproducts  
25 as lobster bait because of current state regulations

1 and I want to know is that true and, if so, how  
2 you -- what you can do about that.

3 MR. HEIM: Yeah, so as of today regulations  
4 has been created for net pen operations and regarding  
5 the salmon cutoff, so we have been in dialogue with  
6 the lobster unions and also the DMR of the state and  
7 they are favorable to doing this. The basis for  
8 doing that and the reason why you want to be rigorous  
9 here is that you want to make sure that you do not  
10 have the risk of transmitting any disease, so that's  
11 why a program like this will be subjected to a health  
12 certification program according to the same routines  
13 as when Maine imports bait fish from, for example,  
14 the Pacific Coast into Maine, you would have the same  
15 issue in that scenario. The reasoning we are  
16 different from that net penning is that we have  
17 strong preventative measures against parasites and  
18 pathogens, so the risk is significantly reduced and  
19 when you add in addition to that the health  
20 certification program that's why they're favorable to  
21 move forward on this.

22 AUDIENCE MEMBER: (Trudy Miller.) So this  
23 is just a regulation issue?

24 MR. HEIM: It's a regulatory issue and we're  
25 moving our dialogue with the authorities on this and

1 we sincerely hope it goes through because there has  
2 been a big bait challenge in Maine.

3 AUDIENCE MEMBER: (Trudy Miller.) I know.

4 MR. HEIM: And it's a fantastic resource  
5 that can help this industry, so we hope this synergy  
6 can be realized and we're working hard on doing that.

7 AUDIENCE MEMBER: (Trudy Miller.) Thank you  
8 very much.

9 MR. HEIM: The other thing I'd just like to  
10 say on the trust issue, I fully understand that and  
11 that's the reason we also have submitted our  
12 applications for independent external permit use.  
13 So, for example, the discharge we talked about  
14 briefly today and also previously has been submitted  
15 and reviewed by the Conservation Law Foundation,  
16 which usually sues companies for environmental  
17 problems and they have written a letter of support to  
18 DEP based on what they have read and the same with  
19 the GMRI in Portland and the same with the Atlantic  
20 Salmon Federation that works to conserve wild salmon  
21 populations. So that's a part of the trust building  
22 process we want to do in Maine is to say, okay,  
23 please do listen to us, but listen to the other  
24 people in Maine who have the scientific background to  
25 assess these things properly. Thank you.

1           AUDIENCE MEMBER: (Trudy Miller.) Thank  
2 you.

3   (Applause.)

4           AUDIENCE MEMBER: My name is Rachel Rabinor  
5 and I just moved here to Maine in July.

6           AUDIENCE MEMBER: We can't hear.

7           MR. LEE: Speak up.

8           AUDIENCE MEMBER: My name is Rachel Rabinor  
9 and I moved to Maine in July. This is the first  
10 meeting I've been to, so this may have been covered  
11 in other meetings, I don't know. I do have  
12 environmental concerns, but also I have concerns  
13 about the short and long-term effects of traffic.  
14 I -- first I'll express my concerns and then I'll ask  
15 you questions. Okay. So the thing is how much  
16 traffic will there be there? Trucks leaving and  
17 where do the trucks go? I do know or believe that  
18 the roads here were not constructed for heavy  
19 traffic, so I am assuming that there will have to be  
20 road repairs. How often is Route 1, which is a  
21 cliché I think to say this, but I will say it, I  
22 think it is a life-line along the coast here, so I'm  
23 concerned about how often it's going to have to be  
24 closed for your trucks for repairs. So what size  
25 trucks will you be using and during construction how

1 long will construction be? How many trucks will be  
2 going on Route 1? Are you going to be closing it  
3 down? And then once you are producing your product,  
4 again, how many trucks and what are you planning to  
5 do about the roads?

6 MS. RANSOM: Hi. Thank you for coming and  
7 participating. It's not always easy to do that as a  
8 newcomer in town. I wanted to let you know, first of  
9 all, traffic is primarily a concern that will be  
10 covered in detail in the city planning meetings, so  
11 oddly enough it's not a key component of the state  
12 application process, but it figures highly in the  
13 city process, so I will give a you wide variety of  
14 numbers during that process as well. But just to  
15 give you a rough idea, we have conducted a traffic  
16 study where we look at traffic counts as the existing  
17 situation right now on Route 1 and out on Perkins  
18 Road and at various intersections and we look at the  
19 facility's operations and say what's the impact of  
20 the increased truck traffic due to their operations.  
21 And bottom line is there is not a lot of impacts  
22 because there is not a lot of truck traffic and  
23 because the operation is primarily growing fish, you  
24 have a little bit of product that leaves and a little  
25 bit of feed that comes in and you have the employees



1 which will be between 60 and 100 employees that come  
2 to the site, but the impacts are not significant, so  
3 I think in general you're not going to feel those  
4 impacts strongly. The thing that I think people are  
5 going to recognize the most will be during the  
6 construction phase in the early part of the  
7 construction as we talked about earlier, when you  
8 build a pipeline you have to cross Route 1 with that  
9 pipeline and in order to do that you have to alter  
10 the flow of traffic on Route 1 during the months that  
11 you construct that. And the plan is to actually  
12 build a small bypass, the road would be diverted up  
13 onto the water district property so that the two  
14 lanes of traffic can continue to flow in, you know, a  
15 lane in the northbound and a lane in the southbound  
16 direction while the work is being done in the actual  
17 part of Route 1 itself. And then once the work has  
18 been -- the pipeline has been laid through on Route 1  
19 that part would be repaved and restored and the  
20 bypass section would be closed and you'd go back to  
21 going back and forth on Route 1. And that's a bit of  
22 an over simplification. If somebody is interested in  
23 getting more details, we do have people here that can  
24 help you with that, but I do encourage you to come to  
25 the city planning process as well where we're going

1 to try to cover that in a lot greater detail. We  
2 have an independent traffic engineer who was hired as  
3 a consultant to the project to conduct that traffic  
4 study and there will be a thick report as part of  
5 that application that will cover some of that for  
6 you. Hopefully that helps.

7 AUDIENCE MEMBER: (Rachel Rabinor.) Okay.  
8 It does, yeah. And so then can you just tell us how  
9 many trucks when you're in production will be leaving  
10 daily?

11 MR. HEIM: I think we have the maximum of 16  
12 or 17.

13 AUDIENCE MEMBER: We can't hear.

14 MS. RANSOM: A maximum of 16 to 17 per day.

15 AUDIENCE MEMBER: (Rachel Rabinor.) And  
16 then the report that you're telling me to check on  
17 you've concluded that there won't be problems with  
18 heavy traffic heavy trucks on the road on Route 1?

19 MS. RANSOM: It's similar to the size  
20 vehicles that currently go up and down Route 1, so  
21 the added impact of an additional 16 trucks isn't  
22 expected to take -- I want to say there are something  
23 like 9,000 vehicle trips per day existing right now  
24 on Route 1, so the additional 16 to 17 truck trips  
25 are not anticipated to have a significant impact.

1           AUDIENCE MEMBER: (Rachel Rabinor.) Okay.  
2 Thank you.

3           MS. RANSOM: You're welcome.

4           AUDIENCE MEMBER: My name is Jamila  
5 Levasseur. I've just got something quick. You say  
6 in your initial presentation you said your goal in  
7 raising these fish is to provide sustainable seafood  
8 and I don't believe there is anything at all  
9 sustainable about this project, but you don't mention  
10 the profit is obviously a priority. It has to be.  
11 Can you tell me why you chose to register and  
12 incorporate in the State of Delaware, which is not  
13 where you're raising your fish instead of here in  
14 Maine, the state that you claim to love?

15           MR. HEIM: I think will you find companies  
16 throughout the U.S. who register in Delaware for  
17 many -- a great many reasons because it's a favorable  
18 state to be registered in as a business. What you  
19 then do is you local register your business where you  
20 are actually doing the business. This is very common  
21 among companies all over the U.S.

22           AUDIENCE MEMBER: (Jamila Levasseur.) I'm  
23 very aware of that.

24           MR. HEIM: So and that's typically if you go  
25 to legal counsel in the U.S. they will often

1 recommend you to do this because they have favorable  
2 conditions for setting up a corporation.

3 AUDIENCE MEMBER: (Jamila Levasseur.) Okay.  
4 Can you be a little more specific about how -- what  
5 those favorable conditions are and how that impacts  
6 the State of Maine?

7 MR. HEIM: It doesn't have any impact at  
8 all. It's a matter of ease of procedures and ease of  
9 registering a company in the state, which are  
10 favorable. I don't see any impact at all in terms of  
11 doing business in Maine. It's a U.S. registered  
12 company. So obviously companies in the U.S. can be  
13 registered in any state and can do business across  
14 any state in the country and so I think every  
15 business needs to consider what's the best option for  
16 them.

17 AUDIENCE MEMBER: (Jamila Levasseur.) Yeah,  
18 of course. I really hope that at some point we can  
19 hear from a corporate lawyer or a lawyer who has  
20 experience in corporate law who perhaps has a  
21 different view of this matter because you are trying  
22 to set yourselves up as a corporation that's  
23 different that's putting the environment and putting  
24 sustainability first and yet you're going to be  
25 registering in a state where you're not raising your

1 fish. I've got some serious questions about that.

2 MR. HEIM: Okay. I respect that. Thank  
3 you.

4 (Applause.)

5 AUDIENCE MEMBER: Hi there. I am Jackie  
6 Cassida. So I'm going to be your little neighbor and  
7 so clearly that would mean I do a lot of research and  
8 a lot of reading. And I have to say with all of the  
9 research that's been done and all of the work that's  
10 been done there has been a tremendous amount of work  
11 from our city council and from you and I really have  
12 a lot of gratitude for a lot of what you've done  
13 especially in addressing the concerns that we've had  
14 preserving the land around our property, the trail,  
15 the green buffer zones. Actually, a lot of my  
16 questions have already been answered. So my one  
17 question that I have, you were talking about 100  
18 percent use of that valuable product, the fish, and  
19 you talked about some of the cutoffs. As far as the  
20 waste goes, I know that there is some potential  
21 business there. Can you talk a little bit about that  
22 part of it as far as, you know, I know that it's  
23 going to be packaged up and driven away. What then?

24 MR. HEIM: So actually one of the first  
25 things we did was the study in New England in terms

1 of downstream waste resource industries that can be  
2 potential business partners. So what we concluded is  
3 there is a significant potential and there will be  
4 more. So typically what we have is a fish processing  
5 waste and that's being chilled or frozen. The one  
6 that we really hope will come to a conclusion is the  
7 lobster industry synergy because I think the State of  
8 Maine will benefit greatly from that. Beyond that,  
9 you have a large pet food industry, many other types  
10 of buyers. It's a high value protein resource, which  
11 currently the only available solution that's been  
12 used for the most part for the seafood industry in  
13 Maine is composting, which in our view is a waste of  
14 resources. So we've been reaching out broadly and  
15 see a great range of opportunities to sell this  
16 product and to put it to reuse in a valuable way.  
17 The other part is the filtration, the sludge that we  
18 dewater and then ship out. We have biogas  
19 arrangements that we can pursue and also fairly  
20 concrete solutions there. You can also compost, but  
21 that's a waste of resources in our view. Finally, we  
22 are in the process of looking at a micro-algae  
23 project that would produce high grade organic algae  
24 with one of the leading experts in the U.S. in algae  
25 production and if that it comes to fruition we hope

1 to be able to locate that in Waldo County as well  
2 with additional jobs for this county. So there is a  
3 number of different ways we can proceed on this.

4 AUDIENCE MEMBER: (Jackie Cassida.) Thank  
5 you. And I just, again, want to say I'm looking  
6 forward to being neighbors and also maybe talk about  
7 that green buffer in the back of my garden.

8 MR. HEIM: Okay.

9 AUDIENCE MEMBER: (Jackie Cassida.) It will  
10 be up for discussion, right? Thank you very much for  
11 all of the information, I appreciate it.

12 (Applause.)

13 AUDIENCE MEMBER: Hi. I am Diane Braybrook  
14 and I live over the bridge in East Belfast. When I  
15 go over that bridge, what a view. I've had a lot of  
16 accidents almost just because I drive this way. And  
17 what do I always see? I see Front Street Shipyard  
18 and I'm always so happy to see that they came to  
19 Belfast and they made Belfast a better place. I am  
20 so excited about you coming to Belfast and making  
21 Belfast a better place. I have no qualms --

22 (Applause.)

23 AUDIENCE MEMBER: (Diane Braybrook.) --  
24 about your licensing. I think you have done your  
25 research, your due diligence far beyond what could

1 ever be expected. When Front Street started, I don't  
2 remember them being put under a microscope the way  
3 you have been, but they are there and they are a  
4 bonus to Belfast. So in my vision you are there.  
5 And tourism is one of the main sources of income in  
6 Belfast. I would love to see this be a destination  
7 for people to come to. Among all your rules and  
8 regulations and licenses, how open will you be able  
9 to be to welcome tourists, education groups?

10 MR. HEIM: I'll take that one as well. That  
11 is actually a part of -- we touched upon this in a  
12 previous meeting in terms of how can we give back to  
13 the community. So and it's also been clear that the  
14 town wants to preserve the water district building,  
15 so we combined sort of the idea of a visitor  
16 educational center for seafood with that existing  
17 building structure and also adding an outdoor salmon  
18 viewing pool so the public can actually come and see.  
19 So what we're doing there is we're giving the  
20 easement to cross our property to the trail system.  
21 We're adding a visitor educational center that, for  
22 example, also in low season could be a great  
23 destination for school kids and classes. And --

24 AUDIENCE MEMBER: (Diane Braybrook.) As a  
25 former educator --



1 MR. HEIM: Yes.

2 AUDIENCE MEMBER: (Diane Braybrook.) -- I  
3 love that idea.

4 MR. HEIM: And so we have also actually  
5 mentioned this to Duck Trap in terms that maybe we  
6 can do something together there and so that's a  
7 possibility. And if there is interest maybe we'll  
8 end up selling smoked salmon for people who go  
9 hiking. And I know our neighbors are producing  
10 blueberries, so maybe we'll team up with them as  
11 well, I can see this. So but we're going to be  
12 looking for input also into that project. I want  
13 that to be a community focused project that can give  
14 something back to the community.

15 AUDIENCE MEMBER: (Diane Braybrook.) I  
16 think it's so exciting what can happen because of you  
17 being part of Belfast. Thank you for being here.

18 (Applause.)

19 AUDIENCE MEMBER: Hi. My name is Phyllis  
20 Coelho and I am from Belfast. I wonder -- as far as  
21 I know you haven't decided on the feed that you will  
22 be giving the fish and my concern is how you'll  
23 guarantee that the feed will not contain GMOs and  
24 other contaminants wildly found in soybean and corn.

25 MR. HEIM: So I can comment on that. Beyond

1 that, I think we have an expert from the feed -- a  
2 veterinarian from the feed industry here today, so he  
3 might be able to shed some light on this as well.  
4 The reason we're not choosing our feed yet is  
5 because, first of all, we're over a year away or a  
6 year-and-a-half away from using any feed and we are  
7 seeing a fantastic interesting development in this  
8 industry right now. The last months have been full  
9 of news about innovation in feed ingredients and the  
10 reason this is happening is really because the  
11 industry is growing so fast that feed industry needs  
12 to innovate in terms of sustainability and sourcing  
13 of ingredients. So just in the last months when we  
14 were in Boston last week at the seafood expo down  
15 there too also you see a whole new range of  
16 micro-algae products, the first insect meal  
17 ingredients are into the market. So all of these  
18 developments are happening rapidly right now and that  
19 means that we will have other choices one year from  
20 today than today in the market and we want to be  
21 there making the right choices when we need our feed  
22 basically.

23 In terms of you're addressing contamination  
24 issues, would you like to comment to that, please?  
25 You can introduce yourself.

1 MR. RAMIREZ: Hi. Thank you for the  
2 question. I work in a fish food plant company and I  
3 can tell that all of the tests that we do to the raw  
4 materials are very intense. All our vendors are  
5 certified. We clearly test for PCB, heavy metals,  
6 any contaminant that can be in those raw materials.  
7 If we find anything, the raw materials are rejected.  
8 After we process the feed they are tested again and  
9 also tested for bacterial contaminants like  
10 salmonella that's a clear concern. All of the feed  
11 that comes in is made in Canada. That means that we  
12 also need to meet all of the EPA requirements and  
13 CFIA requirements to grow the corn. CFIA is the  
14 Canadian side and they signed all of the permanent  
15 documents who allow the feed to come to this country.  
16 In terms of raw materials, all raw materials are  
17 vegetables or animal proteins or fish meal are highly  
18 certified and tested many times.

19 AUDIENCE MEMBER: (Phyllis Coelho.)  
20 Non-GMO?

21 MR. RAMIREZ: No.

22 AUDIENCE MEMBER: (Phyllis Coelho.)  
23 Guaranteed?

24 MR. RAMIREZ: As far as I know, yes.

25 AUDIENCE MEMBER: (Phyllis Coelho.) Thank

1 you.

2           AUDIENCE MEMBER: I'm Steve Hutchings. I've  
3 been a career educator for 40 years. I've lived here  
4 for about 45 years and I've taught environmental  
5 science to local students for that time. I'm  
6 currently teaching at Medomak Valley and I have  
7 Friendship kids. I have about 20 kids that are  
8 full-time lobstering. They're going to be very  
9 pleased about the lobster bait. I'll try to keep  
10 them from driving up here tomorrow because they  
11 would. My point is that is my perspective. My  
12 perspective is kids, all right, and I don't hear  
13 anything about kids. And I've got two grandkids  
14 living at home. They're 16 and 18 and for 35 years  
15 I've been teaching a lot of your kids. I've watched  
16 them graduate from high school, some go on to college  
17 and they leave and you get to see your grandkids once  
18 a year maybe or once every couple years because they  
19 got good jobs elsewhere. Well, the jobs are starting  
20 to be here now and that's all I care about to tell  
21 you the truth. I trust these folks. They're good.  
22 I trust our city government. I trust our state  
23 government. We need jobs. We need opportunities for  
24 kids. We need this to be an international town and  
25 it's going to be and that's going to draw other

1 companies.

2 (Applause.)

3 AUDIENCE MEMBER: (Steve Hutchings.) And my  
4 16 and 18 year old grandkids are going to stay here  
5 and they're going to be able to afford taxes and  
6 that's the issue that I care about. Thank you very  
7 much.

8 (Applause.)

9 AUDIENCE MEMBER: Hi. My name is Kathryn  
10 Shagus. I live in Belfast. And I have -- I would  
11 just like you clear up some things that seem a little  
12 inconsistent especially about the scale you have.  
13 You keep saying that you have all of the experience,  
14 but, you know, the plants in Norway 1,200 tons and  
15 4,200, this is going up to 33,000 tons. You also  
16 say, well, we have, you know, decades of experience,  
17 which I understand that you have lots of good  
18 technical people, but it's -- it's almost like going  
19 to the moon. It's almost like saying we've got the  
20 eggs, we've got the milk, we've got the flower, we've  
21 got the sugar, but we've never cooked the cake  
22 before. And I think that my concern is the risk to  
23 the City of Belfast, which I understand is already  
24 put in \$240,000 promised in start-up costs plus  
25 countless man hours. We've asked before why -- if

1 you so care about the environment, why is it on not  
2 on a Brownfield site as you are doing in Humboldt  
3 County? The last time I asked this question you said  
4 we must have it on fresh water. I -- it seems to me  
5 that there is an awful lot of risk that the city is  
6 bearing, yes, it would be wonderful if it was really  
7 green, if you were really recycling your waste, if it  
8 was not bad for the environment and if it offered  
9 jobs and opportunities for young people, but  
10 basically who -- why should this be trusted?

11 (Applause.)

12 MR. HEIM: Well, I think they're really good  
13 questions, so thank you. And I think the important  
14 thing is everything we develop and build is modular,  
15 so, yes, we are going up in size in Belfast, but it's  
16 like adding more modules of the same standardized  
17 concept. So it doesn't mean that we're building one  
18 huge tank, we're building many medium sized or larger  
19 tanks next to each other basically replicating them.  
20 So the first system is identical to the last system  
21 and we're doing it in a phased manner so this is all  
22 about standardizing and replicating designs in the  
23 end. So, yes, it's bigger than we've done before,  
24 but it's, again, replicating the same standardized  
25 designs and improving them every time. So, for

1 example, the picture you saw from our Norwegian  
2 facility is a vast improvement beyond the one we did  
3 in Denmark. And the one we're doing here in Maine is  
4 a vast improvement, again, from what we've done in  
5 Norway and that's really where this is going with the  
6 innovation and as we are also stacking more and more  
7 experienced people who have built many of these farms  
8 before. I think it's a very good question and that's  
9 why I just want to explain very clearly everything is  
10 modular. We're just multiplying the same thing over  
11 and over again basically.

12 AUDIENCE MEMBER: (Katheryn Shagus.) I  
13 appreciate that --

14 MR. HEIM: Okay.

15 AUDIENCE MEMBER: (Katheryn Shagus.) -- but  
16 it still doesn't really answer the question. It  
17 doesn't really answer the concerns. It doesn't  
18 answer the environmental concerns --

19 MR. HEIM: Okay.

20 AUDIENCE MEMBER: (Katheryn Shagus.) -- and  
21 who is taking -- are you taking the risk if things or  
22 is -- I mean, there is a -- Webster City, Iowa had a  
23 huge, you know, the giant fish farm that was supposed  
24 to -- sustainable and everything the city was left  
25 holding the bag. They're -- corporations don't

1 always pay their taxes. They don't always -- you  
2 look at -- there are a lot of examples. There is a  
3 lot of concern here and I don't think we've gotten  
4 really good answers.

5 MR. HEIM: In terms of the wastewater  
6 treatment you have probably hundreds of companies in  
7 the U.S. who can build the wastewater treatment plant  
8 that we're building. This is not a unique technology  
9 for us. So that's why we're also being clear that,  
10 for example, one of the major systems are delivered  
11 by Mitsubishi which is a global supplier of  
12 wastewater treatment systems, so this can be reviewed  
13 objectively by expert resources and looked at as  
14 well. But I think it's good you ask questions and  
15 that's fair, I think so, and we have put a lot of  
16 stake in this too. We have invested \$6 million in  
17 the state without any permits so far, so that means  
18 that if we didn't know what we were doing our  
19 investors would be pretty stupid. So I think maybe  
20 at least you can see that as a reflection of our  
21 commitment to Maine that we're actually investing  
22 heavily because we have high confidence we are able  
23 to do this.

24 AUDIENCE MEMBER: (Katheryn Shagus.) And my  
25 understanding is you have family investors as well as



1 other investors and --

2 MR. HEIM: We have --

3 AUDIENCE MEMBER: (Katheryn Shagus.) I --  
4 mean, you stand to -- you and many other companies  
5 that want to do this right now stand to make an awful  
6 lot of money, but there are a lot of companies trying  
7 to do the same thing at the same time and some will  
8 fail and some will succeed.

9 MR. HEIM: Yes, and that's maybe the  
10 difference between us and start-ups. We have already  
11 built three facilities and our engineering staff has  
12 built countless facilities before that.

13 AUDIENCE MEMBER: (Katheryn Shagus.) At a  
14 much smaller scale.

15 MR. HEIM: Yeah, but they're getting bigger  
16 and bigger and the knowledge -- that's what happens  
17 in many industries, they grow and they scale and  
18 that's a natural part of how many companies in the  
19 U.S. is developed as well. They started somewhere  
20 and built from there. And I can't speak for every  
21 U.S. company, some -- it's clearly some companies  
22 have probably done better than others and some are  
23 probably more ethical than others and so on and I  
24 can't really stand by what they have done. I have to  
25 speak on terms of our company and what we are good

1 for basically.

2 AUDIENCE MEMBER: (Katheryn Shagus.) Okay.

3 MR. HEIM: And so I think you have to judge  
4 us by our actions and what we show in terms of  
5 experience and our team and that we actually have  
6 already three facilities in operation. We are the  
7 only land-based company in the world today with  
8 different facilities in operation in the presence of  
9 three countries, so we are quite a bit different from  
10 start-ups in this industry.

11 (Applause.)

12 MS. RANSOM: I'd like to just add one more  
13 comment regarding the financial piece. As part of a  
14 SLODA application a company is required to show  
15 financial capacity for the project, so there is a  
16 substantial amount of documentation that will go into  
17 the state and be reviewed by the state as to their  
18 capacity to actually perform what they say they're  
19 proposing. So just as an added layer, I mean,  
20 obviously Erik has spoken to why it wouldn't make  
21 sense for him to go forward if he didn't think he  
22 could succeed, but there is actually a governmental  
23 check on that so if you're interested this will also  
24 be part of the application process. Thank you.

25 AUDIENCE MEMBER: Hi, there. Lou MacGregor.

1 Thank you for the opportunity. I wish I could  
2 support the project. I get up every morning  
3 wondering if this is going to be the day when I'll  
4 feel like I can support it and -- or will this be the  
5 day that we just leave town, but it hasn't happened  
6 yet. I do have a couple of questions. You've  
7 regularly said in these PIMs and elsewhere that  
8 you're being transparent through the Belfast process.  
9 In that case, why won't you release the Gartley and  
10 Dorsky survey of Belfast Bay or at least part of the  
11 bay that you commission? Is it because survey shows  
12 effluent pipe crosses the littoral zone and one or  
13 more of Belfast/Northport residents who don't want  
14 you and won't give you permission to cross the zone  
15 or is it because no one in the area will permit and  
16 you must take a long surreptitious route?

17 MS. RANSOM: This is the Dorsky survey that  
18 you're looking at in this figure.

19 AUDIENCE MEMBER: (Lou MacGregor.) Okay.

20 MS. RANSOM: And this shows, I mean, and,  
21 you know, obviously it's simplified for the  
22 presentation, but the application materials will have  
23 a full response to all of the questions of the  
24 January 22 letter from DEP including copies of the  
25 information that we're providing showing title, right

1 and interest --

2 AUDIENCE MEMBER: (Lou MacGregor.) All  
3 right.

4 MS. RANSOM: -- to the land for the  
5 pipeline.

6 AUDIENCE MEMBER: (Lou MacGregor.) Thank  
7 you.

8 MS. RANSOM: You're welcome.

9 AUDIENCE MEMBER: I'm Susan Cutting and I  
10 live in Belfast. You state -- I just want to clear  
11 up some inconsistencies. You state that the lowest  
12 carbon footprint would come from local net pen  
13 production or wild salmon fishing, but a recent  
14 detailed report says that because of the huge energy  
15 footprint of the RAS systems the lowest carbon  
16 footprint with the lowest accompanying environmental  
17 footprint would be to use existing net pen facilities  
18 in the deep ocean Scandinavian waters and to ship  
19 frozen filets or whole fish in container ships to the  
20 U.S. And I want to follow-up on the question about  
21 climate change. I don't think that this is really  
22 about feeding the world for you, is it? Because --  
23 wait, let me -- well, because what we have  
24 demonstrated here in Belfast is that we have an  
25 amazing local food movement. We have a co-op and

1 our, you know, two different farmer's markets and  
2 there is a lot going on here and we have a lot to  
3 show and share and that is a low carbon footprint.  
4 In this day and age we can't afford to do this to our  
5 children and future generations. Your industry is a  
6 huge facility that is going to have a huge carbon  
7 footprint.

8 AUDIENCE MEMBER: Here here.

9 AUDIENCE MEMBER: (Susan Cutting.) And so  
10 I'm -- I ask that you stop referring to it as a low  
11 carbon initiative because it it's not.

12 MR. HEIM: Okay. Frozen salmon shipped from  
13 Norway has about the same footprint as our fish in  
14 Co2, but I agree with you, you definitely reduce your  
15 footprint with frozen product. So essentially if you  
16 wanted to reduce the Co2 footprint of salmon  
17 consumption in the U.S., stop importing fresh  
18 seafood. Airfreighted. That would be your first  
19 step because you have a much lower footprint from  
20 frozen seafood from fresh seafood. So then there is  
21 the consumer choice if consumers are happy with  
22 frozen products. So that's -- that's an interesting  
23 discussion. Besides that, U.S. emissions of Co2  
24 increased by 3 percent last year and so if you look  
25 at the big picture in the U.S. where the real issues

1 are on Co2, I think we're not the place to start.  
2 There is a much bigger discussion going on that  
3 really needs to be taken seriously in this country  
4 and we definitely want to be a part of that  
5 discussion as well. But in the end, if you look at  
6 the amount of fish produced with this footprint you  
7 will not find any facility in the world with the  
8 footprint efficiency that we are providing and that's  
9 because we have gone through extensive design  
10 processes to be very efficient on footprint here.

11 AUDIENCE MEMBER: (Susan Cutting.) But it  
12 doesn't beat local food. It doesn't go -- so  
13 starting -- a first process is to be to not choose  
14 this model.

15 MR. HEIM: So I -- I actually shop at the  
16 co-op and I really appreciate it and we also shop  
17 local organic and I think that's a great product as  
18 well. The problem is that if you are going to put  
19 feed in total use population organic small scale  
20 farming cannot do it because of yield, so you need a  
21 combination. So my point is you need both. Yes to  
22 both. It's not an either or question, so -- but  
23 that's a very interesting debate that this country  
24 should have in terms of future food systems and the  
25 sustainable issues around them because it is a very

1 important issue. So thank you for the question.

2 (Applause.)

3 AUDIENCE MEMBER: Hi. My name is Anne  
4 Saggese. I'm from Belfast. And I want to say this  
5 has been super fascinating to watch this project  
6 develop, so thank you for the expansive opportunity  
7 you've given us to watch it happen. I know it's been  
8 a rocky road sometimes. I've spent the last 30 years  
9 in local food production, so I would like to back-up  
10 Erik in saying that small family farms can't feed the  
11 world. It is a big part of the solution, but it is  
12 not the solution and we need to be thinking about  
13 technologies like this to fix that. So my question  
14 though was not -- I'm nervous as anything. I don't  
15 know why. -- not all of you are Nordic employees  
16 here, correct, that spoke tonight? So those of you  
17 that are not Nordic employees, what's your  
18 background? What's your expertise? You know, we saw  
19 a lot about there was some science stuff that went  
20 right over my head, so why should I be believing what  
21 you say?

22 MS. RANSOM: I'll start with that. Here we  
23 go. So this slide that Erik put up earlier in the  
24 presentation showed you a variety of the different  
25 partners that have been involved in this project so

1 far and there are others that aren't even on the  
2 slide. We are a variety of scientists, engineers,  
3 architects, landscape architects that have been  
4 brought in to help on the aspects of the project that  
5 are many that go into this application.

6           So, for example, I won't try and speak for  
7 everybody, but SMRT is from a large firm in and it's  
8 composed of architects, landscape architects, and  
9 engineers that have the capability to design  
10 buildings, roadways, foundation systems and the kind  
11 of things that you'd have on any sort of building  
12 process not just specific to aquaculture.

13           Woodard and Curran has been brought onto the  
14 team because they have folks who are experienced at  
15 looking at things like the pipeline and how could you  
16 design a pipe system of that length and into that  
17 depth of water.

18           I represent Ransom Consulting. We are  
19 engineering and scientists who helped with things  
20 such as the stormwater design. We've looked at  
21 groundwater. We are overall looking at the permit  
22 application process and making sure that that's  
23 complete. And, you know, the individuals standing up  
24 here tonight are one of a team of anywhere from a  
25 small group to 100 or so people at each company have



1 been involved in some aspects of this project.

2           Gridworks Consulting is up here to -- a  
3 partner that has looked at some of the energy  
4 consumption for the facility and some of the  
5 questions we've had tonight about how do we  
6 efficiently use energy and do that in a manner that  
7 keeps the carbon footprint down.

8           Ramboll is another environmental consulting  
9 firm and engineering firm that's been hired to  
10 actually provide independent sort of outside review,  
11 so when Ransom or MMA come up and presents some of  
12 our groundwater modeling or discharge modeling that's  
13 one firm's opinion of how it can be done and Ramboll  
14 has been hired to look at that and say, okay, did  
15 they take the right approach, is there another  
16 alternative way we could have done that.

17           Cianbro obviously is something that probably  
18 a lot of you are familiar with, you've seen their  
19 signs and trucks around. They do a lot of  
20 construction. They have a lot of great construction  
21 experience. And they've been looking at this not  
22 only as to how do we build the pipeline, but it's  
23 what we're engineering something that's actually  
24 constructible. There are easier ways to construct  
25 things than others and we don't want to go through a

1 permitting process to permit something that  
2 ultimately a contractor comes in and bids on and says  
3 I can't build that, you guys are crazy. So they've  
4 been brought in early to the team to make sure that  
5 what we do has some experience behind it as well.

6 Drummond Woodsum is, like it says,  
7 attorneys. They're here to make sure they review  
8 this for completeness and thoroughness and make sure  
9 that the application meets the standards it needs to.

10 Kennebec River Biosciences has been involved  
11 in helping with some of the actual, you know,  
12 integral pieces to the fish process itself, how do we  
13 grow these fish successfully.

14 And there is numerous people that didn't  
15 make the slide. We've a got noise consultants, we've  
16 got archeological consultants, we've got wetland  
17 consultants, but each of those are represented by a  
18 large firm with resumes that in many cases have 20 to  
19 30 years of experience behind them. All of that  
20 information actually goes into our application  
21 process. We have a section of the application that  
22 will be resumes and project descriptions to basically  
23 show DEP that the Nordic team has the experience to  
24 do what they say they're going to do.

25 AUDIENCE MEMBER: (Anne Saggese.) How many

1 of these companies are in Maine?

2 MS. RANSOM: I believe everybody that I've  
3 named tonight except maybe Gridworks has a Maine  
4 office.

5 AUDIENCE MEMBER: (Anne Saggese.) Thank  
6 you.

7 MS. RANSOM: You're welcome.  
8 (Applause.)

9 AUDIENCE MEMBER: Hi, there. My name is  
10 Michael Ray. I live in Lincolnville off the map or  
11 of your map, but still interested in what happens in  
12 the area. I've got a question, but as an aside I  
13 just wanted to thank you on a presentation. I used  
14 to be on a little planning board in a little town and  
15 I always get this geekish thrill out of seeing  
16 applications that are comprehensive, even overviews  
17 of applications and I like watching people work too.  
18 But what I didn't hear, and correct me if you went  
19 over it and I missed it, what might -- what plans do  
20 you all have should your application be approved and  
21 you get the permits and what not for if some  
22 relatively significant remedial action has to take  
23 place, stormwater, effluence, you name it. Have you  
24 put money aside in a fund, something above and beyond  
25 fines, what kind of provisions might there be with

1 the DEP? Or maybe -- maybe that's entirely --

2 MS. RANSOM: I can start on some of that.  
3 When I talked to you about groundwater, for example,  
4 we talked about the fact that the -- that we set  
5 action levels and we come up with an action plan. So  
6 what might that look like? So let's just say our  
7 model predicted that somebody's well was going to  
8 have 10 feet of drawdown and we start up a facility  
9 and we see that there is more than that. One of  
10 those action responses might be depending on the  
11 nature of the response that we find a different way  
12 to use water so we don't cause that drawdown, so that  
13 may be they increase the salinity in their tanks as a  
14 response to observed water drawdowns. Let's just say  
15 maybe we're not having an impact on somebody's water  
16 quantity, but let's just say they develop an iron  
17 problem that they didn't have before, our mitigation  
18 for that measure might be we'd give them a water  
19 treatment system. So each part of the application  
20 looks for the applicant to have a way to monitor for  
21 problems that could occur, prevent them from  
22 occurring or stop them and mitigate and that takes  
23 many shapes and forms and that's water, that's  
24 stormwater, that's wetlands, that's design, the  
25 things that don't go as planned because, let's face

1 it, you know, you can model and develop your  
2 engineering and then there is what happens and so the  
3 state protects and the applicant protects to make  
4 sure that they can maintain a good project going  
5 forward.

6 AUDIENCE MEMBER: (Michael Ray.) Yeah,  
7 well, actually what I'm asking, and maybe this is  
8 something that the ordinances don't require you to  
9 do, I don't know. But, no, I was thinking of  
10 something, well, not post-apocalyptic, but if  
11 something major were to happen, okay, monitoring is  
12 good, paying a fine is good, mitigation is good, but  
13 should there be something larger that happens. We  
14 find out 35 years from now that Penobscot Bay is  
15 spoiled, do you -- is there some sort of plan or  
16 commitment to clean-up monetarily? Like I said,  
17 maybe the ordinances don't require this.

18 MS. RANSOM: I mean, there is Maine law that  
19 they'll have to uphold. And there will be ongoing  
20 monitoring so that you know if anything is going on,  
21 so that, you know, the premise behind that is so the  
22 apocalyptic scenario doesn't occur that you've nipped  
23 it in the bud before you get to something like that.  
24 So, I mean, all of these applications have a robust  
25 monitoring program that follows so that the state and

1 the applicant and the community all have the benefit  
2 of knowing if things are going according to plan.

3 (Applause.)

4 MR. WOODWARD: Jay, could you please try to  
5 get out of line so I can use the mute button?

6 (Laughter.)

7 AUDIENCE MEMBER: (Jay Davis.) You don't  
8 want me to do that, but I could. My wife and I --  
9 I'm Jay Davis from Belfast. My wife and I just came  
10 back from a trip to Norway to visit our daughter and  
11 we went to Frederickstad to see Nordic Aquafarms in  
12 real life and it was an interesting experience. One  
13 of the things that struck me was outside the finished  
14 building where I understand from your office in  
15 Belfast you're -- just the -- the fish are just about  
16 to go into this building, there are 40 big round like  
17 round hay bales in Maine stacked up outside the  
18 building and I'm thinking they're not going to feed  
19 hay to these fish.

20 (Laughter.)

21 AUDIENCE MEMBER: (Jay Davis.) But you are  
22 feeding something to the fish in Norway, what is it  
23 and is what you're feeding them subject to any  
24 restrictions in your permit to operate in you -- in  
25 Industrial Park in Frederickstad?

1 MR. HEIM: So I have not the benefit of  
2 being in Frederickstad actually in six months since I  
3 moved here. So you're saying there is hay bales  
4 outside?

5 (Laughter.)

6 AUDIENCE MEMBER: (Jay Davis.) No, they  
7 look like hay bales. Plastic covered hay bales.

8 MR. HEIM: Yeah, it's probably biofilter  
9 material that's been built into the central  
10 biofilters. So that's a part of the final just the  
11 wrapping up the process of the facility, I would  
12 assume without having seen it and so that's the  
13 answer there. And so in Norway the feed formula we  
14 use there is a pretty standard type of feed used in  
15 the industry in Norway. It's specialized for RAS  
16 production basically meaning that it has natural  
17 binders that keep the feed together longer than you  
18 would see in the ocean, so the -- all of the pellets  
19 are consumed because one of the things you don't want  
20 in the systems is to have waste feed floating around  
21 the system because it can give you water quality  
22 problems.

23 AUDIENCE MEMBER: (Jay Davis.) So are they  
24 grain-based or?

25 MR. HEIM: It's a combination -- so, yeah,

1 so what you've been seeing basically in the last 10  
2 years is that the industry has gone in the direction  
3 of where it's significantly increased in plant  
4 protein, the product. If you go 10 years back most  
5 people had 40 to 50 percent fish meal that's  
6 significantly reduced today as research has brought  
7 forth vegetable proteins into the product and then in  
8 addition to that now we're seeing the development in  
9 the market now with new alternative ingredients that  
10 can also replenish/replace, for example, fish meal.  
11 They can also add Omega 3s and 6 to the product  
12 without fish meal, so this is the trend that we're  
13 seeing in the industry right now. So it's basically  
14 response, you know, I think the people in the  
15 industry are responding both to the producers and the  
16 consumers in terms of the choices they want and this  
17 is the clear trend that we're also behind is that we  
18 want to see more and more movement towards all kinds  
19 of sustainable non-GMO. That being said, GMO is not  
20 an issue in Norway, but it is in U.S. and a clear  
21 trend towards more and more sustainable sourcing of  
22 all ingredients in the products.

23 AUDIENCE MEMBER: (Jay Davis.) So is what  
24 you feed the fish part of the permit application and  
25 part of the permit approval?



1 MR. HEIM: Not in Norway. You need to have  
2 accounted for in terms of your residual discharge  
3 after treatment so you know exactly what nutrients  
4 are going to be discharged. Of course in terms of  
5 the food authorities you need to just make sure that  
6 you're feeding your fish with call it an approved  
7 feed. That being said, the largest feed companies in  
8 Norway are, you know, highly regulated as well. So  
9 you can feel some level of confidence in terms of the  
10 regulation process just like the U.S. on these.

11 AUDIENCE MEMBER: (Jay Davis.) Okay.

12 MR. HEIM: I don't know if that -- if you  
13 have more specific questions regarding that.

14 AUDIENCE MEMBER: (Jay Davis.) Well, I'm  
15 trying to get so that people here can understand what  
16 you're going to feed the fish so we can understand  
17 what is going to happen to the bay.

18 MR. HEIM: Yup.

19 AUDIENCE MEMBER: (Jay Davis.) And I know  
20 that you're feeding fish in Norway --

21 MR. HEIM: Yup.

22 AUDIENCE MEMBER: (Jay Davis.) -- and I'm  
23 just trying to find out what it is.

24 MR. HEIM: So to reiterate again it's a  
25 combination of vegetable protein and there is animal

1 protein, mostly fish meal and fish oil in Norway.  
2 Here in Maine, I'm hoping to reduce that even more  
3 and maybe in the future eliminate fish meal with the  
4 ingredients we see coming into the market today. So  
5 that's sort of the end goal for me to get to the new  
6 types of ingredients that really have a different  
7 profile and sustainability. So beyond that, like it  
8 was said, Skretting, we also have a partnership with  
9 Skretting in Norway. They do have very rigorous  
10 testing and rejection of any ingredients that could  
11 conceivably have contamination. So there is a very  
12 rigorous process in the industry interest in terms of  
13 these kind of issues.

14 AUDIENCE MEMBER: (Jay Davis.) Thank you.

15 MR. HEIM: Yup.

16 (Applause.)

17 AUDIENCE MEMBER: My name is Bob Adler and I  
18 promise, Lee, that I will behave too. I have a  
19 couple of questions related to the whole issue of  
20 risk. One, recently I read that the marketplace for  
21 your product is likely to be far more demanding than  
22 state regulators are and I wonder if you can speak to  
23 whether the marketplace is placing stronger demands  
24 on you than regulations, for example, Whole Foods or  
25 the consortium of co-ops. That's one kind of risk

1 I'd like you to talk about. The other on is having  
2 misspent most of my career in the property casualty  
3 insurance industry, I know it is an industry that is  
4 extremely risk averse despite what its intended  
5 purpose is. So particularly with new technologies,  
6 property casualty insurers are very wary of providing  
7 coverage, so I'd like you to speak to your experience  
8 in other countries, but so far in terms of insurer's  
9 willingness to insure you for your work because they  
10 tend not to like risk at all.

11 MR. HEIM: So I have a long career behind me  
12 as an insurance executive.

13 AUDIENCE MEMBER: My sympathies.

14 MR. HEIM: That's what I did before I  
15 produced fish actually. First of all, I think  
16 you're -- I think you're right about the marketplace  
17 being a driver. I think if we, for example, if you  
18 look at the -- we talked about the feed industry, I  
19 mean, consumer trends and expectations are key there.  
20 I think also producer's expectations and trends are  
21 key. Sometimes one is more on the offensive of  
22 pushing certain things than others, but I think, for  
23 example, if you look at the amount of nutrients we  
24 remove per pound of fish no other facility is even  
25 closer internationally to doing what we're doing.

1 It's beyond other permitted facilities in the U.S. by  
2 far. So in this case, I think what we are doing is  
3 trying to set a new standard in the industry saying  
4 when these farms get bigger you need to get cleaner.  
5 And that's -- I can't really speak to the permitting  
6 system in the U.S. exactly where they're going to be  
7 in the future, but what I can say is a lot of the  
8 applications we have reviewed -- actually permits we  
9 have reviewed don't even list nitrogen and  
10 phosphorus, so I think, you know, this is going to  
11 become more and more important in the future and we  
12 have said clearly for the State of Maine set strict  
13 standards but be predictable, that's what businesses  
14 need.

15 AUDIENCE MEMBER: (Bob Adler.) So can you  
16 speak then to like the Whole Foods --

17 MR. HEIM: Yup.

18 AUDIENCE MEMBER: (Bob Adler.) -- are they  
19 setting standards for nitrogen that regulation is  
20 not?

21 MR. HEIM: So the Whole Foods has standards  
22 that they set to have other certification agencies  
23 also like BAP, ACS, ACME, all of these are  
24 certification standards in the market that is driving  
25 standards. They differ. Some can have very specific

1 requirements, for example, to feed, others cover that  
2 and perhaps other things like buyer security  
3 procedures, other things that relate to the  
4 sustainability of your production. I think consumer  
5 sort of trends and demands and expectations feed into  
6 that. And I think also some producers feed into that  
7 that really want to see standards in the market  
8 develop. We're trying to do that in a few areas.  
9 And then you have also of course producers who don't  
10 want to do that, so you'll probably find a whole  
11 range in the industry. So we certainly do look --  
12 monitor very closely all of the trends in the market.  
13 For example, one of the big differences for us as a  
14 Norwegian company coming here is the question of GMO.  
15 I mean, GMOs aren't used in feeds back home. Here  
16 it's a big issue, so certainly there is a difference  
17 between markets as well that are really important to  
18 know and understand, so.

19 AUDIENCE MEMBER: (Bob Adler.) What about  
20 the insurance industry and its willingness to insure  
21 you?

22 MR. HEIM: Yeah. So all of our facilities  
23 are insured to put it that way. So I think the issue  
24 of insurance it's more difficult for start-up  
25 companies without any track record to get the best

1 coverage in the market, they will struggle more.  
2 Established players who have facilities and  
3 operations will have a significant benefit in terms,  
4 again, like you say it's a question of risk, can they  
5 operate these facilities, do they have the track  
6 record as showing that, for example, they have the  
7 environmental profile in order in terms of the  
8 authorities and everything. All of these things they  
9 will do in a risk review with the company. At the  
10 table is this, like you said, companies who basically  
11 have their act together have a fairly good chance of  
12 getting a decent cover, companies who do not will  
13 struggle.

14 AUDIENCE MEMBER: (Bob Adler.) And you have  
15 been perceived as a company who has its act together  
16 in the industry?

17 MR. HEIM: All of our farms are insured,  
18 yes.

19 AUDIENCE MEMBER: (Bob Adler.) Okay. Thank  
20 you.

21 (Applause.)

22 AUDIENCE MEMBER: Good evening. My name is  
23 Ethan Dubrow. I live in Northport and my question is  
24 also for Mr. Heim. It picks up on the last question  
25 that was asked perhaps, maybe not. But in looking at

1 the presentation tonight on slide number 76 that  
2 showed the watershed area on the McDonald Morrissey  
3 slides. I live well within that and I have a drilled  
4 well and my question is that on slide number 74 it  
5 said that the water usage was not anticipated to  
6 influence the use of domestic wells in the  
7 neighboring areas. Great. But if it does, and this  
8 is, and I don't know if this is an action plan  
9 question or an insurance question or just a question  
10 for Mr. Heim, will Nordic Aquafarms pay to connect us  
11 to a city water supply if our wells become unusable?

12 MR. HEIM: Yeah, I think it's a fair  
13 question. Number one, with continuous monitoring we  
14 will see every small change in the aquifer on an  
15 ongoing basis. So we -- if we saw any kind of  
16 negative change that goes beyond what all of the  
17 modeling and testing we've done now, we would know  
18 that very early on if there is slightest changes. So  
19 what options do we have? Number one, our systems are  
20 configured to operate on different salinities, so we  
21 can regulate the fresh water use in our facility,  
22 that's one thing, so we can respond to a situation if  
23 necessary. Secondary, if you should have a worst  
24 case scenario like you're asking me about the  
25 question is yes -- the answer is yes.

1 AUDIENCE MEMBER: (Ethan Dubrow.) The  
2 answer is yes, Nordic Aquafarms --

3 MR. HEIM: We will stand up for our  
4 neighbors.

5 AUDIENCE MEMBER: (Ethan Dubrow.) You will?

6 MR. HEIM: We always have and we always  
7 will.

8 AUDIENCE MEMBER: (Ethan Dubrow.) So if our  
9 water supplies becomes unusable you will connect us  
10 to another water supply?

11 MR. HEIM: We will make sure have you a  
12 solution, yes.

13 AUDIENCE MEMBER: (Ethan Dubrow.) Okay.  
14 Thank you.

15 MR. HEIM: Yes, we will make sure of it.

16 (Applause.)

17 MR. WOODWARD: We are running short on time,  
18 so we will address the three people that are in line  
19 and there will be no additional people lined up for  
20 questions so that we can finish near the hour of 9.  
21 Thank you.

22 AUDIENCE MEMBER: I'm Natalie Charles and I  
23 live in Belfast. I haven't heard any answers to  
24 questions about fish pheromones and kairomones, which  
25 have been found to have a profound effect on the



1 behavior of wild salmon, lobster, sea lice and other  
2 organisms and I'm hoping that you can address this  
3 with respect to the discharge whether -- or is any of  
4 that going to get out?

5 MR. HEIM: I believe we have one of the  
6 leading experts in the U.S. here today; is that  
7 correct?

8 MS. HAMLIN: Hi. Heather Hamlin, so I'm an  
9 endocrinologist dealing with marine species and so I  
10 guess I'm not quite understanding your question. So  
11 what do you -- what do you think pheromones and  
12 kairomones from salmon from this facility will  
13 impact?

14 AUDIENCE MEMBER: (Natalie Charles.) It can  
15 change the behavior. It can change like reproduction  
16 and make -- I forget specifically, but it mixes them  
17 up and they just don't function.

18 MS. HAMLIN: Yeah, so in this particular  
19 case, so these are things that are present in all  
20 different fish in all different species, et cetera,  
21 so there is really no evidence that these particular  
22 pheromones/kairomones, anything from this released  
23 from the facility will impact other fish or behaviors  
24 in a negative way. Yeah, so I am happy to try and  
25 provide for you research and so -- peer reviewed

1 research that basically -- they're review papers in  
2 essence that will explain that this really shouldn't  
3 be an issue with this. So some of those things  
4 you're talking about can impact potentially other  
5 things, but they tend to be in much higher  
6 concentrations, so I personally would have no concern  
7 that this would be an issue in that regard and I am a  
8 reproductive endocrinologist, so, yeah. Yup.

9 AUDIENCE MEMBER: (Natalie Charles.) All  
10 right. I'm not convinced, but thank you.

11 MS. HAMLIN: Yeah, you know, if you want to  
12 email me, I'm happy to talk to you and I'm happy to  
13 send you a whole bunch of literature.

14 AUDIENCE MEMBER: (Natalie Charles.) Okay.

15 MR. HAMLIN: Yup.

16 (Applause.)

17 AUDIENCE MEMBER: Good evening. My name is  
18 Shane Flynn. I'm from Camden. I may be a little bit  
19 further away than most people here, but I just wanted  
20 to make a couple of comments and, well, one comment.  
21 Two of my questions were answered in the last few  
22 minutes. But they -- so I will ask a question with  
23 regard to water supply going forward, but before I do  
24 that I have had some experience with site location in  
25 the past. I have basically had a number of them

1 including two that are in this area, one in Belfast  
2 and one in Northport, and I'd just like to say that  
3 when we came here years ago a company that I worked  
4 for the people of Belfast were very open arms to us.  
5 And I know that this is a very large project for  
6 people here in Belfast and also in Northport and what  
7 I would like to say is I'd like to compliment the  
8 people of this community who were wonderful neighbors  
9 to us in the past and are doing what appears to be a  
10 really good job and asking the correct questions  
11 going through the type of diligence they should go  
12 through and I am sure and I'm confident that wherever  
13 things go that Nordic Aquafarms will have very good  
14 neighbors and people that are supportive as long as  
15 transparency exists, which I think it does.

16           With regards to the water supply and I know  
17 that one question was just answered for a neighbor.  
18 I mean, climates are changing and will continue to  
19 change as it always has and, you know, from the  
20 little bit that I remember on looking at this a few  
21 years back I think it's going to become wetter and  
22 warmer in this part of the world, at least that's  
23 what they think, who knows. So the aquifer will  
24 probably remain about where it is today in terms of  
25 how it recharges, but if it doesn't recharge, if for

1 whatever reason it's depleted significantly, does the  
2 company have plans to address that and, you know,  
3 what is the alternative? You talked about, you know,  
4 increasing the salinity and I'd like to understand  
5 that a little more.

6           But before I finish, I'd just also like to  
7 make one comment and that is people asked -- someone  
8 asked with regard to Delaware and why companies  
9 register in Delaware and I am not a corporate lawyer,  
10 thank God, but I have a lot of experience in Delaware  
11 and a lot of experience in that particular field and  
12 the main reason that people register there there is a  
13 small fee, fees go to this state, whatever state, you  
14 know, I think it's changed a little bit, but about 95  
15 percent of companies register in some fashion in  
16 Delaware, that's declined a little bit in more recent  
17 years, and the reason they do it is not to avoid tax.  
18 It has nothing to do with tax. The taxes would be  
19 the same. It's done for two reasons generally, one,  
20 that Delaware has a Chancery Court. There are very  
21 few of them in the country where they deal with  
22 business law and they're able to address the law very  
23 efficiently and quickly as well. There is a ton of  
24 precedence that exists there and that's why companies  
25 like it. And very importantly, investors demand it

1 in most cases. They want to have companies that are  
2 registered there because in case there are questions  
3 of law they know that they will be dealt with in a  
4 place where it can be dealt with effectively and  
5 there is a lot of law. So thank you.

6 MR. HEIM: Thank you.

7 (Applause.)

8 MR. HEIM: So the question was related to  
9 fresh water and conceivably with the climate change  
10 situation we're seeing. In 20-30 years conceivably  
11 you could envision droughts even though many of the  
12 northern regions are expected to receive probably  
13 just as much, if not more, water. A project like us  
14 have of course our investors are asking the same  
15 question, what do you do if your fresh water  
16 disappears? And of course the way we approach this  
17 is basically a number of different avenues, but the  
18 two most resilient ones is, number one, the ability  
19 to adjust salinity in the system. The second one is  
20 desalination systems. So both are possible to  
21 implement on the sites. We have an overview of the  
22 options and the technologies, so these will be  
23 back-up solutions for the future if we should get  
24 into a situation like that. So these are strategies  
25 that we are required think about also, first of all,

1 from the environmental perspective for Belfast and  
2 also the operation and the responsibility we have for  
3 our investors. So the bottom line is we really do  
4 have solutions to deal with these scenarios.

5 AUDIENCE MEMBER: Hi. My name is Linda  
6 O'Connor and I've wanted to live in Belfast for about  
7 30 years. I moved in last June. I've lived in  
8 different parts of the state, mostly near the coast,  
9 and I arrived just in time for you all to be  
10 undertaking a 40 acre project the size of Bath Iron  
11 Works in this lovely town. The comparison to the  
12 chicken industry that was along the river and by the  
13 bay and there were other industries there to ship --  
14 the Shipyard coming into what was already an  
15 industrial site and doing what its done, Front Street  
16 has done a beautiful job, to the pristine area that  
17 you all have chosen instead of choosing something  
18 that is closer to the water so you don't need long  
19 pipes and that industry that's already gone left a  
20 legacy in the silt in the bay that has often caused a  
21 lot of concern about any sort of dredging with the  
22 mercury and other things. So our bay and your pipe,  
23 okay, and the effluence and I haven't heard anything  
24 about the water temperature and the fact of the -- I  
25 mean, millions of gallons become trillions of gallons

1 over time and the bay is pretty shallow overall and  
2 what studies have you done about what putting all  
3 that in the bay and the warmth of it and what's going  
4 to happen to the lobster industry and other things  
5 that we depend on.

6 MS. RANSOM: I'll try to answer that, that's  
7 a lot of questions wrapped into one. I am not sure  
8 if you've attended any of the previous meetings, have  
9 you?

10 AUDIENCE MEMBER: (Linda O'Connor.) Two or  
11 three.

12 MS. RANSOM: Okay. So then you know the  
13 majority of the information we provided relative to  
14 discharge into the bay and the modeling that was done  
15 and the sampling that was done would be in the MEPDES  
16 application that has been spoken about at the  
17 previous meetings, so a lot of that information is  
18 online if you'd like to look at it. Our actual  
19 MEPDES application is available through the MaineDEP  
20 special projects website and I believe also the City  
21 of Belfast has that application uploaded on their  
22 page or link to it on their page as well. But --

23 AUDIENCE MEMBER: (Linda O'Connor.) That  
24 addresses temperature? Actual -- the model of the  
25 temperature change?

1 MS. RANSOM: The temperature of the  
2 discharge is included in there as well. I think just  
3 a real simple -- since we've kind of gone past our  
4 time limit, a simple way to look at this though is  
5 their discharge while it sounds like a big number is  
6 going into a bay that has approximately 10 trillion  
7 gallons of water in it, so that's not to say that  
8 there is not things you can measure of their  
9 discharge in that water, but it's a small amount  
10 going into a large amount. It's like a drop of water  
11 in a 5 gallon bucket. You know, I'm trying to put it  
12 into sort of tangible things you can picture, but you  
13 wouldn't expect if I took a dropper of hot water and  
14 dropped it into a 5 gallon bucket of cold water that  
15 you'd see an appreciable difference and so that's  
16 kind of, I guess, a way of thinking about it. I'm  
17 not sure I'm doing a great job of answering your  
18 question, but I think --

19 AUDIENCE MEMBER: (Linda O'Connor.) So why  
20 not just take care of it all on-site and put out  
21 whatever discharge as being quality water rather than  
22 putting anything called effluent into our bay?

23 MS. RANSOM: Because the best available  
24 treatment technology that they are using to treat  
25 this water does do that for the majority of compounds



1 that you -- that the treatment technology exists. So  
2 they are removing 99 percent of everything other than  
3 nitrogen and 85 percent of the nitrogen that is  
4 generated at the facility before that water is  
5 discharged. There are components that they are  
6 discharging to the bay that will be at lower  
7 concentration than what the bay contains right now,  
8 so they have got state-of-the-art wastewater  
9 treatment. I don't think they can get better than  
10 that with what's available on the market right now.  
11 That doesn't mean they can't keep improving as  
12 systems improve, but they're, you know, the  
13 information is there in that application to show you  
14 the extent that they're going through to treat that  
15 water before it's released.

16 AUDIENCE MEMBER: (Linda O'Connor.) The  
17 last thing I want to say is congratulations for  
18 getting our town to rezone a residential area on your  
19 behalf. Thank you.

20 AUDIENCE MEMBER: I know.

21 MR. WOODWARD: And make it a question.

22 AUDIENCE MEMBER: A question, okay. My  
23 question is -- it's because I really don't want  
24 Belfast to be left holding the bag, so my question is  
25 that we know that many corporations now do fail and

1 often leave the remnants of their companies in the  
2 towns with towns either having to pick up and pay --  
3 pay for the remediation or what else. And I know  
4 that I -- we talked about this and Deloitte report  
5 which the city commission noted that many of these  
6 corporations are not going to succeed. They are  
7 going to fail. And so what -- and we've talked about  
8 this before, so, Erik, I think we asked you what  
9 happens if you fail and I thought what I heard you  
10 say was not very comforting. It was that you'll  
11 sell -- you'll sell your -- the property and what I  
12 see then -- and you said it will leave Belfast a  
13 great infrastructure. What I see then happening is  
14 that you have framed -- Nordic Aquafarms is so far  
15 ahead in this technology is that we're going to end  
16 up being left with some second rate aquaculture farm  
17 having to move into Belfast, so that's -- so help me  
18 out -- I don't understand that -- I don't -- I think  
19 we would feel very reassured if you would consider a  
20 surety, a surety bond, and I believe we have asked  
21 you about that just so Belfast doesn't get held  
22 holding the bag. And you've said, well, that's  
23 unreasonable, but, you know, I think that that would  
24 give many of us a lot more confidence if that was  
25 something you considered.

1           And the final thing is I would like to know  
2 that you won't come after Belfast to say we need more  
3 money from local government or we might move because  
4 we have a lot of corporations in Maine, including at  
5 Bath Iron Works, despite all of the infrastructure  
6 that the corporation says we're going to move if the  
7 city doesn't give us more money and the state doesn't  
8 give us more money. So can we have assurances that  
9 you are not going to let us -- leave us just holding  
10 the bag.

11           MR. HEIM: Well, first of all, I think  
12 they're good questions and like you said we talked  
13 about them before. First of all, I think it's  
14 important to just restate that this is a multi-phased  
15 project, so it's not like we are developing this  
16 whole site with a complete project, so it's an  
17 opportunity for the community to follow the project  
18 through its stages and obviously -- and you're  
19 thinking about the worst case scenarios --

20           AUDIENCE MEMBER: Of course I am.

21           MR. HEIM: -- right? And so our investors  
22 would be foolish to continue building to put it that  
23 way, so, yeah, I think it's highly self-regulating,  
24 this whole issue. But, again, this is why it's a  
25 multi-phased project to also build our confidence

1 with the community to show the community how this  
2 works and that we deliver on our permit thresholds  
3 every step of the way. That being said, you know,  
4 the benefit of also having strong shareholders  
5 they're long-term. Look at this project. It's a  
6 five to six year investment activity before they see  
7 any revenue. They are long-term in their thinking.  
8 And, you know, if challenges come up, they're not  
9 going to just leave their project and go because  
10 they're already invested and invested so much  
11 interest in this community as a part of this  
12 community. So I think when you look at a project  
13 like this I have to say, again, it's a long-term  
14 effort that's going to go into it. And the worst  
15 case scenario is that you brought up, yeah, you asked  
16 me what if we go out of business and I think my  
17 answer was is that there is a highly valuable piece  
18 of infrastructure that somebody could probably pick  
19 up very cheap or should be a steal, right.

20           So in terms of your question on the other  
21 and so the only expectation we have is to be treated  
22 fairly in Maine in comparison to other businesses, so  
23 that's what we're asking. So, you know, and there is  
24 a dialogue we can have with the authorities and  
25 communities about what that is and so that's sort of

1 where we're coming from at least treat us fair, don't  
2 put, you know, a lot of demands on us that you  
3 wouldn't put on other businesses.

4 AUDIENCE MEMBER: Well, it's an unusual  
5 business though.

6 MR. HEIM: Yeah, well, I'm sure there is  
7 also a facility being built in Bucksport and other  
8 places as well, if you pose things on us and not the  
9 other one, I think that would be pretty unfair. So  
10 I -- I think it's a matter of maybe coming to an  
11 agreement, you know, what standard should there be in  
12 Maine for --

13 AUDIENCE MEMBER: Can you make a commitment  
14 not to come back to the city or the state for more  
15 money should things look bad for you?

16 MR. HEIM: Well, I don't think there is any  
17 source in the money in the state or city.

18 AUDIENCE MEMBER: I hate to tell you --

19 (Laughter.)

20 (Applause.)

21 AUDIENCE MEMBER: I hate to tell you that  
22 General Dynamics makes out pretty well.

23 MR. HEIM: Okay. I'm not really --

24 AUDIENCE MEMBER: General Dynamics makes out  
25 pretty well.

1 MR. HEIM: Well, you know, our company has  
2 never gone and asked for money if we needed money.

3 AUDIENCE MEMBER: So I'll take that as a  
4 commitment.

5 MR. HEIM: What we have done is generally if  
6 there are incentives available for businesses in the  
7 state like the Pine Tree Program in Maine, we apply  
8 for those just like any other business, but I'm not  
9 familiar with a practice with a company needing money  
10 going to the state and say we need money because we  
11 don't have it.

12 AUDIENCE MEMBER: General Dynamics.

13 MR. HEIM: Oh, really? I don't know the  
14 case. That's new to me, but I don't really see that  
15 scenario happening, no.

16 AUDIENCE MEMBER: So you would accept TIFs  
17 and things like that though?

18 MR. HEIM: Well, we can probably provide  
19 free visits and so on, so.

20 MR. WOODWARD: Thank you.

21 (Applause.)

22 MR. WOODWARD: This concludes the question  
23 and answer period. And I tell you, I want to thank  
24 everyone who asked the thoughtful questions. We were  
25 able to hear them, they were able to be answered. It

1 was very respectful. Thank you very much and have a  
2 good evening.

3 (Applause.)

4 (Meeting concluded at 9:16 p.m.)

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C E R T I F I C A T E

I, Robin J. Dostie, a Court Reporter and  
Notary Public within and for the State of Maine, do  
hereby certify that the foregoing is a true and  
accurate transcript of the proceedings as taken by me  
by means of stenograph,

and I have signed:

\_\_\_\_\_

Court Reporter/Notary Public

My Commission Expires: February 6, 2026

DATED: April 9, 2019



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