ALBERNI-CLAYOQUOT REGIONAL DISTRICT

2021 – 2024 Strategic Plan

West Coast Committee Meeting
Wednesday, November 17, 2021

Zoom/Board Room (Hybrid) – 3008 Fifth Avenue, Port Alberni, BC
1:30 pm

Regular Agenda

Watch the meeting live at www.acrd.bc.ca/events/17-11-2021/

Register to participate via Zoom Webinar at:
https://portalberni.zoom.us/webinar/register/WN_0PFq0bsQTvCl4LUzK28pvw

PAGE #

1. CALL TO ORDER

Recognition of Territories.

Notice to attendees and delegates that this meeting is being recorded and livestreamed to YouTube on the Regional District Website.

Introductions around the Board Table.

2. APPROVAL OF AGENDA
(motion to approve, including late items requires 2/3 majority vote)

3. MINUTES

a. **West Coast Committee Meeting – October 6, 2021**

THAT the minutes of the West Coast Committee meeting held on October 6, 2021 be received. **3-6**

4. PETITIONS, DELEGATIONS & PRESENTATIONS (10 minute maximum)

a. **Bob Hansen, Pacific Rim Coordinator and Marianne Paquette, Hitacu Macoah Coordinator, WildsafeBC, regarding end of season presentation on past year's program and events.**

b. **James Rodgers, Executive Director and Co-Founder, CARE Network regarding lease amendment.** **7-16**

5. REQUEST FOR DECISIONS

a. REQUEST FOR DECISION **17-19**

Re: Campground and Development Issues at the Long Beach Airport

THAT the West Coast Committee recommends that the Board of Directors support in principle long-term development planning for lands at the Long Beach Airport and direct staff to complete an assessment of resource needs and financial implications to support this objective as part of the 2022-2026 Financial Planning Process.

6. REPORTS

a. **Millstream Water System – Audit of Multiple Consumer Units – E. Kunderman** **20**

b. **West Coast Organics Diversion Project Update – J. Frank** **21-23**

c. **Long Beach Airport Contamination Stage 1 Report – M. McGregor** **24-105**

THAT the West Coast Committee receive reports a-c.

7. LATE BUSINESS

8. QUESTION PERIOD

Questions/Comments from the public:

- **Participating in Person in the Board Room**
- **Participating in the Zoom meeting**
- **Emailed to the ACRD at responses@acrd.bc.ca**

9. ADJOURN

Alberni-Clayoquot Regional District

MINUTES OF THE WEST COAST COMMITTEE MEETING
HELD ON WEDNESDAY, OCTOBER 6, 2021, 10:00 AM

Hybrid - Zoom/Board Room, 3008 Fifth Avenue, Port Alberni, BC

MEMBERS PRESENT:	Kel Roberts, Director, Electoral Area "C" (Long Beach), Chair Tom Stere, Councillor, District of Tofino Rachelle Cole, Councillor, District of Ucluelet Kirsten Johnsen, Member of Council, Toquaht Nation
REGRETS:	Alan McCarthy, Member of Legislature, Yuułuʔiłʔatḥ Government
STAFF PRESENT:	Teri Fong, Acting Chief Administrative Officer Jenny Brunn, General Manager of Community Services Heather Zenner, Protective Services Manager Michael McGregor, Lands & Resources Coordinator Mark Fortune, Airport Manager Eddie Kunderman, Operations Manager Wendy Thomson, General Manager of Administrative Services Janice Hill, Executive Assistant

The meeting can be viewed on the Alberni-Clayoquot Regional District website at https://www.acrd.bc.ca/events/6-10-2021/

1. CALL TO ORDER

The Chairperson called the meeting to order at 10:00 am.

The Chairperson recognized this meeting is being held throughout the Nuu-chah-nulth territories.

The Chairperson reported this meeting is being recorded and livestreamed to YouTube on the Regional District website.

2. APPROVAL OF AGENDA

MOVED: *Director Cole*
SECONDED: *Director Stere*

THAT the agenda be approved as circulated.

CARRIED

3. MINUTES

a. **West Coast Committee Meeting Minutes – August 24, 2021**

MOVED: Director Stere
SECONDED: Director Cole

THAT the minutes of the West Coast Committee meeting held on August 24, 2021 be received.

CARRIED

4. PETITIONS, DELEGATIONS & PRESENTATIONS

a. **Myrna Moore, Senior Manager, Government Relations, Melissa Coates, Transit Planner, BC Transit, Update on West Coast Transit.**

The delegation provided an update on the Tofino/Ucluelet transit service including transit operations facility, fleet, routing, estimated service levels, resources and estimated costs. The annual total costs of the service are estimated at $891,843; the estimated net municipal share is $418,003. The delegation provided an overview of next steps. The tentative service implementation date is September 2022, contingent on provincial funding.

5. CORRESPONDENCE

6. REQUESTS FOR DECISIONS

a. **Request for Decision regarding Union of British Columbia Municipalities Evacuation Route Planning for the West Coast Region**

MOVED: Director Roberts
SECONDED: Director Johnsen

THAT the West Coast Committee recommend that the Alberni-Clayoquot Regional District Board of Directors apply to the Union of BC Municipalities – Community Emergency Preparedness Program Fund for Evacuation Route Planning for the Bamfield and Long Beach Electoral Areas with interested grant partners.

CARRIED

b. **Request for Decision regarding Long Beach Airport Contamination**

MOVED: Director Stere
SECONDED: Director Cole

THAT the West Coast Committee recommend that the ACRD Board of Directors send a letter to the Minister of Transport, Omar Alghabra and MP Gord Johns, requesting that Transport Canada fulfil their obligations for historical contamination at Long Beach Airport.

CARRIED

c. **Request for Decision regarding West Coast Multi-Use Path Funding**

MOVED: Director Stere
SECONDED: Director Johnsen

THAT the West Coast Committee requests the Electoral Area Directors Committee consider recommending to the ACRD Board of Directors the allocation $550,000 of Community Works funding to complete the West Coast Multi-Use Path.

AND FURTHER, if the Electoral Area Directors Committee does not support the allocation of Community Works Funding to complete the West Coast Multi-Use Path, the West Coast Committee recommends that the ACRD Board of Directors direct staff to develop a plan to phase the construction of the West Coast Multi-Use Path to increase the chances of success during the next BC Active Transportation Grant intake.

CARRIED

7. REPORTS

a. **Ex Officio Member Updates**

- Pacific Rim National Park Update
- Ahousaht First Nation Update
- Tla-o-qui-aht First Nation Update
- Hesquiaht First Nation Update

No updates provided.

8. LATE BUSINESS

9. QUESTION PERIOD

Questions/Comments from the public. The Corporate Officer advised there were no questions or comments respecting an agenda topic from public:

- Participating in Person in the ACRD Board Room
- Participating in the Zoom webinar
- Submissions received by email at responses@acrd.bc.ca.

10. ADJOURN

MOVED: Director Stere
SECONDED: Director Johnsen

THAT this meeting be adjourned 10:38 pm.

CARRIED

Certified Correct:

Kel Roberts, Chairperson	Wendy Thomson, General Manager of Administrative Services

November 5, 2021

Hello again from CARE Network!

Attached is CARE Network's Lease Amendment Proposal that we have been putting together (collecting letters of support, etc) since we last met. This week, we were informed by ACRD staff that long-term leases are still not possible at the Long Beach Airport due to ongoing environmental studies, negotiations with other levels of government, etc.

Therefore, we would like to amend our proposed Lease Amendment (attached) to be a Licence of Occupation with a 20-year term and an option to renew for 20 years. As I understand it, a License of Occupation will give CARE Network the legal authority to pursue the grants, donations, etc. needed for the project, and to utilize the subject property (the old WW2 Officer's Mess and surrounding area) to carry out specific activities such as rehabilitating the old building and using it as a base of operations.

Over the next week we will aim to draft a License of Occupation to present to you (as a delegation) for consideration.

Sincerely,

James Rodgers
CARE Network
250 266 9663

October 21, 2021

Re: Lease Amendment: Request for the West Coast Committee to recommend to the ACRD Board that the WW2 Officer's Mess Building and area at 180 Airport Rd be included in the CARE Network lease as per the following proposal.

Good Day,

As mentioned in my last update to the WCC, CARE is still interested in including the WW2 Officer's Mess building & area in our lease so that we can rehabilitate it for use as the base of operations for our essential, region-wide, animal-related, community health & safety services.

Salient Context:

ACRD staff recently commissioned an engineer's report of this building and it is consistent with the research and quotes that CARE has received previously. Here are some of the salient details followed by our lease amendment proposal:

According to the ACRD commissioned engineer's report, the building is currently a $169,000 liability for the ACRD:

- Estimated cost to demolish the building: $25,000
- Estimated cost to remove hazardous materials if demolished (or if it just falls down): $144,123

The building could become an asset if it is rehabilitated to a usable state:

- Estimated Rehab. Cost: $425,625 ($340,500 plus 25% contingency for soft costs)
    - Cost to replace the building with a similar structure: estimated to be $440,000. However, replacing the building where located is not an option.

We are proposing that CARE Network facilitate turning what is currently a $169,000 liability for the ACRD into a $425,000+ asset.

I should note that what was not covered in the ACRD commissioned engineer's report is a review of the building's historical significance regarding the Tla-o-qui-aht Nation, Japanese-Canadians, the WWII Tofino Air Base, the region's development and that of the Pacific Rim National Park Reserve.

CARE Network has invested with Heritage BC to complete a Statement of Significance and a Conservation Plan for this building. This initial investment by CARE & Heritage BC is a first step towards securing additional grants related to buildings with historical value. The Heritage Consultant concluded the Conservation Plan with this paragraph:

> *We support the proposal because the Officers' Mess represents such an important page of the British Columbia's history. The Officers' Mess is one of the few buildings remaining from the World War Two's Tofino RCAF Airbase. Located on the Tofino-Long Beach Airport grounds, the Officers' Mess is a tangible and accessible representation of the Second War's effort of Canada's West Coast against Japan's aggression, which included enormous sacrifices from the military personnel, the Tla-o-qui-aht First Nation and the local community.*

Proposed Lease Details:

CARE Network would like to take on the rehabilitation of this historically significant building to use it as a base of operations for our regional animal services. Below are the salient details of our proposed lease amendment:

1. **Term: 20 years (switching from the current short-term lease)**
2. **Monthly Lease Rate: $200 (the current bare land rate)**
3. **CARE Network & partners will raise the funds and resources (in-kind contributions) needed, and manage the rehabilitation of the building to a usable state.**
4. **ACRD will work with CARE & others (Federal Government, etc.) to garner and transfer $144,000 to CARE/partners to cover the cost of removing the hazardous materials left over from the 1940's and 50's.**

Critical Regional Support for this Proposal:

Given the history of the land we are proposing to lease, CARE has requested and received permission from the Tla-o-qui-aht First Nation (TFN) to lease this proposed portion of their Traditional Territory (lent to the Federal Government for the 1940's war effort as we understand the situation). We sought a 40-year lease but after due consideration, TFN leadership settled on a 20-year term. Please see the attached letter.

CARE Network also sought and has received support for this proposal from other communities in the region that consider CARE's community health and safety services essential. Attached you will find letters of support from the Ahousaht, Toquaht and Yuułuʔiłʔatḥ Governments.

CARE Network's Region-wide, Essential Services Include:

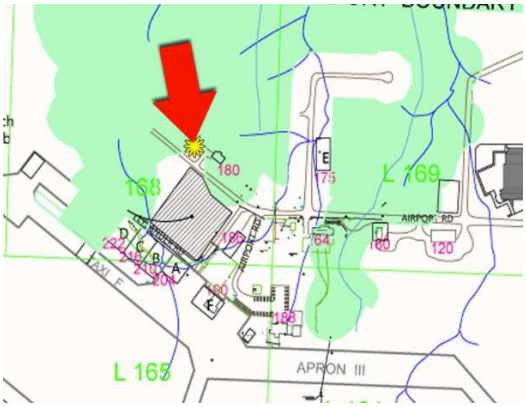
- Animal Bylaw/Regulation Enforcement – Ahousaht, Opitsaht, Ty-Histanis, Esowista, Hitacu and Macoah.
- Animal-related Emergency Response – all communities.
- Temporary sheltering of stray, dangerous, injured or otherwise unwanted animals.
- Animal kenneling and other supportive animal services are also provided to District of Tofino, District of Ucluelet, properties in Area C, and Parks Canada.
- Transportation of animals to services across the island.
- Providing access to free and affordable spay, neuter and vaccination.
- Dog bite and humane education programming.

Contact Information:

- James Rodgers, Cofounder & Executive Director
- Coastal Animal Rescue & Education (CARE) Network Society
- BC Humane Society
- 250 266 9663
- info@coastalanimalrescue.ca
- 180 Airport Road, Tofino, BC V0R 2Z0

Lease Proposal Information:

- Lot K, 180 Airport Road, Tofino
- Proposed Size: 5,625 square metres (1.39 acres)
- Proposed Use: Base of operations for essential, region-wide animal/community emergency, health & safety services and temporary animal sheltering.
- We are not proposing to add any permanent structures to the site. We are proposing to rehabilitate the building currently on the site (in poor condition).



Other Details:

- This proposed amendment to our current lease will not change how we are using the land. Therefore, our use will continue to conform with current zoning and the draft land use plan.
    - **Applicable Zoning:** Regarding the zoning, CARE's interpretation of Regional District of Alberni-Clayoquot Bylaw No. P1282 suggests the proposed operation would fall under the following permitted uses:
        - **164.1.1 j) emergency services -** CARE offers a year-round animal emergency service and sometimes requires air transportation of injured animals. CARE also responds to animal related emergencies such as dog bite/attack situations as part of the bylaw enforcement services that we provide to communities in the region.
        - **164.1.1 k) hospital and health facilities -** CARE provides basic animal health services at the site (examinations, first aid, vaccinations, etc.)
        - **164.1.1 o) storage yard, cold storage, warehousing -** CARE stores equipment onsite needed for our operations throughout the region. This includes boats, vehicles and trailer units that will be relocated as needed as satellite offices in the region.
          • **164.1.1 z) residential use, including staff rental housing, or 164.1.1 aa) caretaker accommodation -** CARE has onsite accommodation (travel trailers) for staff and overnight animal caretakers.
          • **164.1.1 bb) offices -** this building will become CARE Network's office and base of operations.
- Benefits of CARE's services at CYAZ:

    To the Public:

    - Central location to serve all the region's communities equally.
    - CARE's regional animal services are located on regionally managed land.
    - Appropriately located away from primarily residential areas.
    - Establishing a central base of operations for CARE will improve the organization's efficiency.

    For CYAZ:

    - CARE is utilizing a site not likely to be useful to most other users - The size of the proposed site makes it hard for any other potential user to utilize.
    - CARE's near 24/7 presence at this site helps to keep potential trespassers and vandals away from the existing, decommissioned structures (and the old, now burnt down sauna).
    - CARE continues to clean up and maintain the land around the decommissioned buildings on the site. We have taken at least a dozen loads of scrap metal from the site to the dump and many more loads of garbage.
- Services:
    - CARE Network has invested in and established BC Hydro power at the site.
    - Plans are in the works to establish sewer and water connections in the first half of 2021.
- Wildlife Management Plan

    - CARE Network has consulted with Bob Hansen and other specialists to take precautions to keep wild animals in the area safe including:
        - Installing a 5-strand electric fence around our dog enclosures,
        - Clearing brush to create sightlines for approaching animals (to provide warning of our presence).
        - Keeping garbage, etc. secure.
- Security: CARE's presence at the site has deterred numerous folks from camping and using the area without permission. People still show up looking for an old sauna that was built in the forest by a previous tenant. The sauna burnt down a few years ago (before we arrived) and luckily the fire didn't spread to the surrounding trees. CARE has since cleaned up the debris. We have set up motion-activated cameras with two-way communication capabilities so we can monitor the area even when not onsite.
- CARE Network's operations do not pose any potential negative impacts on airport activities.

Thank you for considering CARE Network's proposal intended to improve and sustain our essential, animal-related community health and safety services throughout the Clayoquot/Barkley Sounds Region.

James Rodgers
Cofounder/Executive Director
CARE Network
250 266 9663
info@coastalanimalrescue.ca

'tukʷaaʔath
TRADITION TRANSCENDING TIME

1971 Peninsula Rd P.O. Box 759
Ucluelet, BC V0R 3A0

Office 250.726.4230
Fax 250.726.4403
www.toquaht.ca

Alberni-Clayoquot Regional District
3008 5th Ave
Port Alberni, BC
V9Y 2E3

May 26, 2020

Re: Care Network's regional animal shelter facility lease

West Coast Committee of the ACRD,

I am writing this letter to express Toquaht Nation's support for CARE Network's lease extension application. CARE Network is contracted by Toquaht Nation to support staff with the implementation of health and safety measures in accordance with the Public Order, Peace and Safety Act. CARE provides an essential service to our community from their central, Long Beach location. By securing a 40-year lease and additional building space Care Network can ensure long term sustainability of their programs and services which benefit all the communities of the West Coast Region.

Thank you,

Angela Polifroni
Director of Operations
Toquaht Nation

AHOUSAHT
General Delivery
Ahousaht, BC V0R 1A0
Ph: 250-670-9563 Fax: 250-670-9696
Toll free:1-800-991-1433

July 19, 2021

To whom it may concern;

Attention: West Coast Committee of the ACRD

Ahousaht and CARE Network have worked together on community health & safety measures as related to animal care & controls since 2012. Currently, CARE Network is contracted to facilitate and enforce Ahousaht's Animal Control & Care Bylaw. CARE provides an essential service to the region from their central, Long Beach location. Ahousaht supports CARE's proposal to amend their lease to a 40 year term and to include the Officer's Mess building.

Please contact us at the above phone number if any questions.

Respectfully,

Greg W.Louie
Chief Councillor

Yuutu?it?ath

October 14, 2021

Attention: West Coast Committee of the Alberni-Clayoquot Regional District

RE: Letter of Support for Coastal Animal Rescue & Education Network New Lease Proposal

The Yuutu?it?ath First Nation Government is aware of the proposal being put forth by Coastal Animal Rescue & Education Network (CARE Network) to the West Coast Committee of the Alberni-Clayoquot Regional District to switch their lease from a three (3) year term to a twenty (20) year term. We also understand the proposal includes a request to add a World War II era building into the lease.

The Yuułu?ił?ath Government contracts the enforcement of our animal regulations to CARE Network. Their essential services are vital to our community's health and safety. We fully support CARE Network's proposal to the ACRD to switch to a twenty (20) year lease, and, to include the former officer's Mess Building so it can be rehabilitated and used as CARE's operations base.

If you have any further queries, please do not hesitate to contact me directly on this matter.

Yours truly,

Zoltan Schafer, R.P.F.
Director of Lands and Resources
Zoltan.schafer@ufn.ca
250-720-1177

TLA-O-QUI-AHT
FIRST NATION

October 28th, 2021

Attention: West Coast Committee of the ACRD

Tla-o-qui-aht First Nation supports CARE Network's proposal to shift their animal shelter lease at the Long Beach Airport, on the Long Beach Airport lands with the Haahuulthii of the Tla-o-qui-aht Hawiih, to a 20-year term, and to include the old Officer's Mess building.

We encourage the ACRD to work with CARE and other partners, like the federal government, to raise the funds needed to rid the building of the asbestos and other possible toxins present.

We have worked with CARE Network since 2012 on improving community health and safety by managing the care and control of dogs and cats in our communities. CARE provides essential services to the communities in this region. Being centrally based, for the long term at Long Beach, will make providing these essential services to the entire region more efficient and effective.

This letter of support is provided without prejudice to Tla-o-qui-aht Rights, Title and Interest. If you have any questions regarding this letter of support, please reach our offices or respond to this letter.

Kind regard,

Saya m. Masso

Saya m. Masso
Tla-o-qui-aht Lands and Resources

P. 250.725.3350 F. 250.725.3352
www.tla-o-qui-aht.org

TLA-O-QUI-AHT FIRST NATION
PO Box 18 #1119 Pacific Rim Hwy . Tofino . BC . V0R 2Z0

ALBERNI-CLAYOQUOT
REGIONAL DISTRICT

3008 Fifth Avenue, Port Alberni, B.C. CANADA V9Y 2E3 Telephone (250) 720-2700 FAX: (250) 723-1327

REQUEST FOR DECISION

To: West Coast Committee

From: Jenny Brunn, General Manager of Community Services

Meeting Date: November 17, 2021

Subject: Campground and Development Issues at the Long Beach Airport

Recommendation:

THAT the West Coast Committee recommends that the Board of Directors support in principle long-term development planning for lands at the Long Beach Airport and direct staff to complete an assessment of resource needs and financial implications to support this objective as part of the 2022-2026 Financial Planning Process.

Summary:

At the August 24th West Coast Meeting, the Committee recommended that the Board direct staff to investigate the development of a campground at the Long Beach Airport for West Coast workers which was passed by the Board at the September 8th Meeting. This report is intended to provide an overview of the current challenges that face development at the Long Beach Airport (LBA), including a campground development and provide a plan to better support development at the LBA. This report also highlights some specific concerns/challenges related to the development of a campground that would need to be considered if this was pursued.

Background:

Core Objectives for the Airport

The primary purpose of the Long Beach Airport (LBA) land is to support the operation of the airport terminal and air operations that service the West Coast. This directly supports economic activities, community wellness through enhanced local transportation options and community safety through medivac and emergency service capacity. Operating an airport to meet safety standards and regulations is expensive and resource intense. The LBA Asset Management Plan identified significant infrastructure and asset management requirements which could result in a significant increase in tax requisition for the service. Therefore, a key secondary objective is to generate revenue to limit and possibly reduce the taxation required for this service. The single biggest opportunity for revenue generation is through the development of land with other minor opportunities including landing/passenger/parking fees, fuel sales, and advertising opportunities.

Challenges/Opportunities for Development

To-date, development and leasing at the Long Beach Airport (LBA) has been limited due to a number of concerns including site servicing capacity and issues related to subdivision requirements including site contamination. This has created a situation where interested parties who would be willing to substantially invest at the LBA see the opportunities as high risk. There is also community-based development interest in the LBA lands including the Multiplex and Transit Maintenance/Storage Facility which do not have the same constraints or objectives for development and present an opportunity to utilize properties that would not support long-term registered leases without significant financial investment.

Site Servicing – There are concerns with the current capacity of the water and sewer systems at the LBA. Koers Engineering has been engaged to develop a servicing plan which is expected to be completed by the end of the year. This will determine current capacity for these systems, the limitations for development based on this capacity, what options there are for expanding these systems and associated costs for upgrades. Understanding the long-term servicing needs of a phased development plan of the Airport is key to enable any further development at the LBA.

Land Use Plan - The 2018 updated Land Use Plan has not yet been adopted, resulting in a lack of clarity on support for land use at the LBA. This is a key document to support development at this site and without an adopted plan, there will be a high burden on interested parties to conduct engagement for individual development proposals. ACRD staff time will be required to facilitate engagement with all of the interested parties on the West Coast including First Nations.

Contaminated Sites and Long-term Leasing Alternatives – Staff have engaged PGL Environmental to complete a Stage 1 Preliminary Site Investigation for all of the LBA land. The results of this are detailed in a sperate report on this agenda. The results of this report will inform development planning and which areas would require further investigation and investment in order to meet requirements for registered long-term leasing. The next step will be to identify lease alternatives for these properties that may include License of Occupation, Non-registered Leases, or other Agreements to enable development on these sites.

Development Guidance The process for establishing long-term leases or alternative development agreements has not been undertaken at the LBA. With limited available funding, expertise and staff resources, this has presented a number of barriers which has limited current development to short-term leasing. The creation of a business and development plan would incorporate information and constraints from the water/sewer servicing plan, contaminated sites investigation and land use plan to create a framework to encourage highest value development/leasing opportunities throughout the entire site. Following this step, detailed guidelines and an application processes can be created to encourage and inform interested developers on how to proceed.

Action Plan to support Long-term Development and Investment in Land at the LBA:

- Stage 1 Contaminated Sites Report – finalize report and seek Federal funding for remediation of asbestos.
- Water/Sewer Servicing Plan – review options for site servicing and implement long-term infrastructure plans.
- Adoption of the Land-Use Plan – engagement with stakeholders, update, engage, update, adopt
- Business and Development Plan – engage a consultant for creation of this plan
- Development Guidelines – create guidelines and process

The steps above will need to be completed prior to pursuing any major developments at the LBA including a permanent campground for West Coast Workers. Once the first 4 items have been completed, it will be clear if there are any potential development areas/sites that would be suited for a campground development.

At that time, staff will need to address the following items that have been raised as specific concerns for a campground at the LBA:

1) Conflict with the Land Use Plan. The 2007 Tofino-Ucluelet Airport Land Use Plan specifically identified the following concern of “full-time residential use, even for civil servants and staff, is a cause for concern as this should not be permitted to develop into a new townsite”. The draft 2018 Updated Land Use Plan states this same intent. However, this updated plan has not yet been adopted and there is opportunity to review and reconsider this as a key value/mission of the plan.

2) Competition with existing business. There are many other campgrounds on the West Coast including the Long Beach Golf Course which provides campground sites on lands leased from the ACRD adjacent to the Airport. These businesses provide oversight, management, security and adequate servicing to offer relatively affordable camping sites in the area.
3) Staffing requirements for operation of a campground. Current staff are already overtaxed accomplishing the annual work plan to ensure proper maintenance and operation of the airport. Additional staffing would be required to manage a campground.
4) Return on Investment. Operation of a campground for west coast workers may have to be run at a revenue loss since the workers who have been illegally camping currently do not choose to utilize existing campground options available on the West Coast. Running a subsidized campground will not generate surplus revenues and does not support the airport goals.

It is important to note that the existing hazelwood lease area is not readily available for the ACRD to run as a campground. This site was established as a temporary solution for shift workers. This site will likely need to be redeveloped in order to be operated as a campground as it can currently only run at half capacity in order not to overwhelm the current sewer system. The completed Water/Sewer Servicing Plan will provide clarity on the servicing capacity at this location.

Time Requirements – Staff & Elected Officials:

The above action plan will require significant staff resources in order to be completed. If the committee supports the plan, an assessment of resourcing needs will be completed with the new CAO and resulting recommendations brought to the Board or Committee for consideration during the financial planning process.

Financial:

In April 2021, LBA received $180,000 in grant relief funding that can be utilized to cover on-going operational costs at the airport and enables the ACRD to reallocate existing operational budgets towards work that was not previously in the financial plan or carry forward as a surplus. This funding has allowed staff to proceed with the Stage 1 Contaminated Sited Report and the Airport Servicing Plan. This funding could be allocated to undertake a business and development plan as well as fund short term staffing resources to support this action plan.

Strategic Plan Implications:

Economic recovery, sustainable capital reserves, partnerships and alignment.

Submitted by: Jenny Brunn
Jenny Brunn, GM of Community Services

Approved by: Teri Fong
Teri Fong, CPA, CGA, Acting Chief Administrative Officer

ALBERNI-CLAYOQUOT
REGIONAL DISTRICT

3008 Fifth Avenue, Port Alberni, B.C. CANADA V9Y 2E3 Telephone (250) 720-2700 FAX: (250) 723-1327

INFORMATION REPORT

To: West Coast Committee

From: Eddie Kunderman, Operations Manager

Meeting Date: November 17, 2021

Subject: Millstream Water System – Audit of Multiple Consumer Units

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Schedule A of the "**Millstream Water Local Service Area Rates and Regulations Bylaw F1144, 2019"** for the Millstream Water System outlines the quarterly water rates due per consumer unit. A recent audit of the water system showed that there are 10 additional consumer units that are only billed for one service, while having multiple consumer units on the property.

As part of a fair and equitable process, staff will be sending letters to these residences informing them that as of March 1, 2022 they will be billed for each consumer unit on their property. For each additional unit being billed, we will receive an annual revenue increase of $1,040. With 10 additional consumer units, we will see a total annual revenue increase of $10,400. It should also be noted that with the creation of the Asset Management Plan, we will be reviewing the water rates for the Millstream Water System as a part of the 2022-2026 Financial Plan, and these rates are subject to change as a part of this review.

The purpose of this report is to notify the West Coast Committee about the audit and the additional revenues generated. No approval is required for this change.

Submitted by: Eddie Kunderman
Eddie Kunderman, Operations Manager

Reviewed by: Jenny Brunn
Jenny Brunn, General Manager of Community Services

Approved by: Teri Fong
Teri Fong, CPA, CGA, Acting Chief Administrative Officer

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REPORT FOR INFORMATION

To: **West Coast Committee**

From: Jodie Frank, Organics Coordinator

Meeting Date: November 17, 2021

Subject: West Coast Organics Diversion Project Update

Desired Outcome:

The purpose of this report is to provide the West Coast Committee (WCC) with an update on the status of the organic's diversion program on the West Coast as a follow up to the previous report for Information provided on May 26th, 2021.

Summary:

ACRD staff are finalizing the phase two implementation plan for the regional organics diversion project that includes the design and construction of a compost facility on the West Coast. The timeline for implementation and the launch of the three-stream Sort'nGo (recycling, organics, and garbage) cart collection service is planned for Fall 2022.

Background:

As part of the West Coast Sort'nGo program, a West Coast Working group has been established which includes staff from the District of Tofino and Ucluelet, Parks Canada, Tofino Urban Farms, Recycle BC, and Ozzard Environmental. The intention of the group is to meet regularly to discuss key decisions relating to operational and policy related functions. Staff from Yuułuʔiłʔatḥ First Nation and Tla-o-qui-aht First Nation have also been involved in the working group and are exploring the option of joining the 3-stream collection service, but formal letters of interest to join the service have not been received from either of the governments to-date.

The proposed Sort'nGo program will include a three-stream automatic cart collection waste service for all residential properties of 4 units or less. The curbside collection bylaw will be updated in early spring 2022 to address these changes. This update will provide clarity that all eligible properties will be part of the new service and outline the process for requesting an exclusion from the service if they meet certain criteria and provide a waste management plan to confirm they have a 3 -stream waste service already in place.

It is proposed that each property will receive the following:

- 120 L Organics Cart
- 240 L Recycle Cart
- 120L Garbage Cart

West Coast Landfill and Compost Facility

In May 2021 a contract was awarded to Tetra Tech for the design of a compost facility at the West Coast Landfill and will provide processing capacity to accommodate organic waste from West Coast communities including the curbside residential collection stream, IC&I sector (industrial, commercial, and institutional) as well as biosolids. The design will accommodate 2040 peak volumes and will include the following elements:

- Expansion and upgrades of the public tipping areas to support current and future public waste diversion and stewardship drop off areas; and

- The construction of a pipe-on grade aerated static pile composting system (ASP)

ACRD staff and Tetra Tech engineers have recently completed the 60% design phase and are working towards the 90% detailed design.

It is important to note that the proposed ASP system is a similar process to that of the current pilot run by Tofino Urban Farms (TUF) which has demonstrated great success over the course of the pilot.

The major components of the ASP system are:

- Aeration blowers.
- On-grade high density polyethylene (HDPE) pipes.
- Flexible pipe connections; and
- Temperature probes.

Components of the composting facility that are incorporated into the conceptual design include:

- Receiving Building.
- Active Composting Windrows and Building; and
- Compost Curing Windrows.

Procurement for the processing technology and general site construction are scheduled to be released as RFPs in early January 2022. Construction is scheduled to be completed late Summer 2022 and operational by Fall 2022.

The upgrades to the landfill will also include an education component to engage with the visiting community members while incorporating local artwork design elements to accent the landfill.

<u>Engagement and Outreach Plan</u>

As part of phase one of the regional organic diversion program, the ACRD developed a regional Sort'nGo brand that will be used to promote the new 3-stream waste services on the West Coast. Engagement will begin early 2022 with the launch of the 'LetsconnectACRD' online hub that will host information related to the Sort'nGo West Coast program. Key messages and FAQ's have been developed that will inform residents on the details for the new service delivery. The platform will also collect feedback and identify potential barriers and issues to ensure smooth project delivery. The main communication activities are:

October-Dec 2021

- Prepare key information materials
- Create West Coast Lets Connect page
- Update key messages and FAQ's

January – May 2022 - Inform residents regarding Sort'nGo Program

- Introduction and launch of the Sort'nGo program – mail out to all homeowners
- Promotion of the "LetsConncetACRD page" and the Sort'nGo Program
    - Press release, Radio ads, social media, town halls, community presentations
- Create and develop resident welcome package material (sorting guides, how too, cart placement, collection information. etc.)

September - November 2022 – Program Roll Out

- Plan and host public information sessions
- Deployment of carts and residential welcome packages.

December – May 2023 – Implementation and Follow-up

- Door-to-door audits and cart inspection program
- Educate and regulate as required to ensure service is used correctly

The ACRD will continue working with Surfrider to facilitate educational aspects of the new waste services and leverage the organization's well connected and positive education and outreach connections they have built with west communities to date.

Financial:

West Coast Landfill Upgrades

The total capital costs for the organics processing facility and upgrades at the West Coast Landfill are currently estimated at $4.15 M. This is significantly higher than the conceptual design estimated costs of $1.2 M. This is due to an increase in project scope to include more significant upgrades of the public tipping area and a global trend of project price escalations seen across the province and worldwide. The design of the facility is being finalized and will be presented to the WCC Committee in early 2022 with the related financial impacts.

There is currently $3.5M remaining from the Strategic Priorities Grant for Regional Organics Diversion. However, a portion of this grant has been ear-marked for the purchase of carts for the Alberni Valley Electoral Areas if a 3-stream program is supported. Staff are undertaking public engagement for phase 3 in early spring 2022. Following this process and direction from the public, staff will provide recommendations on how the remaining Strategic Priorities Grant funding can be fairly allocated. Long-term borrowing options are required for the upcoming leachate upgrades at the West Coast Landfill and this funding mechanism can be utilized for funding the organics capital costs that are not grant funded.

Curbside Collection

The purchase and delivery of carts for the West Coast is estimated at $575,000.The initial calculations for impacts on waste collection service estimate the expanded service to cost approximately $200 per household per year. This is inline with other neighbouring communities providing 3-stream collection:

- Port Alberni ($180 - $400)
- Regional District of Nanaimo ($165-$250)
- Squamish ($200-345)

The total estimated cost for Phase 2 – West Coast is approximately $4.725 M. Staff are finalizing impacts to tipping fees, user fees and overall budget and will present the financial implications of this project during the financial planning process in early 2022.

Submitted by: Jodie Frank
Jodie Frank, Organics Coordinator

Reviewed by: Jenny Brunn
Jenny Brunn, General Manager of Community Services

Approved by: Teri Fong
Teri Fong, CPA, CGA, Acting Chief Administrative Officer

ALBERNI-CLAYOQUOT
REGIONAL DISTRICT

3008 Fifth Avenue, Port Alberni, B.C. CANADA V9Y 2E3 Telephone (250) 720-2700 FAX: (250) 723-1327

REPORT FOR INFORMATION

To: West Coast Committee

From: Michael McGregor, Lands and Resources Coordinator

Meeting Date: November 17, 2021

Subject: Long Beach Airport Contamination Stage 1 Report

Summary:

As the ACRD guides the continued development of the LBA, the process to enter into long term leases (longer than 3 years) requires a site disclosure statement submitted to the approving officer. If there is known/suspected contamination on a development site, the site disclosure statement will trigger the requirement to conduct a Stage 1 and potentially a Stage 2 Preliminary Site Investigation (PSI). If contamination is confirmed the development of the site would be frozen.

The Alberni Clayoquot Regional District (ACRD) retained PGL Environmental Consultants (PGL) to complete a Stage 1 Preliminary Site Investigation (PSI) report for Long Beach Airport (YAZ). The objective of this Stage 1 PSI is assess the likelihood that contamination is onsite and to delineate areas of potential environmental concern (APECs). and recommend further investigation if necessary.

Based on the review of the previous reports, historical documents, interviews, and a site inspection, it appears likely that contamination remains in some of the APECs. This conclusion is based on the changes in the regulatory framework that occurred since 2008, with the introduction of soil vapour standards, regulation of additional substances and the changes on regulatory standards, which decreased for many substances.

One additional APEC was identified as part of this PSI and the presence of asbestos was identified in an existing APEC.

This report has identified a number of areas that do not require further CSR investigation in order to establish a long-term lease. It has also identified areas that will require further investigation where it would be costly to pursue long term registered leases. Staff will be utilizing this information, along with site servicing plan, to create a development options plan for the airport to best guide development interests at the Long Beach Airport and support the airport Land Use Plan.

Background:

The Site underwent a phased environmental site assessments, remediation, and risk assessment program from 1997 to 2008 under the direction of Transport Canada, while the Site was owned by the federal government. In the process of these assessments, 21 potential contaminated sites were identified and assessed, some of these with several issues or APECs and several of these sites showed no or only minor contamination and were not further assessed. Seven sites were physically remediated, and four sites were addressed with risk assessments.

Time Requirements – Staff & Elected Officials:

There has been and will continue to be significant staff time required to pursue a solution to the outstanding contamination issues at LBA. A significant amount of staff time will also be required to create a development options plan/guideline.

Financial:

The continued development of LBA utilizing the airport lands as a revenue generation model for the service is impacted by the presence of identified contamination. Inability to develop, or alternative leasing and licensing is required in areas where contamination is likely.

Strategic Plan Implications:

The development of the LBA aligns with the ACRD Strategic Plan by supporting economic recovery and development.

Policy or Legislation:

A signed Agreement to Transfer document outlines the rights and responsibilities for both Transport Canada and the ACRD.

Submitted by: Michael McGregor
Michael McGregor, Lands and Resources Coordinator

Reviewed by: Jenny Brunn
Jenny Brunn, GM of Community Services

Approved by: Teri Fong
Teri Fong, CPA, CA, Acting Chief Administrative Officer

Long Beach Airport
Tofino, BC

Stage 1 Preliminary Site Investigation

PREPARED FOR:
Alberni Clayoquot Regional District
3008 5th Street
Port Alberni, BC V9Y 2E3

PREPARED BY:
PGL Environmental Consultants
402 – 645 Fort Street
Victoria, BC V8W 1G2

PGL ENVIRONMENTAL CONSULTANTS

solve and simplify

PGL File: 5350-01.02

September 2021

Executive Summary

The Alberni Clayoquot Regional District (ACRD) retained PGL Environmental Consultants (PGL) to complete a Stage 1 Preliminary Site Investigation (PSI) report for Long Beach Airport (YAZ) in Tofino, BC (the Site).

The objective of this Stage 1 PSI is to identify areas of potential environmental concern (APECs) and their associated potential contaminants of concern and recommend further investigation if necessary.

The scope of work for this Stage 1 PSI included a review of archival records, interviews, and a Site reconnaissance.

The Site is an operating airport and a former military base. The Site is owned by the ACRD and consists of 15 District Lots near Tofino, B. It is close to Highway 4 and Pacific Rim National Park Reserve. The Site has been an active airport since the 1940s when it was developed as part of the World War II effort. The Site is at an elevation of approximately 20m above seal level; the local topography can generally be described as flat. Several gullies are present at the north, south, and east boundary of the airport, and several creeks emerge at the airport that drain towards the north or south.

The Site underwent a phased environmental site assessments, remediation, and risk assessment program from 1997 to 2008 under the direction of Transport Canada, while the Site was owned by the federal government. In the process of these assessments, 21 potential contaminated sites were identified and assessed, some of these with several issues or APECs and several of these sites showed no or only minor contamination and were not further assessed. Seven sites were physically remediated, and four sites were addressed with risk assessments.

One additional APEC was identified as part of this PSI and the presence of an unknown substance (asbestos) was identified in an existing APEC.

The assessment, remediation, and risk assessment followed the federal and provincial regulatory regime applicable at that time and at the completion of the program, the ownership of the Site was transferred to the ACRD. Regulatory instruments, such as Certificates of Compliance were not issued for the remediated lands at the completion of the program.

Based on the review of the previous reports, historical documents, interviews, and a site inspection, it appears likely that contamination remains in some of the APECs. This conclusion is based on the changes in the regulatory framework that occurred since 2008, with the introduction of soil vapour standards, regulation of additional substances and the changes on regulatory standards, which decreased for many substances.

In general, APECs with a high apparent degree of contamination were thoroughly assessed and remediated in the past. Some APECs with a low apparent degree of contamination were not further assessed beyond an initial level and not remediated.

Ongoing operations at the airport also have the potential to re-contaminate the Site, such as in areas where activities take place that have the potential to cause contamination, such as fuels storage areas and equipment maintenance and repair areas.

Based on the above, there are seven APECs that have a high potential for contamination in soil, soil vapour, groundwater, surface water, or sediment. However, the potential for a high risk from this residual contamination to ecological receptors or humans or the migration of contaminants offsite is generally low.

One human health risk, namely exposed asbestos containing materials will require immediate attention. Other substances, such as odorous soil with apparent petroleum hydrocarbon contamination, or soil impacted with debris that is encountered during maintenance work, will need to be handled appropriately as it is encountered during maintenance and construction.

It is possible that additional contaminated areas that have not been identified as part of this study or previous studies are present at the airport property, such as areas that were not visible through air photo reviews, were not known to airport personnel and are overgrown. Such areas can be identified by the observation of odorous soil, discoloured or odorous seepage water, surface and subsurface debris including glass, metal, vehicles parts or building material. If such areas are encountered during future work, a qualified environmental consultant should be notified.

Areas of the Site that had past or current site used that are listed in Schedule 2 of the BC Contaminated Sites Regulation (CSR) must follow the process prescribed in the CSR to identify, assess, and remediate these areas to facilitate rezoning or redevelopment.

A site disclosure statement will need to be completed and submitted to the approving officer for subdivision, to the municipality for zoning, development, or building permit and to the Ministry for decommissioning, ceasing operations, insolvency, or by order and to the prospective purchaser at the sale of the property. The site disclosure statement will trigger the requirement to conduct a Stage 1 and 2 PSI and if contamination is identified, the development of the Site will be frozen.

While it is not necessary to conduct an airport-wide Stage 2 PSI at this time, it will be necessary to conduct additional investigations in those locations that are scheduled for redevelopment. As areas are identified for redevelopment, these areas should be further investigated, and the results compared to the current BC CSR standards. If required, several APECs can be grouped together for Stage 2 PSIs of specific areas that are targeted for redevelopment. Regulatory instruments, such as a Determination or a Certificate of Compliance will be required to facilitate the building permit, rezoning, or redevelopment process, such instruments can be applied for on an area-by-area basis. If a Certificate of Compliance is required for an area, a site-specific detailed update of the Stage 1 PSI will be required, followed by a Stage 2 PSI.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.

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List of Acronyms

ACM	-	asbestos containing materials
ACRD	-	Alberni Clayoquot Regional District
APEC	-	area of potential environmental concern
AST	-	aboveground storage tank
CSR	-	BC Contaminated Sites Regulation
ENV	-	BC Ministry of Environment and Climate Change Strategy
HEPH	-	heavy extractable petroleum hydrocarbons
LEPH	-	light extractable petroleum hydrocarbons
PAH	-	polycyclic aromatic hydrocarbons
PAH	-	polycyclic aromatic hydrocarbons
PCOC	-	potential contaminants of concern
PGL	-	PGL Environmental Consultants
PRNPR	-	Pacific Rim National Park Reserve
PSI	-	Preliminary Site Investigation
UST	-	underground storage tank
VPH	-	volatile petroleum hydrocarbons
WWII	-	World War II

1.0 INTRODUCTION

The Alberni Clayoquot Regional District (ACRD) retained PGL Environmental Consultants (PGL) to complete a Stage 1 Preliminary Site Investigation (PSI) report for the Long Beach Airport (YAZ) in Tofino, BC (the Site). The site location is shown on Figure 1. Site photographs are provided in Appendix 1.

1.1 Objective and Scope

The objective of this Stage 1 PSI is to identify areas of potential environmental concern (APECs) and their associated potential contaminants of concern (PCOCs) and recommend further investigation if necessary.

The scope of work for this Stage 1 PSI included a review of archival records, interviews, and a Site reconnaissance.

This report was prepared by Ingo Lambrecht and was reviewed by Tom Berger, and research was conducted by Sarah Greene; their qualifications are summarized in Table A.

Table A: Report Participants

Participant	Education	Accreditation	Role	Experience (years)
Ingo Lambrecht	M.Sc. equivalent	P.Geo.	Principal Report Author	27
Tom Berger	B.Sc.	P.Geo.	Senior Review	20
Sarah Greene	-	-	Research Technician	5

All participants are qualified to complete the scope of their assignments based on their education, training, and experience.

This report was prepared, and the investigations were carried out, in accordance with the requirements of the *Environmental Management Act* and the BC Contaminated Sites Regulation (CSR). This report may be submitted as part of an application, under the Roster of Approved Professionals provisions of the *Environmental Management Act* and the CSR and may be relied upon by the BC Ministry of Environment and Climate Change Strategy (ENV) and the Contaminated Sites Approved Professionals Society for this purpose.

1.2 Context

The Site is an operating airport and a former military base. The Site is owned by the ACRD and consists of 15 District Lots in the Tofino – Long Beach Airport lands, near Tofino, BC; it is close to Highway 4 and Pacific Rim National Park Reserve. The Site location and a general overview is shown on Figure 1.

The Site has been an active airport since the 1940s when it was developed as part of the World War II effort.

Previous environmental work at the Site was conducted as part of a divestiture program under the auspices of Transport Canada and commissioned through Public Works and Government Services Canada. The environmental work program included staged environmental audits, environmental site assessments, remediation projects, and risk assessments, which were completed from 1997 to 2009 by several consultants. In these work programs, potentially contaminated Sites were identified (Sites A to W), assessed, and remediated either through physical remediation, risk assessment, or a combination thereof.

In the course of the previous environmental work, contaminated areas were identified, assessed, remediated, and risk-managed in accordance with federal environmental guidelines applicable at the time. After the completion of the environmental program, the airport lands were divested from the federal crown to the ACRD.

We understand that the ACRD is considering redevelopment of parts of the Site. We understand that a Determination or Certificate of Compliance is a requirement for the proposed rezoning or development permits.

The ACRD identified nine "contemplated redevelopment areas" (1 to 9), and three sub-areas (9A, 9B, and 9C) where redevelopment with a mix of commercial and residential land use is anticipated. The contemplated redevelopment areas are superimposed onto the Sites (A to W) on Figure 2. Several of the contemplated redevelopment areas (1 to 9) are close to or overlap with some of the Sites.

2.0 SITE INFORMATION

General information regarding location, land use, and ownership is summarized in Table B.

Table B: Site Identification Information

Civic Address	188 Airport Road, Tofino, BC
PIDs	1. 024-749-419 2. 024-749-397 3. 010-157-913 4. 024-158-569 5. 024-159-034 6. 010-322-451 7. 024-100-145 8. 024-100-137 9. 024-100-153 10. 024-749-389 11. 024-158-666 12. 024-749-435 13. 009-392-351 14. 009-392-335 15. 009-392-319
Owner	Alberni Clayoquot Regional District
Land Use	Commercial
Zoning	Airport - commercial
Proposed Land Use	Commercial, residential, depending on area
Latitude*	49° 4' 49.6"
Longitude*	125° 46' 34.0"
Site Area	Approximately 370 hectares
ENV Site #	5401

* *Source: Google Earth*

2.1.1 Adjacent Property Uses

Adjacent property uses are as follows:

- North – Pacific Rim National Park Reserve, forested wildlands;
- East – Pacific Rim National Park Reserve, forested wildlands;
- South – Highway, Pacific Rim National Park Reserve (PRNPR), Long Beach; and
- West – Highway, PRNPR, Esowista 3 Reserve.

Based on the observed conditions, no offsite APECs were identified from our Site reconnaissance. There are no environmental risks associated with neighbouring property use.

2.2 Physical Setting

The physical setting of the Site and surrounding area is key to developing a preliminary Conceptual Site Model that supports selecting APECs. Groundwater flow direction and velocity are particularly important to APEC assessment, as they determine the migration potential from offsite risks. Site surface cover, and surficial soil can determine infiltration rates and the vulnerability of the subsurface to contamination originating at the surface.

2.2.1 Topography

The Site is at an elevation of approximately 20m above seal level and the local topography can generally be described as flat. Several gullies are present at the east side of the Site, near Site G, at the northern boundary of the property, and at the south. A topographic map is provided in Appendix 2.

2.2.2 Surficial Geology

Geological maps indicate surficial soils in the area consist of "*thick Holocene and Fraser marine and glaciomarine deposits masking details of relief of underlying units, and with surface expression reflecting genesis of deposit. Dominantly silt, clay and stony silt and clay with thicknesses locally as great as 200m.*"

Groundwater is likely highly vulnerable to contamination originating at the surface, and moderately mobile, given the soil texture and setting.

2.2.3 Hydrology and Hydrogeology

2.2.3.1 Surface Water

Roadside drainage ditches run along the airport roads, taxiways, and runways. Other watercourses in the area are several unnamed creeks running from the airport in a northward, eastward direction towards Grice Bay and Wickaninnish Bay to the south.

The watercourses on the Site and in the area are freshwater environments. Grice Bay and Wickaninnish Bay are marine environments.

2.2.3.2 Groundwater

The BC Water Resources Atlas indicates that there are no aquifers underlying the Site. (Appendix 2).

Groundwater in the area is estimated to be 3 to 5m below ground surface. Based on the area topography and proximity to several water bodies, groundwater flow direction is expected to be variable and flows towards the nearest surface water body.

2.2.3.3 Water Use Receptors

There are 17 provincially registered water wells registered within 500m of the Site (Appendix 2). Of these, 14 are onsite. The Site is currently not serviced with municipal water. One water well is present at Site F and used as a water supply for the airport.

Current and future use of the aquifers underlying the Site are drinking water supply and groundwater flow to freshwater and marine aquatic life.

2.2.4 Climate

The Environment Canada weather station closest to the Site, with the appropriate weather information is at the Tofino Airport, BC.

Climate Normals from 1981 to 2010 have been recorded for the station and indicate that the area has its highest average daily temperatures in August at 15.0°C with an average daily maximum of 19.1°C and an average daily minimum of 10.8°C. The area has its lowest average daily temperatures in December at 5.0°C with an average daily maximum of 8.1°C and an average daily minimum of 1.9°C. Average yearly rainfall in the area is 3237.2mm; January has the highest monthly rainfall at an average of 477.4mm. Average yearly snowfall in the area is 33.3cm; January has the highest monthly snowfall at an average of 9.2cm.

3.0 REGULATORY FRAMEWORK

Based on past and current ownership, the regulatory framework applicable has changed, which is reflected in the following sections.

3.1 Previous Framework

At the time of the previous environmental work, the Site was owned by Transport Canada and under federal jurisdiction. All work was completed following the federal regulatory framework, mainly following guidance from the Canadian Council of Ministers of the Environment or Health Canada up to 2009. The Site was considered a commercial site.

The regulatory threshold applied at the Site consisted mainly of the Canadian Council of Ministers of the Environment Canadian Environmental Quality Guidelines, 1999 and the Federal Interim Groundwater Quality Standards, 2010.

The previous studies also considered the BC CSR standards in their evaluation.

3.2 Current Framework

Now owned by the ACRD, the Site is under provincial jurisdiction. The BC *Environmental Management Act* provides the framework for the identification, assessment, and remediation of contaminated sites. The BC CSR provides the regulatory standards for assessing contamination. Under Section 11 (2) of the CSR, a site is considered contaminated if the sampled media exceeds the applicable site-specific numerical criteria. Background exceptions may apply. The applicable standards are listed in Table C.

Table C: Applicable Standards

Media	CSR Standard
Soil (Commercial or Residential)	Schedule 3.1 Part 1 - Intake of Contaminated Soil Schedule 3.1 Part 1 - Toxicity to Soil Invertebrates and Plants Schedule 3.1 Part 1 - Groundwater used for Drinking Water Schedule 3.1 Part 1 - Groundwater Flow to Surface Water used by (Freshwater and Marine) Aquatic Life Schedule 3.1 Part 2 and 3 - Generic Numerical Soil Standards
Water	Schedule 3.2 - Drinking Water Schedule 3.2 - Protection of Marine Aquatic Life (Freshwater and Marine)
Vapour (Commercial or Residential)	Schedule 3.3 – Numerical Vapour Standards
Sediment	Schedule 3.4 –Sediment Criteria for Sensitive Use (Marine and Estuarine)

3.2.1 Soil Standards

Soil standards are based on site use and location with respect to environmental and human receptors. The current Site use is commercial; however, the proposed future use includes commercial and residential areas, therefore, Low Density Residential Land use standards (RL^{LD}) or Commercial Land use standards (CL) may be applicable in the future.

3.2.2 Groundwater Standards

Groundwater standards are based on the receptor that could be in contact with the groundwater.

Aquatic Life Water Use Standards apply to groundwater that is or can migrate to within 500m of a surface water body, or if a preferred pathway leads to within 500m of a surface water body. Different standards are applied to marine and freshwater bodies. Several creeks emerge at the Site, therefore freshwater aquatic life water use standards apply.

Nearby marine environments include Grice Bay to the north and Wickaninnish Bay to the south.

The ENV considers groundwater in the province, regardless of location or land use, to be a potential drinking water source. Drinking Water Standards are applied as a default unless site-specific testing demonstrates that the aquifer or groundwater resource is incapable of producing water at a specified yield, or that the natural quality of the groundwater is unsuitable for drinking water purposes. The airport drinking water supply relies currently on well water.

3.2.3 Vapour

Vapour standards, like soil standards, are based on land use and site location with respect to environmental and human receptors. Based on the proposed future use of the Site, residential or commercial standards may be applicable.

3.2.4 Sediment

Sediment quality standards protect freshwater, marine, and/or estuarine aquatic life in sensitive and typical aquatic habitats. Sensitive sediments standards are applied at sites with sensitive aquatic habitat. Typical sediment criteria are applied at all other sites. According to the technical appendix for Criteria for Managing Contaminated Sediment in British Columbia, typical sediment criteria are applied at marinas, docks, and wharves.

Based on Site use and location, freshwater aquatic life sediment standards for sensitive site apply at the Site.

3.2.5 Surface Water

Surface water at the site consist of several fish bearing creeks. The BC Approved and Working Water Quality Guidelines for freshwater use are applicable to all surface waters.

4.0 METHODOLOGY

The identification of APECs and PCOCs is based on the information gathered from historical records interviews and a site inspection. The goal of the records review is to establish the history of activity on the Site and surrounding area as accurately as possible. This process included a review of historical and background information. Table D summarizes the information reviewed.

Table D: Review Summary

Information	Source or Contact	Results
Tenure Information	BC LTSA	Section 4.1
Previous Environmental Reports	Alberni-Clayoquot Regional District, Transport Canada	Section 4.2 and Appendix 3
Business Directories	None	N/A
Aerial Photographs	UBC Geography and Google Earth	Section 4.4 and Appendix 5
Municipal File Information	Alberni-Clayoquot Regional District	Section 4.5
Fire Insurance Plans	None	N/A
Provincial Contaminated Sites	BC Online Site Registry	Section 4.7 and Appendix 4
Federal Contaminated Sites	Federal Contaminated Sites Inventory	Section 4.8 and Appendix 4

4.1 History of Ownership

The Site is owned by the Alberni-Clayoquot Regional District. The previous owner was the federal crown. A title search was not conducted.

4.2 Previous Reports

PGL reviewed previous reports that had information relevant to the Site, such as site assessment and remediation reports. A summary of the reports is provided in Appendix 3.

4.3 Business Directory Search

No business directories have been developed for the Site and neighbouring properties.

4.4 Aerial Photographs

We reviewed a series of historical aerial photographs obtained from the University of British Columbia Geography department library, and Google Earth (Appendix 4).

We have provided a copy of each reviewed aerial photograph in Appendix 4.

4.5 Municipal Search

Relevant municipal information has been provided by the owner and municipal authority, the Alberni Clayoquot Regional District and added to the report where needed. One new APEC was identified based on observations by ACRD staff, consisting of Site X, a former airport control tower (Section 5.24).

The property is currently zoned as commercial land, and a zoning change is not anticipated. Future buildings under consideration are considered commercial, with a caretaker suite on the second floor.

4.6 Fire Insurance Plans

No fire insurance plans were available for the Site.

4.7 Provincial Contaminated Sites Databases

PGL's search of the ENV Site Registry through BC Online (Appendix 4) identified one property on file within the search area. This property is the Site (Site ID 5401).

4.8 Federal Contaminated Sites Inventory

PGL's search of the Federal Contaminated Sites Inventory (Appendix 4) identified nine entries on file within the search area. Two of these entries are offsite, south of Highway 4. These properties are downgradient to the Site and are not a concern. The other seven entries are onsite.

4.9 Site Reconnaissance

PGL staff visited the Site and area on June 28, 2021, to assess current Site conditions and to identify environmental concerns that may be present at the Site and in the surrounding area. Photographs taken during the Site inspections are provided in Appendix 1. Our inspection was limited to areas accessible through the airport authorities. We did not inspect the inside of buildings that were leased.

4.10 Interviews

Interviews were conducted with Mark Fortune. Mr. Fortune is the airport superintendent and has been employed at the airport since 1992, first by Tofino Air and since 2012 by the ACRD.

5.0 RESULTS

The Site was developed as part of the WWII effort, most of the military infrastructure was removed within 10 years after the war. Some of the WWII infrastructure remains in use today and new infrastructure was added in recent years.

Contamination that was related to past operations was assessed, remediated and risk assessed from 1997 to 2008. Contamination remains in some areas that were considered to have only insignificant contamination or proceeded through a formal risk assessment.

The Site was divided into subsites A to W based on the information in previous reports. A new site, Site X, was added based on new information. Site activities that had the potential to cause contamination of media were identified as APECs, which may have been identified as 'Issues" in previous reports.

5.1 Site A

The Site consists of the former power station of the airport that supplied electric power to the base and later to the surrounding community.

5.1.1 Site History

The Site was forested land and in the 1940s clearing and construction started.

The Site was developed with a concrete structure (Building 24), housing the power generators and an asbestos-clad wood-frame addition for additional power generating equipment, equipment repair, and maintenance.

Fuel was stored in aboveground storage tanks (ASTs) to the southeast of the building and in underground storage tanks (USTs) to the northwest of the building.

The generators and other maintenance equipment such a line trucks were serviced on site and waste was disposed of at a landfill to the north of the main building, from where Creek A emerges and flows towards the north.

The Site was remediated in stages as part of the divestiture program and the remediation program was completed in about 2008. Reports documenting the remediation are available up to 2005, later reports are not available from Transport Canada or the ACRD.

The creek bed of Creek A was found to be contaminated and was remediated to the 124m mark and the residual contamination in the downgradient portion of the creek was risk assessed.

5.1.2 Site Use and Physical Appearance

The Site is developed with the remains of a concrete building and is currently used to cut and store firewood. Logs and cut firewood are stored in piles.

5.1.3 Natural Setting

The Site is surrounded by a second growth forest in the east, west and south. To the north, the Site is bordered by old growth of PRNPR. Creek A is emerging at the powerhouse and flows northwards.

5.1.4 Buildings and Structures

The remains of one concrete shell building (Building 24) is present at the Site. All former structures are removed.

5.1.5 Fill

The Site has undergone excavation and re-contouring in the past. Fill of concern was not identified during the site visit.

5.1.6 Aboveground and Underground Storage Tanks

No ASTs or USTs were observed during our site inspection.

5.1.7 Hazardous Materials

No hazardous materials were observed during our site inspection.

5.1.8 Waste Streams

Waste streams consist of sawdust, which remains on Site. No other wastes are generated on the Site.

5.1.9 Stains, Odours, and Stressed Vegetation

No stains, odours or stressed vegetation was observed during our site inspection.

5.1.10 Drinking Water, Wastewater, and Drainage

The Site is undeveloped, there is no municipal water, natural-gas service, or sewer service to the Site.

5.1.11 Interviews

Mr. Fortune indicated that the Site is currently used to cut and store firewood.

Following the remediation of the Site, Building 24 burned down and the burned debris, including asbestos cement cladding was removed from the Site.

5.1.12 Schedule 2 Uses

No current CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses include:

- B3 – electrical equipment manufacturing, refurbishing or wholesale bulk storage;
- E1 – appliance, equipment or engine repair, reconditioning, cleaning, or salvage,
- G2 – automotive, truck, bus, subway or other motor vehicle repair, salvage, or wrecking; and
- H 10 – industrial waste storage, recycling, or landfilling.

5.1.13 Previous Assessment and Remediation

The Site has undergone several stages of assessment and remediation from 1997 to about 2008. This included the remediation of the building footprints, former fuel storage areas, the former landfill and Creek A.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low.

5.1.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified several APECs and Associated PCOCs. The APECs and associated PCOCs are summarized in Table E:

Table E: Site A – APECs and PCOCs

APEC	Location	Activity of Concern	PCOC
A-1	Building A	Power generation, equipment repair	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC/VPH, LEPH/HEPH/PAH, metals
A-2	USTs	Northwest of building	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC/VPH, LEPH/HEPH/PAH, metals
A-3	ASTs	Southeast of building	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC/VPH, LEPH/HEPH/PAH, metals

APEC	Location	Activity of Concern	PCOC
A-4	Landfill	Northeast of building	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Surface Water: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC/VPH, PAH Sediments: PAH, metals

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.1.15 Conclusions and Recommendations

The Site has a low risk for residual contamination, is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR. At that time, an updated site-specific Stage 1 PSI would be required, a site disclosure statement would need to be completed and a Stage 2 PSI would be required.

5.2 Site B

The Site consists of the former organic waste landfill.

5.2.1 Site History

The Site was forested land and in the 1940s clearing started

The Site was used as a disposal area for building debris and organic waste (tree cuttings, brush, stumps). The Department of Fisheries mandated that the debris in a gulley be pulled back up the slope and out of contact with the creek at the bottom of the gulley. That work was reportedly carried out by Transport Canada in 1995.

5.2.2 Site Use and Physical Appearance

The Site is overgrown with mature trees and no building remains were observed.

5.2.3 Natural Setting

The Site is surrounded by a second growth forest in the east, west, and south. To the north, the Site is bordered by old growth of PRNPR.

5.2.4 Buildings and Structures

No buildings or structures were present on Site.

5.2.5 Fill

Fill of concern was not identified during the site visit.

5.2.6 Aboveground and Underground Storage Tanks

No storage tanks were observed during our site inspection.

5.2.7 Hazardous Materials

No hazardous materials were observed during our site inspection.

5.2.8 Waste Streams

No wastes are generated on the Site.

5.2.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation was observed during our site inspection.

5.2.10 Drinking Water, Wastewater, Drainage

The Site is undeveloped; there is no municipal water, natural gas service, or sewer service to the Site.

5.2.11 Interviews

Mr. Fortune indicated that the Site has been vacant since he knows it.

5.2.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses include:

- H1 – municipal waste storage, recycling, composting, or landfilling.

5.2.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS[1] through a geophysical survey, test pitting, sediment, and surface water sampling. Mostly organic waste was encountered with little metal debris.

The soil sampling identified no substances at concentrations exceeding the standards, but PAHs were detected. The sediment sampling identified concentrations of chromium and iron at a concentration exceeding the applied criteria. The surface water sampling identified aluminum and iron at concentrations exceeding the applied criteria.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high, the magnitude of impact is likely low.

[1] Environmental Baseline Study Phase 1: Environmental Audit Update, March 1997, Beatty Franz

5.2.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table F.

Table F: Site B – APECs and PCOCs

APEC	Location	Activity of Concern	PCOC
B-1	Gulley	Organic waste landfilling	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH Sediment: PAH, metals

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.2.15 Conclusions and Recommendations

The Site has a moderate to high risk for residual contamination, is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.3 Site C

The Site consists of the former communications repeater building (Building 54) and the former steam generator plant (Building 25).

5.3.1 Site History

The Site was forested land and in the 1940s clearing and construction started.

The Site was developed with two structures, consisting of the communication building and a steam generating plant; fuel was supplied from ASTs. The communication building remains onsite. The steam generation building and associated ASTs and saddles were removed.

5.3.2 Site Use and Physical Appearance

The Site is overgrown with young and mature trees. The Site was clear of debris.

5.3.3 Natural Setting

The Site is surrounded to the north, east, and west by a second growth forest and to the south by Airport Road. No creeks are nearby.

5.3.4 Buildings and Structures

One concrete building remains on site.

5.3.5 Fill

Fill of concern was not identified during the site visit.

5.3.6 Aboveground and Underground Storage Tanks

No storage tanks were observed during our site inspection.

5.3.7 Hazardous Materials

The building was identified to contain asbestos-containing materials (ACMs), which were reportedly removed.

5.3.8 Waste Streams

No wastes are generated on the Site.

5.3.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation was observed during our site inspection.

5.3.10 Drinking Water, Wastewater, Drainage

The Site is undeveloped; there is no municipal water, natural-gas service, or sewer service to the Site.

5.3.11 Interviews

Mr. Fortune indicated that the Site has been unchanged since 1992.

5.3.12 Schedule 2 Uses

No CSR Schedule 2 uses are currently present on the Site.

Past Schedule 2 uses include:

- F 7 – petroleum product (other than compressed gas) or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.3.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS and was remediated in stages.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low.

5.3.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table G.

Table G: Site C – APECs and PCOCs

APEC	Location	Activity of Concern	PCOC
C-1	Former Steam Plant	Petroleum product storage	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.3.15 Conclusions and Recommendations

The Site has a low potential for residual contamination, is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.4 Site D

The Site consists of the compound of former Building 14, the former Motor Transportation Garage.

5.4.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The building was removed by 1959.

The Site was used as vehicle service and repair facility and included storage of petroleum products in USTs.

5.4.2 Site Use and Physical Appearance

The Site is fenced, has a concrete pad, and is used as storage compound for lumber, precast concrete, and other construction materials by Parks Canada.

5.4.3 Natural Setting

The Site is surrounded by second growth forest in the northwest, and southwest and borders airport road in the northeast. The former Building 14 was to the southeast. An unnamed creek is approximately 180m to the northeast of the Site, flowing to Grice Bay.

5.4.4 Buildings and Structures

No buildings or structures were present onsite.

5.4.5 Fill

Fill of concern was not identified during the site visit.

5.4.6 Aboveground and Underground Storage Tanks

No storage tanks were observed during our site inspection.

5.4.7 Hazardous Materials

No hazardous materials were observed during our site inspection.

5.4.8 Waste Streams

No wastes are generated on the Site.

5.4.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation was observed during our site inspection.

5.4.10 Drinking Water, Wastewater, Drainage

The Site is not serviced.

5.4.11 Interviews

Mr. Fortune indicated that the Site has been unchanged since 1992.

5.4.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses include:

- E1 – appliance, equipment, or engine maintenance, repair, reconditioning, cleaning, or salvage;
- F7 – petroleum product (other than compressed gas) or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.4.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS and was remediated in stages.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low.

5.4.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table H.

Table H: Site D – APECs and PCOCs

APEC	Location	Activity of Concern	PCOC
D-1	Building 14, Former Motor Vehicle Garage	Petroleum product storage, Engine repair	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.4.15 Conclusions and Recommendations

The Site has a low potential for residual contamination, is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.5 Site E

The Site consists of the compound of former Building 16, the former Motor Transportation Garage.

5.5.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The building was removed by 1969.

The Site was used as vehicle service and repair facility and potentially included storage of petroleum products in USTs.

5.5.2 Site Use and Physical Appearance

The Site is fenced and is used as storage compound for lumber, precast concrete, and other construction materials by Parks Canada.

5.5.3 Natural Setting

The Site is surrounded by second growth forest in the southwest and southeast and borders airport road in the northeast. The Site borders the former building 16 in the northwest. An unnamed creek is approximately 180m to the northeast of the Site, flowing to Grice Bay.

5.5.4 Buildings and Structures

No buildings or structures were present onsite.

5.5.5 Fill

Fill of concern was not identified during the site visit.

5.5.6 Aboveground and Underground Storage Tanks

No storage tanks were observed during our site inspection.

5.5.7 Hazardous Materials

No hazardous materials were observed during our site inspection.

5.5.8 Waste Streams

No wastes are generated on the Site.

5.5.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation was observed during our site inspection.

5.5.10 Drinking Water, Wastewater, Drainage

The Site is not serviced.

5.5.11 Interviews

Mr. Fortune indicated that the Site has been unchanged since 1992.

5.5.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses have include:

- E1 – appliance, equipment, or engine maintenance, repair, reconditioning, cleaning, or salvage;
- F 7 – petroleum product (other than compressed gas) or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.5.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, and assessed through test pitting, some minor contamination was identified and the Site was not further assessed.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered moderate.

5.5.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table I.

Table I: Site E – APECs and PCOCs

APEC	Location	Activity of Concern	PCOC
E-1	Building 16, Former Motor Vehicle Garage	Petroleum product storage, engine repair	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.5.15 Conclusions and Recommendations

The Site has a moderate potential for residual contamination, is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.6 Site F

The Site consists of the former pump house.

5.6.1 Site History

The Site was forested land and in the 1940s clearing and construction started.

The Site is the location of the former and current pump house and water treatment plant, which supplies drinking water to the airport.

5.6.2 Site Use and Physical Appearance

The Site is fenced was not accessed as part of the site investigation.

5.6.3 Natural Setting

The Site is surrounded by second growth forest in all directions. There are no creeks nearby.

5.6.4 Buildings and Structures

The Site was not inspected during the site visit. The pump house and water treatment system remain onsite. An unnamed creek is approximately 120m north of the Site.

5.6.5 Fill

The Site was not inspected during the site visit.

5.6.6 Aboveground and Underground Storage Tanks

The Site was not inspected during the site visit.

5.6.7 Hazardous Materials

The Site was not inspected during the site visit.

5.6.8 Waste Streams

The Site was not inspected during the site visit.

5.6.9 Stains, Odours, and Stressed Vegetation

The Site was not inspected during the site visit.

5.6.10 Drinking Water, Wastewater, Drainage

The Site was not inspected during the site visit.

5.6.11 Interviews

Mr. Fortune indicated that the Site has been unchanged since 1992.

5.6.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas) or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.6.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS and was remediated in stages.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low.

5.6.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table J.

Table J: Site F – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
F-1	Former Pump House	Petroleum product storage	Soil: VOC/VPH, LEPH/HEPH/PAH Groundwater: VOC/VPH, LEPH/HEPH/PAH Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.6.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.7 Site G

The Site consists of the former Army Camp #4.

5.7.1 Site History

The Site was forested land until the 1940s. The Site was then developed with an army camp, the 1944 aerial photograph shows the Site developed with 25 buildings, believed to be for accommodation and associated uses, covering approximately 62,000m^2. The 1954 aerial photograph shows the Site bare of buildings and the aerial photograph review documents an increase in vegetation cover since then. In the 1960s, the area was reportedly used for dumping. Recently, the vegetation was cleared to prepare the Site for commercial use.

5.7.2 Site Use and Physical Appearance

The Site is currently under development. Large areas of the Site are cleared of mature trees and shrub. The former roads crossing the Site north-south and east-west are visible.

Two greenhouses are present on the southwestern part of the site and are used to grow vegetable by a community group.

Steel equipment, assumed to be boilers and associated machinery are present on the eastern site boundary. Building debris, including suspect ACM (boiler insulation or lagging), is present on the surface in the eastern part of the Site.

5.7.3 Natural Setting

The Site is surrounded by second growth forest to the north, old growth to the west, a clearing to the south and Airport Road to the west. Creeks emerge in gullies to the south.

5.7.4 Buildings and Structures

Two greenhouses are present onsite.

5.7.5 Fill

Fill, consisting of soil and logs, considered generated from past land clearing was identified during recent clearing at the south side of the Site.

5.7.6 Aboveground and Underground Storage Tanks

No ASTs or USTs were observed on site.

5.7.7 Hazardous Materials

Suspect ACMs were observed on the surface at the northwest part of the Site.

5.7.8 Waste Streams

No waste, other than woodwaste from land clearing, was generated at the Site. Slash piles were created and slated for burning.

5.7.9 Stains, Odours, and Stressed Vegetation

Stains and odours were not observed.

5.7.10 Drinking Water, Waste Water, Drainage

The Site is not serviced.

5.7.11 Interviews

Mr. Fortune indicated that the Site has been vacant until recent development activities. During clearing work in 2020, discarded machinery were found at the east end of the former camp, and suspect ACMs and other building debris were found buried in the footprint of the former army camp, with the majority in the eastern part of the former camp. The suspect ACM consists of friable, fibrous material that is mixed in with building debris, soil and wood waste consisting of stumps, branches etc. from recent clearing.

The camp may have included a steam generator or boiler, considering the amount of boiler equipment that was found during land clearing, or was the location of dumping, as suggested in the 1997 EBS.

The Site is slated to be used for commercial activities. Two greenhouses are present on the western part of the site and used to grow vegetable by a community group.

5.7.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past confirmed or likely Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile above ground or underground storage tanks, except tanks associated with emergency generators or with secondary containment; and
- H5 – landfilling of construction demolition material, including without limitation asphalt and concrete.

5.7.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS and shallow soil, surface water and sediment contamination by metals and PAH was identified. A groundwater investigation was not conducted.

A risk assessment was conducted in 2009 and the risk was found acceptable for the land use at that time, which was as an overgrown forest. It was recommended to update the risk assessment, should the land use change.

The potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.7.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table K.

Table K: Site G – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
G-1	Former Army Camp	Petroleum product storage Demolition debris landfilling	Soil: VOC/VPH, LEPH/HEPH/PAH, metals, asbestos Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds; VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons; PAH = polycyclic aromatic hydrocarbons

5.7.15 Conclusions and Recommendations

The Site is slated for redevelopment, additional contaminants were identified that were not included in the past assessment and the configuration of the Site differs from the conditions of the risk assessment. We recommend halting further ground disturbance, assessing the presence of regulated building materials (ACMs), and update the risk assessment. The update of the risk assessment would require a complete assessment of the Site, including soil, soil vapour and groundwater sampling.

Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.8 Site H

The Site consists of the former Construction Camp #7.

5.8.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The Site was vacant on the 1954 aerial photograph and onwards.

The Site was the location of the former construction Camp #7, which covered approximately 25,000m^2 and consisted of 12 buildings and structures.

5.8.2 Site Use and Physical Appearance

The Site is overgrown with mature trees.

5.8.3 Natural Setting

The Site is surrounded by second growth forest to the north, east, and west and by the taxiway to the south.

5.8.4 Buildings and Structures

No buildings or structures remain on the Site.

5.8.5 Fill

No suspect fill was observed onsite but is likely present.

5.8.6 Aboveground and Underground Storage Tanks

No USTs or ASTs were observed.

5.8.7 Hazardous Materials

No hazardous materials were observed.

5.8.8 Waste Streams

No wastes are generated on site.

5.8.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.8.10 Drinking Water, Waste Water, and Drainage

The Site is not serviced and drains naturally.

5.8.11 Interviews

Mr. Fortune indicated that the Site has been unchanged since 1992.

5.8.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses include:

- H5 – landfilling of construction demolition material, including without limitation asphalt and concrete.

5.8.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS and scattered surface debris was observed in two locations, each measuring approximately 250m^2 and one area was found to have no or only stressed vegetation, measuring approximately 1,500m^2. An investigation was not conducted.

Based on the past land use and the potential for buried building and other debris, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered moderate.

5.8.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table L. The potential for contamination is the highest in the three areas discussed above, which are potential hot spots.

Table L: Site H – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
H-1	Former Construction Camp	Demolition debris, landfilling	Soil: LEPH/HEPH/PAH, metals Groundwater: LEPH/HEPH/PAH, metals Vapour: PAH

Notes: VOC = volatile organic compounds; VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons; PAH = polycyclic aromatic hydrocarbons

5.8.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.9 Site I

The Site consists of the area north of Runway 7-25.

5.9.1 Site History

The Site was forested land and in the 1940s clearing and development started. The Site is vacant on the 1954 aerial photograph and onward.

The Site was the location of several buildings and storage. The area covers approximately 38,000 m^2, with the area formerly occupied by building and equipment of approximately 11,000 m^2.

5.9.2 Site Use and Physical Appearance

The Site is overgrown with brush and growth is managed.

5.9.3 Natural Setting

The Site is surrounded by runways and taxiways on all sides.

5.9.4 Buildings and Structures

No buildings or structures remain on the Site.

5.9.5 Fill

No suspect fill was observed on site.

5.9.6 Aboveground and Underground Storage Tanks

No USTs or ASTs were observed.

5.9.7 Hazardous Materials

No hazardous materials were observed.

5.9.8 Waste Streams

No wastes are generated onsite.

5.9.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.9.10 Drinking Water, Waste Water, and Drainage

The Site is not serviced and drains naturally.

5.9.11 Interviews

Mr. Fortune indicated that the Site has been unchanged since 1992. During ditching work in 2020, soil with a strong petroleum hydrocarbon odour was encountered. Using old photographs, Mr. Fortune tracked the location of the odorous soil back to a building that was formerly present at the Site.

5.9.12 Schedule 2 Uses

No CSR Schedule 2 uses are present on the Site.

Past Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment;

5.9.13 Previous Assessment and Remediation

The Site was assessed in the 1997 EBS and buried waste and soil, groundwater, and sediment contamination was identified. Metal debris, a crushed drum, and a sheen was observed. Reportedly, test pits were excavated in this area by the Aviation History Society looking for aircraft parts. A drum with aluminum shavings was reportedly encountered. Housekeeping measures were recommended. Remediation work was not completed.

Based on the past land use and the identification of contamination and debris, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.9.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table M.

Table M: Site I – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
I-1	Between runway and taxiways	Former fuel storage, potential maintenance, and engine repair	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.9.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

If contaminated soil is encountered during routine work, the soil should be segregated and assessed. Contaminated soil should be treated on site or disposed offsite.

5.10 Site J

The Site consists of Building 18 and the compound currently used by Parks Canada for woodworking.

5.10.1 Site History

The Site was forested land and in the 1940s clearing and construction started, and the Site has been in use since then.

The Site was historically a recreational facility for the army base. The Site is currently used by Parks Canada and houses a wood shop, a decommissioned fuel dispensing facility, and parking areas for vehicles and equipment.

The area covers approximately 5,000m^2.

5.10.2 Site Use and Physical Appearance

The Site is developed with buildings, used for outdoor storage of wood and equipment and is free of debris.

5.10.3 Natural Setting

The Site is surrounded by airport road to the north, and second growth forest to the south, east and west.

5.10.4 Buildings and Structures

Buildings and structures on the Site consist of the main woodshop and associated outbuildings.

5.10.5 Fill

No suspect fill was observed onsite.

5.10.6 Aboveground and Underground Storage Tanks

No indication of USTs was observed. One reportedly unused double-walled AST for vehicle fuel storage was present on the east side of the compound.

5.10.7 Hazardous Materials

No hazardous materials were observed. Hazardous material suspected in the building consist of solvents and paints used in the wood shop.

Hazardous building materials are present and labelled in the onsite building; however, it is not known if the hazmat survey is comprehensive.

5.10.8 Waste Streams

Wastes generated on site are managed by Parks Canada.

5.10.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.10.10 Drinking Water, Wastewater, Drainage

The Site is serviced with drinking water and is on a septic system. Rainwater drains naturally.

5.10.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.10.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment;

5.10.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, storage of fuel in drums was noted. Further work was not completed.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered moderate.

5.10.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table N.

Table N: Site J – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
J-1	South of Airport Road	Former fuel storage Use of paints and solvents	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.10.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

The unused fuel storage and dispensing system should be decommissioned and removed from the Site.

Solvents and other flammable substances should be contained in approved spill containment and flammable storage.

Prior to any repair or demolition work, all potential hazardous building materials should be identified.

5.11 Site K

The Site consists of Building 38 and compound currently used by Parks Canada for maintenance.

5.11.1 Site History

The Site was forested land and in the 1940s, clearing and construction started

The Site is currently used by Parks Canada for equipment storage, repair and maintenance.

The area covers approximately 3,500m^2.

5.11.2 Site Use and Physical Appearance

The Site is developed with a building, used for maintenance, and is used for outdoor storage of equipment.

5.11.3 Natural Setting

The Site is surrounded by roads to the north, east, and west and the Tofino Air compound and hangar to the south.

5.11.4 Buildings and Structures

Buildings and structures on the Site consist of the maintenance shop.

5.11.5 Fill

No suspect fill was observed onsite.

5.11.6 Aboveground and Underground Storage Tanks

The Site was inspected from the perimeter only. No indication of USTs was observed. ASTs were previously identified at the Site, used for fuel oil and waste oil storage.

5.11.7 Hazardous Materials

Hazardous material suspected in the building consist of solvents paints and lubricants used in the shop.

Hazardous building materials are present and were previously identified; however, it is not known if the hazmat survey is comprehensive and up to date.

5.11.8 Waste Streams

Wastes generated onsite are managed by Parks Canada.

5.11.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted from the Site perimeter.

5.11.10 Drinking Water, Wastewater, and Drainage

The Site is serviced with drinking water and is on a septic system. Rainwater drains naturally.

5.11.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.11.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile above ground or underground storage tanks, except tanks associated with emergency generators or with secondary containment;
- E1 – appliance, equipment or engine repair, reconditioning, cleaning, or salvage; and
- G2 – automotive, truck, bus, subway or other motor vehicle repair, salvage, or wrecking.

5.11.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, the presence of ASTs for waste oil and former fuel storage as well as flammables storage was identified. A floor drain in the building was discharging into the nearby ditch. ACMs were identified. Contamination was identified in the ditch and the location of the former UST. Remediation was not completed.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.11.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table O.

Table O: Site K – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
K-1	South of Airport Road	Former fuel storage Waste Oil Storage Use of paints and solvents Equipment maintenance	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.11.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

Prior to any repair or demolition work, all potential hazardous building materials should be identified.

5.12 Site L

The Site consists of former Building 2, a former mess facility and Building 42, a former garage.

5.12.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The Site was developed with a mess facility and a garage. Demolition of Building 2 was completed in 1987.

The Site covers approximately 3,500m^2.

5.12.2 Site Use and Physical Appearance

The Site is overgrown.

5.12.3 Natural Setting

The Site is surrounded by forest on all sides.

5.12.4 Buildings and Structures

The Site is vacant.

5.12.5 Fill

No suspect fill was observed onsite.

5.12.6 Aboveground and Underground Storage Tanks

No indication of USTs or ASTs was observed.

ASTs and USTs were previously identified at the Site, used for heating oil storage.

5.12.7 Hazardous Materials

No hazardous materials were observed.

5.12.8 Waste Streams

No waste is generated onsite.

5.12.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.12.10 Drinking Water, Wastewater, Drainage

The Site is not serviced. Rainwater drains naturally.

5.12.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.12.12 Schedule 2 Uses

Past CSR Schedule 2 use include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment; and

No current Schedule 2 activities were identified.

5.12.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, and the presence of an AST was reported at Building 2. A site assessment confirmed petroleum hydrocarbons contamination of soil. Remediation was completed in 1997.

Dumping and an abandoned AST was identified at the location of former Building 42. Soil sampling was conducted, and no soil contamination was identified.

The risk for residual contamination is considered low.

5.12.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table P.

Table P: Site L – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
L 1	North of Airport Road	Former fuel storage	Soil: VOC/VPH, LEPH/HEPH/PAH Groundwater: VOC/VPH, LEPH/HEPH/PAH Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.12.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. The Site was remediated and the potential for residual contamination is considered low. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.13 Site M

The Site consists of the area of former Building 35, 36, and other buildings. The former use of the buildings is unknown. Building 36 is currently used for residential purpose.

5.13.1 Site History

The Site was forested land and in the 1940s clearing and construction of several buildings started. The buildings, except Building 36, were demolished.

The area covers approximately 2,500m^2.

5.13.2 Site Use and Physical Appearance

The Site is developed with one residential building.

5.13.3 Natural Setting

The Site is surrounded by second growth forest in all directions.

5.13.4 Buildings and Structures

One building is present on the Site.

5.13.5 Fill

No suspect fill was observed onsite.

5.13.6 Aboveground and Underground Storage Tanks

No indication of USTs or ASTs was observed.

5.13.7 Hazardous Materials

Hazardous building materials are likely present.

5.13.8 Waste Streams

Wastes generated onsite consist of domestic waste.

5.13.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted from the site perimeter.

5.13.10 Drinking Water, Wastewater, Drainage

The Site is serviced with drinking water and is on a septic system. Rainwater drains naturally.

5.13.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.13.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment; and
- H5 – landfilling of construction demolition material, including without limitation asphalt and concrete.

5.13.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, three issues were identified, consisting of fill with building debris in the gully, an abandoned fuel tank and drums, and discharge of a septic tank overflow into the gully.

The Site was assessed in 1998 and remediated. The potential for residual contamination is considered low.

5.13.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified two APECs and associated PCOCs, which are summarized in Table Q.

Table Q: Site M – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
M-1	Building 36	Former fuel storage	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH
M-2	Gully	Demolition debris landfilling	Soil: LEPH/HEPH/PAH, metals, asbestos Groundwater: LEPH/HEPH/PAH, metals Vapour: PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.13.15 Conclusions and Recommendations

The Site is slated for redevelopment. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

The environmental issues at the Site were reportedly addressed through remediation; however, it is likely building debris remains in the gully and that the soil with debris in the gully will not meet current environmental standards for clean fill.

Prior to any repair or demolition work, all potential hazardous building materials should be identified in the on-site building.

5.14 Site N

The Site consists of a former and current fuel storage and dispensing area for aircraft, as well as the terminal and maintenance building

5.14.1 Site History

The Site was forested land and in the 1940s, clearing and construction started.

The Site is currently used to store and dispense fuel, store maintenance equipment, and operate the terminal.

The area covers approximately 4,000m^2.

5.14.2 Site Use and Physical Appearance

The Site is used for fuel storage and dispensing and appeared in a good condition. Some unused materials are stored onsite as well, consisting of empty plastic drums and ladders.

5.14.3 Natural Setting

The Site is surrounded by the concrete apron and grassed areas.

5.14.4 Buildings and Structures

The Site is developed with aboveground fuel storage tanks, dispensing equipment, concrete enclosures, an oil/water interceptor and two small storage buildings.

5.14.5 Fill

No suspect fill was observed on site.

5.14.6 Aboveground and Underground Storage Tanks

The Site has two double walled tanks, set in a concrete enclosure. One AST (38,000L capacity) is used for kerosine storage, one AST (19,000L) capacity) is used for aviation gas storage.

5.14.7 Hazardous Materials

Hazardous materials in the building consist of lubricants.

5.14.8 Waste Streams

Wastes are disposed of in a metal waste receptacle, managed by the airport authority.

5.14.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.14.10 Drinking Water, Wastewater, Drainage

The Site is serviced not serviced with drinking water, runoff from the concrete apron is collected in a catch basin and treated in an oil water separator. Rain water in grassed areas drains naturally.

5.14.11 Interviews

Mr. Fortune identified that no spills were reported at the site and that the buildings are not used for lubricant storage.

5.14.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.14.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, the presence of soil contamination was identified.

A UST was decommissioned, and oily water from the UST treated onsite. Soil contamination from the UST vicinity was remediated. Groundwater monitoring was completed in subsequent years.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low.

5.14.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which is summarized in Table R.

Table R: Site N – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
R-1	?	Former and current fuel storage	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.14.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.15 Site O

The Site consists of the former bomber hangar and is currently used by Tofino Air and Atleo Air. A detailed audit of the operation was outside the scope of this investigation.

5.15.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The original hangar was removed by 1982.

The Site is currently used by Tofino Air for aircraft storage, repair, and maintenance.

The area covers approximately 2,300m^2.

5.15.2 Site Use and Physical Appearance

The Site is developed with a several buildings, used for aircraft storage, repair, and maintenance.

5.15.3 Natural Setting

The Site is surrounded by concrete aprons to the east and west, the taxiway to the south and the perimeter fence to the north.

5.15.4 Buildings and Structures

Buildings and structures on the Site consist of metal and wood-frame buildings.

5.15.5 Fill

No suspect fill was observed onsite.

5.15.6 Aboveground and Underground Storage Tanks

ASTs were identified at the Site, used for fuel and waste oil storage.

5.15.7 Hazardous Materials

Hazardous material suspected in the building consist of solvents paints and lubricants used in the shop.

Hazardous building materials are likely present.

5.15.8 Waste Streams

Wastes generated onsite are managed by the tenant and include commercial waste and waste oil.

5.15.9 Stains, Odours, and Stressed Vegetation

Stains are present on the surface of the concrete.

5.15.10 Drinking Water, Wastewater, and Drainage

The Site is serviced with drinking water and is on a septic system. Rain water drains naturally.

5.15.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.15.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F 7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment;
- E1 – appliance, equipment or engine repair, reconditioning, cleaning, or salvage; and
- G2 – automotive, truck, bus, subway, or other motor vehicle repair, salvage, or wrecking.

5.15.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, assessment identified contamination of soil and sediment. Soil and sediment were remediated in the 1997-1998 remediation program.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.15.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table S.

Table S: Site O – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
O – 1		Former fuel storage Waste Oil Storage Use of paints and solvents Equipment maintenance	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.15.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. At the closing of the current operation, before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

Prior to any repair or demolition work, all potential hazardous building materials should be identified.

5.16 Site P

The Site consists of the former fighter hangar and is currently used by the airport for storage of equipment and materials.

A detailed audit of the operation was outside the scope of this investigation.

The area covers approximately 2,000m^2.

5.16.1 Site Use and Physical Appearance

The Site is developed with a building used for storage.

5.16.2 Natural Setting

The Site is surrounded by forest to the north, east, and west, cleared areas to the east and a taxiway to the south.

5.16.3 Buildings and Structures

Buildings and structures on the Site consist of metal and wood-frame buildings.

5.16.4 Fill

No suspect fill was observed onsite.

5.16.5 Aboveground and Underground Storage Tanks

No ASTs or USTs were identified on the Site.

5.16.6 Hazardous Materials

Hazardous material suspected in the building consist of solvents paints and lubricants used in the shop.

5.16.7 Waste Streams

Waste is not generated on the Site.

5.16.8 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation was observed.

5.16.9 Drinking Water, Wastewater, Drainage

The Site is not serviced.

5.16.10 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.16.11 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment;
- E1 – appliance, equipment or engine repair, reconditioning, cleaning, or salvage;
- G2 – automotive, truck, bus, subway or other motor vehicle repair, salvage, or wrecking; and
- H5 – landfilling of construction demolition material, including without limitation asphalt and concrete.

5.16.12 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, assessment identified contamination of soil, sediment, and surface water and the presence of buried waste, consisting of metal debris and building materials and mechanical equipment.

The soil and sediment at the Site was remediated and debris was removed in 1997/1998.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low for past issues, but high from current operations.

5.16.13 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table T.

Table T: Site P – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
P – 1	Apron	Former fuel storage Waste Oil Storage Use of paints and solvents Equipment maintenance	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH
P – 2	Gully	Demolition debris landfilling	Soil: LEPH/HEPH/PAH, metals, asbestos Groundwater: LEPH/HEPH/PAH, metals Vapour: PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.16.14 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. At the closing of the current operation, before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

Prior to any repair or demolition work, all potential hazardous building materials should be identified.

5.17 Site Q

The Site consists of the former army camp #3.

5.17.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The buildings were removed by 1954.

The Site is currently vacant and covers approximately 10,000m^2.

5.17.2 Site Use and Physical Appearance

The Site is vacant and overgrown with trees.

5.17.3 Natural Setting

The Site is surrounded by roads to the north, east, and west and the Tofino Air compound and hangar to the south.

5.17.4 Buildings and Structures

No buildings or structures are present on the Site.

5.17.5 Fill

No suspect fill was observed onsite.

5.17.6 Aboveground and Underground Storage Tanks

No indication of AST or UST presence was observed.

5.17.7 Hazardous Materials

No hazardous materials were observed on site.

5.17.8 Waste Streams

No waste is generated onsite.

5.17.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.17.10 Drinking Water, Wastewater, Drainage

The Site is not serviced.

5.17.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.17.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses were not identified.

5.17.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, a concrete trench with sludge was identified and metal concentrations in the sludge exceeded the regulatory thresholds applied. The risk from the contaminated sludge was considered low and remediation was not recommended.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.17.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table U.

Table U: Site Q – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
Q – 1	Concrete trench	Unknown	Soil: metals Groundwater: metals Vapour: none

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.17.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.18 Site R

The Site consists of the former 25-yard shooting range.

5.18.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The Site was used as a range to align aircraft guns.

The Site is currently vacant and covers approximately 300 m^2.

5.18.2 Site Use and Physical Appearance

The Site is developed with a concrete butt stop.

5.18.3 Natural Setting

The Site is surrounded by forest and grassed areas to the northeast and west and by a taxiway to the south.

5.18.4 Buildings and Structures

Buildings and structures on the Site consist of the concrete butt stop and adjacent rooms.

5.18.5 Fill

No suspect fill was observed onsite.

5.18.6 Aboveground and Underground Storage Tanks

No indication of AST or UST presence.

5.18.7 Hazardous Materials

No hazardous materials were observed.

5.18.8 Waste Streams

No wastes are generated onsite.

5.18.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.18.10 Drinking Water, Waste Water, and Drainage

The Site is not serviced.

5.18.11 Interviews

Mr. Fortune indicated that the Site was assessed, contamination was not identified and all bullets were historically removed for recycling.

5.18.12 Schedule 2 Uses

Past CSR Schedule 2 uses include:

- E6 – outdoor firearm shooting range.

5.18.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, and soil and groundwater sampling was conducted in 1997. Marginal soil contamination was identified in one sample for arsenic. Lead concentrations in soil were below the applied thresholds and would meet current standards.

Groundwater contamination by metals of concern was not identified, although iron and manganese exceeded the applied criteria.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered moderate.

5.18.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table V.

Table V: Site R – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
R-1	North of taxiway	Outdoor range	Soil: metals Groundwater: metals Vapour: none

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.18.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

Prior to any repair or demolition work, all potential hazardous building materials should be identified.

5.19 Site S

The Site consists of the former gasoline storage area.

5.19.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The Site appears decommissioned on the 1954 aerial photograph and is overgrown on the 1969 aerial photograph.

The Site is currently vacant and overgrown.

The area covers approximately 1,500m^2.

5.19.2 Site Use and Physical Appearance

The Site is vacant and overgrown.

5.19.3 Natural Setting

The Site is surrounded by forest to the north, south, east, and west.

5.19.4 Buildings and Structures

No buildings or structures are present onsite.

5.19.5 Fill

No suspect fill was observed onsite.

5.19.6 Aboveground and Underground Storage Tanks

No indication of ASTs or USTs was observed. Previous USTs were decommissioned.

5.19.7 Hazardous Materials

No hazardous materials are present onsite.

5.19.8 Waste Streams

No wastes are generated onsite.

5.19.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.19.10 Drinking Water, Wastewater, Drainage

The Site is not serviced.

5.19.11 Interviews

Mr. Fortune indicated that no activities occurred at the Site after the remediation was completed.

5.19.12 Schedule 2 Uses

Past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.19.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, and further assessed. Four USTs were removed, and the site remediated in 1998. Groundwater was found to be compliant in 2004.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered low.

5.19.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table W.

Table W: Site S – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
S – 1	East of taxiway	Former fuel storage	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.19.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

5.20 Site T

The Site consists of the Tofino Golf course, formerly known as the Long Beach Recreation Cooperative.

5.20.1 Site History

The Site was forested land and in the 1940s clearing and development started. For WWII, the Site was developed with four bunkers to store ordnance.

In 1986, the golf course and clubhouse were constructed. The Long Beach Airport terminal building, consisting of mobile structures, was located on site in the 1990s. The area covers approximately 50,000m^2.

5.20.2 Site Use and Physical Appearance

The Site is developed with a clubhouse, maintenance buildings, a golf course, and a campground. The Site is in good condition.

5.20.3 Natural Setting

The Site is surrounded by roads to the west, the airport taxiways and runways to the east, and forest to the north and south.

5.20.4 Buildings and Structures

Buildings and structures on the Site consist of the clubhouse, camp site kiosk and maintenance buildings.

5.20.5 Fill

No suspect fill was observed onsite.

5.20.6 Aboveground and Underground Storage Tanks

A detailed inventory of USTs and ASTs was outside the scope of work.

5.20.7 Hazardous Materials

Hazardous material suspected in use include paints, fuels, lubricants, pesticides, herbicides, and fertilizers.

Hazardous building materials are likely present.

5.20.8 Waste Streams

Wastes generated onsite are managed by the Golf Course, using a commercial hauler.

5.20.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted from the Site perimeter.

5.20.10 Drinking Water, Wastewater, Drainage

The Site is serviced with drinking water and is on a septic system. Rainwater drains naturally.

5.20.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.20.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F 7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment; and
- G2 – automotive, truck, bus, subway or other motor vehicle repair, salvage, or wrecking.

5.20.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS and the presence of an ASTs for gasoline storage and dispensing, a drum for diesel storage and dispensing and a sheen on the water close to the tank and drum was noted. Various debris was notated, dumped in a gully adjacent to the apron. The debris consisted of various scrap metal, vehicles, but also paint cans and other debris.

Fertilizers, herbicides, and pesticides as well as lubricants and part cleaners are stored and handled in the bunkers and maintenance shed.

The previous audit in 1995 identified the presence of drums containing waste oil, and the area of waste oil storage was found to show a sheen, stained soil, and stressed vegetation in 1997.

No further assessment or remediation was conducted at the Site.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered moderate to high.

5.20.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified three APECs and associated PCOCs, which are summarized in Table X.

Table X: Site T – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
T-1	Bunkers and maintenance building	Former fuel storage Waste Oil Storage Use of paints and solvents Equipment maintenance Fertilizer, herbicide and pesticide storage	Soil: VOC/VPH, LEPH/HEPH/PAH, metals, herbicides, pesticides, nitrate Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals herbicides, pesticides, nitrate Vapour: VOC, VPH, PAH
T-2	Gully dump	Waste disposal	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
LEPH= light/heavy extractable petroleum hydrocarbons
VPH = volatile petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.20.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require assessment in accordance with the BC CSR.

At the time of redevelopment, the findings of the Stage 1 PSI would require a detailed update.

Prior to any repair or demolition work, all potential hazardous building materials should be identified.

5.21 Site U

The Site consists of a former borrow pit.

5.21.1 Site History

The Site was forested land and in the 1940s clearing started. The Site was used as a borrow pit and in the 1950s and then in the 1960s used as a landfill. At the time of the1997 EBS, the Site was overgrown and metal debris, including a partial automotive body protruded from the ground,

The area covers approximately 10,500m^2.

5.21.2 Site Use and Physical Appearance

The Site is vacant and overgrown, portions of the site are cleared and vegetation height is managed for air traffic safety.

5.21.3 Natural Setting

The Site is bordered by forest and the highway in the south and east, a taxiway and runway to the north and forest to the west. The Site is sloping to the southeast towards the bay.

5.21.4 Buildings and Structures

The Site was inspected from the distance; no buildings or structures are on the Site.

5.21.5 Fill

Historically the Site was a borrow pit and landfill.

5.21.6 Aboveground and Underground Storage Tanks

The Site was inspected from the distance, no indication of ASTs or USTs was observed.

5.21.7 Hazardous Materials

Hazardous materials suspected in the landfill consists of waste, including building debris and asbestos.

5.21.8 Waste Streams

No wastes are generated onsite.

5.21.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted from the site perimeter.

5.21.10 Drinking Water, Wastewater, Drainage

The Site is not serviced. Rainwater drains naturally.

5.21.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992.

5.21.12 Schedule 2 Uses

Past CSR Schedule 2 uses include:

- H1 – municipal waste storage, recycling, composting, or landfilling; and
- H5 – landfilling of construction demolition material, including without limitation asphalt and concrete.

5.21.13 Previous Assessment and Remediation

The Site was identified in the 1997 EBS, and subsequently assessed in stages. Metal contamination was identified in soil, surface water, groundwater, and sediment.

A Preliminary Quantitative Risk Assessment was conducted at the Site from 2006 to 2008 and no unacceptable human health or ecological risk was identified for the land use at the time. The risk management approach required to maintain the Site configuration and use as in the report assumptions.

Based on the past and current land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.21.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table Y.

Table Y: Site U – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
U-1	East of highway and Esowista	Waste disposal	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Surface Water: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.21.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning, redevelopment, site disturbance or reconfiguration, the Site would require assessment in accordance with the BC CSR.

5.22 Site V

The Site consists of a former dump site south of runway 7-25.

5.22.1 Site History

The Site was forested land and in the 1940s clearing started. The Site was used for aircraft storage and maintenance, based on aerial photographs from the 1940s. The Site is unused since the 1950s.

The Site is currently vacant and overgrown. The area covers approximately 1,000m^2.

5.22.2 Site Use and Physical Appearance

The Site is vacant and overgrown, the vegetation height is managed.

5.22.3 Natural Setting

The Site is surrounded by a runway to the north, and managed forest to the east, south, and west.

5.22.4 Buildings and Structures

Buildings and structures are not present on the Site.

5.22.5 Fill

No suspect fill was observed onsite.

5.22.6 Aboveground and Underground Storage Tanks

No indication of AST or USTs presence was observed.

5.22.7 Hazardous Materials

No hazardous materials are present onsite.

5.22.8 Waste Streams

Wastes are not generated onsite.

5.22.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted from the Site perimeter.

5.22.10 Drinking Water, Wastewater, and Drainage

The Site is not serviced. Rainwater drains naturally.

5.22.11 Interviews

Mr. Fortune indicated that the Site has been largely unchanged since 1992. He had noticed metal and other equipment debris at the surface in the past and knows from photo evidence that the Site was developed with a hangar at the beginning of the airport construction.

5.22.12 Previous Assessment and Remediation

The Site was identified in the 1997 EBS and assessed. Metal and glass debris was identified in a gully and soil contamination was identified. Surface water and sediment contamination was not identified downgradient of the site and the contamination was considered to be minor.

No further work was conducted.

Based on the past land use, the potential for residual contamination of media at concentrations exceeding the BC CSR standards is considered high.

5.22.13 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table Z.

Table Z: Site V – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
V-1	South of runway 07-25	Waste disposal	Soil: VOC/VPH, LEPH/HEPH/PAH, metals Groundwater: VOC/VPH, LEPH/HEPH/PAH, metals Surface Water: VOC/VPH, LEPH/HEPH/PAH, metals Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds
VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons
PAH = polycyclic aromatic hydrocarbons

5.22.14 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning, redevelopment, site disturbance or reconfiguration, the Site would require assessment in accordance with the BC CSR.

5.23 Site W

The Site consists of the former drain field for sewage disposal for Esowista.

5.23.1 Site History

The Site was forested land and in the 1940s clearing started. The drain field was decommissioned in 2016, when Esowista was connected to the municipal sewer system.

The Site is currently vacant, and vegetation is managed.

The area covers approximately 3,500m^2.

5.23.2 Site Use and Physical Appearance

The Site is vacant and part of the managed vegetation area of the airport.

5.23.3 Natural Setting

The Site is south of the runway and several gullies drain to the south.

5.23.4 Buildings and Structures

Buildings and structures are not present on the Site.

5.23.5 Fill

No suspect fill was observed onsite.

5.23.6 Aboveground and Underground Storage Tanks

No indication of ASTs or USTs was observed.

5.23.7 Hazardous Materials

Hazardous materials are not expected.

5.23.8 Waste Streams

No wastes are generated onsite.

5.23.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted from the site perimeter.

5.23.10 Drinking Water, Wastewater, Drainage

The Site is a septic field. Rainwater drains naturally.

5.23.11 Interviews

Interviews were not completed.

5.23.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses did not occur onsite.

5.23.13 Previous Assessment and Remediation

The Site was identified in the 1997 Phase 1 Environmental Audit Update. The report identified the potential that untreated sewage may contaminated the surface water downgradient of the drain field during times of high water table.

The surface water downgradient of the drain field was sampled in the 1997 field program. The results showed only low concentrations of nutrients and fecal coliform bacteria and concluded that there are no significant impacts. The report recommended a regimented monitoring program.

5.23.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, no APEC was identified.

5.23.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time.

5.24 Site X

The Site consists of a former airport tower.

5.24.1 Site History

The Site was forested land and in the 1940s clearing and construction started. The tower is present on the 1954 aerial photograph, but not from the 1969 aerial photograph onwards.

The Site was developed with a control tower and covers an area of approximately 500m^2.

5.24.2 Site Use and Physical Appearance

The Site is currently vacant, an abandoned UST was identified during ditch grading.

5.24.3 Natural Setting

The Site is surrounded by a taxiway to the southwest, cleared areas to the southeast and northwest and forest to the northeast.

5.24.4 Buildings and Structures

No buildings are present on the Site.

5.24.5 Fill

No suspect fill was observed onsite.

5.24.6 Aboveground and Underground Storage Tanks

An abandoned UST, assumed to be used for heating fuel was identified onsite, measuring approximately 1.8m in diameter and 4.5m long. The UST was about 70% full with water.

5.24.7 Hazardous Materials

No hazardous materials are present.

5.24.8 Waste Streams

No wastes are generated onsite.

5.24.9 Stains, Odours, and Stressed Vegetation

No stains, odours, or stressed vegetation were noted.

5.24.10 Drinking Water, Wastewater, and Drainage

The Site is not serviced. Rainwater drains naturally.

5.24.11 Interviews

Mr. Fortune indicated that the UST was encountered when an excavator conducted routine ditch maintenance in recent years. Transport Canada was notified. No follow-up action occurred.

5.24.12 Schedule 2 Uses

Current and past CSR Schedule 2 uses include:

- F7 – petroleum product (other than compressed gas), or produced water storage in non-mobile ASTs or USTs, except tanks associated with emergency generators or with secondary containment.

5.24.13 Previous Assessment and Remediation

The Site was not captured in past assessment programs and is a new discovery.

5.24.14 Areas of Potential Environmental Concern

Based on the information gathered during the Stage 1 PSI, PGL identified one APEC and associated PCOCs, which are summarized in Table AA.

Table AA: Site X – APECs and PCOCs

APEC	Location	Activity of Concern	PCOCs
X-1	North of taxiway	Former fuel storage	Soil: VOC/VPH, LEPH/HEPH/PAH Groundwater: VOC/VPH, LEPH/HEPH/PAH Vapour: VOC, VPH, PAH

Notes: VOC = volatile organic compounds VPH = volatile petroleum hydrocarbons
LEPH= light/heavy extractable petroleum hydrocarbons PAH = polycyclic aromatic hydrocarbons

5.24.15 Conclusions and Recommendations

The Site is not slated for redevelopment and no further work is recommended at this time. Before rezoning or redevelopment, the Site would require the removal of the UST and assessment in accordance with the BC CSR.

6.0 SUMMARY

Based on our Stage 1 PSI, we have identified APECs and associated PCOCs at the Long Beach Airport. Most APECs identified in this Stage 1 PSI had been addressed through site assessments and remediation, or risk assessment as part of the divestiture process and remediated to the regulatory standards applicable at that time.

APECs that went through physical remediation have a low potential to have significant contamination remaining.

APECs that went through a risk assessment process have a moderate to high potential to have significant contamination remaining. The common risk management approach was to maintain the APECS in the condition that they were at the time of the risk assessment. Any disturbance of these sites may expose ecological receptors or humans to contaminants.

Some APECs that were identified and investigated in the past were at that time considered to have only minor potential for contamination or that the identified contamination only poses an insignificant risk. These areas have a moderate to high potential to have significant contamination remaining.

Areas of the Site that had past or current Schedule 2 uses must follow the process of the BC *Environmental Management Act* and CSR to identify, assess and remediate the sites to facilitate rezoning or redevelopment. For the redevelopment of parcels with APECs that had a BC CSR Schedule 2 activity, it will be required to provide a Site Disclosure Statement to the appropriate authorities. The Site Disclosure Statement will trigger the requirement to conduct a Stage 1 and 2 PSI at the APECs on the respective parcels. If the Stage 2 PSI demonstrates that the development areas and APECs outside of the development areas are not contaminated, the parcel is considered not contaminated and can be developed. If the Stage 2 PSI demonstrates that the development areas are not contaminated, but APECs outside of the development areas are contaminated, steps can be taken towards regulatory instruments (Determinations) that cover portions of the parcels, such as the development areas. This process would require pre-approval from the Ministry.

While it is not necessary to conduct an airport-wide Stage 2 PSI at this time, it will be necessary to conduct additional investigations in those locations that are scheduled for redevelopment. As areas are identified for redevelopment, these areas should be further investigated, and the results compared to the current BC CSR standards. If required, several APECs can be grouped together for Stage 2 PSIs of specific areas. If regulatory instruments, such as a Determination or a Certificate of Compliance are required for the rezoning process, such instruments can be applied for on an area-by-area basis. If a Certificate of Compliance is required for an area, a site-specific detailed update of the Stage 1 PSI will be required, followed by a Stage 2 PSI. Table BB provides a summary of the legal parcel IDs cross-referenced to APECs and development areas. Table CC provides a summary of the development areas cross referenced to APECs.

Table BB: Summary of PIDs and APECs and Development Areas

Legal Lot PID	APECs Present	Development Area	CSR Investigation Required
024-749-419	None	No	No
024-749-397	None	No	No
010-157-913	None	No	No
024-158-569	None	No	No
024-159-034	T-1, T-2	No	No
010-322-451	R-1, S-1, T-2, Q-1, X-1	No	No
024-100-145	K-1, M-1, M-2, P-1, Q-1	Yes: 1, 2, 3	Yes
024-100-137	A-1, A-2, B-1, J-1, L-1	Yes: 4, 5, 6, 7	Yes
024-100-153	A-3, A-4, C-1, D-1, F-1	Yes: 6, 8, 9A	Yes
024-749-389	T-1, T-2	No	No
024-158-666	None	No	No
024-749-435	T-2, U-1	No	No
009-392-351	I-1, K-1, N-1, O-1	Yes: 1	Yes
009-392-335	I-1, V-1	Yes: 7, 9C	Yes

Legal Lot PID	APECs Present	Development Area	CSR Investigation Required
009-392-319	D-1, E-1, G-1, H-1	Yes: 8, 9A, 9B, 9C	Yes

Table CC: Summary of Development Areas and APECs

Development Area	Legal Lot PID	APECs Present	CSR Investigation Required
1	024-100-145 and 009-392-351	O-1	Yes
2	024-100-145	None	No
3	024-100-145	M-1	Yes
4A	024-100-137	None	No
4B	024-100-137	L	Yes
5	024-100-137	None	No
6	024-100-137	None	No
7A	009-392-335	None	No
7B	024-100-153 024-100-137	None	No
8	009-392-319	None	No
9A	024-100-153 009-392-319	None	No
9B	009-392-319	G	Yes
9C	009-392-319	None	No
9D	009-392-319	None	No

It is possible that additional contaminated areas that have not been identified as part of this study or previous studies are present at the airport property, such as areas that were not visible through aerial photograph reviews, were not known to airport personnel and are overgrown. Such areas can be identified by the observation of odorous soil, discoloured or odorous seepage water, surface, and subsurface debris including glass, metal, vehicles parts or building material. If such areas are encountered during future work, a qualified environmental consultant should be notified.

Based on photographs and interviews, firefighting equipment at the airport consisted historically of water trucks and CO_2 extinguishers. There is no indication that a fire fighter training area existed at the airport that used aqueous film forming foam, containing per- and poly-fluoroalkyl substances. AFFF was not in use until the 1960s.

7.0 PROFESSIONAL STATEMENT

Pursuant to the requirements of Part 16 of the CSR, PGL affirms that:

- This documentation has been prepared in accordance with all requirements of the *Waste Management Act* and Regulations; and
- The persons signing this report have demonstrable experience with this type of investigation and the Site conditions.

8.0 STATEMENT OF LIMITATIONS AND CONDITIONS FOR REPORT

8.1 Complete Report

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment are a part of the Report, which is of a summary nature and is not intended to stand alone without reference to the instructions given to PGL by the Client, communications between PGL and the Client, and any other reports, proposals or documents prepared by PGL for the Client relative to the specific site described herein, all of which together constitute the Report.

In order to properly understand the suggestions, recommendations and opinions expressed herein, reference must be made to the whole of the Report. **PGL is not responsible for use by any part of portions of the Report without reference to the whole report.**

8.2 Basis of Report

The Report has been prepared for the specific site and purposes that are set out in the contract between PGL and the Client. The findings, recommendations, suggestions, or opinions expressed in the Report are only applicable to the site and purposes in relation to which the Report is expressly provided, and then only to the extent that there has been no material alteration to or variation from the information provided or available to PGL.

8.3 Use of the Report

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. No other party may use or rely upon the Report or any portion thereof without PGL's written consent, and such use shall be on terms and conditions as PGL may expressly approve. Ownership in and copyright for the contents of the Report belong to PGL. Any use which a third party makes of the Report, is the sole responsibility of such third party. **PGL accepts no responsibility whatsoever for damages suffered by any third party resulting from use of the Report.**

Respectfully submitted,

PGL ENVIRONMENTAL CONSULTANTS

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SEG/IPL/TEB/slr
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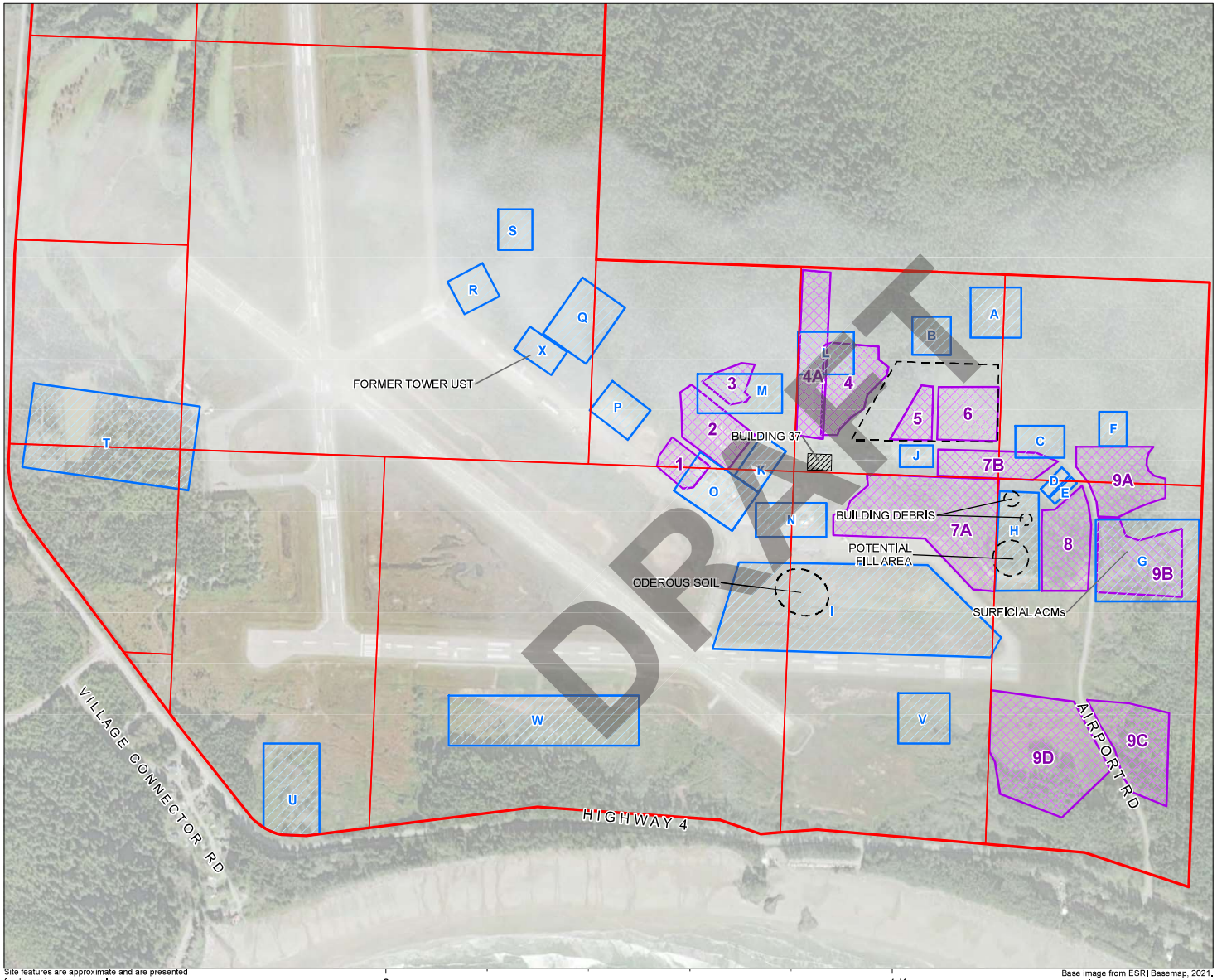

N

- Airport Boundary
- Parcel Boundary
- Investigation Sites
- Future Development Area
- Possible amalgamation

Site features are approximate and are presented for discussion purposes only.

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Base image from ESRI Basemap, 2021.
Parcel data from Open Data BC, 2019.

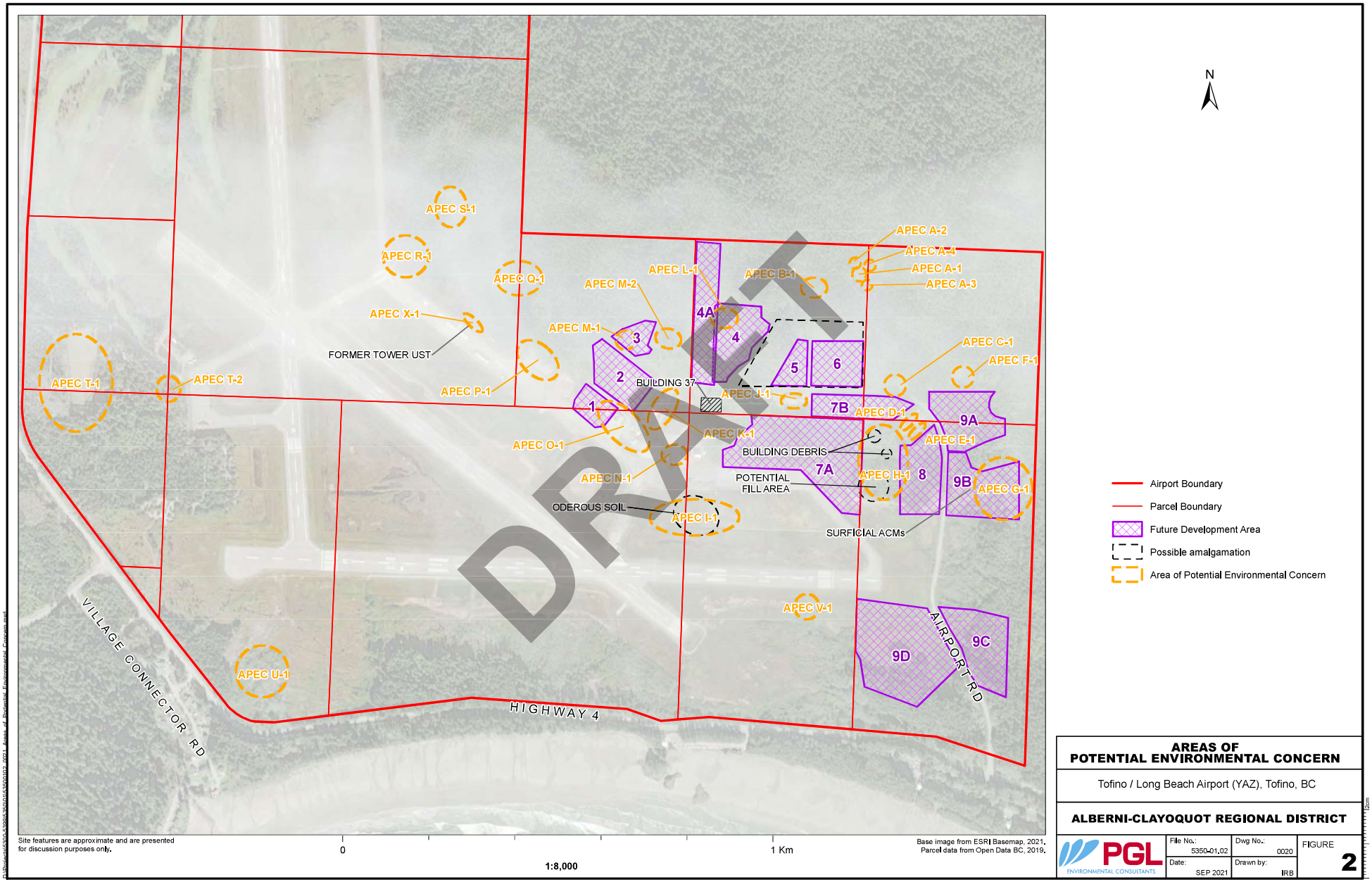
SITE PLAN AND AREAS OF FUTURE DEVELOPMENT

Tofino / Long Beach Airport (YAZ), Tofino, BC

ALBERNI-CLAYOQUOT REGIONAL DISTRICT

PGL ENVIRONMENTAL CONSULTANTS

File No.:	Dwg No.:	FIGURE
5350-01.02	0011	1
Date: SEP 2021	Drawn by: IRB	



AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Tofino / Long Beach Airport (YAZ), Tofino, BC

ALBERNI-CLAYOQUOT REGIONAL DISTRICT

PGL ENVIRONMENTAL CONSULTANTS

File No.:	Dwg No.:	FIGURE
5350-01.02	0020	2
Date: SEP 2021	Drawn by: IRB	