Photo & Video Evidence of AquaBounty Former Worker Testimony

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SUMMARY

This document outlines the photo and video evidence provided by former AquaBounty employee, Braydon Humphrey, and referred to in the <u>AquaBounty Exposed</u> <u>Report</u>. The 113 pieces of evidence provided here are meant to complement and reinforce the testimony provided by Braydon that documents the hazardous, toxicological, and dangerous conditions he witnessed during his employment with AquaBounty at the Indiana farm.

The photo and video evidence is categorized into five sections: (1) Worker Safety Violations, (2) Product Quality & Consumer Health Risks, (3) Containment Breaches & Effluent Water Pollution, (4) Animal Abuse, and (5) Other.

In the Workplace Hazards section, there is overwhelming evidence of Aquabounty's hazardous workplace conditions including photos of improper storage of chemicals, unsafe set-up and usage of equipment, and many more worker safety violations.

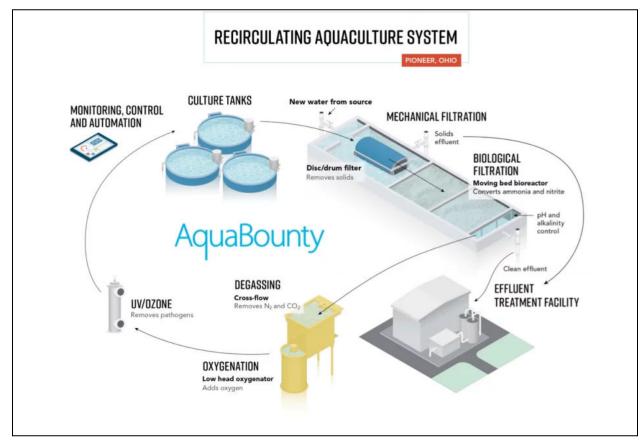
The Product Quality & Consumer Health section displays rampant fiberglass particles, toxicological water conditions, willingness to use antibiotics, mold, and unsanitary practices. It also provides evidence of a manager instructing employees to obscure the truth to visitors around the amount of fish mortalities.

The Containment Breaches & Effluent Water Pollution section reveals the immense amount of leaks and spills of dirty water and feed, numerous violations of containment procedures/regulation and environmental management, and biosecurity issues of pests such as maggots, frogs, rats, etc.

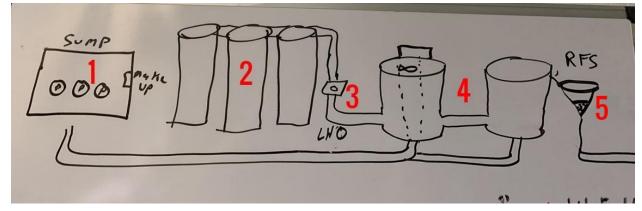
The Animal Abuse section displays the inhumane conditions within Aquabounty's facility with the countless photos of high mortalities, fish lesions, injuries, and physiological deformities.

The Other section displays a page from the spiral-bound notebook that included questionable handwritten notes about the former worker that were felt as retaliatory.

Background on AquaBounty's Recirculating Aquaculture System (RAS)



Graphic from AquaBounty's website



Drawing by Braydon describing process of water recirculating through the system at the Indiana farm

- 1. Sump a reservoir of water with three pumps, which houses one large drum filter. Also has a section of replenishing inlet of clean water ("makeup" water) to clear out foul water and help flush tanks.
- 2. Three towers that are roughly three stories tall in size where biological chemical treatment of water happens. Lots of delamination of fiberglass from these vessels causes contamination in the tanks. Degassing of CO2 happens here as well.

- 3. Low Head Oxygenator (LHO) Uses physics to get the most efficient use of liquid oxygen mixing driven by gravity. There are emergency backup oxygen systems in tanks but LHO is the main source.
- 4. Fish Tanks with a Side/Overflow box that would eventually return back to Sump. There is a mortality lift (pneumatics to lift the grate and create suction) at the bottom that would allow removing mortalities, but FDA said it cannot be used because of containment risks because fish could go through the side box. However, it was used on occasion to remove morts, as pulling out large numbers of morts with nets was difficult.
- 5. Radial Flow Settler (RFS) cone shaped, removes contaminated solids (fish excrement). Some water also exits the system through here. Otherwise, all water from the tanks returns to the Sump. Some were tilted off their originally installed axis, the full water weight of one of these is a huge accident waiting to happen.

Names & Roles of Managers from Staff Chat at AquaBounty Farms Indiana

The following list of people were managers and held the following Roles during the former workers employment. They can be identified within the images of staff chats and documents included below.

- Alejandro Rojas Chief Operating Officer, AquaBounty Technologies
- Pete Bowyer Farm Manager, AquaBounty Farms Indiana
- Tess E. Bowyer Hatcheries and Fingerling Manager, AquaBounty Farms Indiana
- Javier Main Production Manager, AquaBounty Farms Indiana
- Jimmy Main Production Manager, AquaBounty Farms Indiana
- Joseph Shift Lead Supervisor, AquaBounty Farms Indiana
- Jake Clawson Shift Lead Supervisor, AquaBounty Farms Indiana
- Lucas (Luke) Bradburn Shift Lead Supervisor, AquaBounty Farms Indiana

WORKER SAFETY VIOLATIONS

#	Image/Video	Description
1	CE THE THE THE THE THE THE THE THE THE TH	Improper hydrochloric acid (HCI) storage. Leakage. Barrels cannot be repurposed and must be returned to the supplier when used. Some barrels were repurposed to store nets.







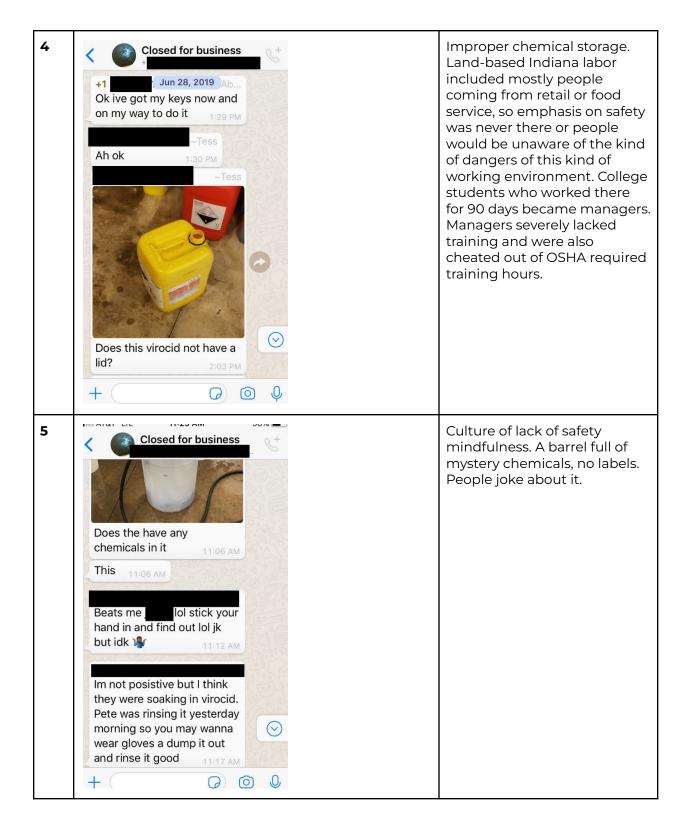
Hydrochloric acid barrels not stored safely, leaking of chemicals. Yellow/green puddle of acid near the barrel openings. Pictures were taken in April 2019. Staff not properly trained in safety procedures and no SDS was on site until after Dec. 2019

Hydrochloric acid is highly corrosive and may result in severe burns/ulcers if in contact with skin or ingested. Short-term inhalation of HCl may cause inflammation and irritation in the respiratory tract, and lead to pulmonary edema, swelling and spasm of the throat, and suffocation. Material is extremely destructive to tissue of the mucous membranes.

(Hydrochloric acid leak incidents documented here occurred in December 2019)

3 ∦ վ∏⊧ **4**% ավ 93% **≣** 08:50 AquaBounty Farms In... Q Pete B You both joined December 30th, 2019 Hello, I was asked to come look at the hcl vapor in grow out due to my classes in air quality. I will say that the fogging could be extremely bad to human health being inhaled depending on the ppm and exposure duration. I attached a file with some of the risk and law requirements. I mainly am bring it up due to if someone was to be affected by the vapor it could cause life long affects as well as a major issue for the company if someone got ill due to it. With that said we may need to look into air quality equipment for future utilisation of HCL or other chemicals as well as to give people peace of mind. File from Android 221KB pdf Pete B 8:29 PM Hello Message Pete B

This is the 2nd consecutive night where we had concentrated hydrochloric acid become aerosolized. My coworker decided to make the event more official by communicating with my boss directly in writing.



#farm

9:49 AM

Just a reminder, if you are going to put something in any container it needs to be labeled with what is in it. This bottle is labeled 70% alcohol when someone put paint thinner in it.

Another example of safety being a lack of priority and not providing proper training of employees. Example: being surprised by paint thinner wrongly labeled as alcohol.

7



Overloaded outlet with multiple extension cords used together. Water in the tank behind and above. Safety is obviously not a priority. Possibly lead to injuries and fire hazard.

Main production building on a support beam. No cover on the outlet. The outlet is burnt. Vulnerable to water splashes. Fire hazard

9



Tank of fish on left. Platform on right ad hoc in-house construction mesh metal underfoot that bent, buckled, and rusted. The metal railing was cut and left exposed to some extremely sharp edges. Accessibility issues, hard to walk through. Not safety tested.

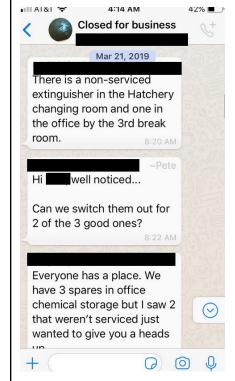


10	Platform (same from photo evidence #9) post unsecured to the floor. Not bolted down on half of the contact plate.
11	Platform post's contact plate bolted over another support beam which held up the walkways around a main production tank
12	Extremely bald tires on a forklift. No training on forklifts for 10 months+. No servicing of the vehicles. Propane leaks. Videos of spinning tires that could lead to an accident or punctured tank. Forks left high up in the air with no operators behind the wheel.

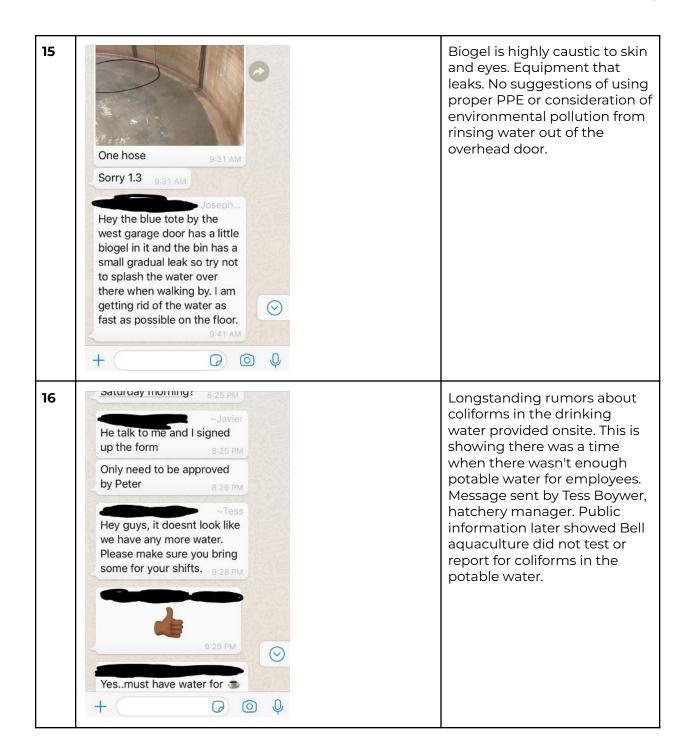


Expired Fire Extinguishers. Picture taken December 2018. Fire Extinguishers not replaced, were left over from purchase of Bell Aquaculture facility. No new ones purchased for budgeting reasons until the following quarter after alerting supervisors.

14



Evidence of non-serviced fire extinguishers (that expired in March 2014). Originally observed by staff in December 2018. Huge fire risk with the type of chemicals, electricals, buildings, and general equipment onsite.





Worker safety/OSHA relevant. People servicing these lift stations without confined space training. Permit required for entry.

A safety manager [from USPS] told me the OSHA regulates 64 hours of training before being expected to work in confined spaces. We did not comply with that requirement as shown in videos of workers cleaning main production tanks.

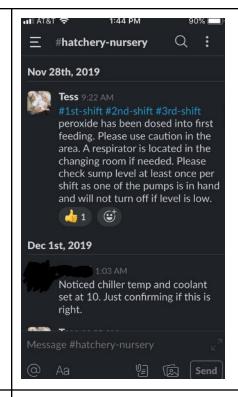
There was no safety manager on site. No OSHA competent person. No spill response task force. No emergency action plan.

18



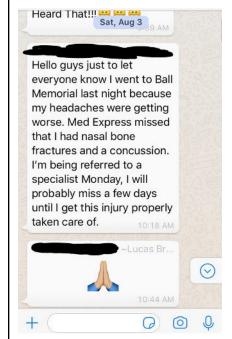
OSHA related. Moving platforms for fish transfers. No training for anyone on moving platforms. Hard hats are pictured but no harness or fall arrest systems in place.





Just an example of this site being generally hazardous in a highly industrial and scientific sense. No one at the farm received extended chemical training beyond maybe a simple powerpoint-style handout about identifying chemical warning labels.

22



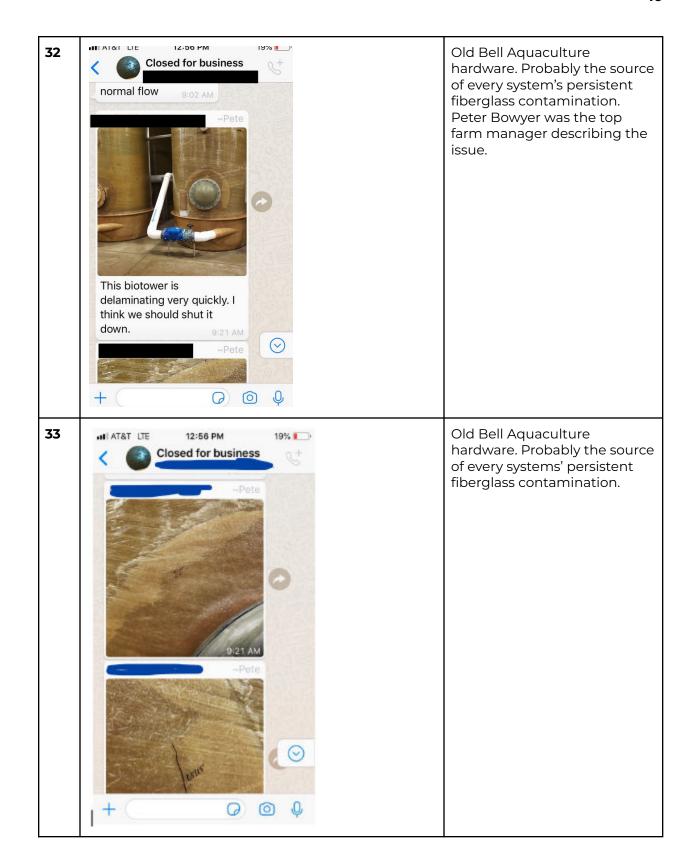
It was a running joke that one employee was dangerous to work for, a hard hat was placed below a note "must wear when working with Joe!" He eventually allowed a 4" wide hose snap back and hit this coworker in the nose. No accident was recorded where we publicly advertised (in the main office on a white board) the number of injuries. Joe was then put into a supervisor position after only working there for 3 months. Most employers even require "near misses" to be reported.

23	we have one in the lab. 3:55 PM It's all good I'm already out here thanks though. I'm hoofing in the rain cuz it's hard to be in the Chevy without being able to put the windows down. I was getting choked out. 685-694 gpm 4:17 PM Thank you, i will write it in 4:19 PM	The Chevy was a corporate vehicle on site that workers occasionally needed to traverse over the entire property. This worker describes the exhaust from the truck seeping into the interior and causing a fairly severe physical reaction.
24	Video https://drive.google.com/file/d/1F0v276SN-XtdF71Ffjx E6UW8mBxuqFGK/view?usp=sharing	Worker shown spraying caustic chemical BioGel in a tank recently emptied of fish. The tank is considered a confined space and bodily injuries from improper chemical use/storage did occur.
25	Video https://drive.google.com/file/d/1XThflHEHAyG0-M4Fas-F2vKUkNEAloWr/view?usp=sharing	Here we have water from a bio tower in the main production area whose water is falling past an installed curtain and onto concrete and high voltage power outlets colored red and gray.
26	Video https://drive.google.com/file/d/10DoS_ktmnX4796Ht OVNEMbkXtIETP8Qk/view?usp=sharing	This is a viewing window for one of the bio towers in the main production building. The seal of the window against the fiberglass is broken, pressure is forcing a stream of water to jet past a bolt connection. Aging infrastructure, worker safety issue.
27	Video https://drive.google.com/file/d/1UhXqbiQwDEFG-s50 2MEzUOLE4xwiaylw/view?usp=sharing	Another sealing issue of a main production biotower.

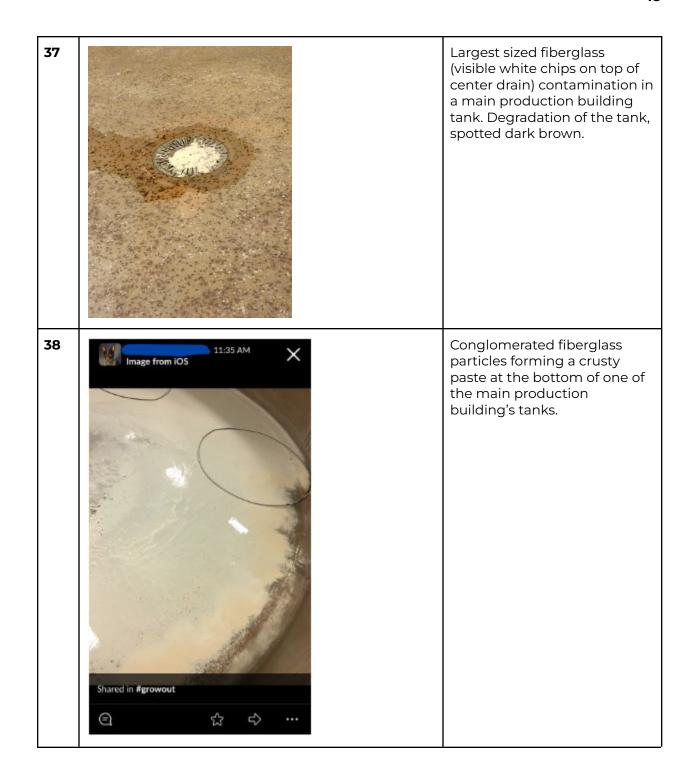
28	Video https://drive.google.com/file/d/13W_MmCTaZPC3JKR HWZo2gu1vet1Le2qp/view?usp=sharing	Examples of relatively new workers put to work in dangerous confined spaces, with serious threat of engulfment without proper training or oversight. They also crowd the fish to remove from the tank, but in the process some fish die from the stress.
29	Video https://drive.google.com/file/d/1bM3rlOvt3ojbMtli8rp 6Ffz2OllINNNO/view?usp=sharing	Hydrochloric acid incident.
30	Video https://drive.google.com/file/d/1HsN-nHff3NRfLauT_S gv_XTpT2Ec4WR9/view?usp=sharing	Mechanical integrity. Heavy machinery servicing, bald tires, unsafe connections, employee training.
31	Video https://drive.google.com/file/d/16AW8sPeHgnDLvRYXNMPbOWhdh_L1jRRB/view?usp=sharing	This video shows the biotowers for a system in the main production building overflowing. Majority of the rearing hardware for the farm was left over from Bell. Just like the tanks and towers, these specific biotowers were in terrible condition and prone to dangerous malfunctions along with heavy delamination of the fiberglass material it was made out of.

PRODUCT QUALITY & CONSUMER HEALTH RISKS

#	Image/Video	Description
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34 Fiberglass particles have settled down in one of the tanks of the main production building. Persistent contamination due to the fact almost all hardware is the same from Bell Aquaculture. I am not a biologist, but this never sat right with me. I imagine the range of sizes for these particles is small enough to be a constant irritant to fish eyes, gills, intestinal, and skin. 35 Fiberglass contamination and untrained workers in a confined space. 36 Fiberglass contamination at the top of a main production tank's bio tower. Crusted over and required power washing. 'Frowny face' carved out to show clean surface distinction.



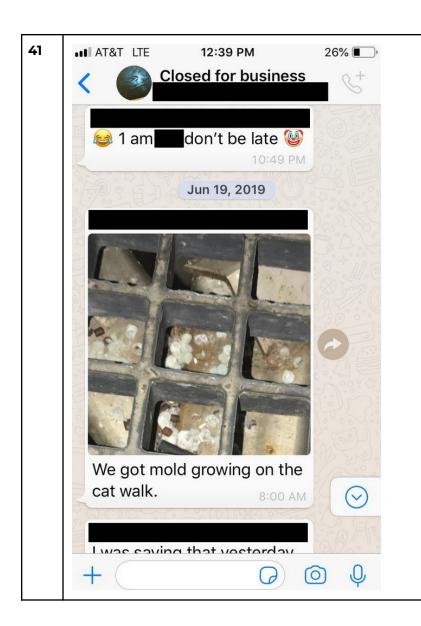


Abrupt change in water clarity from left to right. Fiberglass being the most likely contaminant

40



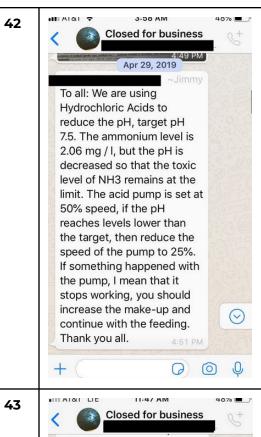
These are the drum filters of the main production system. They are designed to rotate in the sump water to filter out small particles and are then automatically sprayed down clean. Here we see fiberglass particles have re-conglomerated into a kind of paste that is so sticky that they required pressure washing which inevitably sent some of it back into the sump. Filter film should be translucent enough to see small individual squares, as pictured for some but not the vast majority.



Mold on the catwalk. The primary containment system is the net on the tank. Feed was hand scooped and tossed over the nets. Some pellets bounced out onto the floor, grates, and catwalks. There were mounds of wasted feed on the ground.

Feed wasted was apparently beneficial for cohort metrics according to bosses, when reviewing food conversion ratios. In a sense, it seemed to me that they were always playing with statistics, because they were also okay with a decent percent of every cohort having underperforming fish and being culled. It was somehow positive in a biomass-sense if fish died.

Aquaculture usually aims to have 1 lb of feed used per 1 lb of fish produced. Their feed conversion ratios might actually be a point of pride, one of the few things that go as well as advertised.

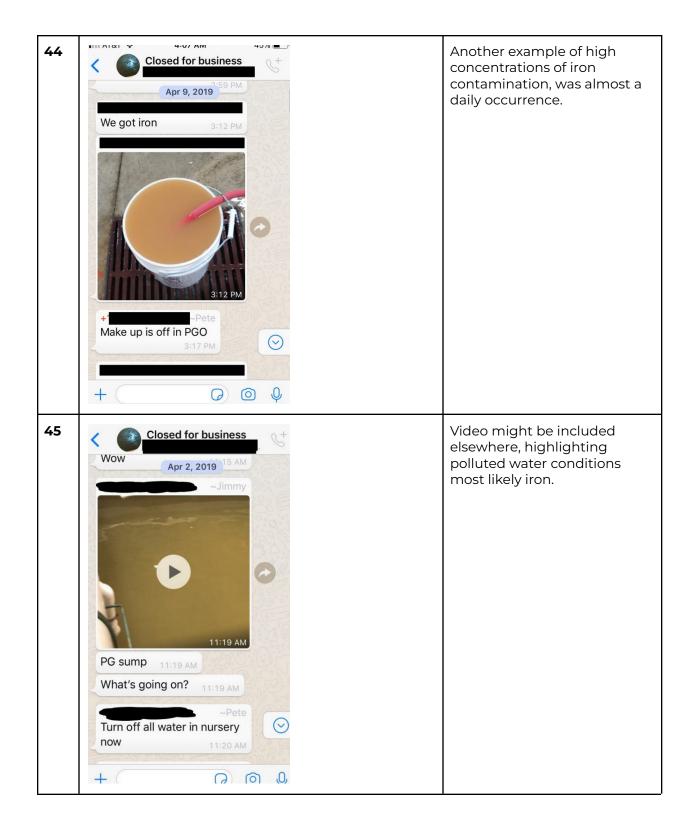


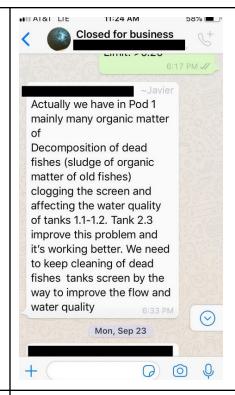
April 2019. Showing a manager discussing the use of hydrochloric acid. Evidence of harsh chemicals usage and that water quality demanded a somewhat extreme attempt to avoid toxic conditions for the fish.



Near daily occurrence of visibly high iron levels in well water. Toxic to fingerlings and detrimental to younger fish development.

Forward-looking statements in press releases mention a lack of heavy metals, iron is a heavy metal. Definitely not "clean enough to drink" as advertised in the press.

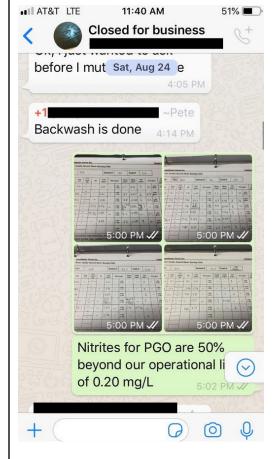




Fish swim around and occasionally dine on the rotting corpses of their relatives. When too much mortality happens, the systems can't handle the bodies and the water quality degrades accordingly.

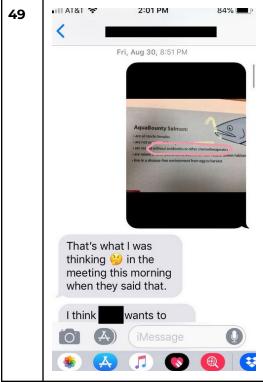
I try to remember that Aquabounty is marketing a consumable, so consumers won't find anything appetizing about 'old dead fish sludge.'

47



Nitrites are the second of three chemical drivers for the nitrification process, which is important to maintain in a recirculating aquatic system. Fish poop creates total ammonia nitrogen, bacteria break that down into nitrite, and other bacteria break nitrite down to nitrate. Ammonia is the most toxic to fish, nitrite is a little less so, and nitrate is comparatively much more tolerable. We always had issues with nitrite for the year I was onsite and handling the bulk of the water lab work. Here we can see the picture in the top left includes lab results for a system called Pre Grow Out. We were 50% beyond our own operational limit of the chemical, which negatively affected the animals in a number of ways including their respiration. Realize please that this limit is set in-house and we couldn't

even maintain it. The COO Alejandro Rojas (who had a veterinarian background) once discussed setting up an experiment where we would increase TAN or nitrite in a small system of fish until it purposefully killed them. Then, he said, we would truly know the amount of these noxious chemicals that they could handle. ∎I AT&T 🛜 3:58 AM 49% ■ 48 Lab results from a coworker. Total ammonia nitrogen and All Media 5/1/19, 11:32 AM nitrite are not only well above AquaBounty's internal limit, they are above the lab spectrometer's measuring range. Samples would need Pre-Grow out 50-75% dilution at times LHO (blue)-D.O.:99.1%10.0 mg/l which would then affect T: 14.1°C accuracy. pH:7.82 TAN: 3.16 (System message- "OVER MEASURING RANGE") Nitrate: 2.3 mg/l Nitrite: 0.457 (System message- "OVER MEASURING RANGE") TSS: 4 mg/l Alk. 232 mg/l WATER QUALITY LHO. 2



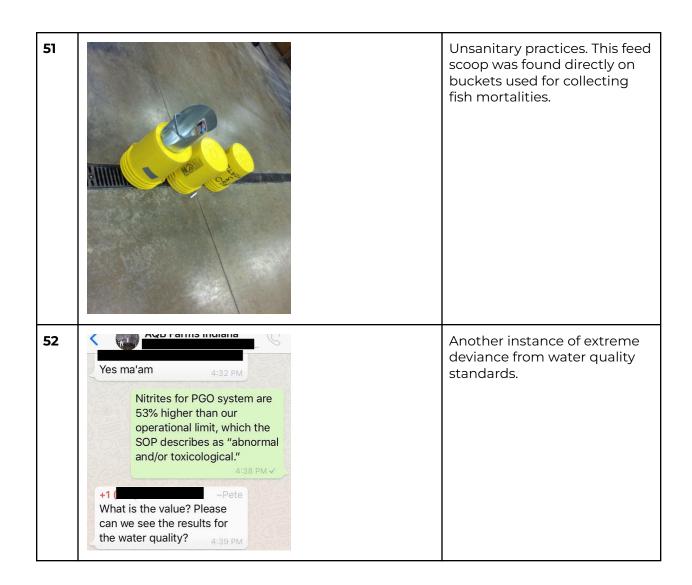
A meeting with high-level corporate employees where I and a coworker left feeling the same thing after they mentioned they would not be afraid of using antibiotics if they needed to. None were used to my knowledge while I was there. Another example of the company acting against the forward-looking press statements they've made.

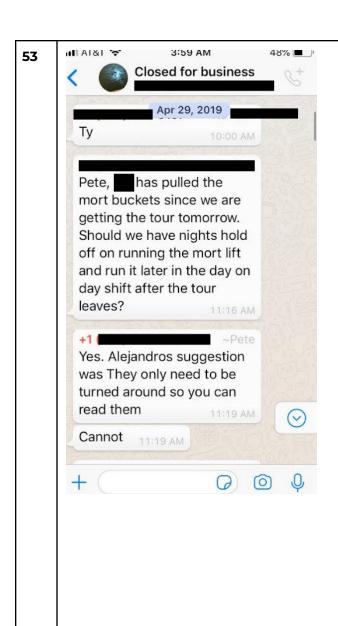
50



From left to right: Clear distilled water, yellow TAN samples, red Nitrite samples, and brown Nitrate samples.

Anyone who has done these standard Hach procedures could tell you these starkly visible concentrations (especially nitrite) are very high without even having the numbers from the spectrometer.





Peter Bowyer (Pete) was the farm manager during my time at AQB. He always loved to say we displayed "no fakery" at the farm but is shown here taking a cue from the COO (Alejandro Rojas) to obscure the normal conditions workers and animals would be subjected to on days without tours or guests.

Mort buckets refer to containers we used to keep collected mortalities (dead fish). Workers were told to put the label out of view to remove the possible shame of needing to admit how much death occurs in intensive aquaculture.

Mortality lift use is mentioned again, which was not approved by FDA regulation. To ask whether they should wait to use it is because they are mostly concerned with affecting water clarity for the tour. When removing morts, some corpses were so decomposed that their skin and meat would cause clouds of organic matter to recirculate through the system.

54 #water-quality Q Dec 4th, 2019 TAN in pod 1 is very high at 4.45. That puts our unionized at 0.085 with is above our limit of 0.06 Dec 5th, 2019 Braydon 7:33 PM 55

Sourced from the credibility of other workers, we again see lab results that are beyond our in-house limits of total ammonia nitrogen, even going further and contextualizing the specific noxious element of unionized ammonia being higher than ideal.

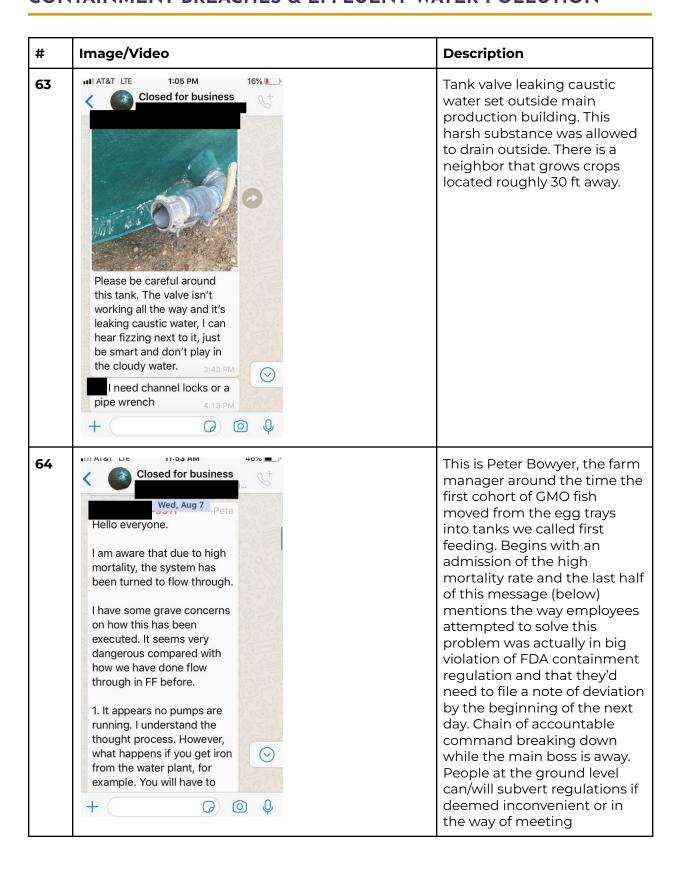
Disgusting conditions like this molded fish feed in a floor drain could be found in every building of the farm.

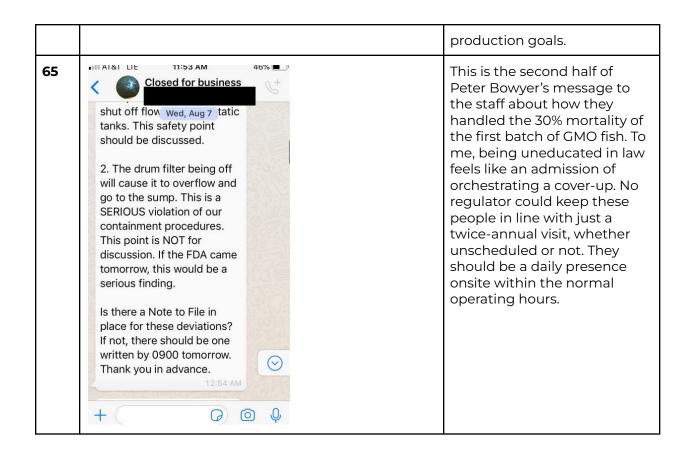
56 Video

https://drive.google.com/file/d/15FZGL3_UdnRDqTO0 Mlayr9TDPgsSMRhL/view?usp=sharing Horrible water quality for an active fish system. Iron was geographically in over abundance.

57	Video https://drive.google.com/file/d/1deEkAVFRCMd41jPW sCg24GcIAZmgF4-Y/view?usp=sharing	Workers sweeping fiberglass particles down into a drain of the main production tank, which due to the nature of recirculation design will still be present in the system after their attempts. No confined space training is given to any employees.
58	Video https://drive.google.com/file/d/1mFsPmMpKyti1dMR gyR1iloOrVDY8C6mi/view?usp=sharing	Rotating drum filter located in main production sump. The small square panels should be somewhat translucent but are instead caked with re-conglomerated fiberglass particles and therefore keep the filter from operating properly. The filter did capture these particles but cleaning them from the filter ultimately led to most of them being put back into the sump.
59	Video https://drive.google.com/file/d/1pccNHewx3EGCRzPl CsDHXBLIjof5cX0P/view?usp=sharing	Fiberglass particles floating on the surface of the water in the main production building.
60	Video https://drive.google.com/file/d/1YTska4jD8nWzdGT1P xamrklpEMzCCuXI/view?usp=sharing	The fish aimlessly swirling around a drain plate of a main production building tank are dead, removing the corpses is difficult so the festering meat and organs stay in the water where it is dined on by other fish and negatively impact water quality.
61	Video https://drive.google.com/file/d/1ddCkONt8s8LVa0Hz 0u4MbzxZEpDfSQzB/view?usp=sharing	Sump of the main production system is overflowing and the water quality is filled with contaminants.
62	Video https://drive.google.com/file/d/1fG1B-4HXxoNjea9sgV FHJGXG8by6155P/view?usp=sharing	Black mold rests above the water line in the main production sump. This typical water clarity is also in direct contention to what AQB shows on tours of the farm.

CONTAINMENT BREACHES & EFFLUENT WATER POLLUTION





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT We Protect Hoosiers and Our Environment. 100 N. Senate Avenue - Indianapolis, N 48204

(800) 451-6027 + (317) 232-8603 + www.idem.IN.gov

Michael Bracken Compliance Manager TCFI Bell SPE I, LLC 9885 West State Road 67 Redkey, Indiana 47373

May 15, 2017

Dear Mr. Bracken:

Re: Noncompliance Letter NPDES Permit No. IN0062669 TCFI Bell – Delaware Co.

Staff of the Indiana Department of Environmental Management (IDEM), Office of Water Quality, has reviewed the compliance status of the above cited facility for the period of January 2016 through March 2017. This review revealed violations of the facility's permit, as follows:

Part I. A. 1 of the permit sets forth the final effluent limitations and monitoring requirements applicable to the discharge from outfalls 001, 002 and 003.

Specifically, the submitted Discharge Monitoring Report(s) indicate your facility exceeded its limits for the following:

Outfall 001

Ammonia – September and October 2016 Dissolved Oxygen – May, June, July, September, and October 2016 Total Suspended Solids – October and November 2016

BOD - December 2016

Dissolved Oxygen - June and October 2016

Outfall 003

Dissolved Oxygen – May 2016 Total Suspended Solids – March 2016

The February 2017 DMR was a month late, and as of May 10, 2017 we have not received the March 2017 DMR which was due no later than April 28,

An Equal Opportunity Employer

Source:

https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=804 63907&dDocName=80463261&Rendition=web&allowInterrupt=1& noSaveAs=1

From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #80463261 to view the file.

This is a paper of noncompliance from the Indiana department of environmental management for **Bell Aquaculture**, the same site and most of the hardware you'll still find that makes up AquaBounty's farm. You can see a whole slew of water quality violations.



e all sections of this form and email it to Office of Water Quality, Compliar h completion of this report will satisfy the Office of Water Quality (OWQ) to on reporting requirements of your NPDES permit. To speak with some

itionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be sediately reported to the Emergency Response Section split response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

Facility Name	County	NPDES Permit Number
Aqua Bounty Farms	Delaware	IN0062669
Individual Reporting	Telephone Number	Reporting Date (month, day, year)
Peter Bowyer	919-748-9911	11/21/19

Date (month, day, year)	Outfall	Parameter	Permit Limit (Units/Daily/Weekly/Ave/Max/Min)	Monitored Value
10/10/19	001	Ammonia	1.7 mg/L permit average	1.78 mg/L
Date (month, day, year)	Outfall	Parameter	Permit Limit (Units/Daily/Weekly/Ave/Max/Min)	Monitored Value

Description of the Noncompliance and its Cause:
The ammonia concentration was 0.08 mg/L over the 1.7 mg/L permit average.

Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Tir it is Expected to Continue.

The period of noncompliance is believed to have been caused by temperature changes in the lagoons and inadequate aeration in the lagoons for nitrification to properly occur.

SIGNATURE: Peter Bowyer 11/21/19

https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=829 04064&dDocName=82903469&Rendition=web&allowInterrupt=1 &noSaveAs=1

From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #82903469 to view the file.

These are issues of noncompliance from the Indiana department of environmental management for **AquaBounty** from October and November of 2019. Only 5-7% over the permitted limit but the important context is the date of October/November 2019. The farm was nowhere near full capacity and still couldn't handle the amount of toxins created by the fish. Being at least 1/3 of the water quality lab staff, it was surprising I wasn't immediately made aware of this situation.



NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT State Form 32415 (R 156-13) Office of Water Quality

INSTRUCTIONS: Complete all sections of this form and email it to Office of Water Quality, Compliance Data Section at <u>wavecont-(finishers Notes)</u>

Therough completion of this report will satisfy the Office of Water Quality (DWQ) telephone and 5-day within noncompliance netification reporting requirements of your NPICES parent. To speak with somewore in CVIV, cell (317) 228-328.

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Dection spill response line at (317) 230-7745 or toll fine within indiana at (300) 230-7745.

	FACILITY INFORMATION	
Facility Name	County	NPDES Permit Number
Aqua Bounty Farms	Delaware	IN0062669
Individual Reporting	Telephone Number	Reporting Date (month, day, year)
Peter Bowyer	919-748-9911	12/18/19
Front Address		

pbowyer@aquabounty.com

		NO	NCOMPLIANCE INFORMATION	
Date (month, day, year) 11/7/19	Outel 001	Parameter Ammonia	Permit Limit (Units:Daily/Weekly/AveMax/Min) 1.7 mg/L permit average	1.82 mg/L
Date (month, day, year)	Outfall	Parameter	Permit Limit (Units/Daily/Weekly/Ave/Max/Min)	Monitored Value

Description of the Noncompliance and its Cause:
The ammonia concentration was 0.12 mg/L over the 1.7 mg/L permit average.

Description of the Period of Noncompliance, including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time is a Expected to Continue.

The period of noncompliance is believed to have been caused by temperature changes in the lagoons and inadequate aeration in the lagoons for nitrification to properly occur. It is thought that biofiltration is continuing to mature inside the fish rearing units and is expected to improve.

Steps Taken or Planned to Reduce, Eliminate, and Prevent Recognishos of the Noncompliance: Investigate aeration of the lagoons to ensure proper nitrification is occurring. Also, continue to monitor the maturity of the bio-media.

CERTIFICATION AND SIGNATURE

I certify under panalty of line that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my requiry of the person or personnel end or manage the system, or those personnel streetly responsible for gathering the information, the reformation submitted to, to the best of my bronkings and belieft, my, accounts, and complete. I am series that there are significant personals for submitting false information, including the peaching of the and imprisonment for thronking including the

ATURE Peter Bowyer 12/18/19

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From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #82916171 to view the file.

BYPASS / OVERFLOW INCIDENT REPORT

That now exist, place has provided and the form and e-mail signed copies to successful formation (College of Water Caulity)

MRTRUCTIONS

MRTRUCTIONS

MRTRUCTIONS

**The Complete all parts of this form and e-mail signed copies to successful formation (College of Water Caulity) (CVIV) Institution and written bypass downline in properties of your MPOISS permit. Please is used of Middle Caulity (CVIV) Institution and written bypass downline in properties of your MPOISS permit. Please is used of Middle Caulity (CVIV) Institution and written bypass downline in properties of your MPOISS permit. Please is used of Middle Caulity (CVIV) Institution and written bypass downline in properties of the reverse search greatering organization (CVIV) Institution (CVIV) In

This is a serious containment violation around the property's lift stations. 15,000 gallons of tank water backflow on the ground near the indoor rearing areas.

March 2021

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From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #83133103 to view the file.



NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT

INSTRUCTIONS: Complete all sections of this form and email it to Office of Water Quality, Completion Data Section at <u>www.reports.@icom.Pl.com</u>
Thorough completion of this report will sastey the Office of Water Quality (OWQ) salephere and 5-day written encompliance
notification reporting regurarements of your NPDES portm. E to speak with secretarion in OWQ, all \$177, 282-2877.

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

	FACILITY INFORMATION	
Facility Name	County	NPDES Permit Number
Aqua Bounty Farms	Delaware	IN0062669
Individual Reporting	Telephone Number	Reporting Date (month, day, year)
Peter Bowyer	919-748-9911	7/8/2020
Email Address	**************************************	- American Company

pbowyer@aquabounty.com

Date (month day, year) 7/8/2020	Outfall 001	Parameter Ammonia	Permit Limit (Units/Daily/Wookly/Avo/Max/Min) 1.7 mg/L monthly permit average	Monitored Value 2.32 mg/L
Date (month, day, year) 7/30/2020	Outfall 001	Parameter Ammonia	Permit Limit (Units/Daily/Wsekly/Ave/Msx/Min) 1.7 mg/L monthly permit average	Monitored Value 2.00 mg/l

Description of the Nercompliance and its Cause:
The ammonia concentration was 0.62 mg/L over the 1.7 mg/L monthly permit average on 7/8/20, 0.30 mg/l over the 1.7 mg/L monthly permit average on 7/8/20, 0.30 mg/l over the 1.7 mg/L monthly permit average on 7/8/20, 0.30 mg/l over the 2.16 mg/l average of the two samples collected during July 2020.

Description of the Period of Nancompliance, including Exact Dates and Time, and if the Nancompliance has not been Corrected, the Antilopated Time II is Expected to Continue.

This non-compliance was for the reporting period that included the month of July 2020. Monthly average effluent limits for ammonia are 3.3 mg/L during winter months, however, the limits for ammonia obsence to Summer limits of 1.7 mg/L monthly average during the period of May 1st through November 30th. The higher ammonia concentrations are a recent development within the facility, however, the primary reason for the increase is still under investigation. Prior to the seasonal change from Winter to Summer limits, the facility discharge was generally in compliance for all parameters. Aquabounty is considering various options to control and reduce the ammonia in the discharge, however, since ammonia removal is impacted by phistical, chemical and biological processes both within the fish rearing system as well as the actual wastewater treatment system, the system may not respond to adjustments rapidly.

Steps Taken or Planned to Reduce, Eliminate, and Prevent Recognitions of the Noncompliance: Investigate various sources of ammonia generation and removal in the fish rearing system as well as the discharge from the treatment system. Determine alternative methods of reducing the ammonia in the fish rearing area as well as in the discharge from the treatment system, wetlands ponds and discharge area.

Learlify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Eased on my inquiry of the person or person with manage the system, or those personnel directly responsible for gathering the information, the information submitted is. If the test of my which manage the system, or board in possible for gathering in the formation, including the information, including the possibility of the said my account to which will be a simple on the said in a specific of the said internation, including the possibility of the said my second to know they will be said in the said my second to the said in the said in the said my second to the said of th

SIGNATURE: Peter Bowyer 8/27/2020

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From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #83060709 to view the file.

This is a notice of a whole month of noncompliance in July 2020 for significant % over the daily limit of ammonia for the property's effluent.



INSTRUCTIONS: Complete all sections of this form and email it to Office of Water Quality, Compliance Data Section at <a href="https://www.neuroper.org/lines/neuroper

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

	FACILITY INFORMATION	
Facility Name	County	NPDES Permit Number
Aqua Bounty Farms	Delaware	IN0062669
Individual Reporting	Telephone Number	Reporting Date (month, day, year)
Peter Bowyer	765-625-1690	6/29/2021

pbowyer@aquabounty.com

Date (month, day,	Outfell	Parameter	Permit Limit (Units/Daily/Weekly/Ave/Max/Min)	Monitored Value
year) 6/9/2021	001	Ammonia	1.7 mg/L monthly permit average	3.64 mg/L
Date (month, day, year) 6/25/2021	Outfail 001	Parameter Dissolved Oxygen	Permit Limit (Units/Daily/Weekly/Ave/Max/Min) 6.0 mg/L monthly permit average	Monitored Value 5.09 mg/L

Description of the Noncomplaince and its Gause:
The ammonia concentration was 1.94 mg/L over the 1.7 mg/L monthly permit average. Dissolved Oxygen sample collected on 6/92/021 was 5.85 mg/L. Dissolved Oxygen is 5.09 mg/L after averaging the two samples the results are 0.91 mg/L below permit limits

Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue.

This non-compliance was for the reporting period that included the month of June 2021. Monthly average effluent limits for ammonia change to Summer limits of 1.7 mg/L monthly average during the period of May 1st through Novembers 20°. Prior to the seasonal change from Winter to Summer limits, the facility discharge was in compliance for all parameters. Aquabounty is considering various options to control and reduce the ammonia in the discharge, however, since ammonia removal is impacted by physical, chemical and biological processes both within the fish rearing system as well as the actual wastewater treatment system, the system may not respond to adjustments rapidly. Dissolved Oxygen concentration is low due to the increase of TAN and Phosphorus concentrations as well as dense aquatic plant growth in lagoons.

Stees Taken or Plannel to Reduce, Elimieta, and Prevent Recourance of the Noncompliance: Investigate various sources of ammonia generation and removal in the fish rearing system as well as the discharge from the treatment system. Determine alternative methods of reducing the ammonia in the fish rearing area as well as in the discharge from the treatment system, wellands ponds and discharge area. Additional drum filters will be added to effluent plant to remove additional suspended solids that are linked to the increased TAN levels. Investigating addition of ammonia control bacterial supplement to effluent plant? Ilagoons. Increase the performance of arerator blower and diffuser at outfall 001.

CERTIFICATION AND SIGNATURE

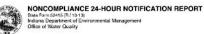
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From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #83175443 to view the file.

This is a notice of a whole month of noncompliance in June 2021 for over double the daily limit of ammonia for the property's effluent and a noticeable amount below the requirement for dissolved oxygen levels.



INSTRUCTIONS: Complete all sections of this form and email it to Office of Water Quality, Compliance Data Section at <a href="https://www.neuroper.org/let/or-of-this-per-visit section-of-this-per-visit-section-of-this-per-visi

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergancy Response Section soil response line at: [317] 293-7745 or toll free within Indiana at: [888] 293-7745.

	FACILITY INFORMATION	
Facility Name	County	NPDES Permit Number
Aqua Bounty Farms	Delaware	IN0062669
Individual Reporting	Telephone Number	Reporting Date (month, day, year)
Peter Bowyer	765-625-1690	6/7/2021

pbowyer@aquabounty.com

		NO	NCOMPLIANCE INFORMATION	
Date (month, day,	Outfall	Parameter	Permit Limit (Units/Daily/Weekly/Ave/Max/Min)	Monitored Value
year) 5/4/2021	001	Ammonia	1.7 mg/L monthly permit average	2.44 mg/L
Date (month, day, year)	Outfall	Parameter	Permit Limit (Units/Daily/V/eekty/Ave/Max/Min)	Monttored Value
5/20/2021	001	Ammonia	1.7 mg/L monthly permit average	2.20 mg/L

Description of the Noncompliance and its Cause:
The ammonia concentration was 0.62 mg/L over the 1.7 mg/L monthly permit average after resampling on 5/20/2021.

Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticlosted Time it is Exceeded to Continue.

This non-compliance was for the reporting period that included the month of May 2021. Monthly average effluent limits for ammonia are 3.3 mg/L during winter months, however, the limits for ammonia change to Summer limits of 1.7 mg/L monthly average during the period of May 1st through Novembers 30°. Prior to the seasonal change from Winter to Summer limits, the facility discharge was generally in compliance for all parameters. Aquabounty is considering various options to control and reduce the ammonia in the discharge, however, since ammonia removal is impacted by phisical, chemical and biological processes both within the fish rearing system as well as the actual wastewater treatment system, the system may not respond to adjustments rapidly. Resampling for ammonia was conducted on May 20, 2021.

Steps Taken or Planned to Reduce, Eliminate, and Prevent Rescurrence of the Noncompliance: Investigate various sources of ammonia generation and removal in the fish rearing system as well as the discharge from the treatment system. Determine alternative methods of reducing the ammonia in the fish rearing area as well as in the discharge from the treatment system, wetlands ponds and discharge area.

CERTIFICATION AND SIGNATURE

I certify under genality of law that this document and all attachments were proposed under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gether and evaluate the information submitted. Beased on my inquiry of the person or persons who menage the system, or those persons directly responsible for spatnering the information, the information submitted is. In the load of my knowledge and besid, true, accurate, and complete. I am aware that there are significant penalities for submitting false information, including the possibility of time and improamment for knowledge data.

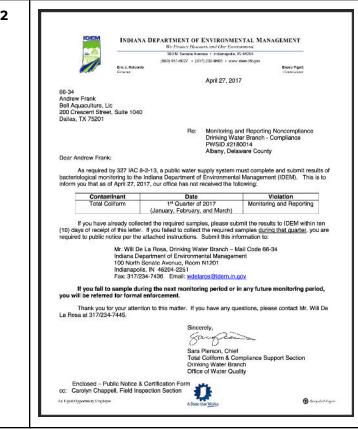
SIGNATURE: Peter Bowyer_ DATE (month, day, year); 6-8-2021

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From: https://vfc.idem.in.gov/DocumentSearch.aspx

Under "Alternate Field" select "Agency Interest (AI) ID" and enter 5991 into the agency ID #. Click on document #83202771 to view the file.

This is a notice of a whole month of noncompliance in May 2021 for significant % over the daily limit of ammonia for the property's effluent



This is an issue of noncompliance for the Albany property when it was Bell Aquaculture regarding monitoring and reporting of coliforms in the drinking water on site. In Jan-March 2017.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 N. Senate Avenue • Indianapolis, IN 46204 (800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Bruno Pigott

October 4, 2017

66-34 Bell Aquaculture, Llc Attn: Andrew Frank P.O. Box 85 Redkey, IN 47373

Monitoring and Reporting Noncompliance Drinking Water Branch – Compliance PWSID #2180014 Redkey, Delaware County

Dear Andrew Frank:

The Indiana Department of Environmental Management (IDEM) staff of the Office of Water Quality has conducted a review of your drinking water monitoring and reporting requirements in order to determine compliance with the Revised Total Coliform Rule (RTCR).

This review noted the following violations:

Contaminant	Date	Violation	Corrective Action
Total Coliform	August 2017	40 CFR 141.860(c)(1) 40 CFR 141.860(d)(1)	Submit report(s
		Monitoring & Reporting	On
		Violations	Public Notice pe
		Failure to collect and submit routine distribution sample result(s) for Total Coliform	instructions and send a copy to IDEM
		Rules cited have been incorporated by reference at 327 IAC 8-2.4-1	

An Equal Opportunity Employer





Within ten (10) days of receipt of this letter, you must submit the required sampling results to IDEM. If you failed to collect the required samples, you are required to public notice per the attached instructions. Community water systems may public notice in their annual Consumer Confidence Report (CCR) as long as the timing, content, and delivery requirements for Tier 3 notification are met. If you choose to public notice now, you are still required to public notice for this violation in your annual CCR. Submit this information to:

Indiana Department of Environmental Management (IDEM) OWQ Drinking Water – Mail Code 66-34 Attn: Ceazar Natividad 100 N. Senate Avenue Indianapolis, IN 46204-2251 Fax: 317/234-7436 or Email: cnativid@idem.in.gov

Failure to submit the required information may result in a referral to IDEM's

These are issues of noncompliance for the Albany property when it was **Bell** Aquaculture regarding monitoring of coliforms in the drinking water on site. In August 2017.

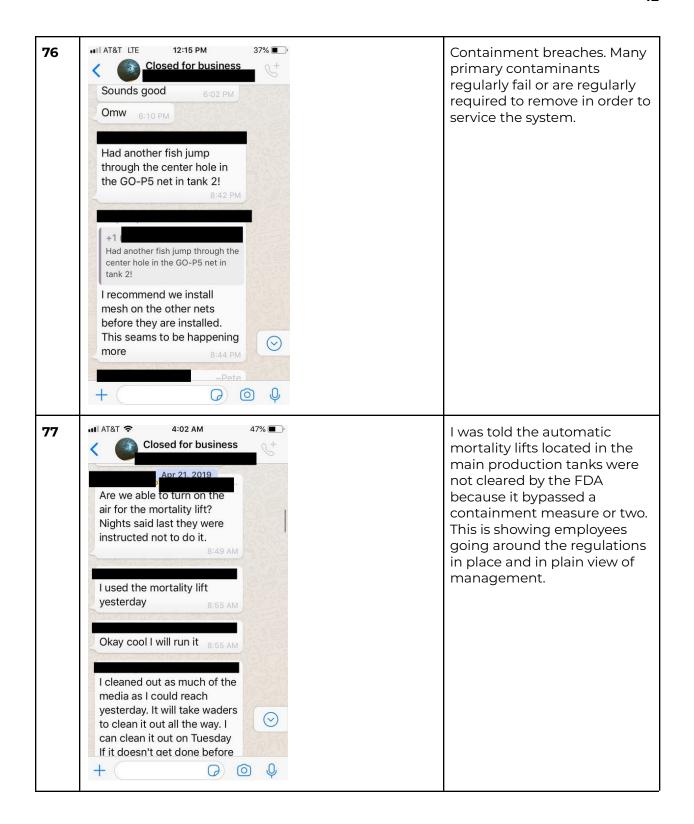
Containment breach.
Containment regulations are either not being followed or not properly installed here to conform to FDA standards.
Specifically the drain and mortality lift.

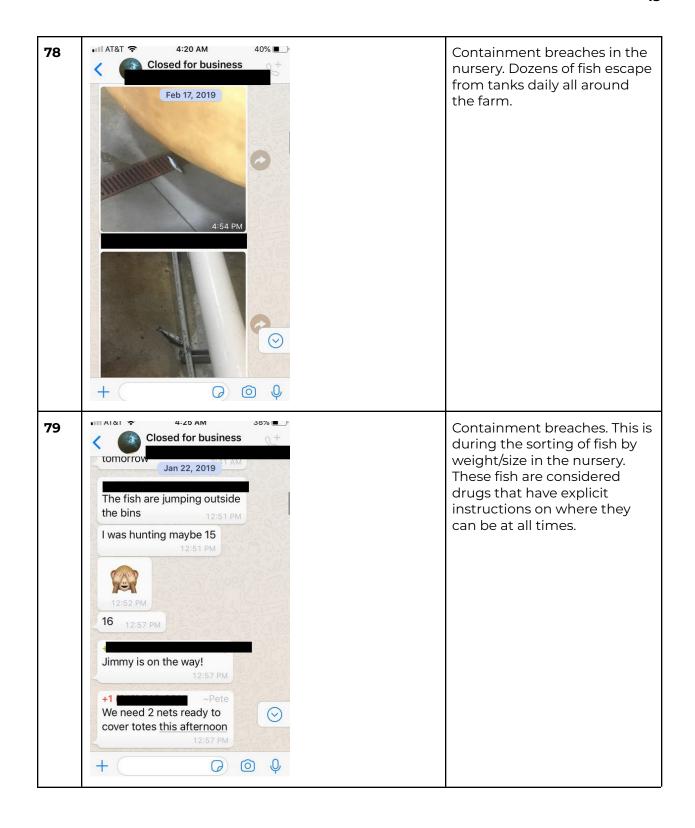
Animal welfare, you can see at the top of the body where scales were ripped away from suction forces.

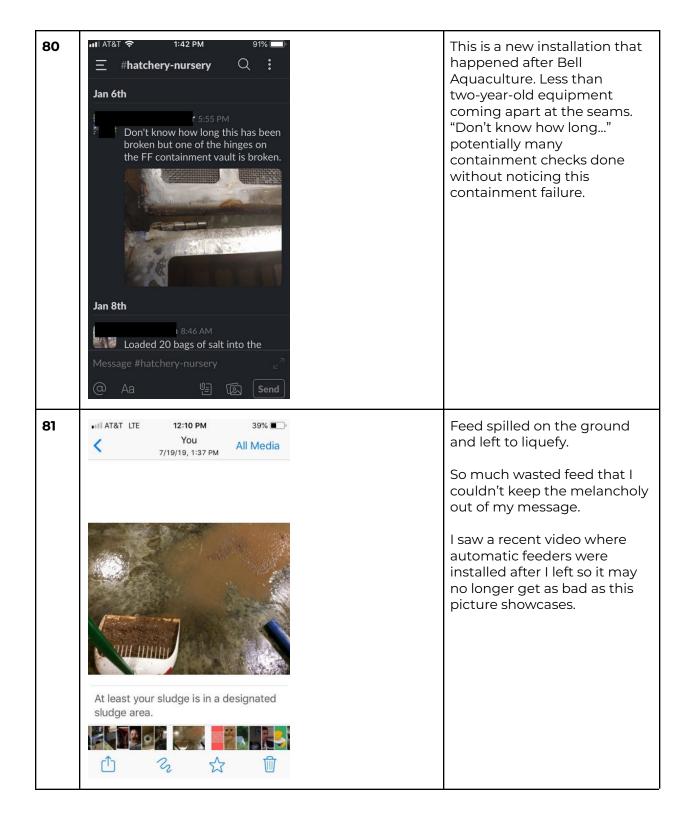
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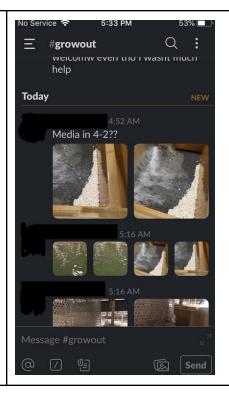


Gap in containment. The floor grate didn't completely cover the floor drain.

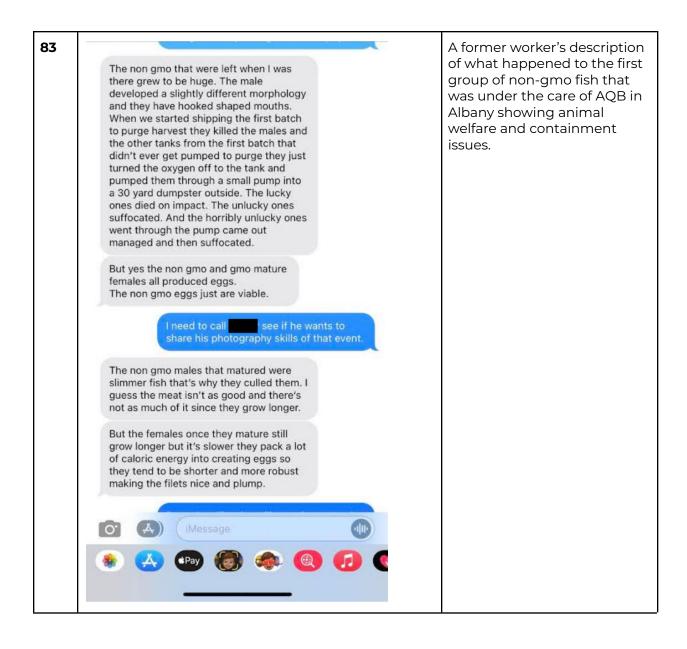


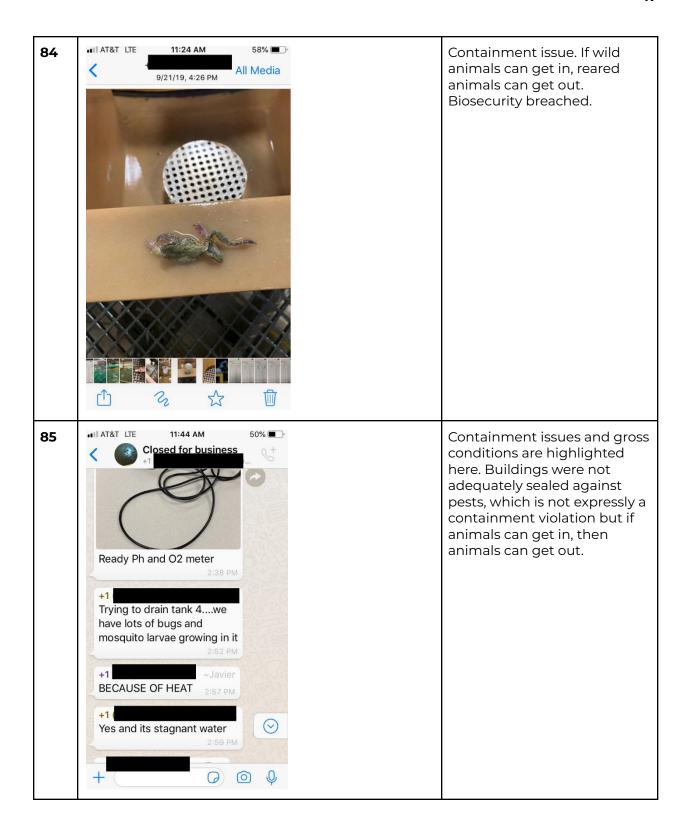


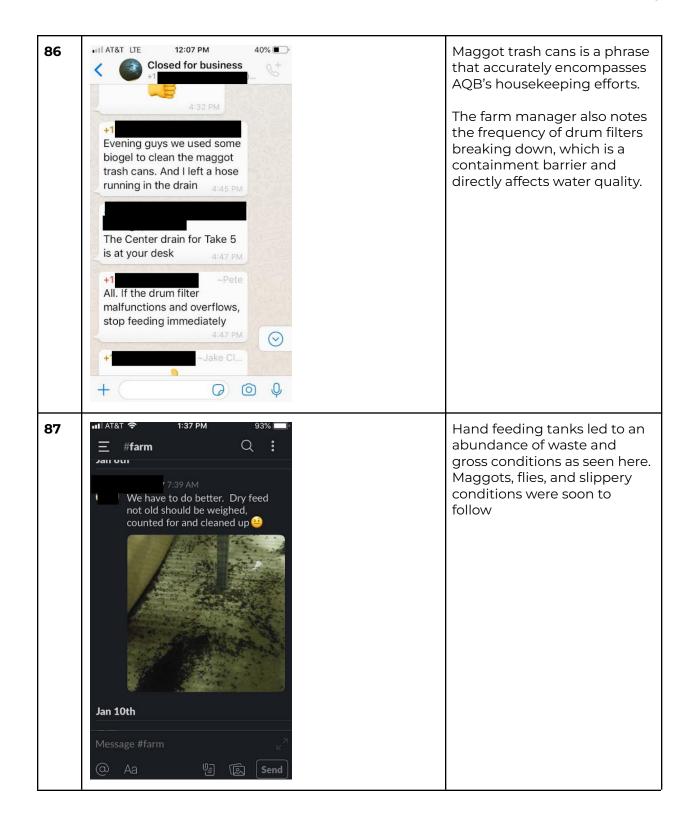


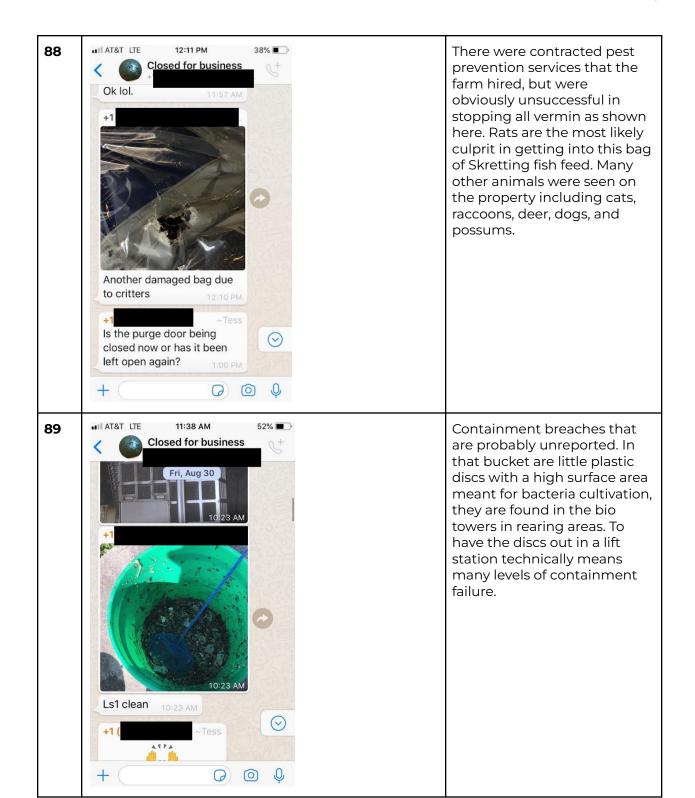


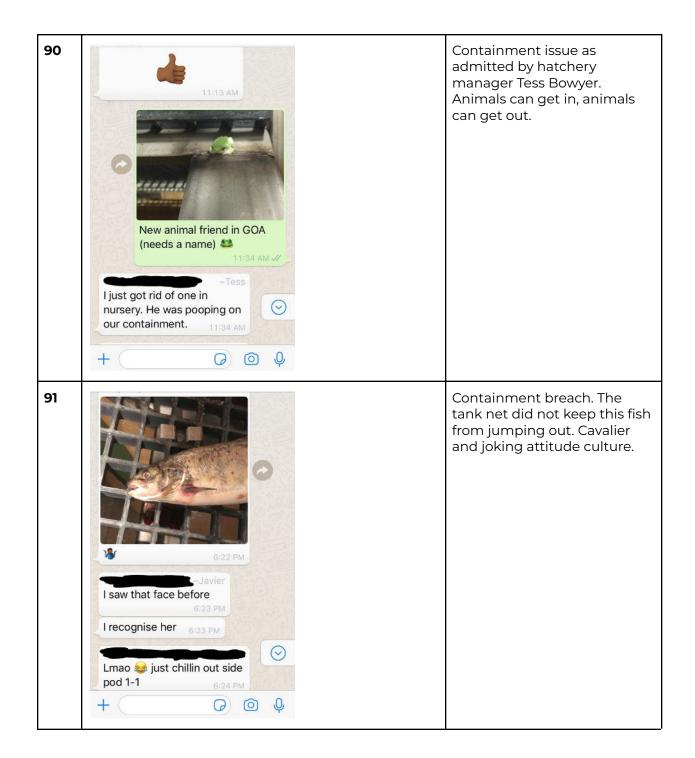
These small white disks, used for bacteria cultivation, escaped their original position in the bio towers and made their way to the sidebox of the main production tank. I was told that these technically counted as containment violations when they showed up away from their intended location.











ANIMAL ABUSE

#	Image/Video	Description
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93 9/16/19, 10:52 PM Bottom of 2-3, drain is being clogged

This is an underwater camera that we used to see at the bottom of the main production building tanks. Here we can see dozens of dead fish clogging up the drain, with no easy way of removing them.

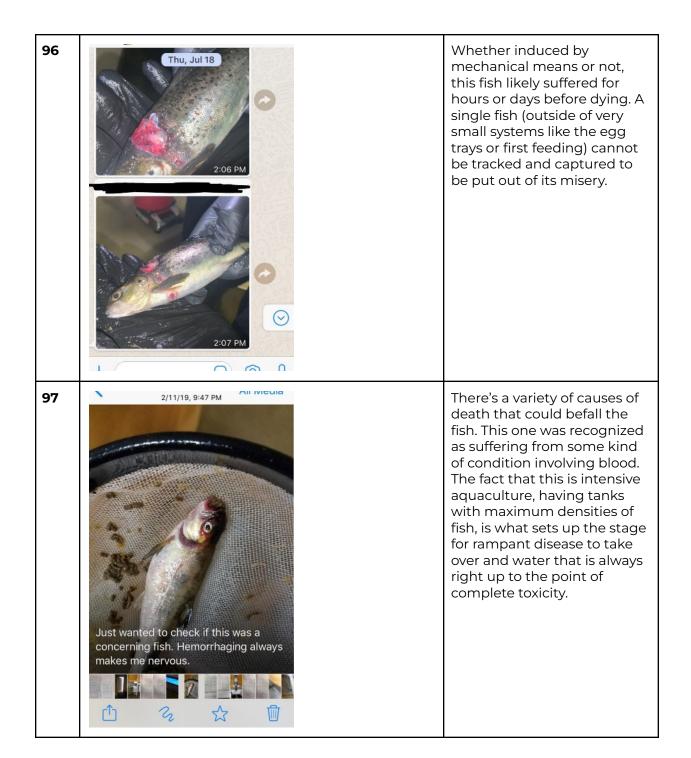


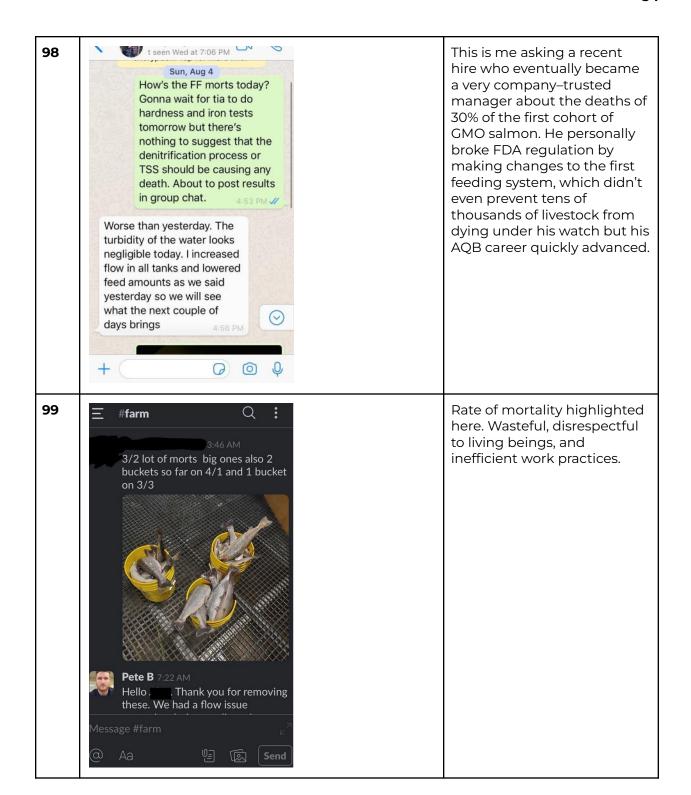
This is a fish suffering from a serious physical injury and in all likelihood was forced to continue to swim until succumbing to exhaustion, disease, or starvation. There's no way to track/capture a single live fish in the main production tanks due to tank size, water clarity, and avoidance maneuvers from a live animal

95



Strange lesions and diseases were commonplace.
Sideswimmers were also an issue continued on from as far back as Bell Aquaculture which could be based on stress or bacteria.







Not sure which batch of fish this is describing exactly. Says December in the nursery so it could be the second cohort of GMOs. Daily deaths numbering in the hundreds.

At this stage, growth is actually more than twice as conventional salmon but slows down as they age. This early explosion of growth actually caused many of the fish's stomachs to rupture.

Reminds me of french bulldogs since most require a c-section to be born. We as humans have actually manipulated something into being that nature itself tries to demand nonviable.

101



Was told GMO fish actually have fewer genetic abnormalities compared to conventional fish but had no statistics to confirm.
Conjoined twins pictured here. The sender of this message is hatchery manager Tess Bowyer

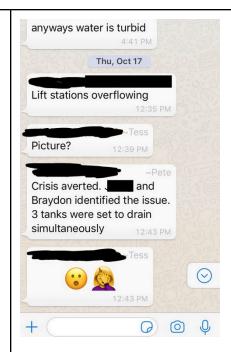


The rate of mortality is highlighted here. Wasteful, disrespectful, cruel, and inefficient work practices.

103



This picture is dated and time-stamped. So it should align with the 2nd big die-off I witnessed. Feed quality was noticeably different by realizing the gloves I used were getting oily. See the glossy palm versus the dull black side of the glove. This die-off was in pre-grow out, the water quality and clarity quickly degraded and wasn't even noticed by a recent fisheries graduate who became a manager after only 90 days. I came on the next shift after her and knew something was immediately wrong when I was able to reach out and touch fishes at the surface of the water.



Cronyism and probably an unreported FDA violation. COO kept hiring Chileans as managers with questionable industry skills. I saw this manager draining three 75,000-gallon tanks at once and had to scream at him to stop. That water had to go somewhere and the lift stations could only handle so much at once. The overflowing of lift stations is also a serious containment violation.

That same manager also accidentally sent a pornographic video to the entire staff on our shared phone app within his first month of working. No disciplinary action for doing so, to my knowledge.

105

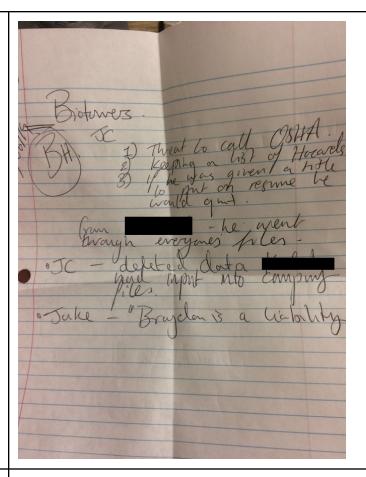


Salmon from a viewing window in a main production tank. Overcrowding of fish was common. The fish at the top has a bright pink spot, which is a flesh wound. Injured or sick fish cannot be easily captured in a 75,000-gallon tank and for that reason, many fish like this one suffered until dying from exhaustion, disease, or inability to feed themselves.

106 Example of a worker (would 6:40 PM // Sat, Sep 14 later, just past her 90 days, be Nah if it wasn't for her I may promoted to a management not of noticed and then you position) who passed on a came over and started failing fish system to the next petting fish like you were shift without realizing the god or something 😂 😂 😂 I definitely knew shit was precarious situation at all. fked up then I was alerted by this coworker Still, she should've raised shown here, then I came over the alarm to mgmt earlier. and realized the fish weren't Being an educated fish person. Tank looks like it's swimming away from my failing completely. 6:49 PM J shadow above the tank, then proceeded to reach out and Ohhh yea I was like nah this actually touch the barely shit it ain't right only reason living fish with my hand why I noticed is cuz I be without any reaction from observant but if you compare that tank t to them. G 0 0 107 Video Twins or deformed genetic https://drive.google.com/file/d/1tGsbgrmbygJV-nam features of fish were p4fTuLFYbxxCeUOo/view?usp=sharing commonplace. 108 Video Worker conducting an https://drive.google.com/file/d/ltgsKLZKgvTFcS5r4cY autopsy of a dead salmon. b0CKXdEOPIX608/view?usp=sharing Possibly a mechanical reason for the tearing of flesh on top but on the bottom of the fish there's a small skin blemish that was found on many other fish which might indicate disease.

OTHER

#	Image/Video	Description
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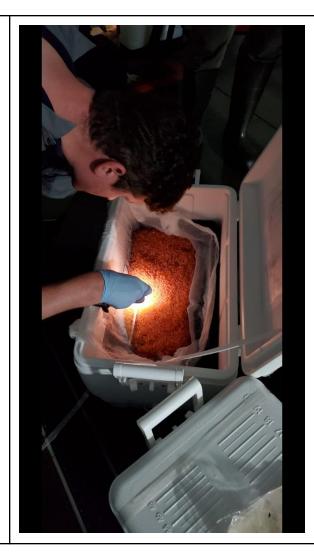


The official reason I was fired was misappropriating company documents. This was the document, which was in a normal, unmarked spiral-bound notebook. It was located in our main office on the main table which is used for general daily meetings and where some people take their lunch hour. I opened it up out of boredom and saw diagrams and information prevalent to me as a technician so kept flipping pages until I saw this as the most recent entry. To me, this was overwhelming evidence of retaliation but OSHA thought otherwise because Indiana is a right-to-work state and AquaBounty falsely claimed this journal was located inside my boss's desk.

110



This is to highlight the fact that for how terrible Bell Aquaculture was, they still considered the Best Aquaculture Practices accreditation within their reach. AquaBounty attempted this as well while I was there. The company wanted it as a sticker they could put on the consumer packaging, nothing more.



This is Peter Bowyer with the first cohort of GMO salmon eggs on the day they arrived in Indiana. Not included for any evidence's sake, just curiosity.

