

Cavadini, Roger ENV:EX

From: Sundher, Avtar S ENV:EX
Sent: Monday, September 29, 2014 9:19 AM
To: Hamelin, Trevor M ENV:EX
Cc: Downie, AJ ENV:EX
Subject: 2014_09_29 Permit for scallop larvae boiling water using a coal burning boiler

Good morning Trevor

Can you follow-up with Ryan regarding an air and water discharge. I am not sure if he would fall under WDR.

Please copy Brett on any email response

Thanks

Avtar S. Sundher, B.Sc.
Head, Coast Authorizations Section
Tel: (604) 582-5272
Fax: (604) 584-9751
avtar.sundher@gov.bc.ca

From: Downie, AJ ENV:EX
Sent: Friday, September 26, 2014 12:29 PM
To: Sundher, Avtar S ENV:EX
Subject: Fwd: Permit for scallop larvae boiling water using a coal burning boiler

Avtar
Is this something you or your staff could respond to?
Thx
AJ

AJ Downie
Regional Director – Coast Region
Ministry of Environment

Sent from my iPhone

Begin forwarded message:

From: "Environmental Protection Division ENV:EX"
<envprotdiv@Victorial.gov.bc.ca>
Date: September 26, 2014 at 9:53:30 AM PDT
To: "Downie, AJ ENV:EX" <AJ.Downie@gov.bc.ca>
Cc: "Environmental Protection Division ENV:EX"
<envprotdiv@Victorial.gov.bc.ca>
Subject: FW: Permit for scallop larvae boiling water using a coal burning boiler

Good morning AJ,

The following inquiry came into the EPD general mailbox. Is this something you or your group would be able to reply to? Please cc the EPD mailbox (copied here) on any outgoing message.

Thank you,

Brett Yerex
Office Assistant
Environmental Protection Division, Victoria

From: jiangRyan s.22
Sent: Thursday, September 25, 2014 6:21 PM
To: Environmental Protection Division ENV:EX
Subject: Permit for coal burning

Hi,

This is Ryan from Hummingbird Cove Ltd.(incorporation Number is BC0460993 Date is Dec 24, 1993). We are going to run a business to raise the scallop larvae. Our location is 14839 Hwy 101, Powell River B.C. We already have the water intake license. But we'd like to know how long it usually take to apply a water discharge license.

And we need a big boiler for heating water. Can we use a coal fired boiler?
Look forward to hear you.

Ryan

Cavadini, Roger ENV:EX

From: Hamelin, Trevor M ENV:EX
Sent: Tuesday, October 7, 2014 9:29 AM
To: s.22
Cc: Yerex, Brett ENV:EX
Subject: 2014_10_07 Permit for scallop larvae boiling water using a coal burning boiler

Hi Ryan,

Based on the information you have provided in your email, I am assuming that the tanks for rearing scallop larvae are on land and therefore your operation would fall under the following category under our Waste Discharge Regulation:

"aquaculture — land-based industry" means establishments, except home-based businesses, educational facilities and establishments of hobbyists or artisans, engaged in land-based aquaculture, including but not limited to,

- (a) those engaged, for the purposes of land-based aquaculture, in
 - (i) culturing or collecting freshwater or saltwater species of finfish or shellfish, or
 - (ii) harvesting other freshwater or saltwater products, and
- (b) those engaged in operating finfish or shellfish hatcheries, rearing ponds or other similar facilities where finfish or shellfish are fed, nurtured, held, maintained or reared in fresh water or salt water to reach a size for release or for market sale;

Land-based aquaculture activities require an authorization from the Ministry of Environment. Currently there is a long waitlist to get an authorization (approximately two years). There are alternative approaches to getting an authorization sooner, but are subject to extra cost bourn by the company and subject to approval by our Regional Director.

As for the boiler, the Ministry of Environment will not authorize a coal fired boiler, there is cleaner technology available, natural gas or biomass boilers.

Please note, I have made some assumptions in my assessment of your authorization requirements. Please provide more information should you wish to pursue an authorization from Ministry of Environment. I've attached a web-link to our authorization page that will provide more information on our authorization process;

<http://www2.gov.bc.ca/gov/topic.page?id=0876E90DA4744A449423D35EB4E09785>

If you have any questions, please do not hesitate to call me.

Regards,

Trevor Hamelin, AScT
Environmental Protection Officer
Ministry of Environment | Environmental Protection Division
2nd Floor, 10470 152nd St. | Surrey | BC | V3R 0Y3
Tel: (604) 582-5275 | Fax: (604) 584-9751

From: Roth, Myron AGRI:EX [<mailto:Myron.Roth@gov.bc.ca>]
Sent: Monday, January 12, 2015 4:11 PM
To: 'bon@thorconsult.ca'
Cc: White, Kirsten M ENV:EX
Subject: Shellfish Hatchery Waste Discharge Permit

Dear Bon,

Further to your call last week regarding a waste discharge permit for the shellfish hatchery project you're working on, I've asked Kirsten White to follow up with you to clarify the specific requirements – and how he might go about acquiring an file number should he require one.

Kirsten, Bon's number is 250-787-8874.

Thanks again for your assistance with this request.

Regards,
Myron

Myron Roth, Ph.D., P.Ag. | Industry Specialist, Aquaculture & Seafood
BC Ministry of Agriculture | 808 Douglas Street, Victoria, BC, V8W 2B6
T: 250-356-1831 | M: 250-812-0706

Cavadini, Roger ENV:EX

From: Hamelin, Trevor M ENV:EX
Sent: Monday, February 16, 2015 12:57 PM
To: 'Bonaventure Thorburn'
Subject: 2015_02_16 1257 Permit Application for Wiser Discharge Marine Environment
Attachments: Waste Discharge Authorization-application.pdf

Hi Bon,

Thank you for the heads up about no application form on our Waste Discharge web page. Our Victoria staff are aware and are trying to rectify the issue. I happen to have a copy of the application form on my desktop and have attached for your reference.

Please hold off on submitting the application, as Conrad Berube will be back to work this week. I want to make sure that we are consistent with our approach to permitting or not permitting shellfish hatcheries, as I am not aware of any shellfish hatcheries within my region. FYI – because VI University is an educational facility, they are exempt from having to get a permit for their discharge.

I don't need the aquaculture application, if I am consulted the other government agencies with provide me with all of the information.

Regards,

Trevor Hamelin, AScT
Environmental Protection Officer
Coast Region - Authorizations
(Office) 604-582-5275
(Fax) 604-584-9751

From: Bonaventure Thorburn s.22
Sent: Monday, February 16, 2015 10:15 AM
To: Hamelin, Trevor M ENV:EX
Subject: Permit Application for Wiser Discharge Marine Environment

Trevor,

Thanks for the information when we talked a few weeks back about whether there was a need for a permit for a proposed shellfish hatchery/nursery at Hummingbird Cove, BC. Before making any submission to your Victoria office, you suggested that I forward the preliminary discharge information onto yourself.

I attach a site plan for the proposed hatchery (INTAKEJan05.pdf) for your review. The saltwater intake screen is at the south end of the existing LOO 242630 foreshore tenure in -20m of water at low tide. The salinity of that water is approximately 25-30 ppt and the intake temperature will be in the range of 5-7°C. The volume of intake/discharge will be a maximum of 280 litres/second at the shellfish hatchery/nursery.

Most of the water in the hatchery/nursery will be flow-through tanks and raceways. However, at a time when there is active incubation & rearing of shellfish larvae to spat stage (about 3 months of the year),

approximately one-fifth (20%) of the intake saltwater volume will be heated to a temperature of 13°C before discharge. This heated discharge water will initially be mixed with flow-through water discharge water. Before final discharge at the foreshore (near Dwelling #4), both of these discharge waters will then be filtered through a sump and a concrete tank partially filled with a sand/gravel mix. I can supply you with the details of the 5000 gal tank, if required.

On February 11th, we submitted the application for a Shellfish Hatchery /Nursery Licence to Front Counter BC (Valerie Brenahan) and Fisheires & Ocean Canada (Jain Alcock-White). They may contact you when processing the application. Let me know if you will need copies of all six design drawings and the actual application of the site (it's long at 95 pages).

I have searched your BC Ministry of Environment and the Front Counter BC websites several times for an actual BC MOE discharge permit application form without success. I have all your guidelines for the application but there are no operational links to the application form noted. By the way, I checked with most of the other shellfish hatcheries in BC, (including the Vancouver Island University's Shellfish Research field station next door here in Bowser) and none have saltwater discharge permits. If we are required to forward an official discharge permit application to your Victoria office, kindly forward me the link to the fillable PDF form.

I look forward to hearing back from you at your earliest convenience on this matter.

Cheers!

Bon Thorburn, P.Eng.

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874

s.22

email: bon@thorconsult.ca web: www.thorconsult.ca

SURVEY NOTES: Contours from Marine Charts & PR Reg.Dist. Maps
SITE SURVEYS BY: EMERY & RAE LAND SURVEYING LTD.
4507 Manson Ave. Powell River BC, V8A 3N3
File: 10176-3
ELEVATIONS IN METRES TO HYDROGRAPHIC '0' TIDE CHART DATUM

CONTRACTOR SHALL CONFIRM ONSITE PRIOR TO
CONSTRUCTION THAT POLES AND EQUIPMENT WILL
MEET WCB CLEARANCE REQUIREMENTS FOR
OVERHEAD PRIMARY AND SECONDARY LINES.

ENG.	REVISION	DATE	No.
1	-	-	1
			2
			3
			4
			5

NOTES:
THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET
THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES.
THORCONSULT LTD., ITS EMPLOYEES, SUBCONSULTANTS
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EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT
OF THEIR USE OF THESE DRAWINGS.

ENGINEER'S SEAL

PRELIMINARY

LEGAL DESCRIPTION:
13 ac. Development
Area of: Part of Lot L
(Explanatory Plan
13613), DL 2091,
Group 1, New
Westminster District

TASK	BY	DATE
DRAWN	BT/FT	DEC/14
DESIGNED	BT	DEC/14
CHECKED	-	-
AS-BUILTS	-	-

OWNER:
HUMMINGBIRD COVE LIFESTYLES LTD.
14839 Highway 101
Powell River, BC V8A 0N1
PROJECT:
SHELLFISH HATCHERY



**THORCONSULT
LIMITED**

192 Crome Point Road, Bowser,
British Columbia Canada V0R 1G0

WATER & LAND DEVELOPMENT ENGINEERS

email: bon@thorconsult.ca
website: www.thorconsult.ca

FAX: (250) 757-8874
TEL: (250) 757-8874

POWELL RIVER REGIONAL DISTRICT

TITLE:
HATCHERY & INTAKE SITE PLAN

SCALE: HORIZ : 1:2000

PROJECT No.
BT 14-P

DRAWING No.
02 of 6

REV No
0

Cavadini, Roger ENV:EX

From: Bonaventure Thorburn s.22
Sent: Tuesday, February 17, 2015 10:49 AM
To: Hamelin, Trevor M ENV:EX
Subject: 2015_02_17 Permit Application for Wiser Discharge Marine Environment

Trevor,

Thanks for the application form. I hope you are not misinterpreting my email on the issuance of a permit. I do want to make sure that the proposed hatchery/nursery is according to existing regulations. I am surprised that VIU, so-called being a leader in shellfish research, does not monitor its discharge outfall. s.22

But, I have failed to reach him, so far, to get their conclusions on this issue.

I'll hold off with the application submission until you've discussed with Conrad and you get back to me.

Cheers!

Bon

From: Hamelin, Trevor M ENV:EX [<mailto:Trevor.Hamelin@gov.bc.ca>]
Sent: Monday, February 16, 2015 12:57 PM
To: 'Bonaventure Thorburn'
Subject: RE: Permit Application for Wiser Discharge Marine Environment

Hi Bon,

Thank you for the heads up about no application form on our Waste Discharge web page. Our Victoria staff are aware and are trying to rectify the issue. I happen to have a copy of the application form on my desktop and have attached for your reference.

Please hold off on submitting the application, as Conrad Berube will be back to work this week. I want to make sure that we are consistent with our approach to permitting or not permitting shellfish hatcheries, as I am not aware of any shellfish hatcheries within my region. FYI – because VI University is an educational facility, they are exempt from having to get a permit for their discharge.

I don't need the aquaculture application, if I am consulted the other government agencies with provide me with all of the information.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer
Coast Region - Authorizations
(Office) 604-582-5275
(Fax) 604-584-9751

Cavadini, Roger ENV:EX

From: Berube, Conrad ENV:EX
Sent: Monday, March 16, 2015 11:21 AM
To: 'Bonaventure Thorburn'; Victoria EPD Permit Administration ENV:EX
Subject: 2015_03_16 Shellfish Hatchery Waste Discharge Permit

Hi Bon—

Definitely sounds like you need to update your Adobe Reader—or that something else is wonky. I just considered the top couple of items you mentioned but didn't see any of the problems you noted.

Here's what the form you sent looks like to me:

Courier delivery address: Ministry of Environment,
Environmental Management Branch, Business Services Section
3rd Floor, 2975 Jutland Rd., Victoria BC V8T 5J9

Application for an Authorization to Discharge Waste under the *Environmental Management Act*

This Application Form can be submitted to the Ministry of Environment by mail or courier. If paying by CREDIT CARD, the Pre-Authorization Form and Application Form can be faxed.

INSTRUCTIONS:

1. If you are completing this form by hand, please PRINT clearly. All fields marked with an asterisk * must be completed. Please visit http://www.env.gov.bc.ca/epd/waste_discharge_auth/index.htm for information and Guidance Documents that will assist you in understanding the application process and any other documents that may be required.

2. If a **New Permit, New Approval or New Operational Certificate** is required, ***please use this application form.***

A **Permit** is an Authorization to discharge waste to the environment.

An **Approval** is an Authorization to discharge waste to the environment for a maximum of 10 years.

An **Operational Certificate** is a set of conditions issued by the Ministry of Environment for discharge of waste to the environment included in a solid or liquid Waste Management Plan.

A new application is a multi-step process that requires submission of a preliminary application followed by meetings with Ministry staff, followed by submission of a final application to the Ministry, the application fee and Payment Form (\$200 for a Permit; \$100 plus variable fee for an Approval or Operational Certificate).

Preliminary Application: All fields on Pages 1 to 3 marked with an asterisk * must be completed. This is the first submission of a preliminary application.

Final Application: Sign and date your final application at the bottom of Page 3. Include your Pre-Authorization# and Tracking# in the fields on Page 1. Pages 1 - 4 and 6 must be completed. This is the final submission of a final application. Page 5 is only required if your regional representative advises that a Technical Assessment Report is not required.

3. Your regional representative will advise you of any additional documents (such as Environmental Protection Notice, Site Plan(s), Location Map, Consultation Report, Technical Assessment Report) required for your application.

*Purpose of

(If necessary, attach a separate page.) To discharge flow-through seawater in a land-based system

From: Bonaventure Thorburn s.22
Sent: Saturday, March 14, 2015 9:18 PM
To: Berube, Conrad ENV:EX; Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Conrad,

See my attached DRAFT application form partially filled out. I'll point out what's missing or partially missing on my version of the Discharge Application form.

- Page 1 top – Top line in grey box says “Pre- “ blank. What follows Pre-?
 - Second line is cut in half & seems to say “Authorization #” Is this correct?
- Page 1 bottom- “Is the Authorization required for remediation of a contaminated...” The next line is missing. Could it be site?
 - After the first box it says “Ye...” Does this mean Yes?
- Page 2 on left midway above “Doing Business As (if applicable) – Black text is missing between this line and “OR” What does it say?
- Page 3 top left below “*Contact First and Last” – next line is missing and I assume it means Name.
- Page 3 midway right after “Source of..” I don't know what the line says under GP or the next box Surve. I assume it is the type or accuracy of the Lat/Longs.
- Page 3 Just below these boxes is a box for the *Longitude. There is a bracket missing after (Must be in decimal degrees... Is there any text after this?
- Page 3 bottom after ...describe location e.g. – the next line is mostly missing but seems to be “ 3km North....
- Page 3 Bottom after the box that should say “Yes” It only says “Ye...” and there is right end bracket after the red text (If No, please provide details...” Is there any more red text here?
- Page 3 Bottom after “Signature of Applicant” in black and “or Agent, if....” In red... – There is no more text or a return right bracket. What is the red text that's missing?
- Page 4 top left after *Description of Discharge... - the next line is cut but seems to be “Source”. Is this correct?
- Page 4 top left after *Discharge type... - the next line in red says (select all that... The rest of the text is missing – What is the rest of this text?
- Page 4 top left right - there are no right end brackets after “(If different from facility...” and (Must be decimal degrees...” Is there any more red text on these two lines?
- Page 4 mid left after “*PID/PIN/Crown File” – Does next line say “Number”?
- Page 5 top left after “Distance to nearest surface water” – Does next line say “Metres” ?
- Page 5 midway left after “Residential or Health Care Facility” – I assume the next line says “metres”
- Page 6 top after “indicate’ – I assume next line says “ how you will pay.”
- Page 6 top after “Money & Credit” Boxes’ – I assume next line says “ Order & Card.”
- Page 6 midway “... if different than name on...” - I assume next line says “Card”

Most of the missing or squashed lines seem to be OK. I hope that I'm not missing anything. If so, let me know.

Cheers!

Bon Thorburn, P.Eng.

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874 s.22

email: bon@thorconsult.ca web: www.thorconsult.ca

From: Berube, Conrad ENV:EX [<mailto:Conrad.Berube@gov.bc.ca>]
Sent: Friday, March 13, 2015 11:48 AM
To: 'Bonaventure Thorburn'; Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

BTW, I didn't have any problems filling data into the form that Bon sent back to me...maybe the problem is with the version of Adobe on his machine...

From: Berube, Conrad ENV:EX
Sent: Friday, March 13, 2015 10:37 AM
To: 'Bonaventure Thorburn'
Cc: Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Please contact Permit Administration as per my original message

From: Bonaventure Thorburn s.22
Sent: Thursday, March 12, 2015 2:39 PM
To: Berube, Conrad ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Conrad,

Thanks for all the documentation on discharge permits. I have been swamped and have just gotten around to filling out the application form. In the process, I find that the PDF form, that both you & Trevor have sent me, is somehow compromised. That is, it's missing full or partial lines of text throughout. Do you have an original scan or a different PDF form that is in better condition? or should I labour on with this one?

Cheers!

Bon Thorburn, P.Eng.

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874 s.22

email: bon@thorconsult.ca web: www.thorconsult.ca

From: Berube, Conrad ENV:EX [<mailto:Conrad.Berube@gov.bc.ca>]

Sent: Tuesday, February 24, 2015 11:52 AM

To: s.22

Cc: Victoria EPD Permit Administration ENV:EX

Subject: FW: Shellfish Hatchery Waste Discharge Permit

Dear Bon—

As per

<http://www2.gov.bc.ca/gov/DownloadAsset?assetId=120E28350DA849CAB49FD8CFC411ED1E&filename=wdaprocess.pdf>

A. Applicant – review of authorization process	Applicant: reviews Ministry of Environment process/guidance documents on ministry internet web site reviews regulatory requirements that pertain to application.
B. Applicant – preparation of draft application documents	Applicant: ⌚ completes draft application documents: application form terms of reference for technical assessment, if aware that it is applicable public and agency consultation plan Environmental Protection Notice ⌚ submits draft application documents to Ministry of Environment.

Please fill out and submit an application (Application Form for authorization to discharge waste.pdf) outlining your project as per the instructions at <http://www2.gov.bc.ca/gov/topic.page?id=1653E566D9E84CCE81FB33F2819D350E> (make sure that you include a characterization of the BOD and TSS of effluent compared to that of influent)

The completed form should be submitted to
PermitAdministration.VictoriaEPD@gov.bc.ca

It will then be assigned for review (probably, but not necessarily, to me) in due course.

c

From: Roth, Myron AGRI:EX
Sent: Thursday, February 19, 2015 11:29 AM
To: Berube, Conrad ENV:EX
Subject: FW: Shellfish Hatchery Waste Discharge Permit

From: Bonaventure Thorburn s.22
Sent: Tuesday, January 20, 2015 3:49 PM
To: White, Kirsten M ENV:EX
Cc: Roth, Myron AGRI:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Kristen,

I'm anxiously awaiting word from you on who to contact in your ministry about a discharge permit application for flow-through saltwater at shellfish hatchery under construction near Powell River. Submission of the Hatchery Licence application for this large project is being held up until I can contact the correct person in MOE and obtain an MOE file number. Can you please give me a call-back on this matter at your earliest convenience?

Cheers!

Bon Thorburn, P.Eng.

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874 s.22

email: bon@thorconsult.ca web: www.thorconsult.ca

From: White, Kirsten M ENV:EX [<mailto:Kirsten.White@gov.bc.ca>]
Sent: Tuesday, January 13, 2015 9:36 AM
To: 'Bonaventure Thorburn'

Cc: Roth, Myron AGRI:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Hi Bon,

This is not my area of expertise as I deal with municipal liquid waste. However, in Conrad's absence I will do my best to point you in the right direction and provide you with the information you need. I will try to assist as soon as I am able. I am heading into meetings for the remainder of this week though so will look into your query further next week and follow up with you then.

Thanks for your patience and understanding,

Kirsten

Kirsten White, BSc, PAg

Senior Environmental Protection Officer
Authorizations Section, Coast Region, Environmental Protection Division
Ministry of Environment
Phone: 250-751-3193
Email: Kirsten.White@gov.bc.ca

From: Bonaventure Thorburn^{s.22}
Sent: Monday, January 12, 2015 4:28 PM
To: Roth, Myron AGRI:EX; bon@thorconsult.ca
Cc: White, Kirsten M ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Kirsten,

I am pleased to finally reach someone who looks after this area of aquaculture. When you are free, Kirsten, please do give me a call (Please note that my work phone # is 250 757-8874) to discuss the proposed hatchery details further.

Thanks Myron for your valuable assistance!

Bon Thorburn, P.Eng.

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874 ^{s.22}

email: bon@thorconsult.ca web: www.thorconsult.ca

From: s.22
To: [Berube, Conrad ENV:EX; Victoria EPD Permit Administration ENV:EX](#)
Subject: Email 1 of 3 RE: Shellfish Hatchery Waste Discharge Permit
Date: Friday, March 13, 2015 12:54:58 PM
Attachments: [DischargeApplication.pdf](#)

Conrad,

Thanks for the info. I also had no problem filling out the PDF form, however, if you look closely, there are many lines of the form that are distorted. See attached PDF.

On another note, if you could please have a look at page 4 of 6 of the [draft](#) application attached, under **Contaminants or Parameters in the Discharge**, I have listed some 'allowed values' based on some shellfish hatcheries' effluents in Washington State. I failed to find any shellfish hatchery in BC (even the VIU Shellfish Research Station next door to me) that has monitored the contaminants in their discharge water.

Do you have any such 'allowed values' for BC Shellfish Hatcheries in your files?

Cheers!
Bon Thorburn, P.Eng.

ThorConsult Ltd.
Water & Land Development Engineering Consultants
192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874
email: bon@thorconsult.ca web: www.thorconsult.ca

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Sent: Friday, March 13, 2015 11:48 AM
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Cc: Victoria EPD Permit Administration ENV:EX
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Subject: RE: Shellfish Hatchery Waste Discharge Permit

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Cheers!
Bon Thorburn, P.Eng.

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Water & Land Development Engineering Consultants
192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874
email: bon@thorconsult.ca web: www.thorconsult.ca

From: Berube, Conrad ENV:EX [<mailto:Conrad.Berube@gov.bc.ca>]
Sent: Tuesday, February 24, 2015 11:52 AM
To: s.22
Cc: Victoria EPD Permit Administration ENV:EX
Subject: FW: Shellfish Hatchery Waste Discharge Permit

Courier delivery address: Ministry of Environment,
Environmental Management Branch, Business Services Section
3rd Floor, 2975 Jutland Rd., Victoria BC V8T 5J9

Application for an Authorization to Discharge Waste under the *Environmental Management Act*

This Application Form can be submitted to the Ministry of Environment by mail or courier. If paying by CREDIT CARD, the signed Payment Form and Application Form can be faxed.

INSTRUCTIONS:

1. If you are completing this form by hand, please PRINT clearly. All fields marked with an asterisk* must be completed. Please visit http://www.env.gov.bc.ca/epd/waste_discharge_auth/index.htm to review the information and Guidance Documents that will assist you in understanding the application process and any other documents that may be required.

2. If a **New Permit, New Approval or New Operational Certificate** is required, ***please use this application form.***

A **Permit** is an Authorization to discharge waste to the environment.

An **Approval** is an Authorization to discharge waste to the environment for a maximum of 15 months.

An **Operational Certificate** is a set of conditions issued by the Ministry of Environment for facilities included in a solid or liquid Waste Management Plan.

A new application is a multi-step process that requires submission of a preliminary application, followed by meetings with Ministry staff, followed by submission of a final application together with the application fee and Payment Form (\$200 for a Permit; \$100 plus variable fee for an Approval).

Preliminary Application: All fields on Pages 1 to 3 marked with an asterisk * must be completed for the submission of a preliminary application.

Final Application: Sign and date your final application at the bottom of Page 3. Include your Pre-Authorization# and Tracking# in the fields on Page 1. Pages 1 - 4 and 6 must be completed for the submission of a final application. Page 5 is only required if your regional representative advised that a Technical Assessment Report is not required.

3. Your regional representative will advise you of any additional documents (such as Environmental Protection Notice, Site Plan(s), Location Map, Consultation Report, Technical Assessment Report) that are required for your application.

*Purpose of
Application
[e.g., to discharge air
emissions from
a sawmill]

(If necessary, attach a separate page.) To discharge flow-through seawater in a land-based shellfish aquaculture hatchery-nursery. The hatchery obtains the raw seawater obtained from a deep water (-20m) intake 200m off the beach at the site in Jervis Inlet. Most of the water in the hatchery/nursery will be flow-through tanks and raceways. However, at a time when there is active incubation & rearing of shellfish larvae to spat stage (about 3 months of the year), approximately one-fifth (20%) of the intake saltwater volume will be heated to a temperature of 13°C before discharge. This heated discharge water will initially be mixed with flow-through water discharge water. There could be minor increases in suspended solids & BOD content in this discharge saltwater. The hatchery will use only seawater and not any chlorine or muriatic acid compounds for cleaning tanks.

Is this Authorization required for remediation of a contaminated site? ☐ Yes ☒ No

*Authorization Type: ☒ Permit ☐ Approval ☐ Operational Certificate

Authorized Agent Information*(*Complete only if you are an Authorized Agent for the Applicant)*Agent's Company Name **OR**
First and Last NameAgent Numbers
[e.g., (999) 999-9999]

Phone:

(250) 757-8874

Cell:

s.22

Fax:

E-mail Address

bon@thorconsult.ca

Applicant's Authorization for AgentI / we *(applicant)* hereby authorize Bon Thorburn, P.Eng. of Thor Consult Ltd.to deal with the Ministry directly on all aspects of this application. *(Agent)*

Applicant's Name

Hummingbird Cove Lifestyles Ltd. - Ms. Xi Ping Ding

Signature of Applicant *(not Agent or Representative)*

March 13, 2015

Date (month.dd.yyyy)

*(You will need to sign this only if you are authorizing an agent or representative to act on your behalf.)***Applicant Information***(Must be the name of the company or person seeking authorization, **NOT** the Agent)**Company Legal Name *(as registered with the BC Registrar of Companies)* **OR**
Individual's Full Legal Name

Hummingbird Cove Lifestyles Ltd.

Doing Business As *(if applicable)**Applicant Numbers
[e.g., (999) 999-9999]

Phone:

(604) 487-1499

Cell:

s.22

Fax:

E-mail Address

*Legal Address *(as registered with BC Registrar of Companies)*

204 - 5740 Cambie Street, Vancouver, BC, V5Z 3A6

*Mailing Address *(if different from above)**Billing Address *(if different from above)*

*Nearest Municipality to Facility/Site

Powell River, BC

Contact Information for this Application*(Name of person the Ministry can contact for this Application, NOT the Agent)*

*Contact First and Last Name Mr. George Chen

*Contact Numbers
[e.g., (999) 999-9999]

Phone:

Cell:

Fax:

s.22

E-mail Address

s.22

Facility Location and Information*Facility Type and
Description
*(describe the primary
activity of the facility)*

Shellfish hatchery & nursery for the breeding, incubation & culturing of shellfish

NAICS Code

112510

Regional District

Powell River

*Facility Location:

Source of Data: ☒ GPS ☐ Survey

*Latitude 49.78194

N

*Longitude -124,18583

W

Other *(Please list)**(Must be in decimal degrees format)*

*Either Legal Land Description or PID/PIN/Crown File Number is required.

Legal Land Description
(Lot/Block/Plan)

(If necessary, attach a separate page.)

OR

PID/PIN/Crown File No.

(If necessary, attach a separate page.) PID # 006 633 919

*Facility Address
(civic address)

14839 Highway 101, Powell River BC V8A 0N1

[e.g., 1234 Main Street, Vancouver, BC, V8W 9M1

OR if no civic address, describe location e.g.,
3 km North of Sechelt, BC on Highway 101]

*Is Applicant Legal Land Owner?

☒ Yes ☐ No *(*If No, please provide details below)*

Legal Land Owner Name

Hummingbird Cove Lifestyles Ltd.

Legal Land Owner Numbers
[e.g., (999) 999-9999]

Phone:

Cell:

Fax:

s.22

E-mail Address

*Facility Operator/Site Contact
First and Last Name

Xi Ping Ding

*Facility Operator/Site Contact
Numbers [e.g., (999) 999-9999]

Phone:

Cell:

Fax:

s.22

E-mail Address

March 13, 2015

Date (month.dd.yyyy)

Signature of Applicant *(or Agent, if applicable)*

Discharge Source and Associated Details*(Please provide one page for each Discharge)*

*Description of Discharge Source Flow-through shellfish aquaculture hatchery-nursery

*Discharge Type:

(select all that apply)

☐ Air

☒ Effluent

☐ Refuse

Proposed Treatment and Disposal

(effluent disposal method must be identified, i.e., subsurface or irrigation)

Sumo & sand-gravel filter tank

*Discharge Location *(if different from facility location):*

*Source of Data: ☒ GPS ☐ Survey

*Latitude 49.77972

N

*Longitude -124.18722

W

(Must be in decimal degrees format)

Other *(Please list)*

*Either Legal Land Description or PID/PIN/Crown File Number is required.

Legal Land Description *(If necessary, attach a separate page.)*

(Lot/Block/Plan)

OR

PID/PIN/Crown File No. *(If necessary, attach a separate page.)* PID # 006-633-919

Rate of Discharge (Flow)

Minimum Discharge Rate	Average Discharge Rate	Maximum Discharge Rate	Units	Duration	Duration Units [e.g., hrs/day]	Frequency	Frequency Units [e.g., days/week]
0	100	280	L/Sec	24	Hour	100	Days

Contaminants or Parameters in the Discharge

Parameter or Contaminant Name	Minimum	Average	Maximum	Units
Total suspended solids	1	5	15	mg/L
Settleable solids	0.1	0.3	1.0	mg/L
BOD	0.1	2.0	5.0	mg/L
Total Phosphorus	0.1	0.13	0.39	mg/L
Ammonia- Nitrogen	0.01	0.20	1.50	mg/L

Add another page

Remove page

Receiving Environment

Complete all pertinent fields.

CHARACTERISTICS OF RECEIVING ENVIRONMENT

Distance to nearest surface water (metres)	Jervis Inlet Foreshore at the site
Low water dilution ratio	unknown
Name of water body	Hummingbird Cove - Jervis Inlet
Flushing rate (years)	+/- 2Knot Tides 2x a day
Precipitation (mm/y)	2300
Distance to highest water table (metres)	Jervis Inlet Foreshore at the site
Soil Type and profile (to 3 metres depth)	Bedrock
Other	

DISTANCE TO SPECIFIED FEATURES

Water Well (metres)	NA
Reservoir (metres)	NA
Dwelling (metres)	15m
Serviced Lot (metres)	NA
Recreational Area (metres)	NA
Residential or Health Care Facility (metres)	NA
Other Distance (metres)	NA

LAND USE/AMBIENT GUIDELINES

Background water/air Quality	NA
Plume/Dispersion modeling results	NA
Other Discharges near your location	NA

Payment Form

Amount of Payment Submitted

200.00

Form of Payment

The Ministry of Environment accepts AMERICAN EXPRESS, MASTERCARD or VISA as well as cheque or money order. Please indicate how you will be paying:

☒ Cheque ☐ Money Order ☐ Credit Card

(Please provide your credit card information in the area below)

Cheque or Money Order Payment Option

For payment by Cheque or money order please make payable to **Minister of Finance** and mail to the appropriate address below.

Name as it appears on cheque or money order:

Thor Consult Ltd.

Credit Card Payment Option

Do not complete this section if you are paying by cheque or money order.

Please bill my: ☐ AMERICAN EXPRESS

☐ MASTERCARD

☐ VISA

Name as it appears on Credit Card

Name of applicant if different than name on Card

Contact telephone number for Cardholder

Credit Card Number

Credit Card Expiry Date

Signature

Credit card information provided on this form will not be retained. Upon authorization of payment request, this page will be destroyed.

Mailing and Contact Information

You can **MAIL** your completed application form with a cheque, money order or this credit card payment form to:

Environmental Management Branch
Ministry Of Environment
PO Box 9377 Stn Prov Govt
Victoria, BC V8W 9M1

Or **DELIVER** by courier to:

3rd Floor, 2975 Jutland Road, Victoria, BC V8T 5J9

You can **FAX** your completed application form and this credit card payment form to: **(250) 356-0299**

Print Form

Reset Form

From: s.22
To: [Berube, Conrad ENV:EX; Victoria EPD Permit Administration ENV:EX](#)
Subject: Email 3 of 3 RE: Shellfish Hatchery Waste Discharge Permit
Date: Saturday, March 14, 2015 9:19:02 PM
Attachments: [DischargeApplication.pdf](#)

Conrad,

See my attached DRAFT application form partially filled out. I'll point out what's missing or partially missing on my version of the Discharge Application form.

- o Page 1 top
 - Top line in grey box says "Pre- " blank. What follows Pre-?
 - Second line is cut in half & seems to say "Authorization #" Is this correct?
- o Page 1 bottom- "Is the Authorization required for remediation of a contaminated..." The next line is missing. Could it be site?
 - After the first box it says "Ye..." Does this mean Yes?
- o Page 2 on left midway above "Doing Business As (if applicable) - Black text is missing between this line and "OR" What does it say?
- o Page 3 top left below "*Contact First and Last" - next line is missing and I assume it means Name.
- o Page 3 midway right after "Source of.." I don't know what the line says under GP or the next box Surve. I assume it is the type or accuracy of the Lat/Longs.
- o Page 3 Just below these boxes is a box for the *Longitude. There is a bracket missing after (Must be in decimal degrees... Is there any text after this?
- o Page 3 bottom after ...describe location e.g. - the next line is mostly missing but seems to be "3km North....
- o Page 3 Bottom after the box that should say "Yes" It only says "Ye..." and there is right end bracket after the red text (If No, please provide details..." Is there any more red text here?
- o Page 3 Bottom after "Signature of Applicant" in black and "or Agent, if..." In red... - There is no more text or a return right bracket. What is the red text that's missing?
- o Page 4 top left after *Description of Discharge... - the next line is cut but seems to be "Source". Is this correct?
- o Page 4 top left after *Discharge type... - the next line in red says (select all that... The rest of the text is missing - What is the rest of this text?
- o Page 4 top left right - there are no right end brackets after "(If different from facility..." and (Must be decimal degrees..." Is there any more red text on these two lines?
- o Page 4 mid left after "*PID/PIN/Crown File" - Does next line say "Number"?
- o Page 5 top left after "Distance to nearest surface water" - Does next line say "Metres" ?
- o Page 5 midway left after "Residential or Health Care Facility" - I assume the next line says "metres"
- o Page 6 top after "indicate" - I assume next line says "how you will pay."
- o Page 6 top after "Money & Credit" Boxes' - I assume next line says "Order & Card."
- o Page 6 midway "... if different than name on..." - I assume next line says "Card"

Most of the missing or squashed lines seem to be OK. I hope that I'm not missing anything. If so, let me know.

Cheers!

Bon Thorburn, P.Eng.

ThorConsult Ltd.
Water & Land Development Engineering Consultants
192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874 **s.22**
email: bon@thorconsult.ca web: www.thorconsult.ca

From: Berube, Conrad ENV:EX [mailto:Conrad.Berube@gov.bc.ca]
Sent: Friday, March 13, 2015 11:48 AM
To: 'Bonaventure Thorburn'; Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

BTW, I didn't have any problems filling data into the form that Bon sent back to me...maybe the problem is with the version of Adobe on his machine...

From: Berube, Conrad ENV:EX
Sent: Friday, March 13, 2015 10:37 AM
To: 'Bonaventure Thorburn'
Cc: Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Please contact Permit Administration as per my original message

From: [Berube, Conrad ENV:EX](#)
To: [e 22](#)
Cc: [Victoria EPD Permit Administration ENV:EX](#); [Roth, Myron AGRI:EX](#)
Subject: Email 2 of 2 RE: Shellfish Hatchery Waste Discharge Permit
Date: Tuesday, March 17, 2015 1:29:48 PM
Attachments: [RE Shellfish Hatchery Waste Discharge Permit.msg](#)

Bon—

In the document titled “DischargeApplication.pdf” you have not included any values characterizing the influent (intake). These are necessary to assess the application. The draft application will not be considered complete without such values. Please find some reputable data for the region (Myron Roth may be able to assist in this) or conduct baseline sampling to submit the data as requested previously (see attached).

Feel free to call to discuss if you would like.

Thank you,

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Nanaimo, BC V9T 6J9
(250) 751-3167; FAX: (250) 751-3103
email: conrad.berube@gov.bc.ca

From: Victoria EPD Permit Administration ENV:EX
Sent: Tuesday, March 17, 2015 11:29 AM
To: [e 22](#)
Cc: Berube, Conrad ENV:EX
Subject: FW: Shellfish Hatchery Waste Discharge Permit

Hi Bon,

I’ve had a look at the form which looks completed properly except for the Agent Authorization area on page two.

Your name or consultant company, needs to be entered after header for Authorized Agent Information and currently this area is blank. Then under Applicant’s Authorization for Agent the applicant (not the agent) needs to complete this area and sign and date. I have enclosed the agent authorization page separately for you to complete with your client.

Please note, that until this agent authorization form is completed and we also receive the application fee of \$200.00 we can’t enter this request in our system. If you would like to pay the application fee by phone, please let me know and I can contact you to get this information. Or you can pay by cheque as you indicated on your application but we can’t enter this request until we receive payment.

For security reasons we cannot accept credit card information by email.

Cheers.

Thérèse Starck
Permitting Officer
Business Services Branch
Environmental Protection Division, Ministry of Environment
Phone: (250) 356-9224
Fax: (250) 356-0299

Please send all permit related emails to: PermitAdministration.VictoriaEPD@gov.bc.ca
Please do not send credit card information via email.

From: Bonaventure Thorburn [s,22](#)
Sent: Saturday, March 14, 2015 9:18 PM
To: Berube, Conrad ENV:EX; Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Cavadini, Roger ENV:EX

From: s.22
Sent: Wednesday, March 25, 2015 11:01 AM
To: Hamelin, Trevor M ENV:EX
Cc: Jennifer Mollins; s.22
Subject: 2015_03_25 Aquaculture permit application by Hummingbird Cove Lifestyles Ltd.

Trevor: thank you for this timely and focussed update which deals with my two core concerns. Please keep me well posted on any WDA permit requests for effluent disposal in the immediate offshore area. s.22

s.22 in close proximity to Hummingbird Cove and the adjacent Provincial Park Campsite and public diving area, generally from late May to October, and s.22 all year round as permitted. s.22

s.22 . We practice low impact living on our land. Quite simply, we expect neighbouring industry in the ALR to work to parallel environmental goals. Besides my family's direct interest in effluent disposal impacts and plans, and our respect for First Nations' rights on unceded Crown lands (foreshore) and offshore waters, we also believe that a higher standard of public consultation and involvement is necessary in the ALR, especially for projects like this. I also have concerns about the employment of non- Canadian labourers on site (which appears to be the case), when there are multi- talented local workers available. Overall, please understand that I am not anti-development; I am rather pro- sustainable development with all that implies. Skelhp (the Sechelt dialect place name for the vicinity of Saltery Bay) is a magically restorative and beautiful place. One day my ashes will be spread there. Until then, I will work as a steward of the values I have expressed.

Let us stay in close contact,
Yours sincerely,

s.22

> On Mar 25, 2015, at 5:24 PM, Hamelin, Trevor M ENV:EX <Trevor.Hamelin@gov.bc.ca> wrote:

>

> Hi s.22

>

> I do not have a lot of information to be able to brief you. I am aware of the aquaculture licence and only have a very basic understanding of the applicants plan.

>

> The Ministry of Environment (MoE) has not received a waste discharge application (WDA) for this site, which would provide me with technical details, so again, I don't have a lot of information to provide. However, should the MoE receive a WDA, it is mandatory that the applicant consult with First Nations and notify any potentially impact individuals and companies. Additionally, any WDA could trigger an Environmental Impact Study to determine any possible effects of the discharge to the receiving environment. Once all of that work is completed, there is a decision made on whether to issue or decline the permit. Should the permit be issued, there is an appeals process that could be triggered.

>

> This all the information that I am able to provide at this time, but, in the event that a WDA is received they have to do work to satisfy the type of concerns that you have brought forward.

>

> Regards,

>

> Trevor Hamelin, ASCT

> Environmental Protection Officer

> Coast Region - Authorizations

> (Office) 604-582-5275

> (Fax) 604-584-9751

>

>

>

> -----Original Message-----

> From: s.22

> Sent: Wednesday, March 25, 2015 12:42 AM

> To: Hamelin, Trevor M ENV:EX

> Cc: Jennifer Mollins

> Subject: Aquaculture permit application by Hummingbird Cove Lifestyles Ltd.

>

> Hi Trevor: I am a s.22

with concerns about effluent discharge from the above

referenced project. I am currently s.22

I need a briefing from you on all

aspects of this issue. I would also appreciate any briefing you can supply on Sechelt or Sliammon First Nations

awareness of the offshore and foreshore implications of this project for overall water quality, aquatic species health risks, and traditional food gathering. Jennifer Mollins of DFO Nanaimo provided your contact information.

>

s.22

Cavadini, Roger ENV:EX

From: Berube, Conrad ENV:EX
Sent: Wednesday, March 25, 2015 11:46 AM
To: Hamelin, Trevor M ENV:EX
Subject: 2015_03_25 Shellfish Hatchery Waste Discharge Permit
Attachments: 2015_03_16 Shellfish Hatchery Waste Discharge Permit

Per our conversation

From: Berube, Conrad ENV:EX
Sent: Tuesday, March 17, 2015 1:30 PM
To: s.22
Cc: Victoria EPD Permit Administration ENV:EX; Roth, Myron AGRI:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Bon—

In the document titled “DischargeApplication.pdf” you have not included any values characterizing the influent (intake). These are necessary to assess the application. The draft application will not be considered complete without such values. Please find some reputable data for the region (Myron Roth may be able to assist in this) or conduct baseline sampling to submit the data as requested previously (see attached).

Feel free to call to discuss if you would like.

Thank you,

-
" ` Conrad Bérubé
" ` Environmental Protection Officer
_ - _ - _ | ' \ / ^ Ministry of Environment (Authorizations Unit)
_ / / / - ' ~ () () 2080-A Labieux Road
\ \ _ / \ - . _ / \ / Nanaimo, BC V9T 6J9
/ | | (250) 751-3167; FAX: (250) 751-3103
' ^ ^ email: conrad.berube@gov.bc.ca

From: Victoria EPD Permit Administration ENV:EX
Sent: Tuesday, March 17, 2015 11:29 AM
To: s.22
Cc: Berube, Conrad ENV:EX
Subject: FW: Shellfish Hatchery Waste Discharge Permit

Hi Bon,

I've had a look at the form which looks completed properly except for the Agent Authorization area on page two.

Your name or consultant company, needs to be entered after header for Authorized Agent Information and currently this area is blank. Then under Applicant's Authorization for Agent the applicant (not the agent) needs to complete this area and sign and date. I have enclosed the agent authorization page separately for you to complete with your client.

Please note, that until this agent authorization form is completed and we also receive the application fee of \$200.00 we can't enter this request in our system. If you would like to pay the application fee by phone, please let me know and I can contact you to get this information. Or you can pay by cheque as you indicated on your application but we can't enter this request until we receive payment.

For security reasons we cannot accept credit card information by email.

Cheers.

Thérèse Starck
Permitting Officer
Business Services Branch
Environmental Protection Division, Ministry of Environment
Phone: (250) 356-9224
Fax: (250) 356-0299

Please send all permit related emails to: PermitAdministration.VictoriaEPD@gov.bc.ca
Please do not send credit card information via email.

From: Bonaventure Thorburn s.22
Sent: Saturday, March 14, 2015 9:18 PM
To: Berube, Conrad ENV:EX; Victoria EPD Permit Administration ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Conrad,

See my attached DRAFT application form partially filled out. I'll point out what's missing or partially missing on my version of the Discharge Application form.

- Page 1 top – Top line in grey box says "Pre- " blank. What follows Pre-?
 - Second line is cut in half & seems to say "Authorization #" Is this correct?
- Page 1 bottom- "Is the Authorization required for remediation of a contaminated..." The next line is missing. Could it be site?
 - After the first box it says "Ye..." Does this mean Yes?
- Page 2 on left midway above "Doing Business As (if applicable) – Black text is missing between this line and "OR" What does it say?
- Page 3 top left below "**Contact First and Last" – next line is missing and I assume it means Name.
- Page 3 midway right after "Source of.." I don't know what the line says under GP or the next box Surve. I assume it is the type or accuracy of the Lat/Longs.
- Page 3 Just below these boxes is a box for the *Longitude. There is a bracket missing after (Must be in decimal degrees... Is there any text after this?
- Page 3 bottom after ...describe location e.g. – the next line is mostly missing but seems to be " 3km North....
- Page 3 Bottom after the box that should say "Yes" It only says "Ye..." and there is right end bracket after the red text (If No, please provide details..." Is there any more red text here?

Cavadini, Roger ENV:EX

From: Hamelin, Trevor M ENV:EX
Sent: Wednesday, March 25, 2015 11:50 AM
To: Berube, Conrad ENV:EX
Subject: FW: Permit Application for Wiser Discharge Marine Environment

From: Bonaventure Thorburn s.22
Sent: Monday, February 16, 2015 10:15 AM
To: Hamelin, Trevor M ENV:EX
Subject: Permit Application for Wiser Discharge Marine Environment

Trevor,

Thanks for the information when we talked a few weeks back about whether there was a need for a permit for a proposed shellfish hatchery/nursery at Hummingbird Cove, BC. Before making any submission to your Victoria office, you suggested that I forward the preliminary discharge information onto yourself.

I attach a site plan for the proposed hatchery (INTAKEJan05.pdf) for your review. The saltwater intake screen is at the south end of the existing LOO 242630 foreshore tenure in -20m of water at low tide. The salinity of that water is approximately 25-30 ppt and the intake temperature will be in the range of 5-7°C. The volume of intake/discharge will be a maximum of 280 litres/second at the shellfish hatchery/nursery.

Most of the water in the hatchery/nursery will be flow-through tanks and raceways. However, at a time when there is active incubation & rearing of shellfish larvae to spat stage (about 3 months of the year), approximately one-fifth (20%) of the intake saltwater volume will be heated to a temperature of 13°C before discharge. This heated discharge water will initially be mixed with flow-through water discharge water. Before final discharge at the foreshore (near Dwelling #4), both of these discharge waters will then be filtered through a sump and a concrete tank partially filled with a sand/gravel mix. I can supply you with the details of the 5000 gal tank, if required.

On February 11th, we submitted the application for a Shellfish Hatchery /Nursery Licence to Front Counter BC (Valerie Brenahan) and Fisheires & Ocean Canada (Jain Alcock-White). They may contact you when processing the application. Let me know if you will need copies of all six design drawings and the actual application of the site (it's long at 95 pages).

I have searched your BC Ministry of Environment and the Front Counter BC websites several times for an actual BC MOE discharge permit application form without success. I have all your guidelines for the application but there are no operational links to the application form noted. By the way, I checked with most of the other shellfish hatcheries in BC, (including the Vancouver Island University's Shellfish Research field station next door here in Bowser) and none have saltwater discharge permits. If we are required to forward an official discharge permit application to your Victoria office, kindly forward me the link to the fillable PDF form.

I look forward to hearing back from you at your earliest convenience on this matter.

Cheers!

Bon Thorburn, P.Eng.

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874

s.22

email: bon@thorconsult.ca web: www.thorconsult.ca

Business Services

MAR 25 2015

Received

FAX

For: Ministry of Environment - Thérèse Starck

Fax number: 250 356-0299

From: Bon Thorburn

Fax number: 250 757 8874

Date: Mach 24/15

Regarding: Hummingbird Cove Discharge Permit Application

Number of pages: 7 including this cover page

Comments:

Thérèse,

As discussed herein is the application with appropriate signatures on page 2 & 3.

Thanks for your kind assistance. Can you please submit the same to Conrad.

Bon

ThorConsult Ltd.

Water & Land Development Engineering Consultants

182 Crome Point Road, Bowser, B.C. CANADA V0R 1G0
Phone/Fax: (250) 757-8874 Email: bon@thorconsult.ca Web: www.thorconsult.ca



Ministry of
Environment

Environmental Management Branch
Business Services Section
PO Box 9377 Stn Prov Govt
Victoria, BC V8W 9M1
Fax: (250) 356-0299

Pre-Authorization# 107751
Tracking# 337752

Business Services
MAR 25 2015
Received

Courier delivery address: Ministry of Environment,
Environmental Management Branch, Business Services Section
3rd Floor, 2975 Jutland Rd., Victoria BC V8T 5J9

Application for an Authorization to Discharge Waste under the *Environmental Management Act*

This Application Form can be submitted to the Ministry of Environment by mail or courier. If paying by CREDIT CARD, the signed Payment Form and Application Form can be faxed.

INSTRUCTIONS:

1. If you are completing this form by hand, please PRINT clearly. All fields marked with an asterisk* must be completed. Please visit http://www.env.gov.bc.ca/epd/waste_discharge_auth/index.htm to review the information and Guidance Documents that will assist you in understanding the application process and any other documents that may be required.

2. If a **New Permit, New Approval or New Operational Certificate** is required, please use this application form.

A **Permit** is an Authorization to discharge waste to the environment.

An **Approval** is an Authorization to discharge waste to the environment for a maximum of 15 months.

An **Operational Certificate** is a set of conditions issued by the Ministry of Environment for facilities included in a solid or liquid Waste Management Plan.

A new application is a multi-step process that requires submission of a preliminary application, followed by meetings with Ministry staff, followed by submission of a final application together with the application fee and Payment Form (\$200 for a Permit; \$100 plus variable fee for an Approval).

Preliminary Application: All fields on Pages 1 to 3 marked with an asterisk* must be completed for the submission of a preliminary application.

Final Application: Sign and date your final application at the bottom of Page 3. Include your Pre-Authorization# and Tracking# in the fields on Page 1. Pages 1 - 4 and 6 must be completed for the submission of a final application. Page 5 is only required if your regional representative advised that a Technical Assessment Report is not required.

3. Your regional representative will advise you of any additional documents (such as Environmental Protection Notice, Site Plan(s), Location Map, Consultation Report, Technical Assessment Report) that are required for your application.

*Purpose of
Application
(e.g., to discharge air
emissions from
a sawmill)

(If necessary, attach a separate page.) To discharge flow-through seawater in a land-based shellfish aquaculture hatchery-nursery. The hatchery obtains the raw seawater obtained from a deep water (-20m) intake 200m off the beach at the site in Jervis Inlet. Most of the water in the hatchery/nursery will be flow-through tanks and raceways. However, at a time when there is active incubation & rearing of shellfish larvae to spat stage (about 3 months of the year), approximately one-fifth (20%) of the intake saltwater volume will be heated to a temperature of 13°C before discharge. This heated discharge water will initially be mixed with flow-through water discharge water. There could be minor increases in suspended solids & BOD content in this discharge saltwater. Hatchery will use only seawater for cleaning.

Is this Authorization required for remediation of a contaminated site? ☐ Yes ☐ No

*Authorization Type: ☒ Permit ☐ Approval ☐ Operational Certificate

Authorized Agent Information

(Complete only if you are an Authorized Agent for the Applicant)

Agent's Company Name OR
First and Last Name

Bon Thorburn, P.Eng. of ThorConsult Ltd.

Agent Numbers
(e.g., (999) 999-9999)

Phone:

Cell:

Fax:

(250) 757-8874

s.22

E-mail Address

bon@thorconsult.ca

Applicant's Authorization for Agent

I/we, Applicant, hereby authorize

Bon Thorburn, P.Eng. of ThorConsult Ltd.

to deal with the Ministry directly on all aspects of this application.

Agent

Applicant's Name

Hummingbird Cove Lifestyles Ltd. - Ms. Xi Ping Ding

Signature of Applicant

(Not Agent or Representative)

March 23, 2015

Date (month.dd/yyyy)

(I/we declared to sign this only if you are authorizing an agent or representative to deal on your behalf)

Applicant Information

(Must be the name of the company or person seeking authorization NOT the Agent)

*Company Legal Name (as registered
with the B.C. Registrar of Companies) OR
Individual's Full Legal Name

Hummingbird Cove Lifestyles Ltd.

Doing Business As (if applicable)

*Applicant Numbers
(e.g., (999) 999-9999)

Phone:

Cell:

Fax:

(604) 487-1499

s.22

E-mail Address

*Legal Address (where letter must be
registered at, if applicable)

204-5740 Cambie Street, Vancouver, BC, V5Z 3A6

*Mailing Address (if different from above)

*Billing Address (if different from above)

*Nearest Municipality to Facility/Site

Powell River, BC

Contact Information for this Application(Name of person the Ministry can contact for this Application, **NOT** the Agent)

*Contact First and Last Name Xi Ping Ding

*Contact Numbers

[e.g., (999) 999-9999]

Phone:

Cell:

Fax:

E-mail Address

s.22

Facility Location and Information

*Facility Type and Description

(describe the primary activity of the facility)

Shellfish hatchery & nursery for the breeding, incubation & culturing of shellfish

NAICS Code

112510

Regional District

Powell River

*Facility Location:

*Latitude 49.78194

N

*Longitude -124.18583

W

(Must be in decimal degrees format)

Source of Data: ☒ GPS ☐ Survey

Other (Please list)

*Either Legal Land Description or PID/PIN/Crown File Number is required.

Legal Land Description
(Lot/Block/Plan)

(If necessary, attach a separate page.)

OR

PID/PIN/Crown File No.

(If necessary, attach a separate page.) PID # 006 633 919

*Facility Address
(civic address)

[e.g., 1234 Main Street, Vancouver, BC, V8W 9M1]

OR if no civic address, describe location e.g.,
3 km North of Sechart, BC on Highway 101]

14839 Highway 101, Powell River BC V8A 0N1

*Is Applicant Legal Land Owner?

☒ Yes ☐ No (*If No, please provide details below)

Legal Land Owner Name

Hummingbird Cove Lifestyles Ltd.

Legal Land Owner Numbers

[e.g., (999) 999-9999]

Phone:

Cell:

Fax:

s.22

E-mail Address

*Facility Operator/Site Contact
First and Last Name

Xi Ping Ding

*Facility Operator/Site Contact
Numbers [e.g., (999) 999-9999]

Phone:

Cell:

Fax:

s.22

E-mail Address

Signature of Applicant (or Agent, if applicable)

March 23, 2015

Date (month.dd.yyyy)

Discharge Source and Associated Details*(Please provide one page for each Discharge)*

*Description of Discharge Source **Flow-through shellfish aquaculture hatchery-nursery**

*Discharge Type:
(select all that apply) ☐ Air ☒ Effluent ☐ Refuse

Proposed Treatment and Disposal
(effluent disposal method must be identified, i.e., subsurface or irrigation) **Two compartment concrete sand & gravel filter tank**

*Discharge Location (if different from facility location):

*Source of Data: ☒ GPS ☐ Survey

*Latitude **49.77972** N

*Longitude **-124.18722** W

(Must be in decimal degrees format)

Other (Please list)

*Either Legal Land Description or PID/PIN/Crown File Number is required.

Legal Land Description (Lot/Block/Plan) (If necessary, attach a separate page.)

OR

PID/PIN/Crown File No. (If necessary, attach a separate page.) PID # 006-633-919

Rate of Discharge (Flow)

Minimum Discharge Rate	Average Discharge Rate	Maximum Discharge Rate	Units	Duration	Duration Units [e.g., hrs/day]	Frequency	Frequency Units [e.g., days/week]
0	100	280	L/sec	24	Hour	100	Days

Contaminants or Parameters in the Discharge

Parameter or Contaminant Name	Minimum	Average	Maximum	Units
Discharge - Total suspended solids	1.00	5.00	15.00	mg/L
Discharge - BOD	0.10	2.00	5.00	mg/L
Discharge - Total Phosphorus	0.10	0.13	0.39	mg/L
Discharge - Ammonia & Nitrate	0.01	0.20	1.50	mg/L
Intake - Total suspended solids	Tested 03/17/15	10.0		mg/L
Intake - BOD	Tested 03/17/15	<6.0		mg/L
Intake - Total Phosphorus	Tested 03/17/15	0.0126		mg/L
Intake - Ammonia & Nitrate	Tested 03/17/15	0.0058 & <0.020		mg/L

Add another page

Remove page

Receiving Environment

Complete all pertinent fields.

CHARACTERISTICS OF RECEIVING ENVIRONMENT

Distance to nearest surface water (metres)	Jervis Inlet Foreshore at the site
Low water dilution ratio	unknown
Name of water body	Hummingbird Cove - Jervis Inlet
Flushing rate (years)	+ 2 Knot Tides 2x a day
Precipitation (mm/y)	2300
Distance to highest water table (metres)	Jervis Inlet Foreshore at the site
Soil Type and profile (to 3 metres depth)	Bedrock
Other	

DISTANCE TO SPECIFIED FEATURES

Water Well (metres)	Not Applicable (NA)
Reservoir (metres)	NA
Dwelling (metres)	15m
Serviced Lot (metres)	NA
Recreational Area (metres)	NA
Residential or Health Care Facility (metres)	NA
Other Distance (metres)	NA

LAND USE/AMBIENT GUIDELINES

Background water/air Quality	NA
Plume/Dispersion modeling results	NA
Other Discharges near your location	NA

Payment Form

Amount of Payment Submitted 200.00

Form of Payment

The Ministry of Environment accepts AMERICAN EXPRESS, MASTERCARD or VISA as well as cheque or money order. Please indicate how you will be paying:

☐ Cheque ☐ Money Order ☒ Credit Card

(Please provide your credit card information in the area below)

Cheque or Money Order Payment Option

For payment by Cheque or money order please make payable to **Minister of Finance** and mail to the appropriate address below.

Name as it appears on cheque or money order:

Credit Card Payment Option

Do not complete this section if you are paying by cheque or money order.

GIVEN BY PHONE.

Please bill my: ☐ AMERICAN EXPRESS

☐ MASTERCARD

☒ VISA

Name as it appears on Credit Card

Name of applicant if different than name on Card

Contact telephone number for Cardholder

Credit Card Number

Credit Card Expiry Date

Signature

Credit card information provided on this form will not be retained. Upon authorization of payment request, this page will be destroyed.

Mailing and Contact Information

You can **MAIL** your completed application form with a cheque, money order or this credit card payment form to:

Environmental Management Branch
Ministry Of Environment
PO Box 9377 Stn Prov Govt
Victoria, BC V8W 9M1

Or **DELIVER** by courier to:

3rd Floor, 2975 Jutland Road, Victoria, BC V8T 5J9

You can **FAX** your completed application form and this credit card payment form to: **(250) 356-0299**

Print Form

Reset Form

Cavadini, Roger ENV:EX

From: s.22
Sent: Monday, May 4, 2015 1:10 PM
To: Hamelin, Trevor M ENV:EX
Subject: 2015_05_04 Hummingbird Cove Shellfish Aquaculture Project

Hi Trevor: thanks for your speedy response. I look forward to your notification of me of any upcoming public consultation, which I shall of course attend/ participate in/ be a citizen for, so to speak. It appears that it falls to me to stay in touch with you, and I will from time to time. Think of me as a citizen steward, in the cause of best practices and sustainability of the public waters and lands where my family and I live.

s.22

> On May 4, 2015, at 10:06 AM, Hamelin, Trevor M ENV:EX <Trevor.Hamelin@gov.bc.ca> wrote:

>

> Hi s.22 ,

>

> There is no new information to provide you and I will not be contacting you to provide you regular updates. Please understand that there are too many potential and active waste discharges within the province to be able to give updates to concerned or interested members of the public.

>

> Please note, not all activities that the Ministry of Environment (Ministry) regulates will trigger public consultation. However, If the Ministry receives a Waste Discharge application for any discharge at the site, it will likely trigger public consultation and not necessarily a public meeting.

>

> First Nations Consultation also has not been triggered, as the Ministry has not received any waste discharge applications for the site, there is no information for us to provide First Nations. Also note, if First Nations consultation were taking place, I would not be providing you with the details of those discussions.

>

> If public consultation takes place, I'll make sure that you are aware.

>

> Regards,

>

> Trevor Hamelin, AScT

> Environmental Protection Officer

> Coast Region - Authorizations

> (Office) 604-582-5275

> (Fax) 604-584-9751

>

>

> -----Original Message-----

> From: s.22

> Sent: Friday, May 1, 2015 9:24 PM

> To: Hamelin, Trevor M ENV:EX

> Cc: Jennifer Mollins

> Subject: Hummingbird Cove Shellfish Aquaculture Project

>

> Hello Trevor and Jennifer: can you please update me as a citizen and 'project neighbour' on the present state of the permitting process for the above mentioned project. It has been over a month since I initiated contact, and neither of you have updated me as to the Waste Disposal Agreement (Provincial), or the DFO oversight of potential diseases that might impact fishes or the marine environment as a result of effluent release into Jervis Inlet. I am also keen to hear how any consultations with Sechelt and Sliammon First Nations are proceeding given their unceded Coast Salish lands and waters in the adjacent foreshore and offshore waters of Skelhp (the Coast Salish place name for where I live).

>

> My neighbours and I are meeting more frequently now to discuss this project, and there still has been no public involvement meeting in our region to explain, discuss or answer questions about the project. I also look forward to hearing from you about how the two senior levels of government are sharing information about the project, and the potential impacts it may create.

>

s.22

Cavadini, Roger ENV:EX

From: Manning, Michelle <Michelle.Manning@dfo-mpo.gc.ca>
Sent: Monday, May 4, 2015 11:49 AM
To: Hamelin, Trevor M ENV:EX
Subject: 2015_05_04 RE: Hummingbird Cove Shellfish Aquaculture Project 7593

Great. Thank you for the explanation.

Best Regards,

Michelle

-----Original Message-----

From: Hamelin, Trevor M ENV:EX [mailto:Trevor.Hamelin@gov.bc.ca]
Sent: Monday, May 04, 2015 11:47 AM
To: Manning, Michelle
Subject: RE: Hummingbird Cove Shellfish Aquaculture Project 7593

Hi Michelle,

We have been in contact with an Engineer representing the shellfish hatchery, we want him to provide us with information that states the discharge is cleaner than the marine water coming in. We don't want to assume they don't need a permit. But, generally speaking we haven't issued permits to shellfish hatcheries. However, they are planning to heat the water with some type of boiler, that activity may require a permit.

There is no formal exemption for shellfish hatcheries.

I can only suggest that you encourage any applicants to ensure that they do not need a waste discharge authorization from MoE, by contacting us.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer
Coast Region - Authorizations
(Office) 604-582-5275
(Fax) 604-584-9751

-----Original Message-----

From: Manning, Michelle [mailto:Michelle.Manning@dfo-mpo.gc.ca]
Sent: Monday, May 4, 2015 11:29 AM
To: Hamelin, Trevor M ENV:EX
Subject: FW: Hummingbird Cove Shellfish Aquaculture Project 7593

Hi Trevor,

I am taking over review of this file from Jain Alcock-White with respects to the aquaculture licence.

o clarify things, should I be asking the applicant to apply for a Waste Discharge permit or is this entirely up to the applicant? I know historically shellfish hatcheries do not usually obtain permits since it is assumed that the waste water will be cleaner leaving the building, then when it entered, but is their a formal exemption for shellfish hatcheries?

Thanks,

Michelle

Michelle Manning

Aquaculture Management Coordinator | Coordinatrice -Gestion de l'aquaculture Aquaculture Management Division |
Division de la gestion de l'aquaculture Fisheries and Oceans Canada | Pêches et Océans Canada
1965 Island Diesel Way Nanaimo BC V9S 5W8 Government of Canada | Gouvernement du Canada Telephone |
Téléphone 250-754-0409 Facsimile | Télécopieur 250-754-0134 Michelle.Manning@dfo-mpo.gc.ca <http://www.pac.dfo-mpo.gc.ca/aquaculture/index-eng.htm>

-----Original Message-----

From: Mollins, Jennifer
Sent: Monday, May 04, 2015 10:54 AM
To: Schut, Steven; Manning, Michelle
Subject: FW: Hummingbird Cove Shellfish Aquaculture Project 7593

FYI

-----Original Message-----

From: Hamelin, Trevor M ENV:EX [mailto:Trevor.Hamelin@gov.bc.ca]
Sent: Monday, May 04, 2015 10:07 AM
To: s.22
Cc: Mollins, Jennifer
Subject: RE: Hummingbird Cove Shellfish Aquaculture Project

Hi s.22

There is no new information to provide you and I will not be contacting you to provide you regular updates. Please understand that there are too many potential and active waste discharges within the province to be able to give updates to concerned or interested members of the public.

Please note, not all activities that the Ministry of Environment (Ministry) regulates will trigger public consultation. However, If the Ministry receives a Waste Discharge application for any discharge at the site, it will likely trigger public consultation and not necessarily a public meeting.

First Nations Consultation also has not been triggered, as the Ministry has not received any waste discharge applications for the site, there is no information for us to provide First Nations. Also note, if First Nations consultation were taking place, I would not be providing you with the details of those discussions.

If public consultation takes place, I'll make sure that you are aware.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer
Coast Region - Authorizations
(Office) 604-582-5275
(Fax) 604-584-9751

-----Original Message-----

From: s.22

Sent: Friday, May 1, 2015 9:24 PM

To: Hamelin, Trevor M ENV:EX

Cc: Jennifer Mollins

Subject: Hummingbird Cove Shellfish Aquaculture Project

Hello Trevor and Jennifer: can you please update me as a citizen and 'project neighbour' on the present state of the permitting process for the above mentioned project. It has been over a month since I initiated contact, and neither of you have updated me as to the Waste Disposal Agreement (Provincial), or the DFO oversight of potential diseases that might impact fishes or the marine environment as a result of effluent release into Jervis Inlet. I am also keen to hear how any consultations with Sechelt and Sliammon First Nations are proceeding given their unceded Coast Salish lands and waters in the adjacent foreshore and offshore waters of Skelhp (the Coast Salish place name for where I live).

My neighbours and I are meeting more frequently now to discuss this project, and there still has been no public involvement meeting in our region to explain, discuss or answer questions about the project. I also look forward to hearing from you about how the two senior levels of government are sharing information about the project, and the potential impacts it may create.

s.22

Cavadini, Roger ENV:EX

From: Bonaventure Thorburn s.22
Sent: Friday, May 22, 2015 12:28 PM
To: Berube, Conrad ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Thanks Conrad!

Bon

From: Berube, Conrad ENV:EX [<mailto:Conrad.Berube@gov.bc.ca>]
Sent: Friday, May 22, 2015 11:42 AM
To: Bonaventure Thorburn
Subject: RE: Shellfish Hatchery Waste Discharge Permit

The attached will at least let you check where you are in the queue—if the job hasn't been assigned to anyone yet at least you'll know that...

From: Bonaventure Thorburn s.22
Sent: Friday, May 22, 2015 11:37 AM
To: Berube, Conrad ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Conrad,

Is there any way that I can find out to whom the file has been assigned?

Bon

From: Berube, Conrad ENV:EX [<mailto:Conrad.Berube@gov.bc.ca>]
Sent: Friday, May 22, 2015 11:26 AM
To: Bonaventure Thorburn
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Nope, it hasn't been assigned to me.

From: Bonaventure Thorburn s.22
Sent: Friday, May 22, 2015 11:25 AM
To: Berube, Conrad ENV:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Conrad,

I was just wondering if my Hummingbird Cove discharge application has crossed your desk yet.

Cheers!

ThorConsult Ltd.

Water & Land Development Engineering Consultants

192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0



Phone/Fax: (250) 757-8874

s.22

email: bon@thorconsult.ca web: www.thorconsult.ca

From: Berube, Conrad ENV:EX [<mailto:Conrad.Berube@gov.bc.ca>]
Sent: Tuesday, March 17, 2015 1:30 PM
To: s.22
Cc: Victoria EPD Permit Administration ENV:EX; Roth, Myron AGRI:EX
Subject: RE: Shellfish Hatchery Waste Discharge Permit

Bon—

In the document titled “DischargeApplication.pdf” you have not included any values characterizing the influent (intake). These are necessary to assess the application. The draft application will not be considered complete without such values. Please find some reputable data for the region (Myron Roth may be able to assist in this) or conduct baseline sampling to submit the data as requested previously (see attached).

Feel free to call to discuss if you would like.

Thank you,

Conrad Bérubé
Environmental Protection Officer
Ministry of
Environment (Authorizations Unit)
2080-A Labieux Road
Nanaimo, BC V9T 6J9
(250) 751-3167; FAX: (250) 751-3103
email: conrad.berube@gov.bc.ca

September

From: [Berube, Conrad ENV:EX](#)
To: [Hamelin, Trevor M ENV:EX](#); [Danyluk, Carol ENV:EX](#)
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593
Date: Thursday, September 24, 2015 3:13:53 PM

Hey Carol and Trevor—

Regionally we have never issued a permit for a shellfish hatchery because, to this point, application materials for other such facilities have included data indicating that proposed discharges do not meet the definition of effluent under EMA. As far as I know, no data comparing the quality of influent compared to effluent has been submitted (only proposed effluent was characterized). I agree with Trevor that, should the effluent temperature differ significantly from that of influent (i.e. enough that such a difference “injures or is capable of injuring property or any life form” and thus meets the definition of effluent), a permit may be required.

c

From: Hamelin, Trevor M ENV:EX
Sent: Thursday, September 24, 2015 3:01 PM
To: Mollins, Jennifer
Cc: Danyluk, Carol ENV:EX; Berube, Conrad ENV:EX
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jennifer,

Hummingbird Cove has submitted a waste discharge application for a discharge, that is currently sitting in a lengthy authorization processing queue. They would need a permit, even though theoretically the effluent should be better quality than the incoming water, just a little warmer. We do have permit conditions that detail temperature requirements of a discharge, but they are usually just a secondary discharge to another more significant discharge to the environment.

In this case, I have a much earlier email from Hummingbird, that asks if they could use a coal fired boiler to heat the water. It would appear if they need to heat the water there will likely be an Air permit, with a secondary effluent discharge. But that is all dependent on the proposed effluent quality discharged to the environment.

I have cc'd Carol Danyluk to this email as she is the Section Head for the group that will eventually process this permit application. I am no longer involved in Aquaculture discharges.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer

Authorizations - South
(Office) 604-582-5275
(Fax) 604-584-9751

From: Berube, Conrad ENV:EX
Sent: Thursday, September 24, 2015 2:41 PM
To: Mollins, Jennifer
Cc: Hamelin, Trevor M ENV:EX
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jennifer—

I requested information on the proposed effluent from the QP and never received an answer. As I am not currently working in the Authorizations unit I don't know if that information has been received since July (but I doubt it).

From: Mollins, Jennifer [<mailto:Jennifer.Mollins@dfo-mpo.gc.ca>]
Sent: Thursday, September 24, 2015 1:29 PM
To: Berube, Conrad ENV:EX
Subject: FW: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Conrad – does this facility need an MoE permit?

From: Hamelin, Trevor M ENV:EX [<mailto:Trevor.Hamelin@gov.bc.ca>]
Sent: Wednesday, March 25, 2015 10:33 AM
To: Mollins, Jennifer
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jennifer,

We do issue permits based on the temperature of effluent discharges to receiving environment. It would be a temperature range that they would need to stay within. However, I'm not sure that MoE has issued permits for land-based shellfish farms, at least not from the Surrey office. I've left a message for Conrad in our Nanaimo office to see if he has experience with land-based shellfish farms.

Are there any other contaminants that could be discharge from a shellfish farm? I know they are filter feeders, so likely they might be cleaning the water?

I could see MoE issuing a permit based on how they are heating the water. If some type of biomass or natural gas boiler is used we'd issue an air permit. I recall someone enquiring about using a coal fired boiler to heat water from an operation like this in the Powell River area, it might be that same site.

I'll let you know the result of my conversation with Conrad.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer
Coast Region - Authorizations
(Office) 604-582-5275
(Fax) 604-584-9751

From: Mollins, Jennifer [<mailto:Jennifer.Mollins@dfo-mpo.gc.ca>]
Sent: Monday, March 23, 2015 2:44 PM
To: Hamelin, Trevor M ENV:EX
Subject: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Trevor,

Would this site require a BC MOE discharge permit for discharge 280 L/sec of seawater where 30% of discharge has been heated by up to 4 degree Celsius? Location is Lot L, DL2091, Group 1, NWD, Plan 13613EP, Powell River RD.

I am assessing this site for an aquaculture licence.

Jennifer Mollins
Senior Coordinator, Shellfish Aquaculture Management | Coordinatrice supérieure de la gestion de l'conchyliculture
Fisheries Management Branch – Pacific Region | Direction de la gestion des pêches – Région Pacifique
Fisheries and Oceans Canada | Pêches et Océans Canada
1965 Island Diesel Way Nanaimo BC V9S 5W8
jennifer.mollins@dfo-mpo.gc.ca
Telephone Téléphone 250-754-0394 Facsimile | Télécopieur 250-754-0391
Government of Canada | Gouvernement du Canada
www.pac.dfo-mpo.gc.ca

October

Cavadini, Roger ENV:EX

From: Kukulies, Brian FLNR:EX
Sent: Tuesday, October 27, 2015 3:17 PM
To: Berube, Conrad ENV:EX
Subject: Hummingbird Cove Lifestyles Ltd

Hi Conrad,

I am the land officer looking after an application by Hummingbird Lifestyles Ltd for a couple of intakes for their shellfish hatchery near Powell River.

I just wanted to give you a heads up that I had a comment from a member of the public that was to do with the seawater discharge from the facility. I contacted Bon Thorburn and he provided me some detail on the application that has been sent to MoE and he gave me your name as a contact. I am going to provide your name to the member of the public^{s.22} so that if he has more questions he can contact you. The discharge is not part of the application I am dealing with.

I will bcc you the response to s.22 and I have attached the info I received from Bon.

Any questions please let me know.

^^

Brian Kukulies, RPF
Land Officer
Ministry of Forests, Lands and Natural Resource Operations
Sunshine Coast Resource District
7077 Duncan Street
Powell River, British Columbia
V8A 1W1
Phone (604) 485-0725 Fax (604) 485-0799
Mail to: Brian.Kukulies@gov.bc.ca

November

From: Berube, Conrad ENV:EX
To: s.22
Cc: Kukulies, Brian FLNR:EX; Victoria EPD Permit Administration ENV:EX
Subject: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])
Date: Monday, November 2, 2015 9:09:00 AM

Hello^{s.22} -- I am not currently working with the authorizations unit.

Please direct any comments/concerns you have to the consultant working on the file:

Bon Thorburn, P.Eng.
ThorConsult Ltd.
Water & Land Development Engineering Consultants
192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0
Phone/Fax: (250) 757-8874^{s.22}
email: bon@thorconsult.ca web: www.thorconsult.ca

or to MoE's Permit Administration office:

Ministry of Environment
Environmental Management Branch Permit Administration
PO Box 9377 Stn Prov Govt
Victoria BC V8W 9M1
Phone: (250)356-0929, (250)387-9953
Fax: (250)356-0299
Please send all permit related emails to
PermitAdministration.VictoriaEPD@gov.bc.ca

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      `` ^ ^
Conrad Bérubé
Environmental Protection Officer
Ministry of Environment (IPM Unit)
2080-A Labieux Road
Nanaimo, BC V9T 6J9
(250) 751-3167; FAX: (250) 751-3103
email: conrad.berube@gov.bc.ca
```

-----Original Message-----
From: Kukulies, Brian FLNR:EX

Sent: Tuesday, October 27, 2015 3:18 PM
To: s.22 _
Subject: FW: Land Application Comments [File #2411638].

Hi s.22

Thank you for your comments in relation to this application for water intake pipes. I have contacted the applicant's consultant and he has provided me with the following:

1. A Discharge Permit application was made to the Ministry of Environment in March 2015. This application is awaiting review.
2. The hatchery salt water is strictly flow through water. No chemicals are added.
3. After passing through the hatchery tanks the discharged salt water will be filtered through a sand filter before discharge back into the ocean.
4. Guidelines for discharge from a shellfish hatchery have been developed consistent with guidelines from Washington State and the State of Rhode Island. This was done because BC has yet to develop these guidelines.

The Ministry of Environment contact for this application is Conrad Berube, Environmental Protection Officer Ph 250 751-3167
email: conrad.berube@gov.bc.ca

Hope this answers your question

^^

Brian Kukulies, RPF
Land Officer
Ministry of Forests, Lands and Natural Resource Operations
Sunshine Coast Resource District
7077 Duncan Street
Powell River, British Columbia
V8A 1W1
Phone (604) 485-0725 Fax (604) 485-0799
Mail to: Brian.Kukulies@gov.bc.ca

-----Original Message-----

From: FLNR Surrey ARFD FLNR:EX
Sent: Tuesday, October 27, 2015 10:43 AM
To: Kukulies, Brian FLNR:EX
Subject: FW: Land Application Comments [File #2411638].

-----Original Message-----

From: do-not-reply@arfd.bc.ca [<mailto:do-not-reply@arfd.bc.ca>]
Sent: Monday, October 26, 2015 2:56 AM
To: FLNR Surrey ARFD FLNR:EX
Subject: Land Application Comments [File #2411638].

Hello,

I have a concern relating to the discharge of the water after it has served its purpose for the applicant. Has there been an

application for discharge permit and what would the required pre treatment of the effluent be?

Regards,

s.22

Cavadini, Roger ENV:EX

From: Berube, Conrad ENV:EX
Sent: Thursday, November 12, 2015 2:48 PM
To: Stewart, Allison ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX; Danyluk, Carol ENV:EX
Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

Thanks, Allison.

Since I haven't been keeping up with the many changes since my TA to the IPM started I'm not sure of the details-- but I've heard that there is a movement afoot to have all correspondence from authorized parties go to a single e-mail address which would alleviate these issues.

s.22

From: Stewart, Allison ENV:EX
Sent: Thursday, November 12, 2015 2:26 PM
To: Berube, Conrad ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX; Danyluk, Carol ENV:EX
Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

Hi Conrad,

Thanks for uploading your response to the "concerned stakeholder" inquiry to the job underway (tracking no. 337752).

This would appear to be the best place for the correspondence in lieu of an RCM being assigned to this file at this time, but.....we will follow our usual process of running it by the appropriate Section Head first....just in case.

Hope all is well with pesticides....

Cheers.
Allison

Allison Stewart
Team Lead, Permitting Authorizations
Business Services Branch | Environmental Protection Division | Ministry of Environment
Phone: 250 387-9953
Fax: 250 356-0299

Please send all permit related emails to: PermitAdministration.VictoriaEPD@gov.bc.ca
Please do not send credit card information via email.

From: Berube, Conrad ENV:EX
Sent: Monday, November 2, 2015 2:29 PM
To: Stewart, Allison ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX; Danyluk, Carol ENV:EX

Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

Allison—

Until such time as the file is assigned I believe that any incoming correspondence should be directed to Permit Administration and uploaded to the documents tab for the job. I have already uploaded my response to s.22 and Brian.

From: Victoria EPD Permit Administration ENV:EX
Sent: Monday, November 2, 2015 9:19 AM
To: Danyluk, Carol ENV:EX
Cc: Berube, Conrad ENV:EX; Kukulies, Brian FLNR:EX
Subject: FW: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

Hi Carol,

I'm just wondering if you can review the email below and provide any response necessary regarding this pending file which is in AMS with you. It has not been assigned to a Regional Case Manager yet and there are technical questions that Vic Admin cannot address.

Cheers.

Thérèse Starck
Permitting Officer
Business Services Branch
Environmental Protection Division, Ministry of Environment
Phone: (250) 356-9224
Fax: (250) 356-0299

Please send all permit related emails to: PermitAdministration.VictoriaEPD@gov.bc.ca
Please do not send credit card information via email.

From: Berube, Conrad ENV:EX
Sent: Monday, November 2, 2015 9:10 AM
To: s.22
Cc: Kukulies, Brian FLNR:EX; Victoria EPD Permit Administration ENV:EX
Subject: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

s.22 -- I am not currently working with the authorizations unit.

Please direct any comments/concerns you have to the consultant working on the file:

Bon Thorburn, P.Eng.
ThorConsult Ltd.
Water & Land Development Engineering Consultants
192 Crome Point Rd, Bowser, B.C. CANADA V0R 1G0
Phone/Fax: (250) 757-8874 Cell: (250) 951-6305

email: bon@thorconsult.ca web: www.thorconsult.ca

or to MoE's Permit Administration office:

Ministry of Environment
Environmental Management Branch Permit Administration
PO Box 9377 Stn Prov Govt
Victoria BC V8W 9M1
Phone: (250)356-0929, (250)387-9953
Fax: (250)356-0299
Please send all permit related emails to
PermitAdministration.VictoriaEPD@gov.bc.ca

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Conrad Bérubé
Environmental Protection Officer
Ministry of Environment (IPM Unit)
2080-A Labieux Road
Nanaimo, BC V9T 6J9
(250)751-3167; FAX:(250) 751-3103
email: conrad.berube@gov.bc.ca

-----Original Message-----

From: Kukulies, Brian FLNR:EX
Sent: Tuesday, October 27, 2015 3:18 PM
To: s.22
Subject: FW: Land Application Comments [File #2411638].

Hi s.22

Thank you for your comments in relation to this application for water intake pipes. I have contacted the applicant's consultant and he has provided me with the following:

1. A Discharge Permit application was made to the Ministry of Environment in March 2015. This application is awaiting review.
2. The hatchery salt water is strictly flow through water. No chemicals are added.
3. After passing through the hatchery tanks the discharged salt water will be filtered through a sand filter before discharge back into the ocean.
4. Guidelines for discharge from a shellfish hatchery have been developed consistent with guidelines from Washington State and the State of Rhode Island. This was done because BC has yet to develop these guidelines.

The Ministry of Environment contact for this application is Conrad Berube, Environmental Protection Officer Ph 250 751-3167

Cavadini, Roger ENV:EX

From: s.22
Sent: Monday, November 16, 2015 6:23 PM
To: Hamelin, Trevor M ENV:EX
Subject: 2015_11_16 Hummingbird Cove Lifestyles Ltd. Shellfish Hatchery
Attachments: Senior Land Officer.docx

Hello Trevor: I enjoyed our correspondence of last March and May, and wonder if you have anything to report re public information, consultation, or fact sharing on this file?

s.22

Senior Land Officer,
200 – 10428 153rd Street,
Surrey, BC V3R 1E1

November 16, 2015

**RE: Lands File Number 2411638 – Hummingbird Cove Lifestyles Ltd.
Application for a Utility Tenure for saltwater intake pipes, SW corner of Lot L
(Exploratory Plan 13613), DL 2091, Group 1, New Westminster District**

Dear Senior Land Officer:

I wish to comment on the above Application as a neighbour of the project and
s.22 in the vicinity of the proposed shellfish
hatchery.

I also wish to note that I tried to comment online, but found the website difficult to use, and poorly designed. Ultimately I gave up trying to post comments after one hour of trying, and wrote this letter.

The core of my concern with the Hummingbird Cove Lifestyles Ltd. proposal has to do with the lack of filing of a Waste Discharge Application (WDA) for any discharge from the site. In an earlier e- mail exchange (May 4, 2015) with Trevor Hamelin, ASCT (Environment Protection Officer, Coast Region – Authorizations, BC Ministry of Environment), I was informed that there will likely be a public consultation when this WDA is filed, but not necessarily a public meeting to discuss local concerns. Mr. Hamelin promised to make me aware if public consultation takes place. So far I have heard nothing from him.

I now find it odd that Hummingbird Cove Lifestyles Ltd. (an odd name for a shellfish hatchery) would apply for saltwater intake pipes, but not for reciprocal out- flush pipes. Where do they intend to flush their effluent? I assume the public ocean, out front of their private property.

Needless to say, with Saltery Bay Provincial Park's swimming beach and dive zone immediately to the west of the "Proposed LOO 2 Utility Tenure" (an unfortunate acronym), I must request that our Provincial regulators pay close attention to the effluent, its contents, and its impact, not just on fish, but on humans.

I find the current Application misleading in that the above issues are not discussed. Surely a review of this project should cover the entire cycle of potential impacts, and not be conducted in a piecemeal fashion.

I must also note that the entire project to date has been advanced without any formal opportunity for neighbours to be informed as to scale, potential impacts and potential benefits. I hear about the venture via rumour (much of it unpleasant) and

by occasional visual inspection of the building site from the adjacent Provincial Park lands. Surely it is time for a public information session. I must also note that the Notice in the Powell River Peak (October 21, 2015), was poorly designed and the map scale was inappropriate for my research and review purposes. The acronyms were unexplained (e.g. LOO 2), and the long rectangle enclosing the twin intake pipes seemed superfluous. Does it indicate some other form of use perhaps?

I look forward to your acknowledgement of my letter, and to your answers to my questions.

Yours in stewardship of *Skelhp*, the Coast Salish place name for, "The place where the ancients first dropped down from the heavens and taught us how to make paddles out of Yew wood," otherwise known as Saltery Bay.

s.22

Cavadini, Roger ENV:EX

From: Danyluk, Carol ENV:EX
Sent: Thursday, November 19, 2015 3:53 PM
To: Stewart, Allison ENV:EX; Berube, Conrad ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX
Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

Thanks Conrad. I agree that we are not in a position to address the concerns further until such time as an RCM is assigned to evaluate the application proposal and supporting information.

Strictly speaking, someone could also efile this correspondence in the LAN by creating a pre-application folder, and once an RCM is assigned they would convert the folder to an Auth folder. However, to save me a lot of time and frustration, my preference would be for the RCM to file all AMS uploaded documents in the LAN once he/she is assigned.

Allison, let me know if you have any concerns with this approach.

Cheers!

Carol

From: Berube, Conrad ENV:EX
Sent: Thursday, November 12, 2015 2:48 PM
To: Stewart, Allison ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX; Danyluk, Carol ENV:EX
Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

Thanks, Allison.

Since I haven't been keeping up with the many changes since my TA to the IPM started I'm not sure of the details-- but I've heard that there is a movement afoot to have all correspondence from authorized parties go to a single e-mail address which would alleviate these issues.

I'm presuming that the Section Heads aren't going to do all the associated filing ;-)

From: Stewart, Allison ENV:EX
Sent: Thursday, November 12, 2015 2:26 PM
To: Berube, Conrad ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX; Danyluk, Carol ENV:EX
Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

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Hope all is well with pesticides....

Cheers.
Allison

Allison Stewart
Team Lead, Permitting Authorizations
Business Services Branch | Environmental Protection Division | Ministry of Environment
Phone: 250 387-9953
Fax: 250 356-0299

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Sent: Monday, November 2, 2015 2:29 PM
To: Stewart, Allison ENV:EX
Cc: Victoria EPD Permit Administration ENV:EX; Danyluk, Carol ENV:EX
Subject: RE: job 337752 Hummingbird Cove Lifestyles Ltd concerned stakeholder (was RE: Land Application Comments [File #2411638])

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Permitting Officer
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or to MoE's Permit Administration office:

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Conrad Bérubé
Environmental Protection Officer
Ministry of Environment (IPM Unit)
2080-A Labieux Road
Nanaimo, BC V9T 6J9
(250) 751-3167; FAX: (250) 751-3103
email: conrad.berube@gov.bc.ca

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Subject: FW: Land Application Comments [File #2411638].

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The Ministry of Environment contact for this application is Conrad Berube,
Environmental Protection Officer Ph 250 751-3167
email: conrad.berube@gov.bc.ca

Hope this answers your question

[illegible]

Brian Kukulies, RPF
Land Officer
Ministry of Forests, Lands and Natural Resource Operations Sunshine Coast
Resource District
7077 Duncan Street
Powell River, British Columbia
V8A 1W1
Phone (604) 485-0725 Fax (604) 485-0799
Mail to: Brian.Kukulies@gov.bc.ca

-----Original Message-----

From: FLNR Surrey ARFD FLNR:EX
Sent: Tuesday, October 27, 2015 10:43 AM
To: Kukulies, Brian FLNR:EX
Subject: FW: Land Application Comments [File #2411638].

-----Original Message-----

From: do-not-reply@arfd.bc.ca [mailto:do-not-reply@arfd.bc.ca]
Sent: Monday, October 26, 2015 2:56 AM
To: FLNR Surrey ARFD FLNR:EX
Subject: Land Application Comments [File #2411638].

Hello,

I have a concern relating to the discharge of the water after it has served its purpose for the applicant. Has there been an application for

discharge permit and what would the required pre treatment of the effluent be?

Regards,

s.22

December

From: [Vergamini, Don ENV:EX](#)
To: [Cavadini, Roger ENV:EX](#)
Subject: FW: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593
Date: Wednesday, March 16, 2016 12:38:45 PM

Here is one of the e-mails

From: Danyluk, Carol ENV:EX
Sent: Monday, December 21, 2015 4:57 PM
To: Vergamini, Don ENV:EX
Subject: FW: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

FYI – this one has been assigned to you

Carol

From: Hamelin, Trevor M ENV:EX
Sent: Monday, November 30, 2015 2:36 PM
To: 'Alcock-White, Jane'; Mollins, Jennifer
Cc: Danyluk, Carol ENV:EX; Berube, Conrad ENV:EX
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jain,

The Waste Discharge application from Hummingbird Cove has been received and is currently sitting in a backlog of other applications. You can view our application queue at the following site:

<http://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/managing-authorizations/publicly-viewable-application-queues>

Hummingbird is located within the South region.

If you have any further questions, please direct them to Carol Danyluk, as I will not be processing this application.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer
Authorizations - South
(Office) 604-582-5275
(Fax) 604-584-9751

From: Alcock-White, Jane [<mailto:Jane.Alcock-White@dfo-mpo.gc.ca>]
Sent: Monday, November 30, 2015 2:05 PM
To: Hamelin, Trevor M ENV:EX; Mollins, Jennifer

Cc: Danyluk, Carol ENV:EX; Berube, Conrad ENV:EX
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hello,

This application has been reassigned to me and I am looking for an update on the status of the waste discharge application. I would appreciate it if someone was able to provide me with that information.

Cheers,

Jain Alcock-White

Aquaculture Management Coordinator

Aquaculture Management Division | Division de la gestion de l'aquaculture
Fisheries and Oceans Canada | Pêches et Océans Canada
1965 Island Diesel Way Nanaimo BC V9S 5W8
Government of Canada | Gouvernement du Canada
Telephone | Téléphone **250.754.0408**
Jane.Alcock-White@dfo-mpo.gc.ca

New! Sign up and receive AQUACULTURE news and updates using the Fishery Notice System (remember to select the aquaculture categories) – www-ops2.pac.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=pub_reg

From: Hamelin, Trevor M ENV:EX [<mailto:Trevor.Hamelin@gov.bc.ca>]
Sent: Thursday, September 24, 2015 3:01 PM
To: Mollins, Jennifer
Cc: Danyluk, Carol ENV:EX; Berube, Conrad ENV:EX
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jennifer,

Hummingbird Cove has submitted a waste discharge application for a discharge, that is currently sitting in a lengthy authorization processing queue. They would need a permit, even though theoretically the effluent should be better quality than the incoming water, just a little warmer. We do have permit conditions that detail temperature requirements of a discharge, but they are usually just a secondary discharge to another more significant discharge to the environment.

In this case, I have a much earlier email from Hummingbird, that asks if they could use a coal fired boiler to heat the water. It would appear if they need to heat the water there will likely be an Air permit, with a secondary effluent discharge. But that is all dependent on the proposed effluent quality discharged to the environment.

I have cc'd Carol Danyluk to this email as she is the Section Head for the group that will eventually process this permit application. I am no longer involved in Aquaculture discharges.

Regards,

Trevor Hamelin, AScT

Environmental Protection Officer

Authorizations - South

(Office) 604-582-5275

(Fax) 604-584-9751

From: Berube, Conrad ENV:EX
Sent: Thursday, September 24, 2015 2:41 PM
To: Mollins, Jennifer
Cc: Hamelin, Trevor M ENV:EX
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jennifer—

I requested information on the proposed effluent from the QP and never received an answer. As I am not currently working in the Authorizations unit I don't know if that information has been received since July (but I doubt it).

From: Mollins, Jennifer [<mailto:Jennifer.Mollins@dfo-mpo.gc.ca>]
Sent: Thursday, September 24, 2015 1:29 PM
To: Berube, Conrad ENV:EX
Subject: FW: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Conrad – does this facility need an MoE permit?

From: Hamelin, Trevor M ENV:EX [<mailto:Trevor.Hamelin@gov.bc.ca>]
Sent: Wednesday, March 25, 2015 10:33 AM
To: Mollins, Jennifer
Subject: RE: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Jennifer,

We do issue permits based on the temperature of effluent discharges to receiving environment. It would be a temperature range that they would need to stay within. However, I'm not sure that MoE has issued permits for land-based shellfish farms, at least not from the Surrey office. I've left a message for Conrad in our Nanaimo office to see if he has experience with land-based shellfish farms.

Are there any other contaminants that could be discharge from a shellfish farm? I know they are filter feeders, so likely they might be cleaning the water?

I could see MoE issuing a permit based on how they are heating the water. If some type of biomass or natural gas boiler is used we'd issue an air permit. I recall someone enquiring about

using a coal fired boiler to heat water from an operation like this in the Powell River area, it might be that same site.

I'll let you know the result of my conversation with Conrad.

Regards,

Trevor Hamelin, ASCT
Environmental Protection Officer
Coast Region - Authorizations
(Office) 604-582-5275
(Fax) 604-584-9751

From: Mollins, Jennifer [<mailto:Jennifer.Mollins@dfo-mpo.gc.ca>]
Sent: Monday, March 23, 2015 2:44 PM
To: Hamelin, Trevor M ENV:EX
Subject: Hummingbird Cove Lifestyles - hatchery application, Saltery Bay - AQFW 7593

Hi Trevor,

Would this site require a BC MOE discharge permit for discharge 280 L/sec of seawater where 30% of discharge has been heated by up to 4 degree Celsius? Location is Lot L, DL2091, Group 1, NWD, Plan 13613EP, Powell River RD.

I am assessing this site for an aquaculture licence.

Jennifer Mollins
Senior Coordinator, Shellfish Aquaculture Management | Coordinatrice supérieure de la gestion de l'conchyliculture
Fisheries Management Branch – Pacific Region | Direction de la gestion des pêches – Région Pacifique
Fisheries and Oceans Canada | Pêches et Océans Canada
1965 Island Diesel Way Nanaimo BC V9S 5W8
jennifer.mollins@dfo-mpo.gc.ca
Telephone Téléphone 250-754-0394 Facsimile | Télécopieur 250-754-0391
Government of Canada | Gouvernement du Canada
www.pac.dfo-mpo.gc.ca

From: [Vergamini, Don ENV:EX](#)
To: [Cavadini, Roger ENV:EX](#)
Subject: FW: Hummingbird Cove Shellfish hatchery and growout new utility tenure
Date: Wednesday, March 16, 2016 12:39:06 PM

Here is the other

From: Danyluk, Carol ENV:EX
Sent: Tuesday, December 22, 2015 10:55 AM
To: Vergamini, Don ENV:EX
Subject: FW: Hummingbird Cove Shellfish hatchery and growout new utility tenure

FYI. I have just assigned to you.

Carol

From: Holmes, Blair (EC/EC) [<mailto:blair.holmes@canada.ca>]
Sent: Tuesday, December 22, 2015 8:13 AM
To: Danyluk, Carol ENV:EX
Subject: RE: Hummingbird Cove Shellfish hatchery and growout new utility tenure

That's very helpful.

Thanks

Blair Holmes

Environment Canada
Science & Technology Branch
Marine Water Quality Monitoring unit
Pacific Region

Tel: 604-903-4427
Fax: 604-903-4423
e-mail: blair.holmes@canada.ca

From: Danyluk, Carol ENV:EX [<mailto:Carol.Danyluk@gov.bc.ca>]
Sent: December 18, 2015 2:46 PM
To: Holmes, Blair (EC/EC)
Cc: Vroom, Bryan ENV:EX
Subject: RE: Hummingbird Cove Shellfish hatchery and growout new utility tenure

Hi Blair,

This application has been received but not assigned to technical staff for review yet. However, I can confirm that the application does not include human sewage or domestic effluent of any type.

It is proposed that the salt water (no chemical additives) that flows through the hatchery tanks will then be treated by a sand filter prior to being discharged back to the ocean.

Carol

Carol Danyluk, P.Eng.
Section Head, Authorizations – South
Environmental Protection Division, Ministry of Environment
Tel: 250.371-6229
carol.danyluk@gov.bc.ca

24-hour Spill/Environmental Emergency Reporting: 1-800-663-3456 (Provincial Emergency Program)
24-hour RAPP (Report All Poachers and Polluters) tip-line: 1-877-952-7277 (Conservation Officer Service)
www.gov.bc.ca/env

From: Vroom, Bryan ENV:EX
Sent: Monday, December 7, 2015 9:56 AM
To: Danyluk, Carol ENV:EX; Rushworth, George N ENV:EX
Cc: Berube, Conrad ENV:EX
Subject: FW: Hummingbird Cove Shellfish hatchery and growout new utility tenure

Thoughts for Blair? Bryan

From: Holmes, Blair (EC/EC) [<mailto:blair.holmes@canada.ca>]
Sent: Thursday, December 3, 2015 10:38 AM
To: Vroom, Bryan ENV:EX
Subject: Hummingbird Cove Shellfish hatchery and growout new utility tenure

Hi Bryan,

Are you familiar with this application for discharge permit?

I have been getting inquiries regarding a shellfish hatchery being constructed at Hummingbird Cove near Salter Bay. While I have received assurances from the consultant (Bon Thorburn) that no human sewage will be incorporated into the 2 effluent pipes, I was wondering if you can provide any details wrt the application? Or is that proprietary information?

I note that there are about 7 dwellings on the property and was really wondering if they have their own on-site treatment or if it is being considered whether to tie that in with new discharges.

Thanks

Blair Holmes

Environment Canada

Science & Technology Branch

Marine Water Quality Monitoring unit

Pacific Region

Tel: 604-903-4427

Fax: 604-903-4423

e-mail: blair.holmes@canada.ca