

From: [Herborg, Matthias ENV:EX](#)
To: [Pryce, Conrad FLNR:EX](#); [Sokal, Mike ENV:EX](#); [Barlas, Sajid A ENV:EX](#);
cc: [White, Tara FLNR:EX](#); [Woodruff, Patricia ENV:EX](#); ["Choi, Shirley"](#);
["Higgins, Mark"](#); ["Keith, Ian"](#); ["Sheppard, Mark"](#); [Marshall, Vicki FLNR:EX](#);
["Martin, Stacey"](#); [Herborg, Matthias ENV:EX](#);
Subject: Freshwater aquaculture licensing - Klassen applicaton #12835
Date: Wednesday, June 6, 2012 2:05:38 PM

Hello

Regarding the recent discussions surrounding Application# 12835 - Dorocco Developments - Arctic Char to the Introductions and Transfers Committee (ITC), this note is to confirm that the ITC will consider an application from Dorocco Developments, once/if an aquaculture licence is issued. Just for clarification, the role of the ITC is determine whether or not the Department of Fisheries and Oceans, Ministry of Forests, Lands and Natural Resource Operations and the Ministry of Environment have concerns regarding the risk of ecological, disease or genetic impacts resulting from the transfer of the fish specified in the application, and to relay that information to decision makers. From the information provided in this application, the risks, as listed above, appear to be low in the event of escape of arctic char into the Okanagan River. Concerns still exist, however, around the conditions attached to the development of the facility and the implications of water allocation on other elements of the ecosystem. Specifically, there are fisheries temporal concerns around water quality/temperatures in Osoyoos Lake. Details can be provided by regional fisheries management staff.

The following concerns have also been raised and to my knowledge remain unanswered:

1. The fish are proposed to be raised in tanks, in a closed environment. Water intake/discharge pipes will be screened. Therefore, the risk of escape into the Okanagan River is likely low. Survival of escaped fish is also anticipated to be low, due to the warm water temperatures in the Okanagan River and Osoyoos Lake a portion of year (optimum temperatures for Charr are 11 C-16 C). If fish were to escape during the winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival). Potential risks to native species include disease transfer, competition for food & habitat and hybridization.
2. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum

withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge ? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality) ? Water is already limited in the Okanagan during dry years - particularly between July-Sept .

3. The application indicates water withdrawal/discharge pipes will be screened, but does not provide further detail (ie. screening size, life-stage and guidelines to be followed). Screening should meet freshwater Intake end-of-pipe fish screen guidelines (DFO) in order to minimize resident fish entrainment and impingement on the screen.

4. A drum filter and settling tank are proposed to treat effluent water prior to discharge. Will this be sufficient to filter nitrates and pharmaceuticals (used to treat hatchery eggs/fish) from the water and prevent pathogen transfer to the Okanagan River system ? If not, what are the implications to native stocks, SAR and watershed health?

5. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the lake has little to no oxygen (≤ 4 ppm) July –Sept and only a small corridor is available for fish migration and survival (@ 15 m depth). Water temperatures in the upper 15 m of the water column are in sub-lethal to lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.

6. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River ?

7. The effluent discharge rate proposed = 75 L/s . Will this rate be continuous year round or for a specified time period ? What does this mean in terms of licensed use? As I understand it wells are not licensed....

8. Water for the facility is to be supplied from a well and 12 C. The temperature of discharge water, however was not identified. Discharge of effluent water should meet specified guidelines for aquatic life– particularly when dealing with a sensitive ecosystem & fish stocks.

9. The hatchery is proposed in a sensitive ecological area – near historic oxbows off the Okanagan River. What is the risk to the floodplain, SAR and surrounding area from proposed development and water withdrawal and discharge?

10. The application states fish will be supplied “Direct to Food Market”. Will fish be transported live? If so, this will increase risk to native stocks.

I will seek to try to identify and resolve issues surrounding the application process and how regional fish biologist can enter their review comments into the process, as this is causing confusion. Perhaps we could discuss further.

Regards,

Matthias Herborg

Provincial Co-Chair, Introductions and Transfers Committee

From: [Marshall, Vicki FLNR:EX](#)
To: [Woodruff, Patricia ENV:EX](#)
Subject: FW: COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr _ 8929 Rd#17, Oliver BC
Date: Thursday, May 17, 2012 3:16:31 PM
Attachments: [Klassen Application April2012.pdf](#)

From: White, Tara FLNR:EX
Sent: Thursday, May 17, 2012 2:53 PM
To: Marshall, Vicki FLNR:EX
Cc: Herborg, Matthias ENV:EX; Goeller, Neil FLNR:EX; Stewart, Robert FLNR:EX; Sokal, Mike ENV:EX; Cavadini, Roger ENV:EX; Burwash, Michael FLNR:EX; White, Tara FLNR:EX
Subject: COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr _ 8929 Rd#17, Oliver BC

Hi Vicki:

I have reviewed the above noted Aquaculture Application and provide the following comments:

1. Triploid Arctic Charr eggs will be imported from the Yukon. Although they will be coming from a disease certified source and will be heat shock treated triploids, we know from the Freshwater Fisheries Society of BC's research w/ kokanee that sterility is not 100% effective. There is up to a 5% chance that the eggs will not be sterile, thereby increasing the risk of hybridization w/ native stocks, should fish escape.
2. The fish are proposed to be raised in tanks, in a closed environment. Water intake/discharge pipes will be screened. Therefore, the risk of escape into the Okanagan River is likely low. Survival of escaped fish is also anticipated to be low, due to the warm water temperatures in the Okanagan River and Osoyoos Lake a portion of year (optimum temperatures for Charr are 11 C-16 C). If fish were to escape during the winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival). Potential risks to native species include disease transfer, competition for food & habitat and hybridization.
3. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge ? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality) ? Water is already limited in the Okanagan during dry years - particularly between July-Sept .
4. The Okanagan River is directly connected to Osoyoos Lake, which is a trans-boundary watershed. If fish were to escape and survive, there could also be management implications in the US. Additionally, potential impacts from effluent discharge would affect Canadian waters, as well as the US. It would be prudent to consult w/ US fisheries managers regarding the proposed application.
5. The application indicates water withdrawal/discharge pipes will be screened, but does not provide further detail (ie. screening size, life-stage and guidelines to be followed) . Screening should meet freshwater Intake end-of-pipe fish screen guidelines (DFO) in order to minimize resident fish entrainment and impingement on the screen.

6. A drum filter and settling tank are proposed to treat effluent water prior to discharge. Will this be sufficient to filter nitrates and pharmaceuticals (used to treat hatchery eggs/ fish) from the water and prevent pathogen transfer to the Okanagan River system ? If not, what are the implications to native stocks, SAR and watershed health?
7. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the lake has little to no oxygen (≤ 4 ppm) July –Sept and only a small corridor is available for fish migration and survival (@ 15 m depth). Water temperatures in the upper 15 m of the water column are in sub-lethal to lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.
8. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River ?
9. The effluent discharge rate proposed = 75 L/s . Will this rate be continuous year round or for a specified time period ? Water does this mean in terms of licensed use? As I understand it wells are not licensed....
10. Water for the facility is to be supplied from a well and 12 C. The temperature of discharge water, however was not identified. Discharge of effluent water should meet specified guidelines for aquatic life– particularly when dealing with a sensitive ecosystem & fish stocks.
11. The hatchery is proposed in a sensitive ecological area – near historic oxbows off the Okanagan River. What is the risk to the floodplain, SAR and surrounding area from proposed development and water withdrawal and discharge?
12. The application states fish will be supplied “Direct to Food Market”. Will fish be transported live? If so, this will increase risk to native stocks.

If you have any questions regarding the information provided, please feel free to give me a call. I have copied regional EP, Water and Ecosystems staff on my response.
Cheers Tara

Tara White, R.P.Bio.
Senior Fisheries Biologist
Ministry of Forests, Lands and Natural Resource Operations
Okanagan-Thompson Region
Phone: (250) 490-2287
Email: tara.white@gov.bc.ca

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From: Marshall, Vicki FLNR:EX
Sent: Thursday, May 3, 2012 9:09 AM
To: White, Tara FLNR:EX
Subject: FW: Klassen Updated Application Submitted

Hi Tara – here we go again..
to discuss the issues surrounding this application on Friday?

S22

Can I try to set up a meeting for us

Thx,
Vicki.

From: Choi, Shirley [<mailto:Shirley.Choi@dfo-mpo.gc.ca>]

Sent: Wednesday, May 2, 2012 10:43 AM

To: Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian; Martin, Stacey

Subject: FW: Klassen Updated Application Submitted

Hi ITC,

So the madness has begun (again) for the Klassen file. This time he has hired a consultant to help with the set up of his site. He still wants to get triploid Arctic Char eggs from Icy Waters in the Yukon, are we still concerned that it is not an FHPR certified site? We have asked that an ITC application be submitted, but thought we could use a head start to this application. I don't believe a hydrological assessment has been done, does he still need one? Other information on effluent treatment, fish health and fish habitat can be found in the document below as well (Start at Page 18).

Thanks,

Shirley

From: Manning, Michelle

Sent: 2012-May-01 12:04 PM

To: Hughes, Debra; Choi, Shirley; Martin, Stacey

Cc: Meadows, Shelley; Lim, Susan; Kosmider, Gabrielle

Subject: Klassen Updated Application Submitted

Hi all,

Attached is Gary Klassen's updated application. He is going to be sending in some engineered plans separately (I will forward these on when I receive them).

He has asked me to walk through the application with him Thursday morning to make sure he is not missing any info. I was hoping you could all take a look at it and see if there is anything else we need from him. He wants to move fish in June and it would be a great success if we could facilitate that for him this year. The earlier we get our requirements to him (if any), the better.

Thanks so much!

<<Klassen Application April2012.pdf>>

Michelle Manning

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture
Aquaculture Management Division | La Division de Direction 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](tel:250-754-0409)
Facsimile | Télécopieur [250-754-0391](tel:250-754-0391)
michelle.manning@dfo-mpo.gc.ca
www.pac.dfo-mpo.gc.ca

PACIFIC FRESHWATER & LAND-BASED AQUACULTURE APPLICATION

Ministry of Forests, Lands and Natural Resource Operations
Fisheries and Oceans Canada
Transport Canada

PART I – GENERAL APPLICANT INFORMATION

SECTION A: APPLICANT AND GENERAL INFORMATION

1) Applicant Name(s) (Full Legal Name(s) or Registered Company Name) Dorocco Developments Ltd.		Applicant Business Information: Telephone: () Cell: (250) 485 7408 Fax: () Email: gary@dorocco.com	
2) Applicant Business Mailing Address: Box 1000 Osoyoos BC		Postal Code: V0H 1V0	
3) Doing Business as:		4) BC Inc #, BC Registration # or BC Society #	
5) Physical Business Address (if different from above): 8315 Main Street Osoyoos BC V0H 1V0			
6) Contact Name (if different from above): Gary Klassen		Contact Business Information: Telephone: () Cell: (250) 485 7408 Fax: () Email: gary@dorocco.com	
7) Agent/ Representative (if applicable): Jeremy Lee		Agent/Representative Business Information: Telephone: () Cell: (902) 692 0992 Fax: () Email: jeremylee@btinternet.com	
8) Business Mailing Address of Agent/Representative:		Postal Code:	
		Letter of Authorization: <input type="checkbox"/> Yes <input type="checkbox"/> No	

9) Type of Application:		
<input checked="" type="checkbox"/> New site Tenure Type (if applicable): <input type="checkbox"/> Licence of Occupation <input type="checkbox"/> Lease <input type="checkbox"/> Investigative Permit		
<input type="checkbox"/> Amendment Amendment Type: <input type="checkbox"/> Tenure Area <input type="checkbox"/> Infrastructure <input type="checkbox"/> Production <input type="checkbox"/> Species <input type="checkbox"/> Other (Describe)	<div style="border-bottom: 1px solid black; padding-bottom: 5px;"> Currently Approved (required only for type of amendment applied for, attach additional page if necessary) </div> 	<div style="border-bottom: 1px solid black; padding-bottom: 5px;"> Proposed </div>
<input type="checkbox"/> Licence Holder Change		Current Licence Holder Name:
10) Location of Operation:		
<input checked="" type="checkbox"/> Land-Based		<input type="checkbox"/> In Freshwater Body
12) Type of Operation:		
<input checked="" type="checkbox"/> Hatchery (fin fish species)	<input checked="" type="checkbox"/> Grow-Out	<input type="checkbox"/> U-Catch
<input type="checkbox"/> Hatchery (shellfish)	<input type="checkbox"/> Other (describe):	
13) Government Reference Numbers		
BC Land File # (Crown land)	DFO Aquaculture Licence # AQFW 6673	NWPA #
OR	AND	
Park Use Permit # (Park/Protected land)	Site Reference #	Parcel Identification # (Private land)

SECTION B: SITE AND INFRASTRUCTURE INFORMATION

1) Site Category:

<input type="checkbox"/> Provincial Crown Land	<input type="checkbox"/> Provincial Park	<input checked="" type="checkbox"/> Private Land
<input type="checkbox"/> Federal Land	<input type="checkbox"/> First Nation Reserve	<input type="checkbox"/> Other _____

2) Geographic location of site: Okanagan Valley Rural Oliver _____

3) Site Common Name: _____

4) DFO Area: _____ Sub Area: _____ (if applicable)

5) Canadian Hydrographic Service Chart (CHS) Marine Chart Number: _____ and/or

Topographical Map Number: _____

6) If the site is surveyed, provide legal description of site (e.g., Land District and Lot Number):

Land District Similkameen Division of Yale Lot 311 Plan 1790 PID 003-749-614 _____

Civic Address: S22 _____

7) If the site is not surveyed, provide metes and bounds description from a surveyed point or geographic coordinate: _____

8) Provide GPS coordinates for the center of the application area/tenure:

Latitude: 49° 7' __deg. 4.44 min.

Longitude: 119° 34' __deg. 16.55 min.

9) Total Area of site (Hectares): 2.6 Hectares _____

10) **Physical Structures** (Improvements): Complete the table below describing all applicable structures. Attach another page if required.

Purpose: Indicate the purpose of the infrastructure. Examples for buildings include: Office, Residence, Hatchery, Grow-out, Quarantine, etc; examples for tanks include: Fish Rearing, Quarantine, Solids Capture, Water Storage, Purge Tank, etc.

Location: Indicate whether the infrastructure is located in-doors (provide building number), or out-doors.

Lined: Are the ponds lined, Yes or No?

DESCRIPTION	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LOCATION
<i>e.g.: Building 1</i>	<i>Hatchery</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	10 x 10 x 4		
<i>e.g.: Tanks 1</i>	<i>Fish Rearing</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	0.7 x 0.7 x 0.5	380 L	<i>Building 1</i>
LAND-BASED <i>please note: construction in association with fish and fish habitat may require redesign, relocation, mitigation and/or a fish habitat survey review and approval prior to installation. See section E.</i>							
Buildings							
1	Well House	X	<input type="checkbox"/>	1	3x7		
2	Growout	<input type="checkbox"/>	X	1	16x46		
3	Shop&Hatchery	<input type="checkbox"/>	X	1	22x16		
4		<input type="checkbox"/>	<input type="checkbox"/>				
5		<input type="checkbox"/>	<input type="checkbox"/>				
Heath Stacks							
1	Hatchery	<input type="checkbox"/>	X	2	0.5x0.5x1		Building 3
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
Troughs							
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
Tanks							
1	Hatchery	<input type="checkbox"/>	X	2	1x1x0.5	300L	Building 3
2	Growout	<input type="checkbox"/>	X	5	6x2	50m ³ each 250m ³	Building 2
3	Growout	<input type="checkbox"/>	X	4	3x1.7	12m ³ each 48m ³	Building 2
4	Hatchery	<input type="checkbox"/>	X	2	3x1.7	12m ³ each 24m ³	Building 3
Raceways							
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				

Constructed Ponds	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LINED
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
Intake/Discharge Pipes	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LOCATION
Intake Pipe 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
Discharge Pipe 1		<input type="checkbox"/>	X	1	300mm D	120gpm	Okanagan River
2		<input type="checkbox"/>	<input type="checkbox"/>				
IN FRESHWATER BODY <i>please note: proposed in water works or undertakings will require a fish habitat information review. See section E.</i>							
Containment Structures	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	TYPE
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
Work Floats							
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
5		<input type="checkbox"/>	<input type="checkbox"/>				
OTHER (describe)							

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SECTION C: MAPS AND DIAGRAMS:

Attach the following maps and diagrams. They must be submitted to scale and be consistent with the other information in this application. Please refer to the Guide for details and sample diagrams.

1) Location Maps:

- i. A topographic map at a scale of 1:50,000 to 1:250,000 indicating the general location of area under application, noting the location of significant geographic features, such as a lake, mountain, road, community, etc.
- ii. A Cadastral map, Topographical map, or Canadian Hydrographic Service Marine Chart (if applicable) of a scale between 1:20,000 and 1:40,000, showing the general location of the area under application.

2) Operational Diagram: A 1:5000 scale topographical map or hydrographic chart showing the specific area under application and the operational components as outlined in the guide.

3) Site Plan: A plan of the site identifying the location of buildings and out-door infrastructure. Use the table from question 10 to label the plan. Clearly indicate the location of your water source(s) and discharge point(s), along with any water bodies (including culverts and ditches) located on or near the site.

4) Engineered Plans: Any new or proposed infrastructures/construction require an engineered plan.

5) For applications In Freshwater Bodies: Include a 1:2000 scale map(s) showing a side view diagram of the containment array(s) which at minimum must illustrate and itemize all structures above the surface and include all underwater structures (based on season of lowest water).

6) For applications situated On Land: If you are located within or near a flood plain, include a flood plain map (www.env.gov.bc.ca/wsd/data_searches/fpm/reports/regoff.html)

SECTION D: WATER USE

1. Will fresh water be used at this facility? ☒ Yes ☐ No

2. If yes, and if water source is surface water (not ground), provide name:

3. If you already have a water licence at this site, please provide licence number, or provide date of submission of an application:

Do not require water licence for existing well.

SECTION E: FIRST NATIONS CONSIDERATION

Please describe any contact you may have had, including the name of the First Nation(s) and individuals contacted. Provide copies of, or a description of any information you may have acquired from or provided to the First Nations(s) and any archaeological resources and areas of cultural significance you are aware of in the vicinity of the proposed project. Consult the Consultative Area Database (CAD) Public Map Service for First Nations contact information instructions and supporting information – [ftp://ftp.geobc.gov.bc.ca/pub/outgoing/CAD/CAD Public Map Service-User Guidance-Technical Instructions.pdf](ftp://ftp.geobc.gov.bc.ca/pub/outgoing/CAD/CAD%20Public%20Map%20Service-User%20Guidance-Technical%20Instructions.pdf).

Colette Louie clouie@oib.ca

Certified Fisheries Technician

Osoyoos Indian Band

250 498 3942

PART II – INFORMATION FOR THE BC MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS

Introduction

The following information is required as part of the Provincial Crown Land Tenure application to make a licensing decision for licensing under the BC *Land Act*.

Parts I, II and V of the Pacific Freshwater and Land-Based Aquaculture application will be used to review this application for tenure under the BC *Land Act*.

Additional Crown Lands Information

SECTION A: SITING CONSIDERATIONS

Applicants must respond to each consideration and may be required to provide additional information in some situations.

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<p>If water-based, is the site situated in a manner whereby it does not infringe on the riparian rights of an upland owner?</p> <p>If No, has the owner provided written consent for you to occupy the site for the term of the tenure? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, include a copy of the written consent.</p> <p>Indicate if the upland property is: <input type="checkbox"/> Crown <input type="checkbox"/> Private</p>
x	<input type="checkbox"/>	<p>Is the intended use consistent with approved local government bylaws for land use planning and zoning?</p> <p>Provide the name of the Regional District or Municipality for the area:</p> <p>_____ Regional District of Similkameen _____</p> <p>If No, have you discussed your application with local government and have you initiated a re-zoning process? <input type="checkbox"/> Yes <input type="checkbox"/> No Please provide details:</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Is the intended use consistent with a local area plan or Coastal Zone Management Plan?</p> <p>Name of Plan:</p> <p>_____</p>

		Please provide details where an application for variance is submitted: <hr/> <input type="checkbox"/> Check if not applicable
<input type="checkbox"/>	x	Is the site situated in an area of cultural or heritage significance as determined in the <i>Heritage Conservation Act</i> ? If Yes, have you contacted the Heritage and Conservation Branch to discuss your application? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide details: _____ <hr/>

SECTION B: ADDITIONAL CROWN LANDS INFORMATION

1. Is Applicant or Applicant's Spouse a Provincial Government Employee ☐ Yes ☒ No
2. Canadian Citizen or Permanent Resident: ☒ Yes ☐ No
3. Age: 19 or over ☒ Yes ☐ No
4. For applications made by more than one individual: ☐ Joint Tenant or ☐ Tenants in Common

PART III – INFORMATION FOR FISHERIES AND OCEANS CANADA

The following information is required as part of the Federal aquaculture licence application to make a decision for licensing under the *Pacific Aquaculture Regulations*.

Parts I, III, IV, and V must be submitted to apply for your Federal aquaculture licence or to amend an existing licence.

In addition to Part I, DFO requires the applicant(s), if an individual or a proprietorship or a person 'doing business as', submit date(s) of birth:

Applicant Gary Klassen Date of Birth (yyyy/mm/dd): ZZS
Name DOB

Applicant _____ Date of Birth (yyyy/mm/dd): _____
Name DOB

Has an application previously been submitted for this location? ☒ Yes ☐ No

If Yes, provide details:

On June 21, 2011 I submitted a harmonized freshwater application form.

Aquaculture licence # AQFW6673

GOVERNMENT REFERENCE NUMBERS:

Sec. 9 Notification – Tracking #:	Sec. 9 Approval – Water File #:	Water Licence – Water File #:
Well ID #:	ITC #:	Land-Based Finfish Waste Control Regulations Registration #
Does the British Columbia Riparian Areas Regulation apply to this project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, are you requesting a variance? File #: <input type="checkbox"/> Yes <input type="checkbox"/> No		

This completed document will form the site management plan on which your aquaculture licence conditions will be based.

SECTION A: WATER

1) WATER SOURCES

Complete the table below referring to the guide for detailed instructions.

Well ID #: To determine whether you require a well ID number, visit:

http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/wells/identification/faqs.html

	WATER TYPE (Fresh, Brackish, Marine)	EXISTING AT THE SITE	NEW PROPOSED	GOVT ID (Water Act Licence #, or Well ID #)	GPS COORDINATES	MAX WITHDRAWAL RATE (L/sec)
Surface Water Intake¹: Name of Water Body: _____						
#S1		<input type="checkbox"/>	<input type="checkbox"/>			
#S2		<input type="checkbox"/>	<input type="checkbox"/>			
Well						
#W1	<i>Fresh</i>	X	<input type="checkbox"/>	17884	49°7'6.2"N, 119°34'17.2"W	75 L/sec
#W2		<input type="checkbox"/>	<input type="checkbox"/>			
#W3		<input type="checkbox"/>	<input type="checkbox"/>			
#W4		<input type="checkbox"/>	<input type="checkbox"/>			
Municipal Water						
#1		<input type="checkbox"/>	<input type="checkbox"/>			
Other (describe):						
		<input type="checkbox"/>	<input type="checkbox"/>			
TOTAL COMBINED MAXIMUM WITHDRAWAL RATE						

¹: Please ensure your intake is screened according to the appropriate reference documents (see Guide).

2) WATER DISCHARGE

Complete the table below referring to the guide for detailed instructions.

	WATER TYPE (Fresh, Brackish, Marine)	EXISTING AT THE SITE	NEW PROPOSED	GOVT ID (Water Act Licence or Authorization #)	GPS COORDINATES	MAX DISCHARGE RATE (L/sec)
Surface Water Outfall: Name of Water Body: _____						
#S1	Fresh	<input type="checkbox"/>	X		49° 7'4.78" N, 119° 34'10.65" W	75 L/sec
#S2		<input type="checkbox"/>	<input type="checkbox"/>			
Ground Infiltration						
#G1		<input type="checkbox"/>	<input type="checkbox"/>			
#G2		<input type="checkbox"/>	<input type="checkbox"/>			
Municipal Sewer						
#1		<input type="checkbox"/>	<input type="checkbox"/>			
Other (describe):						
		<input type="checkbox"/>	<input type="checkbox"/>			
TOTAL COMBINED MAXIMUM DISCHARGE RATE						

A) Have you applied for a permit under the Environmental Management Act or an exemption under the Land-based Finfish Waste Control Regulations?

☐ Yes (Ref. File # _____)

☐ No

X Not Applicable

Provide details:

Not required because dilution ratio will always be greater than 20 to 1.

SECTION B: SPECIES & PRODUCTION

For Hatchery activities: Complete Table 1 For Grow-Out activities: Complete Table 2 For U-Catch activities: Complete Table 3

Table1: Annual Expected Hatchery Production:

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	NUMBER OF EGGS OR SPAT	ESTIMATED SURVIVAL (%)	ANNUAL PRODUCTION ESTIMATE		EXISTING AT THE SITE	NEW PROPOSED
				NUMBER OF FISH	TONNAGE (MT)		
Ex. Rainbow trout	<i>Onchorhynchus mykiss</i>	12000	75%	9000	0.45	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Arctic Charr	<i>Salvelinus Alpinus</i>	80 000	90%	72 000	0.36	<input type="checkbox"/>	X
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
TOTAL ANNUAL PRODUCTION ESTIMATE					0.36		

Table 2: Annual Expected Grow-Out Production: (excludes shellfish for marine grow-out)

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	NUMBER OF FISH STOCKED	MEAN WEIGHT STOCKE D	GROW- OUT PERIOD (MONTH S)	ESTIMATED SURVIVAL (%)	ANNUAL PRODUCTION ESTIMATE		EXISTING AT THE SITE	NEW PROPOSED
						NUMBER OF FISH	TONNAGE (MT)		
<i>Ex. Rainbow Trout</i>	<i>Onchorhynchus mykiss</i>	50 000	250 g	7	10%	45 000	45	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Arctic Charr	Salvelinus Alpinus	70 000		18		50 000	50 MT	<input type="checkbox"/>	x
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
TOTAL GROW-OUT ANNUAL PRODUCTION ESTIMATE							50 MT		

Table 3: U-Catch

SPECIES (COMMON NAME)	SPECIES (SCIENTIFIC NAME)	NUMBER OF FISH STOCKED PER YEAR	EXISTING AT THE SITE	NEW PROPOSED
<i>Ex. Rainbow Trout</i>	<i>Onchorhynchus mykiss</i>	200	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

To Be Completed By All Applicants:

SOURCE OF FISH/SHELLFISH

4) For each licensed or proposed species, indicate:

- The source location of broodstock (city, state, nearest town, import into BC). Where possible, include contingency source (Name of company & facility).
- Life stage (eggs, spat, juveniles, etc.).
- Genetic Status (mono-sex, diploid, triploid, etc.).

Triploid Arctic Charr eggs will be imported from Icy Waters Ltd. located in Whitehorse, Yukon.

BUSINESS PLAN

5) Purpose of culture for each proposed species (ex. Sale to other Aquaculturists, Direct to Food Market, etc). Refer to guide for assistance.

Direct to Food Market

STOCKING DENSITY

6) Indicate the maximum projected stocking density for each licensed or proposed species.

120 kg m³

PRODUCTION

7) Will you have multiple year classes on site?

X Yes

☐ No

8) Indicate when, during the calendar year, you expect to reach Peak Biomass. (Multiple year class operations may have multiple Peak Biomasses).

Will be attempting to have consistent production 52 weeks of the year.

SECTION C: FACILITY OPERATION

WATER CIRCULATION

1) Will you be recirculating any water on site? ☒ Yes ☐ No

If Yes, please describe the system:

30-70% partial water reuse through a degassing tower - CO² stripper and aerator.

FEEDING

2) Specify the method and amount that the stock will be fed:

1% body weight with automated feeders and by hand

PREDATORS

3) Outline the measures you will undertake to avoid the attraction of predators to your site and how you will deal with them, should a problem arise:

Fish tanks will all be in a contained building in a controlled, insulated environment.

ESCAPES

4) Outline the infrastructure used and the practices employed at the facility to prevent the escape of cultivated fish:

Water will go through 3 levels of screening.

Screen at tank, screen before settling tank, and drum filter prior to discharge.

EFFLUENT TREATMENT

5) Provide a detailed description of any effluent treatment works (UV, ozone, biological and/or mechanical filtration) and/or monitoring occurring or proposed on site (see Guide):

A drum filter and settling tank will be used.

WASTE

6) Describe the methods for storage and disposal of sludge and other waste materials:

Water will flow through swirl separators, then into the settling tank with 5 chambers, and through a drum filter prior to discharge. The sludge and other waste materials will be composted on site.

MORTALITIES

7) Describe the procedures employed to store and dispose of fish/shellfish carcasses during routine operations and major mortality events (refer to guide for specific requirements):

Will use the compost process to make plant fertilizer.

SECTION E: FISH HABITAT & PROTECTION MEASURES

Fisheries and Oceans Canada – Aquaculture Management Division (DFO - AMD) is responsible for the sustainable management of aquaculture in British Columbia.

Like other types of industrial development taking place in and around water, aquaculture projects have the potential to affect fish and fish habitat.

You are completing this section because you have identified that you will be undertaking an activity that may result in a harmful alteration, disruption or destruction of fish habitat. Please Note: if you are referred to an Application Guide section or to contact the Aquaculture Environmental Operations group (AEO), habitat mitigation, relocation, redesign and/or biophysical assessments may be required.

Aquaculture activities must Not result in harm to a Species at Risk Act (SARA) listed species, their residence or their critical habitat, as defined in the associated Recovery Strategy, or Action Plan.

1) Does the proposed project:

a) Have **any** components within 30 m of the high water mark of a watercourse or water body (this includes intakes, outfalls or water crossings)?

☒ Yes – please see Application Guide or contact AEO (see contact information).

☐ No - go to question (b).

(b) Have downstream impacts on water quality or water quantity?

☐ Yes (or maybe) – please see Application Guide or contact AEO (see contact information).

☐ No – No additional information is required.

PART IV – INFORMATION FOR TRANSPORT CANADA

The following information, along with Part I and Part V, is required for the adjudication of the NWPA approval under the *Navigable Waters Protection Act*.

SECTION A: SITING CONSIDERATIONS

Applicants must respond to each consideration and may be required to provide additional information in some situations.

YES NO

x

☐

Is the site situated greater than 30 m from the edge of the approach channel to a small craft harbour, federal wharf or dock?

SECTION B: ADDITIONAL TRANSPORT CANADA INFORMATION

1.a) Waterway Name: _____

b) Width(m): _____ c) Depth Range(m): _____

2. Nearest Community: _____

3. Is this Work: ☐ Proposed ☐ Existing ☐ Modification of Existing Work

4. To help with the review process, please include the following:

☐ Photographs at the site of the proposed/existing work and surrounding area

☐ Environmental Assessment documents (if any)

PART V – INFORMATION FOR ALL AGENCIES

All applicable components of this application package must be complete. Incomplete applications will be returned to applicant. Applicable fees must be submitted at time of application.

Provincial Fees:

Note that the current fee schedule does not include the taxes that apply.

Forms of Payment:

- Cheques or Money orders must be in Canadian Funds to **Minister of Finance**
- Debit Card (in-person only)
- Visa and MasterCard payments are accepted in-person or over the telephone. To locate a FrontCounter BC office, visit the website at <http://www.frontcounterbc.gov.bc.ca/contact/> or call the toll free number 1-877-855-3222.

FrontCounter BC will not accept personal cheques drawn on US banks, regardless of what currency. Payment will not be accepted even if it has "CDN Funds" handwritten on the cheque.

PLEASE NOTE: Additional items may be required (eg. Advertising, Security Deposit, Proof of Insurance, Letter of Consent). Some items may have additional associated costs or require additional processing time.

As the management of this fishery program is both a federal and provincial government responsibility, the information you provide may be subject to the following legislation: British Columbia *Freedom of Information and Protection of Privacy Act* (FOIPP Act); the federal *Access to Information Act*; and the federal *Privacy Act*. The personal information collected by the Government of BC is collected under the authority of section 26 (c) of the FOIPP Act and will be used to process your application(s) and will be shared only with the necessary government agencies needed to provide you with the service that you have requested. If you have any questions regarding the handling of your personal information, please contact FrontCounter BC at 1-877-855-3222 or by writing to Manager, Provincial Operations, FrontCounter BC at 441 Columbia Street, Kamloops, BC V2C 2T3 and/or the Director, Access to Information and Privacy Secretariat at the Department of Fisheries and Oceans Canada and Transport Canada.

The Province of British Columbia, Fisheries and Oceans Canada, and Transport Canada do not consider the information submitted in this form to be confidential unless it is subject to the privacy protection of the *Freedom of Information and Protection of Privacy Act* or the *Access to Information Act*. I understand that the information supplied will be used to review my applications under the BC *Land Act*, BC *Fisheries Act* (until such time as it is amended) Federal *Fisheries Act* and the *Navigable Waters Protection Act* and information will be shared amongst the other agencies, First Nations and/or with the public.

**Signature(s) of
Applicant(s) or
authorized
representative**

**Name(s) of Applicant(s)
or authorized
representative***

Date

*If signature is by an authorized representative please supply a letter granting authorization to act on behalf of the applicant.

Submit completed application, and additional supporting information (if applicable) to:

In Person: Any FrontCounter BC office.

Visit <http://www.frontcounterbc.gov.bc.ca> for the location nearest you.

By Mail: FrontCounter BC, 2080a Labieux Road, Nanaimo, BC V9T 6J9

By Email: frontcounterbc@gov.bc.ca

(NOTE: IF FEES ARE APPLICABLE, CLIENT MUST CONTACT FRONTCOUNTER BC BY TELEPHONE WITH CREDIT CARD INFORMATION PRIOR TO SUBMITTING THE APPLICATION ELECTRONICALLY. DO NOT INCLUDE PAYMENT (CREDIT CARD) INFORMATION VIA EMAIL OR FAX.)

PLEASE RETAIN A COPY OF THIS APPLICATION FOR YOUR RECORDS

APPLICATIONS ARE NOT TRANSFERABLE

THE SUBMISSION OF THIS FORM DOES NOT IN ANY MANNER CONVEY ANY RIGHTS TO USE OR OCCUPY CROWN LAND AND/OR CONDUCT REQUESTED ACTIVITIES

From: [Marshall, Vicki FLNR:EX](#)
To: [Woodruff, Patricia ENV:EX](#)
Subject: Fw: Dorocco Developments (Klassen) Proposed Site Testing
Date: Wednesday, June 20, 2012 6:54:34 PM

Fyi

From: Martin, Stacee [mailto:Stacee.Martin@dfo-mpo.gc.ca]
Sent: Wednesday, June 20, 2012 05:08 PM
To: Higgins, Mark <Mark.Higgins@dfo-mpo.gc.ca>; Sheppard, Mark <Mark.Sheppard@dfo-mpo.gc.ca>; Keith, Ian <Ian.Keith@dfo-mpo.gc.ca>; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX
Cc: Choi, Shirley <Shirley.Choi@dfo-mpo.gc.ca>
Subject: Dorocco Developments (Klassen) Proposed Site Testing

Hello all,

We have been recently been advised by Mr. Klassen that he is interested in importing a small number of arctic char in order to undertake some system testing at his still unlicensed aquaculture site. I understand from ARM that as long as the fish are not sold, donated, bartered with or exchanged in any other manner and as long as they are destroyed and properly disposed of at the end of the, his only licence requirement is an ITC permit to allow transfer of fish to the site.

Although nothing formal has been submitted by Mr. Klassen to date, I believe his intention is to undertake this testing in advance of the (anticipated?) licencing of his site and his next opportunity to import larger numbers of arctic char from Icy Waters (which I understand will be in November). I will be advising Mr. Klassen that in order to proceed, he will need to submit a new ITC application based on this new scenario and that it will be subject to full review by the ITC. In the meantime, however, I am hoping that you can all give some thought as to conditions we would want to associate with any ITC licence (i.e. max number of fish allowed, etc.) and/or how we might want to proceed.

More to follow shortly I am sure, but just wanted to provide a heads up so you can all get your thinking caps on (ha ha ha)! Thanks, everyone. /Stacee

Stacee Martin

A/Governance Coordinator | Coordinateur de gouvernance
Aquaculture Management Division | Gestion de l'aquaculture
Fisheries Management | Direction des pêches
Fisheries and Oceans Canada | Pêches et Océans Canada

200-401 Burrard Street | 401, rue Burrard, bureau 200
Vancouver, BC V6C 3S4 | Vancouver (C.-B.) V6C 3S4
Telephone | Téléphone: (604) 666-6831
Facsimile | Télécopieur: (604) 666-1076
Email | Courriel: stacee.martin@dfo-mpo.gc.ca

From: [Marshall, Vicki FLNR:EX](#)
To: [Woodruff, Patricia ENV:EX](#)
Subject: FW: Follow up for ITC Application for Dorocco Development Ltd. - KLASSEN, Gary.78688
Date: Thursday, September 20, 2012 3:02:56 PM
Attachments: [20120920093523.pdf](#)

I haven't looked at this yet. I will ask Melinda to include you in the applications. I think she is our new Linling but nobody has said anything officially yet.

V.

From: Hewison, Melinda FLNR:EX
Sent: Thursday, September 20, 2012 9:44 AM
To: Marshall, Vicki FLNR:EX
Subject: Follow up for ITC Application for Dorocco Development Ltd. - KLASSEN, Gary.78688

Hi Vicki,

Just going through Linling's pending folder and following up on ongoing applications.

This permit was applied for on May 8th, 2012 and the client had proposed for a transfer date of June 14th, 2012 to transfer 5000 Arctic Char eggs and/or milt from Icy Waters Ltd. in Whitehorse YK to a hatchery in Oliver BC. Could you please advise the status of this application? Has it been denied or should I contact the client and ask if he would still like the permit with a different transfer date?

Thank you,

Melinda Hewison
Permit Officer,
BC Permit & Authorization Service Bureau
Victoria Office: (250) 952-0799

**AUTHORIZATIONS CONCERNING THE MOVEMENT OF
LIVE FISH IN BRITISH COLUMBIA**

Name: Gary Klassen
Address: Dorocco Developments Ltd.
Box 1000, Osoyoos BC V0H 1V0

Introduction and Transfer Application Number: _____
PASB File # NA12-78688



Fisheries and Oceans
Pêches et Océans

Pursuant to Section 56(1) of the Fishery (General) Regulations made under the *Fisheries Act*, permission is hereby granted to transfer _____ to the above named: _____

Conditions as per Section 22(1) of Fishery (General) Regulations:

- Precautions and procedures will be taken to prevent introduction of undesirable flora/fauna and spread of diseases/parasites as indicated on application form.
- This licence must accompany the transfer.
- All fish transferred under this licence must be destroyed and properly disposed of at the end of the research experiment.

This licence expires on _____

On behalf of the Federal Minister of Fisheries and Oceans

Co-Chair, BC Introductions and Transfers Committee

Date



Gary Klassen – Dorocco Developments Ltd. is authorized by this permit to possess, and transport 5000 Arctic char eggs/milt (*Salvelinus alpinus*) from Icy Waters Ltd in Whitehorse, YK to hatchery in Oliver BC pursuant to section 3 of the Freshwater Fish Regulation, BC Reg. 261/83.

Vicki Marshall
A person authorized by the Director, Wildlife
Ministry of Forests, Lands and Natural Resource Operations

Date

Expiry Date: June 15, 2012

This document authorizes the holder to do only the things described above within British Columbia. It does not excuse the holder from any other obligations under any other federal or provincial legislation, whether concerning fish or otherwise.

Bie, Linling FLNR:EX

From: Bie, Linling FLNR:EX
Sent: Wednesday, May 9, 2012 9:45 AM
To: Marshall, Vicki FLNR:EX
Cc: 'Choi, Shirley'
Subject: REVIEW - ITC Permit 78688 - KLASSEN, Gary
Attachments: NA12-78688-KLASSEN.doc; KLASSEN 78688.pdf

Hi Vicki,

Please review attached ITC permit application and draft for Gary Klassen to transport 5000 Arctic char eggs/milt from Yukon to a hatchery in Oliver BC on June 14th, 2012.

Thank you,

Linling Bie

Permit Administrator - Angling Guide Licence
Permit & Authorization Service Bureau
Fish and Wildlife Branch
BC Ministry of Forests, Lands and Natural Resource Operations
Tel: (250) 952-0788
Fax: (250) 387-1814

APPLICATION FOR INTRODUCTION OR TRANSFER OF FISH
AND/OR ACCESS TO WILD AQUATIC RESOURCES FOR AQUACULTURE

FOR INTERNAL USE ONLY

Date Received: _____

Received By: _____

ITC File#: _____

Access File#: _____

SARA File#: _____

PASB File#: _____

1. Applicant Information

Applicant/Company/Agency: Dorocco Developements Ltd.Contact Name: Gary KlassenBus. Phone: 250 485 7408Business Box 1000 Osoyoos B.C. V0H 1V0

Bus. Fax: _____

Mailing Address: _____

Bus. Email: gary@dorocco.com

2. Purpose of transfer:

Aquaculture

3. Species Information for Introduction or Transfer: Please complete the information for the species you wish to transfer in the two tables below. Attach information of additional species if required. For example Row 1, should reflect information regarding the same species across both tables.

Species Common Name(s)	Species Scientific Name	Life Stage	Brood Year	Proposed Number for Transfer	Proposed Transfer Date
1. <u>Arctic char</u>	<u>Salvelinus alpinus</u>	<u>Eggs/Milt</u>	<u>2012</u>	<u>5000</u>	<u>June 14th 2012</u>
2. _____	_____	_____ <input type="checkbox"/>	_____	_____	_____
3. _____	_____	_____ <input type="checkbox"/>	_____	_____	_____
4. _____	_____	_____ <input type="checkbox"/>	_____	_____	_____

Stock Origin	Genetic Status	Source Location of Fish or Aquaculture Licence#	Shellfish or Salmonid Transfer Zone	Nearest Town (City, Province/State)
1. <u>Yukon, Icy Waters Lt</u>	<u>Triploid</u>	<u>Licence no. N/A Yukon</u>	<u>Yukon</u>	<u>Whitehorse</u>
2. _____	_____ <input type="checkbox"/>	_____	_____	_____
3. _____	_____ <input type="checkbox"/>	_____	_____	_____
4. _____	_____ <input type="checkbox"/>	_____	_____	_____

Are any of these species listed under the Species at Risk Act (SARA)?☐ Yes☒ NoIf yes, have you been issued a SARA Permit?☐ Yes☒ No

Are any of these species being Imported from outside Canada?

☐ Yes☒ NoIf you checked "Yes", please note a separate application will need to be made to the Canadian Food Inspection Agency for any imports into BC.

4. Access to Wild Aquatic Resources for Aquaculture Purposes

☒ Access not required, continue to section 5.Please complete the application form for Access to Wild Aquatic Resources for Aquaculture Purposes and submit it together with this application. The form and the access policy can be found on the DFO Pacific Region Aquaculture Website: <http://www.dfo-mpo.gc.ca/aquaculture/pac-eng.htm>For information on access to freshwater species for educational or scientific purposes, please visit:
http://www.env.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html#a2For information on access to marine species for educational or scientific purposes, please visit:
<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/sci/index-eng.htm>

5. Introduction and/or Transfer: Fish

Please note, a fee of \$30.00 will be applied to transport of any freshwater fish native or non-native to BC. Exceptions include transport for the purposes of live food trade, aquariums, and transfers of Pacific Salmon. Freshwater introduction and/or transfer applications should be submitted to the BC Permit and Authorizations Service Bureau.

5a. Rationale for introduction or transfer: Commercial culture of arctic char

5b. Destination: S22

Nearest Town: Oliver, British Columbia

Main mode of Transport:

Air

Destination Description: Hatchery

Destination Transfer Zone: Zone 9 Columbia

Describe method of transport:

(attach additional information if required)

Eggs will be transported by air to Penticton Airport where we will pick them up and bring them to the hatchery.

5c. List any Intermediate sites and transfer dates, if any:

Location of Intermediate Site: None

Arrival and departure date: _____

Location of Intermediate Site: None

Arrival and departure date: _____

5d. Final Destination of Introduction or Transfer

Complete only one of Items *i*, *ii*, or *iii*. In item *i*, animals placed within tenure in natural waters, under an aquaculture licence, must not be released beyond the licensed area. If the proposed release of introduced or transferred fish will be into natural waters, complete all of section *iii*.

i. If purpose is for aquaculture/enhancement:

Company Name: _____

Designated Contact Person: _____

Aquaculture Licence# _____

Provincial Landfile# _____

ii. If final destination is a contained experimental facility:

Will introduction or transfer be separate from other organisms in facilities with respect to: (Check all that apply)

☒ Tanks/ponds

☒ Water Supply

☒ Effluent Discharge

Will effluent be: (check all that apply)

☐ sterilized

☐ discharged directly to the municipal sewer

☐ discharged into ground sump (100%)

☐ discharged into the Ocean

☒ discharged into surface freshwater

Final disposal of the transferred fish: Food Market

iii. If final introduction or transfer is to be released into natural waters (not for commercial aquaculture purposes):

List two waters downstream from the release location:

☐ check if destination is permanently landlocked

1. _____

2. _____

Name federal and provincial fisheries staff who manage fisheries and assess stocks in the area you wish to release the fish. These staff must have been consulted with and approve of this introduction and transfer. Visit <http://www.pac.dfo-mpo.gc.ca/lm-op/maps-cartes/areas-secteurs/index-eng.htm> to determine the Pacific Fishery Management Area and office contact information.

Provincial: _____

Contact Information: _____

Federal: _____

Contact Information: _____

Please attach additional documentation in support of this application, especially issues in regard to risks and mitigation measures.

Acknowledgement:

☒ I am 19 years of age or older

☒ I am authorized by my company to make this application on their behalf

By typing or signing my name below, I certify that the information that I have provided is true and correct to the best of my knowledge. I understand that it is an offence to provide false information.

Date of Application

May 8 2012

Signature

[Signature]

INFORMATION AND PRECAUTIONS RELATING TO THE MOVEMENT OF EGGS, FISH OR INVERTEBRATES

- A. If you are moving eggs, as is preferred over the hatched animal, they should be surface-disinfected according to the procedure in the Manual of Compliance, Fish Health Protection Regulations (Fisheries and Marine Science, Miscellaneous Special Publication 31 (Revised), 1984 Ottawa). The eggs should be rinsed in (fish-free) ground water or pasteurized water to prevent recontamination.
- B. If you are moving fish or invertebrates, please do everything possible to ensure that you do not accidentally introduce nuisance plants or animals. Disinfect or destroy any shipping containers.

APPLICATION INFORMATION

1. Applications should be received at least one month before the date of the proposed movement of the aquatic organism. Please refer to the policy on Access to Wild Aquatic Resources for Aquaculture purposes for timelines on access application submissions: http://www.dfo-mpo.gc.ca/aquaculture/ref/AWAR_e.pdf
2. Transport shall be by the most direct route and with no water exchange unless specifically approved by the committee.
3. For any imports of fish into BC from outside Canada, a separate import permit will be required from the Canadian Food Inspection Agency (CFIA).

Submitting Your Application	
Marine Species	Freshwater Species
<p>For further information regarding the application process or to submit your access and/or transfer application please contact:</p>	<p>Applications for the transport of freshwater fish are subject to a \$30 processing fee. Please submit your application and payment by the following options to the Permit and Authorizations Service Bureau:</p>
<p style="text-align: center;">Shirley Choi Department of Fisheries and Oceans #200- 401 Burrard Street Vancouver, BC V6C 3S4 Phone: 604-666-5519 Fax: 604-666-1076 Email: FAMITC@dfo-mpo.gc.ca</p>	<p style="text-align: center;"><u>Credit Card</u> Authorization form on the next page By Fax only: (250) 387-1814</p> <p style="text-align: center;"><u>Cheque</u> Paid to Minister of Finance By Mail: PO Box 9372 STN PROV GOVT Victoria, BC V8W 9M3 By Courier: 4th Floor, 2975 Jutland Road Victoria, BC V8W 9M3</p> <p style="text-align: center;"><u>Cash</u> In person only: 4th Floor, 2975 Jutland Road, Victoria, BC</p>
<p>Questions regarding Access to Wild Aquatic Resources for Aquaculture Purposes</p> <p>Shellfish Collection: Shellfish.Aquaculture@dfo-mpo.gc.ca Marine Finfish Collection: Marine.Finfish.Aquaculture@dfo-mpo.gc.ca</p>	

This permit does not release the holder from any obligations under the *Fisheries Act* or any other federal or provincial legislation or of any other regulatory agencies.

Permit(s) cannot be issued for activities that are contrary to the proper management of the *Fisheries Act*.

As the management of Introductions and Transfers is both a federal and provincial government responsibility, the information you provide may be subject to the following legislations: *British Columbia Freedom of Information and Protection of Privacy Act*; the federal *Access to Information Act*; and the federal *Privacy Act*. This information will be used to verify your eligibility for the permit(s) you are seeking and for the purposes related to the application administration. If you have any questions regarding the handling of your personal information, please contact the Director of Wildlife for the Province of BC and/or the Director, Access to Information and Privacy Secretariat at the Department of Fisheries and Oceans.

From: [Marshall, Vicki FLNR:EX](#)
To: [White, Tara FLNR:EX](#); [Woodruff, Patricia ENV:EX](#);
cc: [Herborg, Matthias ENV:EX](#);
Subject: FW: ICY WATERS Arctic char bio-containment
Date: Monday, June 11, 2012 4:16:16 PM

Hi Tara and Patricia– just to keep you in the loop.....

From: Keith, Ian [mailto:Ian.Keith@dfo-mpo.gc.ca]
Sent: Monday, June 11, 2012 3:48 PM
To: Herborg, Matthias ENV:EX; Martin, Stacey; Higgins, Mark; Marshall, Vicki FLNR:EX; Sheppard, Mark
Cc: Choi, Shirley
Subject: ICY WATERS Arctic char bio-containment

I have had to return to the Klassen file, and consulted with a veterinary colleague. (First Nations have infectious disease concerns.)

I was informed that ICY WATERS, the long established, certified Arctic char facility had a tank collapse. Assumedly ICY WATERS is run by experts and yet they had this disaster.

There is a trans-boundary issue, as ICY WATERS is at the headwaters of the Yukon River and the Yukon River is a major Pacific salmon river in Alaska, as well as the Yukon. I don't know the details but my understanding is that there was escape into the Yukon River.

I would think it prudent to see how this transboundary issue is resolved before wading in, so cavalier, into this Okanagan River transboundary issue. Thanks for this document Tara, and for your voicing ecological concerns Matthias and Vicki.
Ian

From: Herborg, Matthias ENV:EX [mailto:Matthias.Herborg@gov.bc.ca]
Sent: May 24, 2012 3:43 PM
To: Martin, Stacey; Higgins, Mark; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian
Cc: Choi, Shirley
Subject: RE: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char

Hello

So below are a bunch of comments and questions from our regional fish biologist Tara White which we need to address either through the proponent or our

respective agencies. I think it looks like you made some more progress as far as their water use is concerned (pasted below Tara's question).

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Sorry for leaving it to the last day of our 10 day window to response

Matthias

Leif-Matthias Herborg PhD
Aquatic Invasive Species Specialist
BC Ministry of Environment
Victoria, BC

From: White, Tara FLNR:EX

Sent: Thursday, May 17, 2012 2:53 PM

To: Marshall, Vicki FLNR:EX

Cc: Herborg, Matthias ENV:EX; Goeller, Neil FLNR:EX; Stewart, Robert FLNR:EX; Sokal, Mike ENV:EX; Cavadini, Roger ENV:EX; Burwash, Michael FLNR:EX; White, Tara FLNR:EX

Subject: COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr _
8929 Rd#17, Oliver BC

Hi Vicki:

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winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival). Potential risks to native species include disease transfer, competition for food & habitat and hybridization.

3. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge ? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality) ? Water is already limited in the Okanagan during dry years - particularly between July-Sept .

4. The Okanagan River is directly connected to Osoyoos Lake, which is a trans-boundary watershed. If fish were to escape and survive, there could also be management implications in the US. Additionally, potential impacts from effluent discharge would affect Canadian waters, as well as the US. It would be prudent to consult w/ US fisheries managers regarding the proposed application.

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7. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the lake has little to no oxygen (≤ 4 ppm) July –Sept and only a small corridor is available for fish migration and survival (@ 15 m depth). Water temperatures in the upper 15 m of the water column are in sub-lethal to lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.

8. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River ?

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If you have any questions regarding the information provided, please feel free to give me a call. I have copied regional EP, Water and Ecosystems staff on my response.

Cheers Tara

Tara White, R.P.Bio.

Senior Fisheries Biologist

Ministry of Forests, Lands and Natural Resource Operations

Okanagan-Thompson Region

Phone: (250) 490-2287

Email: tara.white@gov.bc.ca

><(((°>

From: Keith, Ian [mailto:ian.Keith@dfo-mpo.gc.ca]

Sent: Thursday, May 24, 2012 3:34 PM

To: Herborg, Matthias ENV:EX

Subject: RE: could one of you give me a call

It isn't you dropping the ball, it is, when it rains it pours.

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This is not addressing the water resource challenge here. I don't know if recirculation has been successful for Arctic char, but recirculation is 90% plus, in my mind, and depending on production, even this may not be sustainable for this ecosystem. With cold water, the biofiltration would likely require a vast reservoir.

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Sent: Thursday, May 24, 2012 12:15 PM
To: Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian
Cc: Choi, Shirley
Subject: FW: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char
Importance: High

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Thanks,
Shirley Choi

A/Governance Officer
Aquaculture Management Division
Fisheries Management
Fisheries and Oceans Canada

200-401 Burrard St.
Vancouver, BC V6C 3S4
Tel. (604) 666-5519

From: Higgins, Mark

Sent: 2012-May-02 11:03 AM

To: Choi, Shirley; 'Matthias Herborg'; 'Marshall, Vicki FLNR:EX'; Sheppard, Mark; Keith, Ian; Martin, Stacey

Subject: RE: Klassen Updated Application Submitted

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Sent: May 2, 2012 10:43 AM

To: Higgins, Mark; 'Matthias Herborg'; 'Marshall, Vicki FLNR:EX'; Sheppard, Mark; Keith, Ian; Martin, Stacey

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From: Manning, Michelle
Sent: 2012-May-01 12:04 PM
To: Hughes, Debra; Choi, Shirley; Martin, Stacey
Cc: Meadows, Shelley; Lim, Susan; Kosmider, Gabrielle
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Thanks so much!

<< File: Klassen Application April2012.pdf >>

Michelle Manning

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture

Aquaculture Management Division | La Division de Direction de l'aquaculture

Fisheries and Oceans Canada | Pêches et Océans Canada

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Telephone | Téléphone [250-754-0409](tel:250-754-0409)

Facsimile | Télécopieur [250-754-0391](tel:250-754-0391)

michelle.manning@dfo-mpo.gc.ca

www.pac.dfo-mpo.gc.ca

From: [Marshall, Vicki FLNR:EX](#)
To: [Woodruff, Patricia ENV:EX](#);
Subject: FW: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char
Date: Thursday, May 24, 2012 3:55:44 PM

Hi Patricia – here is another aquaculture licence in the works....I can provide you with some context if you like but we should be using the same lens wrt process and content around review that we would use for Vancouver Island.

Vicki.

From: Herborg, Matthias ENV:EX
Sent: Thursday, May 24, 2012 3:43 PM
To: 'Martin, Stacey'; 'Higgins, Mark'; Marshall, Vicki FLNR:EX; 'Sheppard, Mark'; 'Keith, Ian'
Cc: 'Choi, Shirley'
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Ministry of Forests, Lands and Natural Resource Operations

Okanagan-Thompson Region

Phone: (250) 490-2287

Email: tara.white@gov.bc.ca

><(((°>

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To: Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian
Cc: Choi, Shirley
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Importance: High

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A/Governance Officer
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200-401 Burrard St.
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Michelle Manning

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michelle.manning@dfo-mpo.gc.ca

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From: [Marshall, Vicki FLNR:EX](#)
To: [Woodruff, Patricia ENV:EX](#);
Subject: FW: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char
Date: Tuesday, June 5, 2012 3:43:03 PM

jkyi

From: Higgins, Mark [mailto:Mark.Higgins@dfo-mpo.gc.ca]
Sent: Tuesday, June 5, 2012 1:57 PM
To: Martin, Stacey; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian
Cc: Choi, Shirley
Subject: RE: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char

I had a chat with John Kerwin at the Washington Department of Fish and Game who is in charge of all things relating to Aquaculture. He indicated that there are 2 Arctic Char operations in Washington State currently and they do monitor for escapes from these facilities (they are flow through single pass facilities). He was of the opinion that BC (Canada) should have mitigation measures to contain the char on our side of the border, and they will monitor facilities on their side. No further consultations with the US will be necessary. Mark.

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Telephone | Téléphone [250-754-0409](tel:250-754-0409)
Facsimile | Télécopieur [250-754-0391](tel:250-754-0391)

michelle.manning@dfo-mpo.gc.ca
www.pac.dfo-mpo.gc.ca

From: [Marshall, Vicki FLNR:EX](#)
To: [White, Tara FLNR:EX](#);
cc: [Woodruff, Patricia ENV:EX](#);
Subject: FW: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Date: Tuesday, September 25, 2012 8:34:47 AM
Attachments: [ITC Application Dec 2012.pdf](#)

Hi Tara – do you have comments?

Thanks,
vicki

From: Choi, Shirley [mailto:Shirley.Choi@dfo-mpo.gc.ca]
Sent: Monday, September 24, 2012 12:50 PM
To: Higgins, Mark; Keith, Ian; Sheppard, Mark; Woodruff, Patricia ENV:EX;
Marshall, Vicki FLNR:EX
Cc: Martin, Stacey
Subject: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Hi All,

Please find attached an application for the transfer of 10,000 Arctic Char eggs from Icy Waters Ltd. in Whitehorse, Yukon to Oliver, BC. Mr. Klassen's Aquaculture licence was issued to him last week after thorough review of escapement prevention measures, and the use of eggs from a certified disease free facility and importing only triploid shocked eggs.

Mark, I believe you mentioned that the source is FHPR certified, does this need a Fish Health Certificate?

Please provide your comments by [October 4, 2012](#).

Thank you,

Shirley Choi

A/Governance Officer
Aquaculture Management Division
Fisheries Management
Fisheries and Oceans Canada

200-401 Burrard St.
Vancouver, BC V6C 3S4

Tel. (604) 666-5519
Fax. (604) 666-1076

From: Gary Klassen [<mailto:gary@dorocco.com>]
Sent: 2012–September-21 6:14 PM
To: Martin, Stacey; Choi, Shirley; XPAC FAM ITC
Subject: Application ITC Arctic Char

Hi

Please find attached application to transfer eggs in the end of November 2012 from Icy Waters Whitehorse.

Can someone confirm this application is appropriately completed?

My new DFO License is AQFW 6673 2012.

Gary Klassen

1-250-485-7408



Fisheries
and Oceans

Pêches
et Océans



APPLICATION FOR INTRODUCTION OR TRANSFER OF FISH AND/OR ACCESS TO WILD AQUATIC RESOURCES FOR AQUACULTURE

FOR INTERNAL USE ONLY

Date Received: _____ Received By: _____ ITC File#: _____
Access File#: _____ SARA File#: _____ PASB File#: _____

1. Applicant Information

Applicant/Company/Agency: Dorocco Developments Ltd

Contact Name: Gary Klassen

Bus. Phone: 1-250-485-7408

Business: Box 1000

Bus. Fax: _____

Mailing Address: Osoyoos BC V0H 1V0

Bus. Email: gary@dorocco.com

2. Purpose of transfer:

Aquaculture

3. Species Information for Introduction or Transfer: Please complete the information for the species you wish to transfer in the two tables below. Attach information of additional species if required. For example Row 1. should reflect information regarding the same species across both tables.

Species Common Name(s)	Species Scientific Name	Life Stage	Brood Year	Proposed Number for Transfer	Proposed Transfer Date
1. Arctic char	Salvelinus alpinus	Eggs/Milt	2012	10000	November 2012
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____

Stock Origin	Genetic Status	Source Location of Fish or Aquaculture Licence#	Shellfish or Salmonid Transfer Zone	Nearest Town (City, Province/State)
1. Yukon, Icy Waters L.	Triploid	Licence no. N/A Yukon	Yukon	Whitehorse
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

Are any of these species listed under the *Species at Risk Act (SARA)*? ☐ Yes ☒ No

If yes, have you been issued a *SARA Permit*? ☐ Yes ☒ No

Are any of these species being imported from outside Canada? ☐ Yes ☒ No

If you checked "Yes", please note a separate application will need to be made to the *Canadian Food Inspection Agency* for any imports into BC.

4. Access to Wild Aquatic Resources for Aquaculture Purposes

☐ Access not required, continue to section 5.

Please complete the application form for **Access to Wild Aquatic Resources for Aquaculture Purposes** and submit it **together** with this application. The form and the access policy can be found on the DFO Pacific Region Aquaculture Website: <http://www.dfo-mpo.gc.ca/aquaculture/pac-eng.htm>

For information on access to **freshwater** species for **educational or scientific purposes**, please visit:

http://www.env.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html#a2

For information on access to **marine** species for **educational or scientific purposes**, please visit:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/sci/index-eng.htm>

5. Introduction and/or Transfer of Fish

Please note, a fee of \$30.00 will be applied to transport of any **freshwater fish** native or non-native to BC. Exceptions include transport for the purposes of live food trade, aquariums, and transfers of Pacific Salmon. **Freshwater introduction and/or transfer applications should be submitted to the BC Permit and Authorizations Service Bureau.**

5a. Rationale for introduction or transfer: Commercial culture of arctic char

5b. Destination: S22

Nearest Town: Oliver BC

Main mode of Transport: Air

Destination Description: Aquaculture Site

Destination Transfer Zone: 9.Columbia

Describe method of transport:

(attach additional information if required)

Air from Whitehorse to Penticton, ground from Penticton to final destination.

5c. List any intermediate sites and transfer dates, if any:

Location of Intermediate Site: None

Arrival and departure date: _____

Location of Intermediate Site: None

Arrival and departure date: _____

5d. Final Destination of Introduction or Transfer

Complete only one of items *i*, *ii*, or *iii*. In item *i*, animals placed within tenure in natural waters, under an aquaculture licence, must not be released beyond the licensed area. If the proposed release of introduced or transferred fish will be into natural waters, complete all of section *iii*.

i. If purpose is for aquaculture/enhancement:

Company Name: Dorocco Developments Ltd

Designated Contact Person: Gary Klassen

Aquaculture Licence# AQFW 6673 2012

Provincial Landfile# PR032

ii. If final destination is a contained experimental facility:

Will introduction or transfer be separate from other organisms in facilities with respect to: (Check all that apply)

☒ Tanks/ponds

☒ Water Supply

☒ Effluent Discharge

Will effluent be: (check all that apply)

☐ sterilized

☐ discharged directly to the municipal sewer

☐ discharged into ground sump (100%)

☐ discharged into the Ocean

☒ discharged into surface freshwater

Final disposal of the transferred fish: Food Market

iii. If final introduction or transfer is to be released into natural waters (not for commercial aquaculture purposes):

List two waters downstream from the release location:

☐ check if destination is permanently landlocked

1. _____

2. _____

Name federal and provincial fisheries staff who manage fisheries and assess stocks in the area you wish to release the fish. These staff must have been consulted with and approve of this introduction and transfer. Visit <http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm> to determine the Pacific Fishery Management Area and office contact information.

Provincial: _____

Contact Information: _____

Federal: _____

Contact Information: _____

Please attach additional documentation in support of this application, especially issues in regard to risks and mitigation measures.

Acknowledgement:

☒ I am 19 years of age or older

☒ I am authorized by my company to make this application on their behalf

By typing or signing my name below, I certify that the information that I have provided is true and correct to the best of my knowledge. I understand that it is an offence to provide false information.

Date of Application 21-Sep-12

Signature Gary Klassen



Ministry of
Forests, Lands and
Natural Resource Operations

VISA/MASTERCARD PAYMENT AUTHORIZATION FORM

*Please note form must NOT be emailed.

Name as it appears on credit card

Gary Klassen

Name as it appears on the permit application if different than the name on the credit card

Dorocco Developments Ltd

Phone number of where the card holder can be reached

1-250-485-7408

E-mail address

gary@dorocco.com

Organization Name

Dorocco Developments

Please indicate what category you are paying for:

<input type="checkbox"/> Application for Commercial Activities under the <i>Wildlife Act</i>	<input type="checkbox"/> Limited Entry Hunting (LEH)
<input checked="" type="checkbox"/> <i>Wildlife Act</i> of BC Permit Application	<input type="checkbox"/> Dean River Draw (DRDraw)
<input type="checkbox"/> Accompany to Hunt Application	<input type="checkbox"/> Non-Resident Hunting Licence (NRHunt)
<input type="checkbox"/> CITES Permit	<input type="checkbox"/> Declaration for Lost Hunter # (DECL HN)
<input type="checkbox"/> Film Production Permit	<input type="checkbox"/> Fish & Wildlife Licence Sales (F&W Lic)
<input type="checkbox"/> Land Use/Occupancy Permit	<input type="checkbox"/> Duplicate Licences (DUP Lic)
<input type="checkbox"/> Commercial Recreation Permit	<input type="checkbox"/> Other: provide details _____
<input type="checkbox"/> Other: provide details _____	

OFFICE USE ONLY:

ATA Tracking number _____ Client Number _____

Please bill my VISA ☒ MASTERCARD ☐ in the amount of \$ 30.00

Signature [Signature]

Card Number

S22

Expiry Date

Please note: The credit card information provided on this form will not be retained. Upon authorization of the payment request all credit card information will be destroyed.

From: [Marshall, Vicki FLNR:EX](#)
To: [Herborg, Matthias ENV:EX](#); [Woodruff, Patricia ENV:EX](#);
Subject: Fw: Klassen fish farm application and related permits
Date: Monday, June 18, 2012 5:26:57 PM

Fyi

From: White, Tara FLNR:EX
Sent: Monday, June 18, 2012 08:14 AM
To: Marshall, Vicki FLNR:EX
Subject: FW: Klassen fish farm application and related permits

FYI

From: Goeller, Neil FLNR:EX
Sent: Tuesday, June 12, 2012 2:56 PM
To: White, Tara FLNR:EX; Cavadini, Roger ENV:EX; Reimer, Shaun FLNR:EX
Subject: Klassen fish farm application and related permits

Tara and Roger and Shaun,

I spoke with both Gary Klassen and Adam Neil (Summit Environmental) regarding the fish farm application down near Oliver.

Summit is preparing a summary report including the proposed works, construction methods and mitigation methods to support the applications to DFO and Water Stewardship (Section 9). I understand that Gary has retained Associated Engineering to assemble the engineering drawings, and as of 2 days ago (or so), Summit to handle the environmental/permitting aspects.

Gary hopes to have shovels in the ground by July 22nd of this year. The summary report by Summit is expected by the end of this month (June). If this date is not possible, we should let him know sooner than later.

From a Section 9 perspective, unless the design changes, I don't see any showstoppers at the moment. I will only be concerned with the outfall pipe which will be a directional drill through the dyke. I will also be concerned if the construction encroaches on Shippet Oxbow, which is adjacent to the proposed farm. This doesn't seem to be the case right now.

Shaun, I'm not sure if they have approached you regarding drilling through the

dyke. They plan to cross Shippet Oxbow and directional drill very close to, what appears to be, a culvert through the dyke at the lower end of Shippet Oxbow.

Roger, Tara said you are handling their permit. My understanding from Gary and Adam at this point is that they are under the impression that a discharge permit is already in place (I may be wrong on this). I talked to Tara about this, and that doesn't sound like it is the case. I think if Adam hasn't contacted you at this point, then it would be a good idea to inform them of the status of their permit.

I will be adding text to the Section 9 Approval regarding the other permit requirements that have to be in place prior to undertaking the work. So if you can let me know what permits need to be in place, that will help me out.

If you know anyone else who is a part of this approval process maybe we can add them to the cc list and expand the conversation so we are all on the same page.

Thanks,

Neil.

Neil Goeller, M.Sc., G.I.T.
Regional Hydrologist
Ministry of Forests, Lands and Natural Resource Operations
Okanagan Shuswap District
Ph: (250) 490-8265, Fx: (250) 490-2231

From: [Choi, Shirley](#)
To: [Higgins, Mark](#); [Keith, Ian](#); [Sheppard, Mark](#); [Woodruff, Patricia ENV:EX](#);
[Marshall, Vicki FLNR:EX](#);
cc: [Martin, Stacey](#);
Subject: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Date: Monday, September 24, 2012 12:50:15 PM
Attachments: [ITC Application Dec 2012.pdf](#)

Hi All,

Please find attached an application for the transfer of 10,000 Arctic Char eggs from Icy Waters Ltd. in Whitehorse, Yukon to Oliver, BC. Mr. Klassen's Aquaculture licence was issued to him last week after thorough review of escapement prevention measures, and the use of eggs from a certified disease free facility and importing only triploid shocked eggs.

Mark, I believe you mentioned that the source is FHPR certified, does this need a Fish Health Certificate?

Please provide your comments by [October 4, 2012](#).

Thank you,

Shirley Choi

A/Governance Officer
Aquaculture Management Division
Fisheries Management
Fisheries and Oceans Canada

200-401 Burrard St.
Vancouver, BC V6C 3S4
Tel. (604) 666-5519
Fax. (604) 666-1076

From: Gary Klassen [mailto:gary@dorocco.com]
Sent: 2012-September-21 6:14 PM
To: Martin, Stacey; Choi, Shirley; XPAC FAM ITC
Subject: Application ITC Arctic Char

Hi

Please find attached application to transfer eggs in the end of November 2012 from Icy Waters Whitehorse.

Can someone confirm this application is appropriately completed?

My new DFO License is AQFW 6673 2012.

Gary Klassen

1-250-485-7408



Fisheries
and Oceans

Pêches
et Océans



APPLICATION FOR INTRODUCTION OR TRANSFER OF FISH AND/OR ACCESS TO WILD AQUATIC RESOURCES FOR AQUACULTURE

FOR INTERNAL USE ONLY

Date Received: _____ Received By: _____ ITC File#: _____
Access File#: _____ SARA File#: _____ PASB File#: _____

1. Applicant Information

Applicant/Company/Agency: Dorocco Developments Ltd

Contact Name: Gary Klassen

Bus. Phone: 1-250-485-7408

Business: Box 1000

Bus. Fax: _____

Mailing Address: Osoyoos BC V0H 1V0

Bus. Email: gary@dorocco.com

2. Purpose of transfer:

Aquaculture

3. Species Information for Introduction or Transfer: Please complete the information for the species you wish to transfer in the two tables below. Attach information of additional species if required. For example Row 1. should reflect information regarding the same species across both tables.

Species Common Name(s)	Species Scientific Name	Life Stage	Brood Year	Proposed Number for Transfer	Proposed Transfer Date
1. Arctic char	Salvelinus alpinus	Eggs/Milt	2012	10000	November 2012
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____

Stock Origin	Genetic Status	Source Location of Fish or Aquaculture Licence#	Shellfish or Salmonid Transfer Zone	Nearest Town (City, Province/State)
1. Yukon, Icy Waters L.	Triploid	Licence no. N/A Yukon	Yukon	Whitehorse
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

Are any of these species listed under the *Species at Risk Act (SARA)*? ☐ Yes ☒ No

If yes, have you been issued a *SARA Permit*? ☐ Yes ☒ No

Are any of these species being imported from outside Canada? ☐ Yes ☒ No

If you checked "Yes", please note a separate application will need to be made to the *Canadian Food Inspection Agency* for any imports into BC.

4. Access to Wild Aquatic Resources for Aquaculture Purposes

☐ Access not required, continue to section 5.

Please complete the application form for **Access to Wild Aquatic Resources for Aquaculture Purposes** and submit it **together** with this application. The form and the access policy can be found on the DFO Pacific Region Aquaculture Website: <http://www.dfo-mpo.gc.ca/aquaculture/pac-eng.htm>

For information on access to **freshwater** species for **educational or scientific purposes**, please visit:

http://www.env.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html#a2

For information on access to **marine** species for **educational or scientific purposes**, please visit:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/sci/index-eng.htm>

5. Introduction and/or Transfer of Fish

Please note, a fee of \$30.00 will be applied to transport of any **freshwater fish** native or non-native to BC. Exceptions include transport for the purposes of live food trade, aquariums, and transfers of Pacific Salmon. **Freshwater introduction and/or transfer applications should be submitted to the BC Permit and Authorizations Service Bureau.**

5a. Rationale for introduction or transfer: Commercial culture of arctic char

5b. Destination: S22

Nearest Town: Oliver BC

Main mode of Transport: Air

Destination Description: Aquaculture Site

Destination Transfer Zone: 9.Columbia

Describe method of transport:

(attach additional information if required)

Air from Whitehorse to Penticton, ground from Penticton to final destination.

5c. List any intermediate sites and transfer dates, if any:

Location of Intermediate Site: None

Arrival and departure date: _____

Location of Intermediate Site: None

Arrival and departure date: _____

5d. Final Destination of Introduction or Transfer

Complete only one of items *i*, *ii*, or *iii*. In item *i*, animals placed within tenure in natural waters, under an aquaculture licence, must not be released beyond the licensed area. If the proposed release of introduced or transferred fish will be into natural waters, complete all of section *iii*.

i. If purpose is for aquaculture/enhancement:

Company Name: Dorocco Developments Ltd

Designated Contact Person: Gary Klassen

Aquaculture Licence# AQFW 6673 2012

Provincial Landfile# PR032

ii. If final destination is a contained experimental facility:

Will introduction or transfer be separate from other organisms in facilities with respect to: (Check all that apply)

☒ Tanks/ponds

☒ Water Supply

☒ Effluent Discharge

Will effluent be: (check all that apply)

☐ sterilized ☐ discharged directly to the municipal sewer ☐ discharged into ground sump (100%)

☐ discharged into the Ocean ☒ discharged into surface freshwater

Final disposal of the transferred fish: Food Market

iii. If final introduction or transfer is to be released into natural waters (not for commercial aquaculture purposes):

List two waters downstream from the release location:

☐ check if destination is permanently landlocked

1. _____

2. _____

Name federal and provincial fisheries staff who manage fisheries and assess stocks in the area you wish to release the fish. These staff must have been consulted with and approve of this introduction and transfer. Visit <http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm> to determine the Pacific Fishery Management Area and office contact information.

Provincial: _____

Contact Information: _____

Federal: _____

Contact Information: _____

Please attach additional documentation in support of this application, especially issues in regard to risks and mitigation measures.

Acknowledgement:

☒ I am 19 years of age or older

☒ I am authorized by my company to make this application on their behalf

By typing or signing my name below, I certify that the information that I have provided is true and correct to the best of my knowledge. I understand that it is an offence to provide false information.

Date of Application 21-Sep-12

Signature Gary Klassen



Ministry of
Forests, Lands and
Natural Resource Operations

VISA/MASTERCARD PAYMENT AUTHORIZATION FORM

*Please note form must NOT be emailed.

Name as it appears on credit card

Gary Klassen

Name as it appears on the permit application if different than the name on the credit card

Dorocco Developments Ltd

Phone number of where the card holder can be reached

1-250-485-7408

E-mail address

gary@dorocco.com

Organization Name

Dorocco Developments

Please indicate what category you are paying for:

<input type="checkbox"/> Application for Commercial Activities under the <i>Wildlife Act</i>	<input type="checkbox"/> Limited Entry Hunting (LEH)
<input checked="" type="checkbox"/> <i>Wildlife Act</i> of BC Permit Application	<input type="checkbox"/> Dean River Draw (DRDraw)
<input type="checkbox"/> Accompany to Hunt Application	<input type="checkbox"/> Non-Resident Hunting Licence (NRHunt)
<input type="checkbox"/> CITES Permit	<input type="checkbox"/> Declaration for Lost Hunter # (DECL HN)
<input type="checkbox"/> Film Production Permit	<input type="checkbox"/> Fish & Wildlife Licence Sales (F&W Lic)
<input type="checkbox"/> Land Use/Occupancy Permit	<input type="checkbox"/> Duplicate Licences (DUP Lic)
<input type="checkbox"/> Commercial Recreation Permit	<input type="checkbox"/> Other: provide details _____
<input type="checkbox"/> Other: provide details _____	

OFFICE USE ONLY:

ATA Tracking number _____ Client Number _____

Please bill my VISA ☒ MASTERCARD ☐ in the amount of \$ 30.00

Signature [Signature]

Card Number

S22

Expiry Date

Please note: The credit card information provided on this form will not be retained. Upon authorization of the payment request all credit card information will be destroyed.

From: [Martin, Stacey](#)
To: [Choi, Shirley](#); [Higgins, Mark](#); [Keith, Ian](#); [Marshall, Vicki](#) FLNR:EX;
[Sheppard, Mark](#); [Woodruff, Patricia](#) ENV:EX;
Subject: ITC Permitting Requirements for Arctic Char Movements
Date: Thursday, August 30, 2012 4:05:58 PM

Hello all,

There has recently been some discussion regarding the potential need for a site specific aquaculture licence condition requiring that all movements to and from the proposed Klassen arctic char facility be licenced by the ITC. Before proceeding with this addition to the aquaculture licence, however, I wanted to touch base with you all to gauge the importance, from your perspective, of permitting and tracking all movements of arctic char. The current general CoL do require that any cross-zone transfers of salmonids have a separate licence, so if you feel this is sufficient in regards to Arctic char specifically, please let me know. Thanks everyone. /S

Stacey Martin

A/Governance Coordinator | Coordinateur de gouvernance
Aquaculture Management Division | Gestion de l'aquaculture
Fisheries Management | Direction des pêches
Fisheries and Oceans Canada | Pêches et Océans Canada

200-401 Burrard Street | 401, rue Burrard, bureau 200
Vancouver, BC V6C 3S4 | Vancouver (C.-B.) V6C 3S4
Telephone | Téléphone: (604) 666-6831
Facsimile | Télécopieur: (604) 666-1076
Email | Courriel: stacey.martin@dfo-mpo.gc.ca

From: [Marshall, Vicki FLNR:EX](#)
To: [Woodruff, Patricia ENV:EX](#);
Subject: RE: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char
Date: Thursday, May 24, 2012 4:38:27 PM

Hi Patricia - Please feel free to call Tara for details or to discuss developments. It could be that she has an old application form for this as this is the second attempt by this proponent.

Thx,
Vicki

From: Woodruff, Patricia FLNR:EX
Sent: Thursday, May 24, 2012 4:26 PM
To: Marshall, Vicki FLNR:EX
Subject: RE: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char

I would like to see more information on where the outflow will end up (so where any escapees and where any nutrients/wastes, etc. could have an effect), and what fish species are present in the surrounding water bodies. The marine licences complete habitat information requirement sheets, which includes information on the surrounding streams, but judging from Tara's questions that hasn't been done with this application.

From: Marshall, Vicki FLNR:EX
Sent: Thursday, May 24, 2012 3:56 PM
To: Woodruff, Patricia FLNR:EX
Subject: FW: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char

Hi Patricia – here is another aquaculture licence in the works....I can provide you with some context if you like but we should be using the same lens wrt process and content around review that we would use for Vancouver Island.

Vicki.

From: Herborg, Matthias ENV:EX
Sent: Thursday, May 24, 2012 3:43 PM
To: 'Martin, Stacey'; 'Higgins, Mark'; Marshall, Vicki FLNR:EX; 'Sheppard, Mark'; 'Keith, Ian'
Cc: 'Choi, Shirley'
Subject: RE: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char

Hello

So below are a bunch of comments and questions from our regional fish biologist Tara White which we need to address either through the proponent or our respective agencies. I think it looks like you made some more progress as far as their water use is concerned (pasted below Tara's question).

I think given the location of the site in an already stressed area we have to be careful around additional impacts to the environment, and since this is also a trans-boundary system we would strongly suggest that DFO needs to consult with the US partners south of the border before putting additional pressure on this system.

Sorry for leaving it to the last day of our 10 day window to respond

Matthias

Leif-Matthias Herborg PhD
Aquatic Invasive Species Specialist
BC Ministry of Environment
Victoria, BC

From: White, Tara FLNR:EX

Sent: Thursday, May 17, 2012 2:53 PM

To: Marshall, Vicki FLNR:EX

Cc: Herborg, Matthias ENV:EX; Goeller, Neil FLNR:EX; Stewart, Robert FLNR:EX; Sokal, Mike ENV:EX; Cavadini, Roger ENV:EX; Burwash, Michael FLNR:EX; White, Tara FLNR:EX

Subject: COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr _ 8929 Rd#17, Oliver BC

Hi Vicki:

I have reviewed the above noted Aquaculture Application and provide the following comments:

1. Triploid Arctic Charr eggs will be imported from the Yukon. Although they will be coming from a disease certified source and will be heat shock treated triploids, we know from the Freshwater Fisheries Society of BC's research w/ kokanee that sterility is not 100% effective. There is up to a 5% chance that the eggs will not be sterile, thereby increasing the risk of hybridization w/ native stocks, should fish escape.
2. The fish are proposed to be raised in tanks, in a closed environment. Water intake/discharge pipes will be screened. Therefore, the risk of escape into the Okanagan River is likely low. Survival of escaped fish is also anticipated to be low, due to the warm water temperatures in the Okanagan River and Osoyoos Lake a portion of year (optimum temperatures for Charr are 11 C-16 C). If fish were to escape during the winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival).

Potential risks to native species include disease transfer, competition for food & habitat and hybridization.

3. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge ? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality) ? Water is already limited in the Okanagan during dry years - particularly between July-Sept .

4. The Okanagan River is directly connected to Osoyoos Lake, which is a trans-boundary watershed. If fish were to escape and survive, there could also be management implications in the US. Additionally, potential impacts from effluent discharge would affect Canadian waters, as well as the US. It would be prudent to consult w/ US fisheries managers regarding the proposed application.

5. The application indicates water withdrawal/discharge pipes will be screened, but does not provide further detail (ie. screening size, life-stage and guidelines to be followed) . Screening should meet freshwater Intake end-of-pipe fish screen guidelines (DFO) in order to minimize resident fish entrainment and impingement on the screen.

6. A drum filter and settling tank are proposed to treat effluent water prior to discharge. Will this be sufficient to filter nitrates and pharmaceuticals (used to treat hatchery eggs/fish) from the water and prevent pathogen transfer to the Okanagan River system ? If not, what are the implications to native stocks, SAR and watershed health?

7. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the lake has little to no oxygen (≤ 4 ppm) July –Sept and only a small corridor is available for fish migration and survival (@ 15 m depth). Water temperatures in the upper 15 m of the water column are in sub-lethal to lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.

8. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River ?

9. The effluent discharge rate proposed = 75 L/s . Will this rate be continuous year round or for a specified time period ? Water does this mean in terms of licensed use? As I understand it wells are not licensed....

10. Water for the facility is to be supplied from a well and 12 C. The temperature of discharge water, however was not identified. Discharge of effluent water should meet specified guidelines for aquatic life– particularly when dealing with a sensitive ecosystem & fish stocks.

11. The hatchery is proposed in a sensitive ecological area – near historic oxbows off the Okanagan River. What is the risk to the floodplain, SAR and surrounding

area from proposed development and water withdrawal and discharge?
12. The application states fish will be supplied "Direct to Food Market". Will fish be transported live? If so, this will increase risk to native stocks.

If you have any questions regarding the information provided, please feel free to give me a call. I have copied regional EP, Water and Ecosystems staff on my response.

Cheers Tara

Tara White, R.P.Bio.
Senior Fisheries Biologist
Ministry of Forests, Lands and Natural Resource Operations
Okanagan-Thompson Region
Phone: (250) 490-2287
Email: tara.white@gov.bc.ca

><(((°>

From: Keith, Ian [mailto:ian.Keith@dfo-mpo.gc.ca]
Sent: Thursday, May 24, 2012 3:34 PM
To: Herborg, Matthias ENV:EX
Subject: RE: could one of you give me a call

It isn't you dropping the ball, it is, when it rains it pours.

I

got the contact info for Michael Burwash, Sr. Ecosystem Biologist for FLNR, Thompson Okanagan Region in Kamloops and Patricia Woodruff in your building as referral people but haven't tried to contact them.

The application says that the existing well would be the water source, flow through, with Phase two with 30 to 70% "recirculation" with 30% as the target. At least this is honest, that they don't state 70% and target 30%. With 120 kg/cubic meter there is need for CO2 stripping and aeration just for re-use, and re-use is not recirculation. I was familiar only with a flow through (surface water) Arctic char operation in PEI where they employed re-use i.e. water from the youngest fish drains to tanks with low density older fish.

This is not addressing the water resource challenge here. I don't know if recirculation has been successful for Arctic char, but recirculation is 90% plus, in my mind, and depending on production, even this may not be sustainable for this ecosystem. With cold water, the biofiltration would likely require a vast reservoir.

From: Martin, Stacey [mailto:Stacey.Martin@dfo-mpo.gc.ca]
Sent: Thursday, May 24, 2012 12:15 PM
To: Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian
Cc: Choi, Shirley
Subject: FW: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic

Char

Importance: High

Hi all,

I realize it has been a crazy couple of weeks for everyone, but just wondering if you had a chance to review Gary Klassen's aquaculture and ITC applications? I understand Mr. Klassen (Dorocco Developments) is hoping to have his aquaculture licence approved shortly, so if there are concerns with proposed aquaculture application we will need to advise as soon as possible and, subsequently, also advise re: his associated ITC application. (Please note that Mark H. confirmed that Icy Waters is an FHPR-certified site, which addresses one of our previous concerns regarding source.)

As per Shirley's earlier email, there is additional information available by request (files were too big to include) so please let me know if you would like copies of location or flood plain maps and/or site diagrams and plans to help inform your review. Thanks, everyone. /Stacee

From: Choi, Shirley

Sent: May 11, 2012 5:21 PM

To: Higgins, Mark; 'Matthias Herborg'; 'Marshall, Vicki FLNR:EX'; Sheppard, Mark; Keith, Ian; Martin, Stacee

Subject: ITC Application# 12835 - Dorocco Developments (aka Gary Klassen) - Arctic Char

Hi All,

Please find attached Gary Klassen's ITC application.

<<CCF08052012_00000.pdf>> <<Klassen Completed Application May 2012.pdf>>

I also have available by request:

- (1) Location Map 1:20000
- (2) Location Map 1:5000
- (3) Flood Plain Map
- (4) Site Diagram
- (5) Site Plan with tank layout
- (6) Pipe Outfall drawings

These files are huge, so I will only send it to you if you need it for the review. I am away next week, so please contact Stacee. Please provide your response to us by May 24, 2012.

Thanks,

Shirley Choi

A/Governance Officer

Aquaculture Management Division
Fisheries Management
Fisheries and Oceans Canada

200-401 Burrard St.
Vancouver, BC V6C 3S4
Tel. (604) 666-5519

From: Higgins, Mark
Sent: 2012-May-02 11:03 AM
To: Choi, Shirley; 'Matthias Herborg'; 'Marshall, Vicki FLNR:EX'; Sheppard, Mark; Keith, Ian; Martin, Stacey
Subject: RE: Klassen Updated Application Submitted

Icy waters is a certified site. Disease issues will be taken care of. Inter-Provincial carrying permit will need to be issued by me (LFHO) for transfer into BC. Province will need to be assured that these will not get in to natural waters, however, they are triploid, so may not be an issue. Mark.

From: Choi, Shirley
Sent: May 2, 2012 10:43 AM
To: Higgins, Mark; 'Matthias Herborg'; 'Marshall, Vicki FLNR:EX'; Sheppard, Mark; Keith, Ian; Martin, Stacey
Subject: FW: Klassen Updated Application Submitted

Hi ITC,

So the madness has begun (again) for the Klassen file. This time he has hired a consultant to help with the set up of his site. He still wants to get triploid Arctic Char eggs from Icy Waters in the Yukon, are we still concerned that it is not an FHPR certified site? We have asked that an ITC application be submitted, but thought we could use a head start to this application. I don't believe a hydrological assessment has been done, does he still need one? Other information on effluent treatment, fish health and fish habitat can be found in the document below as well (Start at Page 18).

Thanks,

Shirley

From: Manning, Michelle

Sent: 2012-May-01 12:04 PM

To: Hughes, Debra; Choi, Shirley; Martin, Stacey

Cc: Meadows, Shelley; Lim, Susan; Kosmider, Gabrielle

Subject: Klassen Updated Application Submitted

Hi all,

Attached is Gary Klassen's updated application. He is going to be sending in some engineered plans separately (I will forward these on when I receive them).

He has asked me to walk through the application with him Thursday morning to make sure he is not missing any info. I was hoping you could all take a look at it and see if there is anything else we need from him. He wants to move fish in June and it would be a great success if we could facilitate that for him this year. The earlier we get our requirements to him (if any), the better.

Thanks so much!

<< File: Klassen Application April2012.pdf >>

Michelle Manning

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture

Aquaculture Management Division | La Division de Direction 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](tel:250-754-0409)

Facsimile | Télécopieur [250-754-0391](tel:250-754-0391)

michelle.manning@dfo-mpo.gc.ca

www.pac.dfo-mpo.gc.ca

From: [Marshall, Vicki FLNR:EX](#)
To: [Askey, Paul FLNR:EX](#); [Hewison, Melinda FLNR:EX](#); [Woodruff, Patricia ENV:EX](#);
Subject: Re: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Date: Wednesday, October 3, 2012 4:22:17 PM

Yes. Thanks!
Approved Melinda.
Vicki

From: Askey, Paul FLNR:EX
Sent: Wednesday, October 03, 2012 03:51 PM
To: Marshall, Vicki FLNR:EX
Subject: RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Yes, if the licence is issued, then transport of sterile eggs is not an issue.

From: Marshall, Vicki FLNR:EX
Sent: Wednesday, October 3, 2012 3:19 PM
To: Askey, Paul FLNR:EX
Subject: FW: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Importance: High

Hi Paul -
Okay with you in Tara's absence?

From: Choi, Shirley [<mailto:Shirley.Choi@dfo-mpo.gc.ca>]
Sent: Wednesday, October 3, 2012 11:15 AM
To: Choi, Shirley; Higgins, Mark; Keith, Ian; Sheppard, Mark; Woodruff, Patricia ENV:EX; Marshall, Vicki FLNR:EX
Cc: Martin, Stacey
Subject: RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Importance: High

Hi All,

Just wanted to follow up on this one, do we need more time or further discussion at our next meeting? The deadline for response is tomorrow.

Thanks!
Shirley

From: Choi, Shirley
Sent: 2012-September-24 12:50 PM
To: Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; vicki.marshall@gov.bc.ca
Cc: Martin, Stacey
Subject: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Hi All,

Please find attached an application for the transfer of 10,000 Arctic Char eggs from Icy Waters Ltd. in Whitehorse, Yukon to Oliver, BC. Mr. Klassen's Aquaculture licence was issued to him last week after thorough review of escapement prevention measures, and the use of eggs from a certified disease free facility and importing only triploid shocked eggs.

Mark, I believe you mentioned that the source is FHPR certified, does this need a Fish Health Certificate?

Please provide your comments by October 4, 2012.

Thank you,

Shirley Choi

A/Governance Officer
Aquaculture Management Division
Fisheries Management
Fisheries and Oceans Canada

200-401 Burrard St.
Vancouver, BC V6C 3S4
Tel. (604) 666-5519
Fax. (604) 666-1076

From: Gary Klassen [<mailto:gary@dorocco.com>]

Sent: 2012-September-21 6:14 PM
To: Martin, Stacey; Choi, Shirley; XPAC FAM ITC
Subject: Application ITC Arctic Char

Hi

Please find attached application to transfer eggs in the end of November 2012 from Icy Waters Whitehorse.

Can someone confirm this application is appropriately completed?

My new DFO License is AQFW 6673 2012.

Gary Klassen

1-250-485-7408

From: [Higgins, Mark](#)
To: [Choi, Shirley](#); [Keith, Ian](#); [Sheppard, Mark](#); [Woodruff, Patricia ENV:EX](#); [Marshall, Vicki FLNR:EX](#);
cc: [Martin, Stacey](#);
Subject: RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Date: Wednesday, October 3, 2012 4:41:42 PM

I will need to issue and Inter-Provincial transfer permit under the FHPR for the importation of eggs into BC. Mark.

From: Choi, Shirley
Sent: October 3, 2012 11:15 AM
To: Choi, Shirley; Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; 'vicki.marshall@gov.bc.ca'
Cc: Martin, Stacey
Subject: RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Importance: High

Hi All,

Just wanted to follow up on this one, do we need more time or further discussion at our next meeting? The deadline for response is tomorrow.

Thanks!
Shirley

From: Choi, Shirley
Sent: 2012-September-24 12:50 PM
To: Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; vicki.marshall@gov.bc.ca
Cc: Martin, Stacey
Subject: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

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Mark, I believe you mentioned that the source is FHPR certified, does this need a Fish Health

Certificate?

Please provide your comments by [October 4, 2012](#).

Thank you,

Shirley Choi

A/Governance Officer
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200-401 Burrard St.
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Tel. (604) 666-5519
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From: Gary Klassen [\[mailto:gary@dorocco.com\]](mailto:gary@dorocco.com)
Sent: 2012–September-21 6:14 PM
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Gary Klassen

1-250-485-7408

From: [Keith, Ian](#)
To: [Choi, Shirley](#); [Higgins, Mark](#); [Woodruff, Patricia ENV:EX](#);
[Marshall, Vicki FLNR:EX](#);
cc: [Martin, Stacey](#);
Subject: RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Date: Wednesday, October 3, 2012 11:48:08 PM

Hi Shirley,
Is the application filled out correctly? I see that he has applied as an experimental facility where there will be final destination of the food market.
I'll await your response.
Thx
Ian

From: Choi, Shirley
Sent: September 24, 2012 12:50 PM
To: Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; vicki.marshall@gov.bc.ca
Cc: Martin, Stacey
Subject: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

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Gary Klassen

1-250-485-7408

From: [Keith, Ian](#)
To: [Choi, Shirley](#); [Higgins, Mark](#); [Sheppard, Mark](#); [Woodruff, Patricia ENV:EX](#); [Marshall, Vicki FLNR:EX](#);
cc: [Martin, Stacey](#);
Subject: RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char
Date: Thursday, October 4, 2012 2:03:28 PM

The interprovincial import permit for surface disinfected eyed eggs from the FHPR certified facility to the aquaculture facility should cover disease concerns - the bacteria isolated from fish from the source facility historically should not be vertically transmitted. With a new hatchery facility there shouldn't be problems with opportunistic bacteria and fungi for this first shipment of fish. The aquaculture licence has mortality reporting requirements should there be unexplained mortalities or infectious disease. Perhaps the permit could have the condition that these reports be reported to ITC as well, at least until the window for the early development diseases, specifically concerned about IPN, and the early and later development diseases, specifically concerned about IHN.

The fish are housed within a structure behind a dyke, not in tanks or raceways outside. The physical structures given the floodplain location has been deemed adequate to contain fish that are sterile by the aquaculture licence. Can this permit compel reporting or destruction of fish with evidence of failed triploidy, such as precocious parr? Escape of fish that are diploid i. e. failed induction of triploidy in embryos, pose genetic and ecological risk to this watershed, and this permit and risk assessment is for sterile triploids.

[Ian](#)

From: Choi, Shirley
Sent: September 24, 2012 12:50 PM
To: Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; vicki.marshall@gov.bc.ca
Cc: Martin, Stacey
Subject: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

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Please provide your comments by [October 4, 2012](#).

Thank you,

Shirley Choi

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Gary Klassen

1-250-485-7408

From: [Marshall, Vicki FLNR:EX](#)
To: ["Mark.Sheppard@dfo-mpo.gc.ca"](#); ["Mark.Higgins@dfo-mpo.gc.ca"](#); ["Stacee.Martin@dfo-mpo.gc.ca"](#); ["Shirley.Choi@dfo-mpo.gc.ca"](#); ["Ian.Keith@dfo-mpo.gc.ca"](#); [Woodruff, Patricia ENV:EX](#);
Subject: Re: ITC Permitting Requirements for Arctic Char Movements
Date: Tuesday, September 4, 2012 11:19:10 AM

Hi All - only rainbow trout can go into the backyard pond under the Wildlife Act Permit Regulation.

Vicki

From: Sheppard, Mark [<mailto:Mark.Sheppard@dfo-mpo.gc.ca>]
Sent: Tuesday, September 04, 2012 11:15 AM
To: Higgins, Mark <Mark.Higgins@dfo-mpo.gc.ca>; Martin, Stacee <Stacee.Martin@dfo-mpo.gc.ca>; Choi, Shirley <Shirley.Choi@dfo-mpo.gc.ca>; Keith, Ian <Ian.Keith@dfo-mpo.gc.ca>; Marshall, Vicki FLNR:EX; Woodruff, Patricia ENV:EX
Subject: RE: ITC Permitting Requirements for Arctic Char Movements

Hi,

To weigh in here... I'm guessing the concerns are that, once Arctic salmonids exist on this site, an aquaculture licence holder can sell/move said fish to another valid (or potential) aquaculture licence holder within the same zone (if the 2nd individual has Arctic char listed as a species on his licence), and/or perhaps move the Arctic salmonid to non-aquaculture back-yard, u-catch, larder/pond (under the Wildlife provision?)? Vicki? Patricia?

Mark Sheppard
Tel: 250-703-0901

From: Higgins, Mark
Sent: August 31, 2012 8:37 AM
To: Martin, Stacee; Choi, Shirley; Keith, Ian; 'Marshall, Vicki'; Sheppard, Mark; 'Woodruff, Patricia'
Subject: RE: ITC Permitting Requirements for Arctic Char Movements

What kind of transfers would Mr. Klassen be making and how often? Fish going to market are exempt from section 56, so in my mind that leaves introductions to his facility (which I think are from an FHPR certified facility in Yukon – correct me if wrong). Am I missing other transactions he will be performing (like supplying

fish to other facilities)? Mark.

From: Martin, Stacee

Sent: August 30, 2012 4:06 PM

To: Choi, Shirley; Higgins, Mark; Keith, Ian; Marshall, Vicki; Sheppard, Mark; Woodruff, Particia

Subject: ITC Permitting Requirements for Arctic Char Movements

Hello all,

There has recently been some discussion regarding the potential need for a site specific aquaculture licence condition requiring that all movements to and from the proposed Klassen arctic char facility be licenced by the ITC. Before proceeding with this addition to the aquaculture licence, however, I wanted to touch base with you all to gauge the importance, from your perspective, of permitting and tracking all movements of arctic char. The current general CoL do require that any cross-zone transfers of salmonids have a separate licence, so if you feel this is sufficient in regards to Arctic char specifically, please let me know. Thanks everyone. /S

Stacee Martin

A/Governance Coordinator | Coordinateur de gouvernance

Aquaculture Management Division | Gestion de l'aquaculture

Fisheries Management | Direction des pêches

Fisheries and Oceans Canada | Pêches et Océans Canada

200-401 Burrard Street | 401, rue Burrard, bureau 200

Vancouver, BC V6C 3S4 | Vancouver (C.-B.) V6C 3S4

Telephone | Téléphone: (604) 666-6831

Facsimile | Télécopieur: (604) 666-1076

Email | Courriel: stacee.martin@dfo-mpo.gc.ca

From: [Higgins, Mark](#)
To: [Martin, Stacey](#); [Choi, Shirley](#); [Keith, Ian](#); [Marshall, Vicki](#) FLNR:EX;
[Sheppard, Mark](#); [Woodruff, Patricia](#) ENV:EX;
Subject: RE: ITC Permitting Requirements for Arctic Char Movements
Date: Friday, August 31, 2012 8:36:46 AM

What kind of transfers would Mr. Klassen be making and how often? Fish going to market are exempt from section 56, so in my mind that leaves introductions to his facility (which I think are from an FHPR certified facility in Yukon – correct me if wrong). Am I missing other transactions he will be performing (like supplying fish to other facilities)? Mark.

From: Martin, Stacey
Sent: August 30, 2012 4:06 PM
To: Choi, Shirley; Higgins, Mark; Keith, Ian; Marshall, Vicki; Sheppard, Mark; Woodruff, Patricia
Subject: ITC Permitting Requirements for Arctic Char Movements

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Stacey Martin

A/Governance Coordinator | Coordinateur de gouvernance

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Email | Courriel: stacee.martin@dfo-mpo.gc.ca

From: [Sheppard, Mark](#)
To: [Higgins, Mark](#); [Martin, Stacey](#); [Choi, Shirley](#); [Keith, Ian](#); [Marshall, Vicki](#) FLNR:
[EX](#); [Woodruff, Patricia](#) ENV:EX;
Subject: RE: ITC Permitting Requirements for Arctic Char Movements
Date: Tuesday, September 4, 2012 11:15:35 AM

Hi,

To weigh in here... I'm guessing the concerns are that, once Arctic salmonids exist on this site, an aquaculture licence holder can sell/move said fish to another valid (or potential) aquaculture licence holder within the same zone (if the 2nd individual has Arctic char listed as a species on his licence), and/or perhaps move the Arctic salmonid to non-aquaculture back-yard, u-catch, larder/pond (under the Wildlife provision?)? Vicki? Patricia?

Mark Sheppard
Tel: 250-703-0901

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Sent: August 30, 2012 4:06 PM
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Stacee Martin

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Facsimile | Télécopieur: (604) 666-1076
Email | Courriel: stacee.martin@dfo-mpo.gc.ca

From: [Hewison, Melinda FLNR:EX](#)
To: [Marshall, Vicki FLNR:EX](#);
cc: [Woodruff, Patricia ENV:EX](#); "[Choi, Shirley](#)";
Subject: REVIEW - ITC Permit - KLASSEN, Gary.82531 - Dorocco Developments Ltd.
Date: Thursday, September 27, 2012 12:36:38 PM
Attachments: [NA12-82531-KLASSEN-DOROCCO DEVELOPMENTS LTD.doc](#)
[20120927123426.pdf](#)

Hi Vicki,

Please find attached ITC permit application and draft permit for Gary Klassen to transport 10,000 Arctic Char (*Salvelinus alpinus*) eggs and/or milt from Whitehorse YT to the aquaculture site located at 8928 Road 17 in Oliver BC. The fish will be landing in Penticton Airport and being transported from there to their destination – as I am still unsure of how to indicate out-of-province origins, could you please review the permit description and confirm if I have indicated this correctly?

The proposed Transfer Date is **November 2012**.

Please let me know if you need anything else.

Thank you,

Melinda Hewison
Permit Officer

Victoria Office: (250) 387-2928
or Toll Free Inside BC: 1-866-433-7272
Permit and Authorization Services Bureau
Fish, Wildlife & Habitat Management Branch
PO Box 9372, Stn Prov Govt
Victoria BC V8W 9M3
Fax: 250-387-1814

**AUTHORIZATIONS CONCERNING THE MOVEMENT OF
LIVE FISH IN BRITISH COLUMBIA**

Name: Gary Klassen
Address: Dorocco Developments Ltd
PO Box 1000, Osoyoos BC V0H 1V0

Introduction and Transfer Application Number: _____
PASB File # 82531



Fisheries and Oceans
Pêches et Océans

Pursuant to Section 56(1) of the Fishery (General) Regulations made under the *Fisheries Act*, permission is hereby granted to transfer _____ to the above named: _____

Conditions as per Section 22(1) of Fishery (General) Regulations:

- Precautions and procedures will be taken to prevent introduction of undesirable flora/fauna and spread of diseases/parasites as indicated on application form.
- This licence must accompany the transfer.
- All fish transferred under this licence must be destroyed and properly disposed of at the end of the research experiment.

This licence expires on _____

On behalf of the Federal Minister of Fisheries and Oceans

Co-Chair, BC Introductions and Transfers Committee

Date



Gary Klassen of Dorocco Developments Ltd is authorized by this permit to possess and transport **10000 Arctic Char** (*Salvelinus alpinus*) **eggs and/or milt** (originating from Whitehorse YT) from the **Penticton Airport** in Penticton BC to the aquaculture site at S22 in Oliver BC pursuant to section 3 of the Freshwater Fish Regulation, BC Reg. 261/83.

Vicki Marshall
A person authorized by the Director, Wildlife
Ministry of Forests, Lands and Natural Resource Operations

Date

Expiry Date: December 1, 2012

This document authorizes the holder to do only the things described above within British Columbia. It does not excuse the holder from any other obligations under any other federal or provincial legislation, whether concerning fish or otherwise.



APPLICATION FOR INTRODUCTION OR TRANSFER OF FISH AND/OR ACCESS TO WILD AQUATIC RESOURCES FOR AQUACULTURE

FOR INTERNAL USE ONLY

Date Received: _____ Received By: _____ ITC File#: _____
Access File#: _____ SARA File#: _____ PASB File#: _____

1. Applicant Information

Applicant/Company/Agency: Dorocco Developments Ltd

Contact Name: Gary Klassen

Bus. Phone: 1-250-485-7408

Business Box 1000

Bus. Fax: _____

Mailing Address: Osoyoos BC V0H 1V0

Bus. Email: gary@dorocco.com

2. Purpose of transfer:

Aquaculture

3. Species Information for Introduction or Transfer: Please complete the information for the species you wish to transfer in the two tables below. Attach information of additional species if required. For example Row 1. should reflect information regarding the same species across both tables.

Species Common Name(s)	Species Scientific Name	Life Stage	Brood Year	Proposed Number for Transfer	Proposed Transfer Date
1. Arctic char	Salvelinus alpinus	Eggs/Milt	2012	10000	November 2012
2.					
3.					
4.					

Stock Origin	Genetic Status	Source Location of Fish or Aquaculture Licence#	Shellfish or Salmonid Transfer Zone	Nearest Town (City, Province/State)
1. Yukon, Icy Waters Lt	Triploid	Licence no. N/A Yukon	Yukon	Whitehorse
2.				
3.				
4.				

Are any of these species listed under the *Species at Risk Act (SARA)*? ☐ Yes ☒ No

If yes, have you been issued a *SARA Permit*? ☐ Yes ☒ No

Are any of these species being imported from outside Canada? ☐ Yes ☒ No

If you checked "Yes", please note a separate application will need to be made to the Canadian Food Inspection Agency for any imports into BC.

4. Access to Wild Aquatic Resources for Aquaculture Purposes

☐ Access not required, continue to section 5.

Please complete the application form for **Access to Wild Aquatic Resources for Aquaculture Purposes** and submit it **together** with this application. The form and the access policy can be found on the DFO Pacific Region Aquaculture Website: <http://www.dfo-mpo.gc.ca/aquaculture/pac-eng.htm>

For information on access to **freshwater species for educational or scientific purposes**, please visit:

http://www.env.gov.bc.ca/pasb/applications-process/scientific_fish_collect.html#a2

For information on access to **marine species for educational or scientific purposes**, please visit:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/scriptex-eng.htm>

5. Introduction and/or Transfer of Fish

Please note, a fee of \$30.00 will be applied to transport of any **freshwater fish** native or non-native to BC. Exceptions include transport for the purposes of live food trade, aquariums, and transfers of Pacific Salmon. **Freshwater introduction and/or transfer applications should be submitted to the BC Permit and Authorizations Service Bureau.**

5a. Rationale for introduction or transfer: Commercial culture of arctic char

5b. Destination: S22

Nearest Town: Oliver BC

Main mode of Transport: Air

Destination Description: Aquaculture Site

Destination Transfer Zone: 9.Columbia

Describe method of transport:
(attach additional information if required) Air from Whitehorse to Penticton, ground from Penticton to final destination.

5c. List any intermediate sites and transfer dates, if any:

Location of Intermediate Site: None

Arrival and departure date: _____

Location of Intermediate Site: None

Arrival and departure date: _____

5d. Final Destination of Introduction or Transfer

Complete only one of items *i*, *ii*, or *iii*. In item *i*, animals placed within tenure in natural waters, under an aquaculture licence, must not be released beyond the licensed area. If the proposed release of introduced or transferred fish will be into natural waters, complete all of section *iii*.

i. If purpose is for aquaculture/enhancement:

Company Name: Dorocco Developments Ltd

Designated Contact Person: Gary Klassen

Aquaculture Licence# AQFW 6673 2012

Provincial Landfile# PR032

ii. If final destination is a contained experimental facility:

Will introduction or transfer be separate from other organisms in facilities with respect to: (Check all that apply)

☒ Tanks/ponds

☒ Water Supply

☒ Effluent Discharge

Will effluent be: (check all that apply)

☐ sterilized

☐ discharged directly to the municipal sewer

☐ discharged into ground sump (100%)

☐ discharged into the Ocean

☒ discharged into surface freshwater

Final disposal of the transferred fish: Food Market

iii. If final introduction or transfer is to be released into natural waters (not for commercial aquaculture purposes):

List two waters downstream from the release location:

☐ check if destination is permanently landlocked

1. _____

2. _____

Name federal and provincial fisheries staff who manage fisheries and assess stocks in the area you wish to release the fish. These staff must have been consulted with and approve of this introduction and transfer. Visit <http://www.pac.dfo-mpo.gc.ca/m-gp/maps-cartes/areas-secteurs/index-eng.htm> to determine the Pacific Fishery Management Area and office contact information.

Provincial: _____

Contact Information: _____

Federal: _____

Contact Information: _____

Please attach additional documentation in support of this application, especially issues in regard to risks and mitigation measures.

Acknowledgement:

☒ I am 19 years of age or older

☒ I am authorized by my company to make this application on their behalf

By typing or signing my name below, I certify that the information that I have provided is true and correct to the best of my knowledge. I understand that it is an offence to provide false information.

Date of Application 21-Sep-12

Signature Gary Klassen