Karger, Kristina TRAN:EX

From: Watt, Stephen TRAN:EX
Sent: Thursday, October 18, 2012 15:07
To: Ree, Terrance TRAN:EX
Cc: Thompson, Bob R OHCS:EX
Subject: RE: Fire Alarm questions / 485519

A fire alarm system is required as per the BC Building Code Terry.

This message is intended to assist in the understanding of the interpretation and requirements of the Fire Services Act and pursuant regulations. It is not intended to provide legal advice and should not be relied upon as such. It is also not intended to replace the need to consult the legislation and regulations for their application in a particular situation. In the event of a conflict between the legislation and this message, the legislation will prevail." As part of the Code development process, this message may be sent to the Building and Safety Standards Branch.

Sincerely,

Stephen Watt
Codes and Standards Coordinator
Office of the Fire Commissioner

BRITISH COLUMBIA | Emergency ManagementBC

Phone: 250-952-5025
OFC 24 Hour Contact Number 1-888-988-9488

From: Ree, Terrance JAG:EX
Sent: Thursday, October 18, 2012 2:54 PM
To: Watt, Stephen JAG:EX
Subject: FW: Fire Alarm questions / 485519

From: Lang, Lorraine JAG:EX
Sent: Thursday, October 18, 2012 12:24 PM
To: Ree, Terrance JAG:EX
Subject: FW: Fire Alarm questions / 485519

Hi Terry.

For your response.
CLIFF #485519

Thanks,

Lorraine Lang
Administrative Assistant

Strategic Business Services
Emergency Management BC
Block A - Suite 200
2261 Keating Cross Road
Saanichton BC V8M 2A5 Canada
www.pep.bc.ca
Ph: 250.952.4913 Fax: 250 952.4888
24 hour Emergency Reporting: 1.800.663.3456

From: Rob Black [mailto:rblack@qrinc.ca]
Sent: Thursday, October 18, 2012 8:27 AM
To: OFC, OFC
Subject: Fire Alarm questions

Good Day,

I have some questions regarding Fire protection systems in remote camps. I can not find any documentation for requirements of fire alarm systems. I know that if units are separated by at least 10 meters they do not need to have the alarms connected. What if the buildings are spaced at 10 meters but are connected by a common corridor? I have attached a sample for reference. Any information would be greatly appreciated.

Thank you,

Rob Black

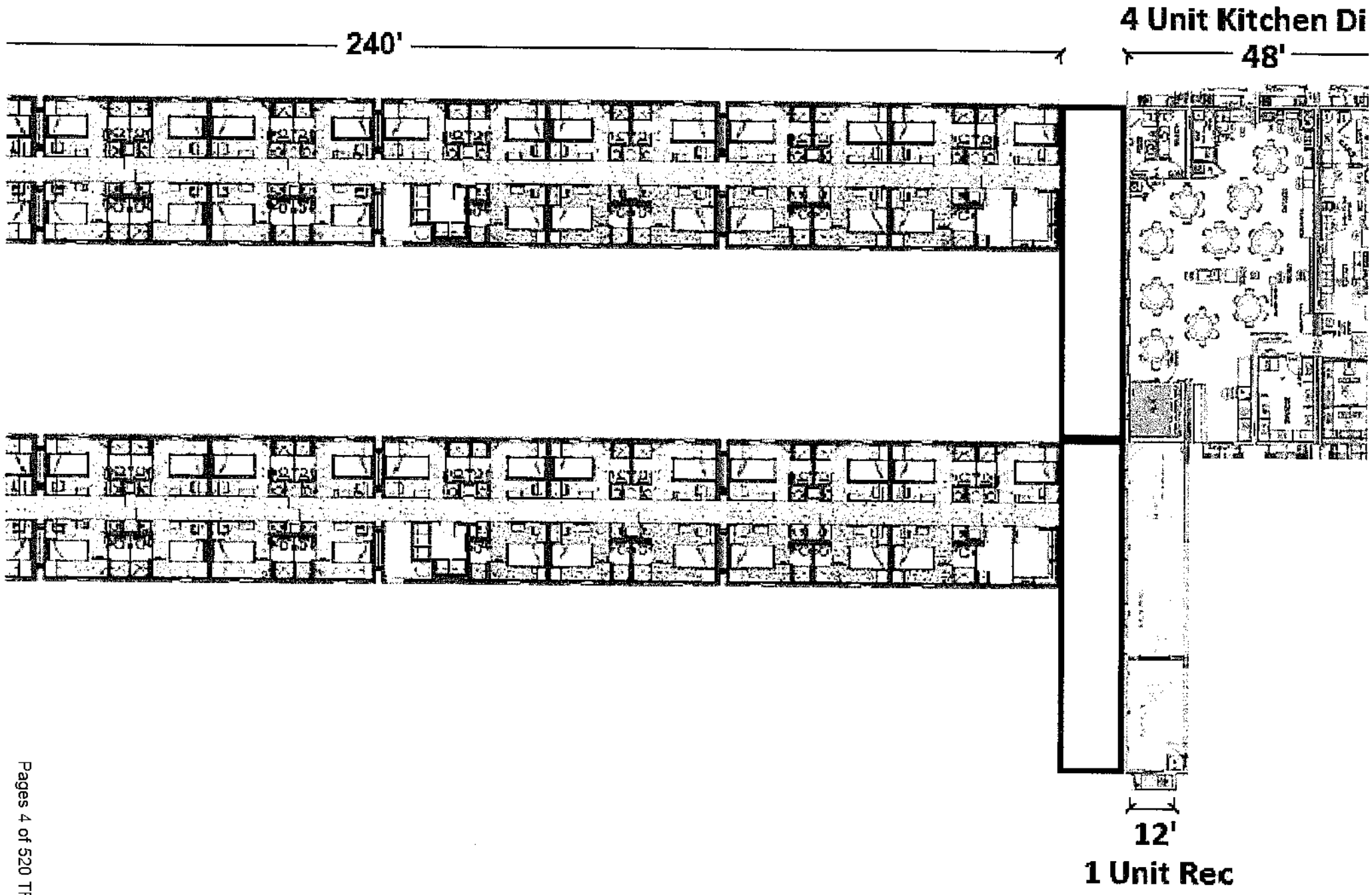
Sr. HSE Advisor
Quicksilver Resources Canada Inc.
Horn River Project Area
250-500-2513
403-348-7647
bc-hse@qrinc.ca
rblack@qrinc.ca
Website: www.qrinc.ca

Karger, Kristina TRAN:EX

From: Ted Vanderwal <tvanderwal@blackdiamondcamps.com>
Sent: Monday, January 7, 2013 13:27
To: Ree, Terrance TRAN:EX
Subject: black diamond job liard
Attachments: 60 Person Camp corridor.pdf

Ted Vanderwal
Project Manager
Black Diamond Structures Division
D: 780.733.4567 | O: 780.447.2060 | C: 780.288.8923 | F: 780.447.2065
21420 113 Avenue, Edmonton, Alberta T5S 2B3

BLACK DIAMOND GROUP


240'
4 Unit Kitchen Di
48'
12'
1 Unit Rec

Karger, Kristina TRAN:EX

From: Thompson, Bob R OHCS:EX
Sent: Monday, August 26, 2013 12:02
To: Ree, Terrance TRAN:EX
Subject: RE: Mobile Home

Hi Terry,

s.22

I'm not aware that mobile homes have ever been afforded spatial separation requirements different from conventional homes but I dare say that mobile homes in parks may have slipped under the radar over the years. There is a long standing requirement in Section 9.10.21., Fire Protection for Construction Camps, that such buildings be 10 m apart unless they conform to the spatial separation requirements of Sections 9.10.14. or 9.10.15. This could serve as a starting point for assessing a mobile home park rather than doing calculations for each unit under 9.10.15. Something to think about is the fire resistance of the exterior walls of older mobile homes finished with thin wood paneling on the interior. Conventional site-built houses have used plaster or gyproc for a very long time and although not assigned a fire resistance rating by the Code that type of construction may have influenced the spatial separation provisions in Part 9.

Regards,

Bob Thompson
Senior Codes Administrator
Building & Safety Standards Branch
Office of Housing & Construction Standards
Province of British Columbia
250 213-6680

From: Ree, Terrance JAG:EX
Sent: Monday, July 29, 2013 3:43 PM
To: Thompson, Bob R OHCS:EX
Subject: Mobile Home

Bob , question , is there a spatial separation distance requirement for mobile home park ? distance between trailers ?
Thanks Terry

Terry Ree

Fire Service Advisor – Northern Region
OFFICE OF THE FIRE COMMISSIONER
Emergency Management BC
Ministry of Justice

Location:
3235 Westwood Drive, Prince George B.C. V2N 1S4

Cell: (250) 640-6263
Office: (250) 612-4148 / Fax: (250) 612-4171
OFC 24 hour contact number: 1-888-988-9488

Toll free 1-888-988-9488

Please consider the environment before printing this e-mail

This message is intended to assist in the understanding of the interpretation and requirements of the Fire Services Act and pursuant regulations. It is not intended to provide legal advice and should not be relied upon as such. It is also not intended to replace the need to consult the legislation and regulations for their application in a particular situation. In the event of a conflict between the legislation and this message, the legislation will prevail."

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Friday, November 29, 2013 13:41
To: Tomaz, David C TRAN:EX
Subject: RE: Information BN Template Oct 2013
Attachments: Information BN Northwest EMBC Nov 2013.docx

Well, it's a start. I hope this gives you something to work with! Let me know if you think it needs tweaking.

M.

Maurie L. Hurst, BA(Crim), MBA
Regional Manager, Northwest

EMERGENCY MANAGEMENT BRITISH COLUMBIA
1B - 3215 Eby Street
Terrace BC V8G 2X8 CANADA
www.embc.gov.bc.ca

Ph 250.615.4800 Fax 250.615.4817
24 Hour Emergency Reporting 1.800.663.3456

From: Tomaz, David C JAG:EX
Sent: Tuesday, November 26, 2013 15:01 PM
To: Hurst, Maurie L JAG:EX
Subject: Information BN Template Oct 2013

Here is the template.
I guess the focus at this time should be what has happened to you thus far in relation to this entire thing called or referred to as the LNG project.
I am sure that there is a collection of projects that all lean towards the LNG as a whole so best to identify as many as possible in terms of impacts to our organization either in the past tense or if possible what will come to us in the near future. I will incorporate this into my staffing discussions.

Talk again real soon

Thanks
David

Cliff: XXXXXX
Date Prepared: November 28, 2013

MINISTRY OF JUSTICE
EMERGENCY MANAGEMENT BC
BRIEFING NOTE

PURPOSE: For INFORMATION

ISSUE: Status update – EMBC Involvement in Industrial Development in NWE

SUMMARY:

- Industrial and commercial development has skyrocketed in Northwest BC, both in conjunction with and separate from LNG development. Emergency Management BC is a key player in an integrated effort to meet the new demands these developments are placing on the communities and the region.

BACKGROUND:

- The Kitimat area has over $40 billion in planned projects in various stages of construction or proposal, including the Rio Tinto Alcan Modernization Project, Kitimat LNG Natural Gas Liquefaction and Export Terminal, Douglas Channel Energy Partnership barge-based LNG facility, LNG Canada Export Facility, Enbridge Northern Gateway Marine Terminal and Pipeline, and the Kitimat Clean oil refinery project.
    - The NWE RM has extensive history (pre-EMBC/PEP) in Kitimat.
    - The NWE RM has a long-established relationship with Rio Tinto Alcan emergency and security management, and maintains contact for emergency preparedness, response, and tsunami notification.
    - The NWE RM toured the Bish Creek LNG terminal construction site with the Joint Task Force Liaison officers in June, meeting with site project managers and camp management staff. The NWE RM has recently established contact for emergency preparedness, response, and tsunami notification with the emergency manager for the site.
    - District of Kitimat is at >1% vacancy rate, with 2,000 transient workers currently in camp working on the Rio Tinto Alcan Modernization Project and another 2,000 to be added for LNG terminal construction. This is placing a strain on emergency services, who have asked that BC Housing pre-position group lodging supplies in the community for ESS response.
        - There is substantial strain on the District's infrastructure, and much of Kitimat is on a flood plain. While the District has not approached the province for Flood Protection assistance (their dike is long established and well maintained), this is a future possibility.
    - The Kitimat-Stikine Regional District is also seeing a strain on infrastructure, and has two projects currently under consideration by the Flood Protection Program.

  - The Haisla First Nation is developing their emergency plan with funding from AANDC, and is linked in to the NWE regional office for support.
- The Prince Rupert / Port Edward area have over $30 billion in planned projects in various stages of construction or proposal, including the Ridley Rail and Utility Corridor, British Gas LNG Terminal, Ridley Terminals Expansion, the Fairview Terminal (Container Port) Phase 2 expansion, and the Pacific Northwest LNG Terminal.
  - The NWE RM participates in the Prince Rupert Port Authority Security and Emergency Preparedness Committee, which links in many of the key industry discussed above. The NWE office maintains contact for emergency preparedness, response, and tsunami notification with the Port Authority, Ridley Terminal, and the Fairview Container Port, amongst other industrial partners.
  - The NWE RM has recently established contact for emergency preparedness, response, and tsunami notification with the emergency manager for the Pacific Northwest LNG Terminal proposal.
  - The City of Prince Rupert and the District of Port Edward have inherited infrastructure such as dams and industrial sites. This has lead to tremendous strain on the communities dealing with upkeep and maintenance. In addition, the Ministry of Environment has had to intervene in two serious dangerous goods issues, resulting in two *BC Environmental Management Act (EMA)* Section 80 responses.
- The Northwest Regional Office currently has a Regional Office Administrator vacancy. In addition, the office can expand to accommodate a Fire Services Advisor to support fire departments meet the increased demand for service in industrial settings.

OTHER MINISTRIES IMPACTED/CONSULTED:

- Northwest RM has participated in a North West Community Readiness Coordination Workshop, which links in provincial ministries (Justice, MoTI, CSCD, Health, MCFD, SDSI and others) in with the local authorities in the impacted area (District of Kitimat, City of Terrace, Kitimat-Stikine Regional District, District of Port Edward, City of Prince Rupert, and the Skeena-Queen Charlotte Regional District).

Prepared by:
Maurie L. Hurst
Northwest Regional Manager
Emergency Management BC
250-615-4800

Approved by:
[Name]
[Title]
[Branch]
[Phone Number]

Attachment(s)
None

Karger, Kristina TRAN:EX

From: Tomaz, David C TRAN:EX
Sent: Friday, November 29, 2013 15:42
To: Hurst, Maurie L TRAN:EX
Subject: Information BN Northwest EMBC Nov 2013
Attachments: Information BN Northwest EMBC Nov 2013.docx

What do you think?

Ministry of Community, Sport and Cultural Development
FOR INFORMATION

Date: April 17, 2015

Title: Mitigating the effects of natural resource based industrial work camps

Issue: Understanding the effects of natural resource based industrial work camps on communities and how they are being mitigated, especially in northern BC.

Background:
BC has long relied on natural resources to fuel its economy. Liquified Natural Gas (LNG) presents a rare opportunity for the Province to build a new industry that will generate jobs, revenues to pay for health and education services, and long-term stability for families and communities. The provincial LNG strategy, *Liquefied Natural Gas: A Strategy for B.C.'s Newest Industry,* illustrates the Province's commitment to working with interested investors to have LNG facilities in operation by 2020.

Resource-based industrial development especially in northern B.C. has been accompanied by the establishment of industrial work camps. BC's industrial work camps typically accommodate temporary work forces in the forestry, mining, and oil and gas sectors. A 2012 inventory estimated that there were approximately 1,800 industrial camp sites in northern BC[1]. As LNG investors make Final Investment Decisions (FID) and construction of LNG pipelines and facilities begins, work camps for this new sector will be established.

Industrial work camps near or within communities can deliver benefits to those communities. They can also have adverse effects by placing additional pressure on local community infrastructure and services such as sewer, landfill, emergency and medical services (Appendix A). If the effects are not mitigated in some way, local governments are reliant on conventional mechanisms, including their tax base, to pay for the additional demand on services and infrastructure. In some cases, historical or conventional approaches to development, especially for large construction workforces can become problematic. For example, some communities have identified potential challenges for service delivery in relation to work camps effects because the temporary workers living in camps are excluded from local census counts and are therefore not accommodated in conventional funding models based on population.

Provincial agencies, in their role as service providers, are also concerned about their ability to deliver needed services and infrastructure in the face of increased demands. Proponents have different concerns, including concerns about escalating costs, gaining social license and ultimately building and operating their facilities and pipelines successfully. This note describes the approaches being undertaken to address the uncertainties experienced by the parties involved.

Discussion:
Local governments and service providers in northeast and northwest B.C. have raised concerns about the potential effects of work camps on community-level infrastructure and services. Their key concerns include (Appendix B):

- Understanding and mitigating the adverse effects of work camps on communities.

[1] Northern Health, October 17, 2012. Part 1: Understanding the State of Industrial Camps in Northern BC: A Background Paper.

- Obtaining information about existing and proposed work camps including a camp's location, size, type and amenities.
- Clarifying and understanding the regulatory framework for work camp permits and approvals (Appendix E).

Historical patterns of resource development have been well-served by conventional approaches to planning for land use, infrastructure and service delivery. More recently, increasing new resource development activity is calling for new ways of responding to the need for adequate community-level infrastructure and services.

The Province is undertaking new and regionally tailored approaches to addressing local government and service provider concerns in both the northeast and northwest. In northeast B.C., the expansion of the natural gas extraction industry has raised concerns about the ability of communities to prepare for increased infrastructure needs and sustain the associated population growth and demand for services. In this region, the Province has responded to those issues, which have not otherwise been addressed by conventional taxation and infrastructure funding approaches, through negotiated memorandums of understanding (MOUs).

The Provincial/Peace River MOU has provided more than $259 million to the Peace River communities of Chetwynd, Hudson's Hope, Taylor, Tumbler Ridge, Dawson Creek, Fort St. John and Pouce Coupe since 2005 to provide additional services and infrastructure resulting from demands of industrial growth. Discussions are underway to renegotiate the existing MOU and put in place a new 15-year agreement, providing certainty and stability and enabling MOU communities to adequately plan for future needs. The Infrastructure Development Contribution Agreement between the Province of BC and the Northern Rockies Regional Municipality represents the Province's commitment to reviving aging infrastructure, assisting in the capital growth of the region and the support of the Northern Rockies as the service sector for shale gas in northeast BC, supplying future Liquefied Natural Gas (LNG) developments in the northwest.

The provincial response is not a single uniform response; it is a suite of diverse initiatives that vary according to the scale and type of impact and the capacity in various communities and regions, and is characterized by two important features:

- strives for customized solutions that reflect the unique social and economic characteristics of communities and regions enabling them to make choices about priorities and long-term vision
- recognizes the fundamental role of partnerships in achieving success and prioritizes solutions that build partnerships and enable them to grow

A central initiative of the provincial approach in the northwest is the Socio-Economic Effects Management Plan (SEEMP) process. Some Environmental Assessment Certificate Holders are required to develop a SEEMP to mitigate the economic and social effects of work camps on communities by undertaking a coordinated process that engages the appropriate stakeholders – certificate holders, local governments, provincial agencies and service providers – in a discussion of the potential effects of work camps and related mitigations. In addition to mitigating effects of work camps, the engagement discussions are key to providing local governments with needed information about work camps. SEEMP discussions are expected to occur relatively early in the project planning / application process, providing local governments with time to create partnerships and plan for potential infrastructure and service effects.

In addition to SEEMP, the following initiatives comprise the provincial approach and address the three key concerns raised by local governments (Appendix C):

- s.13

- Community Readiness Working Group (CRWG) coordinates provincial actions for services and infrastructure in areas where communities may face extraordinary demands arising from major industrial developments. Members of the CRWG include representatives from the following ministries:
    - Advanced Education, Children and Family Development, Community, Sport and Cultural Development, Education, Environmental Assessment Office, Health, Jobs, Tourism and Skills Training, Justice, Aboriginal Relations and Reconciliation, Natural Gas Development, BC Oil and Gas Commission, Social Development and Social Innovation, Transportation and Infrastructure and the Northern Health Authority.
- Community Readiness Initiative including the Community Land-Use Planning Program (CLUPP), Asset Management Capacity Building (AMCB), Planning Intern Program, and local government/community outreach activities.
- Negotiated, customized tax agreements – e.g. taxation agreement between Pacific Northwest LNG and the District of Port Edward providing for full funding of infrastructure upgrades for sewer, water and main roads, and for a proponent contribution to a ring road bypass.
- Environmental Assessment (EA) conditions requiring proponents to mitigate a wide range of adverse effects arising from the development of major projects, including effects of work camps that are not captured in a SEEMP condition.

Some local governments have proposed resource intensive solutions, such as a provincial one-stop oversight body to track and manage the effects of work camps on community-level infrastructure and services. By comparison, the current provincial approach represents a strategic and measured approach where the onus for solving specific issues resides with those who have the interest, motivation and capacity to address them; it respects the desire of proponents and communities to negotiate their own responses. The provincial approach targets financial contributions to specific local-level infrastructure needs. It shares the responsibility of mitigating effects among proponents, local governments, provincial and other service providers, and through its collaborative engagement approach shifts the discussion away from one that says "*you* should do this" to one of "how can each of us best contribute to the solution".

Next Steps:

The topic of industrial work camps and how they relate to communities is complex, touching on numerous stakeholder groups, regulatory authorities, service providers, and jurisdictions. The Province has built its knowledge of the effects of industrial work camps and in response created tools to facilitate mitigations and move LNG certificate holders toward financial investment decisions (FIDs). Development of this briefing note has expanded the Ministry's understanding of the complexities related to the regulatory context for industrial work camps, the need for partnerships and the kinds of effects and mitigations work camps generate.

Contact: Jennifer Hill
Meggin Messenger
Telephone: 250-387-0078
250-387-4045

Appendix A – An overview of industrial work camps and their potential effects

Industrial work camps have been and continue to be used in many resource extraction industries (e.g. forestry, mining, etc.). They are seen as a cost effective way to provide a combination of workplace and living space settings for companies to accommodate temporary workers. They also serve to mitigate the adverse effects of an influx of new residents requiring accommodation in communities close to industrial sites. There has been considerable discussion about work camps associated with increasing resource development in the Northwest particularly as it relates to the LNG industry; the effects of work camps on communities and service providers in a range of sectors are also experienced in the Northeast.

There are different types of work camps, including:

- closed camps – camps used by one proponent to house their workers;
- open camp – camps where the facilities are open to workers from various projects;
- dry camps – camps where alcohol is restricted;
- self-contained camps – camps that provide all necessary amenities and services; and;
- limited-service camps – camps that rely on other organizations including local governments for services such as medical services, water, entertainment etc.

The form of construction and extent of amenities available at industrial work camps also vary. At the basic end of the spectrum, a work camp can consist of a collection of ATCO trailers. More sophisticated work camps can be lodge- or village-like facilities with private bedrooms and private baths, in-room TVs, "wifi" hot spots or multiple amenities such as movie theatres, libraries, weight rooms etc.

Camps will also vary depending on whether they are built to support pipeline or facility construction. Camps that support pipelines can be situated in very remote locations, and be operational for relatively short periods of time. They can be designed to be easily dismantled, moved and set up again to accommodate work crews as they progress along the length of the pipeline. Pipeline construction crews can be small with a need to accommodate 10s of workers, or larger in size e.g. up to 1500 workers.

The location of a work camp can determine the kind of effect it imposes on a community or service delivery organization. Work camps for industrial facilities may be remotely located but can also be located close to communities, and sometimes within the boundaries of a municipality (e.g. Rio Tinto Alcan's camp for the smelter in Kitimat). They may be temporary in nature, with the intention that they will be dismantled once facility construction is complete, or they may be designed for the longer term, for example, to provide accommodation after construction is complete for community residents (i.e. community legacy) or employees that operate the facility. The impacts of work camps on local governments will also vary depending on the size of the camp and level of services and amenities provided by the camp.

Work camps for the construction of industrial facilities can accommodate thousands of workers. As an example, PacificNorthwest (PNW) LNG, a LNG facility with an EA certificate, indicates that there will be a need to accommodate 3,500 to 4,500 people in a temporary work camp at peak construction. According to PNW LNG's EA application, construction of the facility is estimated to take approximately four years. Camp operators may employ mobile work forces and transport workers in and out of the camps (see Appendix F for an overview of numbers of work camps and workers for LNG facility and pipeline projects). These kinds of camps are typically referred to as fly-in/fly-out, drive-in/drive-out, or bus-in/bus-out depending on the mode of transportation.

Appendix B – Key concerns about the effects of industrial work camps on infrastructure and services

Local governments and service providers have raised concerns about the potential effects of work camps on community-level infrastructure and services. The key concerns include:

1. **Obtaining information about existing and proposed work camps including information about a camp's location, size, type, or amenities**

   Local governments and service providers have expressed concern that they don't know where or when work camps will be constructed or for how long they will be operational. Knowledge of the size, location and timing of the establishment of industrial work camps is essential to local governments to help them plan for development and anticipate the demands on community infrastructure, water, sewer, landfill, housing, emergency services, amenities and facilities. Access to this information will enable local governments to take advantage of the benefits or address the adverse effects of the work camps. The Ministry of Health has also identified the need to know about the location and timing of industrial work camps, and has responded by developing a new Work Camps Regulation and supporting guidance, which is described in Appendix C.

   Local governments are also concerned about the need to respond to emergencies at or near work camps. A lack of information about the location, size and type of work camps could pose a safety risk. An overview of the regulatory framework for emergency response in relation to industrial work camps is provided in Appendix D.

   Responses to concerns related to obtaining information about existing and proposed work camps including information about a camp's location, size, type, or amenities include s.13
   s.13
   s.13 SEEMP, Community Readiness Working Group and Community Readiness Initiative.

2. **Understanding and mitigating work camp effects on communities**

   Local governments and service providers have expressed concern about the additional pressures work camps can place on local community infrastructure and services (e.g. sewer, landfill, emergency, medical services). These pressures often result because the workers living in work camps are excluded from local census counts (and sometimes referred to as a shadow population) and therefore they do not contribute additional revenue to the local government tax base to pay for this additional pressure on services and infrastructure. Research reviewing the literature on work camps reveals that the effects most commonly featured include community-life or social effects, for example, increased real estate prices and home rental costs, increased hospital visits and decreased perception of safety in community[2].

   With respect to mitigating effects of work camps, local governments have indicated an interest in having the authority to impose a tax on work camps. The tax revenue would be used to fund the additional servicing requirements, which result from work camps that do not contribute to the local

[2] W. Beamish Consulting Ltd. & Heartwood Solutions Consulting prepared for Peace River Regional District, June 27/13, p.13.

tax base. In particular, local governments would like to have the authority to impose the up to 2% municipal and regional district tax (MRDT) on industrial work camps, a type of accommodation that is currently exempt from the tax. The MRDT applies to the sale of short-term accommodation in participating areas of B.C. Ministry briefing materials for 2014 UBCM Convention indicated that the Ministry of Finance would be made aware of the local government request and highlighted the usefulness of the proposed new Ministry of Health Work Camps Regulation.

While work camps can create extraordinary pressures on community services and infrastructure, they can also mitigate demand for some services, such as housing and related services. A self-contained work camp with high-quality amenities can reduce the burden on a community's services and amenities. There can also be positive economic benefits, such as the expansion of local businesses that service the needs of work camps or the workers (e.g. fishing charters), or employment and specialized training for local residents, in particular for aboriginal groups and communities with traditionally high unemployment rates.

Responses that address concerns related to understanding and mitigating work camp effects on communities include: SEEMP, proposed new Work Camps Regulation and supporting guidance, Community Readiness Initiative, negotiated, customized tax agreements including Infrastructure Development Contribution Agreement – Northern Rockies Regional Municipality and Provincial / Peace River MOU.

3. Clarifying the regulatory framework for work camp permits and approvals

Local governments have highlighted the challenge of understanding the complex regulatory framework for work camps, noting that multiple agencies are responsible for approvals and issuance of work camp permits and there is no inter-agency coordination supporting the framework. At the 2014 UBCM Convention, local governments put forward resolution A4: Worker Camp Permitting, requesting a single window approval process for industrial work camps. The Ministry response indicated that the issue of work camps is not necessarily a gap in the regulatory framework, but rather a need for improved communication and coordination between local governments, proponents and regulatory agencies to ensure a complete understanding of responsibilities and to ensure fair and appropriate responses. The response also described the SEEMP process as a way of achieving improved communication (see: section on SEEMP in Appendix D). Appendix E provides a description of BC's regulatory framework for industrial work camps.

Responses that address concerns related to clarifying the regulatory framework for work camp permits and approvals include SEEMP, s.13

s.13 Community Readiness Working Group and Community Readiness Initiative.

Appendix C – Provincial approach to mitigating the effects of work camps

The provincial government recognizes the role the province has to play in supporting communities to respond to infrastructure and service demands that arise from major resource development projects. The provincial response is not a single uniform response; it is a suite of initiatives that vary according to the scale and type of impact and the capacity in various communities and regions. Taken together these measures strengthen the capacity of communities and regions to accommodate, and benefit from major resource development projects. The following is a description of the suite of measures in place to respond to the key concerns identified above.

1. Socio-Economic Effects Management Plans (SEEMPs) through Environmental Assessment (EA)

To help mitigate economic and social effects of LNG related industrial work camps on communities, some Environmental Assessment Certificate Holders are required to develop a Socio-Economic Effects Management Plan (SEEMP). The basis for the approach, developed collaboratively by the Ministry and Environmental Assessment Office (EAO), is that the economic and social impacts of industrial work camps on communities will be better understood through a coordinated process that engages the appropriate stakeholders – certificate holders, local governments, provincial agencies, service providers – in a discussion of the potential effects of work camps and related mitigations.

A SEEMP sets out an adaptive management process to identify and manage project related socio-economic effects, with a focus on community services and infrastructure. The desired outcome with the development of a SEEMP is to mitigate project related (e.g. work camps) adverse effects on communities and for a Certificate Holder to have access to services that are required for their business and workers.

In addition to mitigating effects of work camps, the engagement discussions that are a key part of the process to develop and implement SEEMPs provide local governments with needed information about work camps. SEEMP discussions are expected to occur earlier in the project planning and application process and therefore provide local governments with time to plan for potential infrastructure and service impacts.

In its response to the 2014 UBCM Convention resolution A4 Worker Camp Permitting, the Ministry replied that the issue of work camps is not necessarily a gap in the regulatory framework, but rather, a need for improved communication and coordination between local governments, proponents and regulatory agencies. The SEEMP requirement is one way that the Ministry is actively pursuing improved engagement between local governments, Certificate Holders and regulatory agencies to ensure a complete understanding of responsibilities and to ensure fair and appropriate responses.

The requirement for SEEMP discussions is currently limited to LNG facilities and pipelines that are part of the Environmental Assessment process. There is no SEEMP requirement to help address local government concerns about obtaining information for existing work camps, projects that do not require EA approval, or EA projects that do not require a SEEMP. Presently, SEEMPS are focused on LNG projects located in northwest BC and LNG pipelines originating in the northeast.

2. Ministry of Health Proposed Work Camps Regulations (WCR)

s.12,s.13

s.12,s.13

3. Environmental Assessment Process (beyond SEEMP conditions)

In addition to Environmental Assessment (EA) conditions requiring proponents to develops SEEMPs, the EA process can require proponents to mitigate a wide range of adverse effects arising from the develop of major projects, including effects of work camps that are not captured in a SEEMP-related condition.

The Environmental Assessment Office (EAO) manages the assessment of proposed major projects in British Columbia as required by the Environmental Assessment Act (Act). The assessment process examines major projects for potentially adverse environmental, economic, social, heritage and health effects that may occur during the life cycle of these projects.

4. Community Readiness Working Group

The Community Readiness Working Group (CRWG) coordinates provincial actions for services and infrastructure in areas where communities may face extraordinary demands arising from major industrial developments. The goal of the CRWG is to enable decisions that support the combined efforts of local governments, provincial service providers and proponents to meet infrastructure, health, safety and social service requirements. The CRWG also monitors and collaborates on local government actions on services and infrastructure and provides feedback on industry actions on services and infrastructure.

Members of the CRWG include representatives from the following ministries: Advanced Education, Children and Family Development, Community, Sport and Cultural Development, Education, Environmental Assessment Office, Health, Jobs, Tourism and Skills Training, Justice, Aboriginal Relations and Reconciliation, Natural Gas Development, BC Oil and Gas Commission, Social Development and Social Innovation, Transportation and Infrastructure and the Northern Health Authority.

5. Community Readiness Initiative

"Community Readiness", which complements the SEEMP, is a broad coordinated response to changing service and infrastructure needs and impacts arising from extraordinary, peak demands during the construction phase of LNG and other major industrial developments. It includes the Community Land-

Use Planning Program (CLUPP), Asset Management Capacity Building (AMCB), Planning Intern Program, local government/community outreach activities.

6. Negotiated, customized tax agreements

The Province is supporting the establishment of customized, negotiated local taxation agreements, where they add the most value. They will be customized to respond to differences among communities, their histories and aspirations and to differences across sectors. To date, a taxation agreement between Pacific Northwest LNG and the District of Port Edward has been successfully negotiated and signed on December 15, 2014. The agreement provides for full funding of infrastructure upgrades for sewer, water and main roads, and for a proponent contribution to a ring road bypass. s.12,s.13

s.12,s.13

s.12,s.13

The Province is also exploring partnership contributions to the ring road bypass through Building Canada. The Province has also committed to regulating a 40% depreciation of capital value of large properties, which requires a regulatory change under the *Assessment Act*.

7. Infrastructure Development Contribution Agreement – Northern Rockies Regional Municipality

The Province has responded to concerns on the part of the Northern Rockies Regional Municipality (NRRM) that the potential growth of the shale gas industry will place significant demands on the community for housing, infrastructure and community services that it will not be able to meet through property taxes. The Infrastructure Development Contribution Agreement (IDCA) was signed in April 2013, allowing the Province to contribute up to $10 million per year for twenty years, towards infrastructure to build a comprehensive service centre for the natural gas industry.

8. Provincial / Peace River Memorandum of Understanding

The Provincial / Peace River Memorandum of Understanding (MOU) was announced in 2005. The MOU provides at least $20 million annually, indexed to changes in the rural industrial assessment base, to the Peace River Regional District. The funds act as "grants-in-lieu", as Peace River communities cannot access what would ordinarily be their municipal industrial property taxes. The funds support communities' ability to provide additional services and infrastructure resulting from demands of industrial growth. Discussion are currently underway to renegotiate the existing MOU and put in place a new 15 year agreement, providing certainty and stability and enabling MOU communities to adequately plan for future needs. It is intended that a renegotiated agreement would extend to 2030.

9. Existing Financial Tools Available to Local Governments to Mitigate Some Effects

Property taxes

Property taxes are a primary source of revenue for local governments, and BC Assessment does reflect property improvements when assessing work camps. The amount of tax increase is dependent on the location, type of improvement and size. As long as BC Assessment is aware of a work camp it will be reflected in the property assessment, and the local government will receive increased taxes.

User fees

In addition to property taxes, most other local government revenue comes from user fees, senior government grants and developer contributions. Typically user fees and charges are used to recover the cost of services (e.g. sewer, water, garbage collection). Fees are often charged to applicants for building permits or licenses and are common when using public transportation, recreational facilities or renting local government property.

Senior government grants

Senior government grants can be conditional – funds transferred for a specific purpose that may not be used for any other project – and unconditional – funds that can be used for any purpose desired by the recipient. Examples of provincially managed conditional grants include infrastructure grants such as the Building Canada Fund and the Infrastructure Stimulus Fund. The primary unconditional grants to local governments are the Small Community Grants, Traffic Fine Revenue Sharing transfers and Regional District Basic Grants.

Developer contributions

There is a range of development finance tools available to local governments to cover at least a portion of growth-related expenditures, including development costs charges (DCCs), local service areas and taxes, density bonusing, latecomer charges and community amenity contributions (when used appropriately). These types of tools could be used by local governments where LNG facilities are being constructed within their jurisdictional boundaries.

In addition to the suite of provincial initiatives, proponents are entering into independent agreements with communities, service providers and First Nations to mitigate potential effects and provide benefits. One example is agreements between a proponent and local educational institutions to incorporate skills training required of employees working to construct and operate LNG facilities. A second example is a service agreement between a proponent and a local government outlining the terms of use of local water for a work camp and facility.

Appendix D – Overview of BC's regulatory framework for emergency response

Emergency management is a continuous and integrated process involving the efforts of individuals, private sector, local, provincial and federal governments to identify threats, determine vulnerabilities and establish required resources to be able to respond effectively to an emergency.

In BC, local authorities including municipalities and regional districts are responsible for planning and responding to emergencies within their jurisdictional areas. Emergency Management British Columbia (EMBC) provides leadership in emergency management on behalf of the Province. EMBC works directly with local governments, provincial ministries, other jurisdictions and volunteers in a coordinated effort to prepare for, respond to and recover from emergencies.

A local authority is responsible for the population within its jurisdiction, which could include industrial work camps. Under the *Emergency Program Act*, a local authority is required to have local emergency plans respecting preparation for, response to and recovery from emergencies and disasters. The Act also requires a local authority to establish and maintain an emergency management organization to develop and implement emergency plans and other preparedness, response and recovery measures. It is a local government decision whether or not to provide fire protection, including suppression and inspection related services.

Workplaces, including industrial work camps to the extent they are workplaces in which workers such as cooks, maintenance people and others work, must comply with the BC Occupational Health and Safety Regulation 296/97 which requires, under Part 3, employers to develop and implement written rescue and evacuation procedures for any workplace in which a need to rescue or evacuate workers may arise. In addition, if and when the new Ministry of Health proposed Work Camps Regulation is adopted, work camps will be required to describe the emergency procedures the camp has in place to deal with medical, health hygiene, natural disasters, facility emergencies, resident related emergencies, and water treatment and sewage disposal failures.

Furthermore, the BC Fire Code references the BC Building Code "Fire Protection for Construction Camps" (Sec 9.10.21) that camps would need to be compliant with. The BC Building Code is applicable to buildings constructed at construction camps. The BC Safety Authority governs electrical, gas and pressure vessels under their act. ~~Furthermore,~~ In addition, the BC Fire Code requires a fire safety plan for occupancies classified as assemblies, care, treatment or detention; every structure required by the BC Building Code to have a fire alarm system; demolition or construction sites; indoor and outdoor storage areas; areas where flammable liquids and combustible liquids are stored or handled; and areas where hazardous processes or operations occur.

Appendix E – Overview of BC's regulatory framework for industrial work camps

This appendix provides an overview of the regulatory framework for work camps, starting with the BC Oil and Gas Commission (OGC), which regulates, through permits and licenses, oil and gas activities including LNG facilities and pipelines. With respect to work camps, the OGC's regulatory role is limited to approving access to Crown land for camps, for example, pipeline work camps. No OGC permit is required for work camps on private land.

Local government bylaws and provincial legislation both have a role in regulating industrial work camps. The *Local Government Act* (LGA) and *Community Charter* (CC) provide local governments with the authority to regulate land use planning and development, specifically to adopt bylaws such as Official Community Plan (OCP), zoning and subdivision servicing bylaws. Local governments have legislative authority for zoning private land and some authority for managing land use that occurs on Crown land.

Many industrial work camps are and will be located on Crown land. The applicability of local government bylaws on Crown land is guided by the *Interpretation Act*. Section 14(2) of the *Interpretation Act* provides that an enactment (which includes a local government bylaw) may not affect the Crown in the use or development of Crown land. This means that local government OCP and zoning bylaws cannot affect the Crown's use of land. However, other local government bylaws that are not concerned with the regulation of land could apply (e.g. speed limits on local streets).

The provisions of section 14(2) of the *Interpretation Act* do not extend to tenants of the Crown. This means that local governments can enact bylaws regulating the use of the land by the tenants of the crown. For example, local governments may enact bylaws for uses such as recreation fishing lodges, ski operations, and forestry or mining camps.

In addition to the OGC and local government regulatory authority, there is a range of Provincial ministries and Acts involved in regulating industrial work camps (see Table 1 below for more information) including:

- *Public Health Act* (*Industrial Camps Regulation, Sewerage System Regulation*) – siting, floor space requirements, sewage management
- *Drinking Water Protection Act* – drinking water (human consumption, sanitation or food preparation)
- *Workers Compensation Act* – camps with cooks, maintenance people, etc.
- *Environmental Management Act* – waste, sewerage regulations, burning, hazardous waste
- *Water Act* – surface source water supply, water diversion and licenses
- *Fire Services Act* – fuel storage
- *Forest and Range Practices Act* – burning piles, road usage, right to occupy land
- *Agricultural Land Commission Act* – non-farm use in the ALR
- *Industrial Roads Act, Transportation Act* – highway access, permits, road construction approvals
- *Land Act* – approve lease or Crown Grant Land of required land.

From time to time questions arise about which legislative authority takes precedence over another, including questions about the relationship of local government bylaws and provincial legislation.

At time of writing, staff is not aware of situations where local government bylaws regulating industrial work camps have been overridden by provincial legislation. There are cases where local government land use bylaws regulating uses or structures other than industrial work camps have been recognized as not having effect because of provincial legislation. Courts have rules that zoning powers under the LGA

cannot be used to prohibit the extraction of aggregate on Crown or private land – because this is not a "use" of the land but an extraction of a resource. Provisions of the *Private Managed Forest Land Act* (PMFLA s. 21) restrict local governments' authority to adopt bylaws or issue certain permits on private managed forest land. Local governments are restricted in their ability to regulate development given that the Private Managed Forest Land Regulation permits one dwelling per registered parcel.

A legal review of the *Oil and Gas Activities Act* (OGAA) and *Public Health Act* (PHA) did not reveal any sections that provide an override of local government bylaws. A local government bylaw is subordinate legislation to either one of these acts. Therefore, if there is a conflict between a local government bylaw and a section of one of these acts, the provincial law would supersede the bylaw. If a person is able to comply with both the provincial law and the local government bylaw, section 10 of the *Community Charter* provides that the bylaw will not be found to be inconsistent with the provincial law. This is known as the "impossibility of dual compliance" test – if a person cannot comply with both the bylaw and the provincial law, then the bylaw will be found to be of no effect.

A thorough review of all BC legislation to determine whether there are other acts or regulations that might apply to work camps and provide an override of local government bylaws has not been undertaken to date, primarily because it would require significant time and resources. It is a possible next step if interest and resources permit.

Table 1: Acts and Regulations and Enforcement Responsibility

	Act and Regulation	Enforcement Responsibility
1	*Public Health Act* – Industrial Camps Regulation • Siting and size of camps • Water supply • Sanitation • Waste management • Sleeping quarters	Ministry of Health, Health Protection Branch, Northern Health Authority, Environment Health Office
2	*Drinking Water Protection Act* and Regulation • Specifies requirements for drinking water intended for human consumption, food preparation or sanitation.	Ministry of Health, Health Protection Branch, Northern Health Authority, Environmental Health Office, Drinking Water Protection Officer
3	*Public Health Act* – Sewage Disposal Regulation (Sewerage System Regulation) • For camps< 100 persons where treat effluent is to be discharged into the ground through absorption fields or seepage pits	Ministry of Health, Health Protection Branch, Northern Health Authority, Environmental Health Office
4	*Workers Compensation Act* – Occupation Health and Safety Regulation, Part 25 Camps • Applies to camps which have workers such as cooks, maintenance people, etc.	WorkSafeBC
5	*Environment Management Act* Waste (Refuse) must be disposed of by incineration in an approved incinerator and/or transported to a municipal landfill(a landfill permit may be issued in instances where travel to a landfill is impractical).	Ministry of Environment, Regional Environmental Protection Office, Regional Waste Manager Recycling - Recycling Council of BC
6	*Environment Management Act* – Municipal	Ministry of Environment, Environment Protection Office

	Act and Regulation	Enforcement Responsibility
	Sewerage Regulation (MSR) Applies to camps of less than 100 persons; and more than 100 persons and treated sewage is to be discharged onto the land surface. At least 90 days before establishing the camp, applicants must provide the MoE: • Site plan • Design of sewage facility (by a qualified professional) • Operating Plan • Environmental Impact Study	
7	*Environment Management Act* – Open Burning Smoke Control Regulation	Ministry of Environment, Environment Protection Office
8	*Water Act* If water for camp operation is taken away from any surface source other than a well a licence for long term operations or approval for operations up to 12 months is required	Ministry of Environment, Regional Water Management Branch, Northern Health
9	*Environmental Management Act* – Hazardous Waste Regulation (and Guide) • Pertains to the generation storage, transport and disposal of hazardous wastes.	Ministry of Environment, Regional Environmental Protection Office
10	*Fire Services Act (BC Fire Code)* *Fuel storage facilities* ~~*Fire Services Act*~~ • ~~Fuel storage facilities~~	Fire Services Act (BC Fire Code) Fuel storage facilities ~~BC Fire Commission~~
11	*Environmental Management Act* – Hazardous Waste Regulation (and Guide) and Spill Reporting Regulation • Spill reporting of petroleum products and other materials	Ministry of Environment, Regional Environmental Protection Office, Provincial Emergency Program
12	*Agricultural Land Commission Act* • Non-farm use in the ALR	Agricultural Land Commission: • Section 26 of the ALC Act delegation of powers under S. 25(1) and (2) – Oil and Gas Commission.
13	*Oil and Gas Commission Act, Petroleum and Natural Gas Act, Pipeline Act*	Oil and Gas Commission • Responsible for regulating oil and gas activities and pipelines • One window review and approval process • ALC Delegation Agreement (NE only)
14	*Electrical Safety Act*	BC Safety Authority
15	*Public Health Act* - Food Premises Regulation • Applies to a place where food intended for public consumption is sold, offered for sale, supplied, handled, prepared, packaged, etc.	Ministry of Health, Health Protection Branch, Northern Health Authority, Environmental Health Office
16	*Forest Act, Forest and Range Practices Act, Environment and Land Use Act, Land Act, Land Titles Act*	Ministry of Forests, Lands and Natural Resource Operations • Delegation agreement in place with the Oil and Gas

	Act and Regulation	Enforcement Responsibility
		Commission for some tenures, road use and road access agreements
17	Wastewater Systems Effluent Regulations (WSER) • Facilities which collect more than 100 cubic metres	Environment Canada
18	*Industrial Roads Act/Transportation Act* • Highway access, permits, road construction approvals, etc.	Ministry of Transportation and Infrastructure
19	*BC Environmental Assessment Act*	Environmental Assessment Office (EAO) • Manages the environmental assessment process for projects that trigger an assessment under the Act.
20	*Local Government Act*	Local Government • Bylaw amendments (Land use, OCP)
21	*The Building Act (BC Building Code)* • Applies to all buildings constructed	Local Government – building code compliance
Primary Source: Policy, Communications, Capacity: A Time to Lead (PRRD) Document		

Appendix F – Overview of LNG facilities and pipelines

Table 2: Facilities work camp overview

	Facility	Location	Workers (construction)	Duration (construction)	Workers (operations)
EA Certificate Issued					
1	Pacific NorthWest LNG	Lelu Island, Port Edward, Prince Rupert Port Authority	3,500 - 4,500	2015 – 2018	unknown
Under EA Review					
2	LNG Canada	District of Kitimat (private lands)	4,500 - 7,500 (3,470 yearly av.)	5 - 10 years	350 - 450 (trains 1 & 2) 450 - 800 (full build-out)
3	Woodfibre LNG	District of Squamish (private lands)	600 person-years	2 years	100 (+ unknown # of contracted staff)
Pre-Application					
4	Aurora LNG	Digby Island, 3km SW of Prince Rupert, SQCRD	4,000 - 5,000	2017-2022	400
5	Grassy Point LNG	30km N of Prince Rupert at Grassy Point, SQCRD (Crown land)	1,000 - 6,000	2017 - 2021	unknown
6	Prince Rupert LNG	Ridley Island, BC, 17 km from Prince Rupert and 15 km from Port Edward	2,000 – 3,850 (in camps); 400 in Prince Rupert	2016 – 2021/24+	unknown
7	WCC LNG	Tuck Inlet, in Prince Rupert	unknown	2017 – 2024 (first phase) 2025 – 2030 (other phases)	unknown

Table 3: Pipelines work camp overview

	Pipeline	Location & Length	Duration (construction)	LGs Affected (within 100km)	Workers & Camps
EA Certificate Issued					
1	Prince Rupert Gas Transmission (PRGT)	**Start:** Hudsons Hope **End:** Port Edward (PNW LNG) **Length:** 900 km	**Duration:** 18-42 months **Start date:** 2016	21 local governments	**Early work :** 400 people **Pipeline construction:** 9 main camps: 1100 beds each 3 compressor station camps: 150 beds each
2	Coastal Gaslink Pipeline (CGL)	**Start:** Chetwynd/ Dawson Creek	**Duration:** 4-24 months **Start date:**	19 local governments	**Pioneer work:** 15 camps: 20-200 workers **Clearing, construction:**

		(Ground Birch) **End:** Kitimat **Length:** 650km	Early 2016		10 main camps: 200 - 1,500 workers
EA Certificate Issued					
3	Westcoast Connector Gas Transmission Pipeline	**Start:** 100 km NW Fort St. John **End:** Ridley Island, Prince Rupert (Prince Rupert LNG) **Length:** 860 km (dual line)	**Start date:** Late 2016	36 local governments	**Pipe construction:** 13 main camps **Preparation:** smaller camps **Temporary work camps:** at 5 compressor sites
4	Pacific Trail Pipeline (PTP)	**Start:** Summit Lake (N of Prince George) **End:** Kitimat (Kitimat LNG) **Length:** 470 km	**Start date:** unknown	10 local governments	unknown

Karger, Kristina TRAN:EX

From: Watt, Stephen TRAN:EX
Sent: Monday, January 6, 2014 11:02
To: Ree, Terrance TRAN:EX
Subject: RE: Wonowon Lodge-Sanjel Fuel Tanks

HI Terry,

I think we would have to identify that FSA s.21(d) applies before we can inspect; do you see any combustible or explosive material being kept or other flammable condition that would endanger life or property?

Also, did we establish that the BCFC provided an exemption from Part 4 for camps, and that this equipment is not fixed as per BCFC definition of fuel dispensing station?

Sincerely,

Stephen Watt
Codes and Standards Coordinator
Office of the Fire Commissioner

From: Ree, Terrance JAG:EX
Sent: Monday, January 6, 2014 10:51 AM
To: Watt, Stephen JAG:EX
Subject: FW: Wonowon Lodge-Sanjel Fuel Tanks

Stephen , have a look , s.22
Terry

Terry Ree

Fire Service Advisor – Northern Region
OFFICE OF THE FIRE COMMISSIONER
Emergency Management BC
Ministry of Justice

Location:
3235 Westwood Drive, Prince George B.C. V2N 1S4

Cell: (250) 640-6263
Office: (250) 612-4148 / Fax: (250) 612-4171
OFC 24 hour contact number: 1-888-988-9488

Toll free 1-888-988-9488


Please consider the environment before printing this e-mail

This message is intended to assist in the understanding of the interpretation and requirements of the Fire Services Act and pursuant regulations. It is not intended to provide legal advice and should not be relied upon as such. It is also not intended to replace the need to consult the legislation and regulations for their application in a particular situation. In the event of a conflict between the legislation and this message, the legislation will prevail."

From: Wonowon Lodge [mailto:wonowonlodge@hotmail.com]
Sent: Monday, January 6, 2014 10:40 AM
To: Ree, Terrance JAG:EX
Subject: Wonowon Lodge-Sanjel Fuel Tanks

Hello

Here's some photos of the rental diesel tanks at our lodge.
Let me know if you need a description of these photos.

Sincerely,

Jana Aven
Camp Manager

Wonowon Lodge
Open Camp Facility
Mile 101 Alaska Highway
Wonowon, B.C.V0C2N0
Office: 250-772-3663
Cell: 250-794-8664
Fax: 250-772-3664
Email:wonowonlodge@hotmail.com

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Tuesday, March 31, 2015 10:53
To: Filmer, Cam A TRAN:EX
Cc: Mohrmann, Ralph TRAN:EX
Subject: RE: LNG / Community Readiness Update

You are most welcome! Hope it meets your needs. ☺

From: Filmer, Cam A JAG:EX
Sent: Tuesday, March 31, 2015 10:51
To: Hurst, Maurie L JAG:EX
Cc: Mohrmann, Ralph JAG:EX
Subject: RE: LNG / Community Readiness Update

Thanks Maurie ☺

From: Hurst, Maurie L JAG:EX
Sent: Tuesday, March 31, 2015 10:49
To: Filmer, Cam A JAG:EX
Cc: Mohrmann, Ralph JAG:EX
Subject: RE: LNG / Community Readiness Update

Hello, Cam.

- Since my first report to you in February (attached), there have been no meetings (to my knowledge) of the Working Group.
- I was contacted, via email, by Prince Rupert Gas Transmission advising me they would be in touch with me regarding their own SEEMP. I have not yet heard back from them.
- We (EMBC – you, Gord, and I) met internally, resulting in your email February 20 (attached).
- I was contacted by the Working Group in an email, clarifying the role and responsibilities of those identified as a "point of contact" for the SEEMP process.
- I was contacted by Jennifer Hill from Community, Sport and Cultural Development on March 4. Jennifer wanted to know if industrial partners were identifying work camp locations to us, which opened the door for me to have a conversation with her about emergency management legislation and EMBC/Local Authority roles and responsibilities. In the end, it was suggested that because it is the Ministry of Health that requires industrial partners to provide notice of camp locations that they would be the natural fit for providing those locations to the Working Group partners.

And that is the sum of my involvement on this file in March. If you have any questions or concerns, please call or email.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

EMERGENCY MANAGEMENT BRITISH COLUMBIA
1B - 3215 Eby Street
Terrace BC V8G 2X8 CANADA
www.embc.gov.bc.ca

Ph 250.615.4800 Fax 250.615.4817
24 Hour Emergency Reporting 1.800.663.3456

From: Filmer, Cam A JAG:EX
Sent: Tuesday, March 31, 2015 10:11
To: Hurst, Maurie L JAG:EX
Cc: Mohrmann, Ralph JAG:EX
Subject: LNG / Community Readiness Update

Hi Maurie

Could I please get an updated summary for any meetings you have had, or any recent developments / supports / requests.

Have an ADMs meeting sitting in for Pat on

Using your last summary with anything new bolded in great.

Thanks

Cam

Karger, Kristina TRAN:EX

From: Hill, Jennifer CSCD:EX
Sent: Friday, April 10, 2015 15:14
To: Tomaz, David C TRAN:EX; Rothe, Karen J TRAN:EX
Cc: Hurst, Maurie L TRAN:EX
Subject: RE: FYI—Work Camps and OHS Regulation

Thanks everyone for your quick response to my inquiry and for Maurie's contact.

Have a great weekend!
Jennifer

Jennifer Hill, MCIP | RPP
Manager, Intergovernmental Initiatives
Intergovernmental Relations and Planning Branch
Ministry of Community, Sport and Cultural Development
6th Floor, 800 Johnson Street
Victoria, BC V8W 9T2
(T) 250-387-0089

From: Tomaz, David C JAG:EX
Sent: Friday, April 10, 2015 3:01 PM
To: Rothe, Karen J CSCD:EX; Hill, Jennifer CSCD:EX
Cc: Hurst, Maurie L JAG:EX
Subject: RE: FYI—Work Camps and OHS Regulation

You are welcome Karen
I might offer that if Jennifer needs or wants some verification from a local authority aspect perhaps a call to our Northwest Regional office in Terrace since there are definitely some examples just this kind of interaction occurring in her region. She may be able to expand on this and maybe even have a contact from a local authority that has experienced this activity directly.

So by way of CC I wish to introduce Maurie Hurst our Regional Manager in the Terrace office.

David C Tomaz

From: Rothe, Karen J CSCD:EX
Sent: Friday, April 10, 2015 14:36
To: Hill, Jennifer CSCD:EX
Cc: Tomaz, David C JAG:EX
Subject: FYI—Work Camps and OHS Regulation

Hi Jennifer,

As we discussed, the local authority is responsible for the population within its jurisdiction and is required to have an emergency response plan. That said, a work camp would need to comply with this regulation—inspection by WorkSafe

BC. I would assume, although that is sometimes dangerous to do, that the procedures under this regulation and the local authority's plan would work together. It might be worthwhile contacting WorkSafe BC about their experience with work camps.

Thank you David and do you have anything to add?

~karen

From: Tomaz, David C JAG:EX
Sent: Friday, April 10, 2015 2:25 PM
To: Rothe, Karen J CSCD:EX
Subject: In OHS Regulations

Part 4: Emergency Preparedness and Response

Risk assessment

4.13 (1) The employer must conduct a risk assessment in any workplace in which a need to rescue or evacuate workers may arise.

(2) If the risk assessment required by subsection (1) shows a need for evacuation or rescue, appropriate written procedures must be developed and implemented, and a worker assigned to coordinate their implementation.

(3) Written rescue and evacuation procedures are required for but not limited to

(a) work at high angles,

(b) work in confined spaces or where there is a risk of entrapment,

(c) work with hazardous substances,

(d) underground work,

(e) work on or over water, and

(f) workplaces where there are persons who require physical assistance to be moved.

Emergency procedures

4.14 (1) Emergency means of escape must be provided from any work area in which the malfunctioning of equipment or a work process could create an immediate danger to workers and the regular means of exit could become dangerous or unusable.

(2) Emergency exit routes must be designed and marked to provide quick and unimpeded exit.

(3) At least once each year emergency drills must be held to ensure awareness and effectiveness of emergency exit routes and procedures, and a record of the drills must be kept.

Repealed

4.15 *Repealed.* [B.C. Reg. 312/2003]

Training

4.16 (1) All workers must be given adequate instruction in the fire prevention and emergency evacuation procedures applicable to their workplace.

(2) Workers assigned to firefighting duties in their workplace must be given adequate training, by a qualified instructor, in fire suppression methods, fire prevention, emergency procedures, organization and chain of command, firefighting crew safety and communications applicable to their workplace.

(3) Retraining for firefighting duties must be provided periodically, but not less than once a year.
(4) A worker not covered by Part 31 (Firefighting), who is assigned to firefighting duties, must be physically capable of performing the assigned duties safely and effectively before being permitted to do them.

Notification of fire departments

4.17 (1) An employer having at a workplace controlled products covered by WHMIS, explosives, pesticides, radioactive material, consumer products or hazardous wastes in quantities which may endanger firefighters, must ensure the local fire department is notified of the nature and location of the hazardous materials or substances and methods to be used in their safe handling.

(2) Subsection (1) does not apply to a workplace

(a) where materials are kept on site for less than 15 days if the employer ensures an alternative effective means for notification of fire departments is in place in the event of fire or other emergency, or

(b) which is not within the service area of a fire department.

Notification of utility service providers

4.18 If work activities conducted by or on behalf of an employer cause a utility service to be hit or damaged, the employer must notify the owner of the utility service without delay.

[en. B.C. Reg. 312/2010, App. D.]

Hope that helps you....

Still linked to the local authority in the end.

David C Tomaz
Emergency Planning Officer; Policy and Legislation
Plans and Mitigation Unit
Emergency Management British Columbia (EMBC)
Block A – Unit 200
2261 Keating Cross Road
Saanichton, BC V8M 2A5
http://www.embc.gov.bc.ca/em

Phone (250) 952-4557 Cell (250) 920-6551
24 Hour Emergency Line 1-800-663-3456

Karger, Kristina TRAN:EX

From:	Tomaz, David C TRAN:EX
Sent:	Saturday, April 11, 2015 15:52
To:	Hill, Jennifer CSCD:EX; Rothe, Karen J TRAN:EX
Cc:	Hurst, Maurie L TRAN:EX
Subject:	Re: FYI—Work Camps and OHS Regulation

Sorry Jennifer but the best source for interpretation and application of the OSH regs or associated legislation would be worksafe BC. I am good for EPA but that is all I should speaking to directly.
Good luck with the search.

Regards,
David C Tomaz

From: Hill, Jennifer CSCD:EX
Sent: Saturday, April 11, 2015 15:29
To: Tomaz, David C JAG:EX; Rothe, Karen J CSCD:EX
Cc: Hurst, Maurie L JAG:EX
Subject: RE: FYI—Work Camps and OHS Regulation

Hi Again Everyone – I have another question for you if. I hope you don't mind...
Would a work camp – a place where workers reside – be considered a place of work for the purposes of the OCCUPATIONAL HEALTH AND SAFETY REGULATION 296/97? The reg refers to Part 3 of Workers Compensation Act which includes this definition of workplace:
"workplace" means any place where a worker is or is likely to be engaged in any work and includes any vessel, vehicle or mobile equipment used by a worker in work.
I can see that for the cooks, cleaners in the camp this could apply but I am wondering if a residential facility would fall under this reg or somewhere else?
I might be way off here, so please set me straight if I am...
Thanks!
Jennifer

Jennifer Hill, MCIP | RPP
Manager, Intergovernmental Initiatives
Intergovernmental Relations and Planning Branch
Ministry of Community, Sport and Cultural Development
6th Floor, 800 Johnson Street
Victoria, BC V8W 9T2
(T) 250-387-0089

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Cc: Hurst, Maurie L JAG:EX
Subject: RE: FYI—Work Camps and OHS Regulation
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David C Tomaz

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To: Hill, Jennifer CSCD:EX
Cc: Tomaz, David C JAG:EX
Subject: FYI—Work Camps and OHS Regulation

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As we discussed, the local authority is responsible for the population within its jurisdiction and is required to have an emergency response plan. That said, a work camp would need to comply with this regulation—inspection by WorkSafe BC. I would assume, although that is sometimes dangerous to do, that the procedures under this regulation and the local authority's plan would work together. It might be worthwhile contacting WorkSafe BC about their experience with work camps.

Thank you David and do you have anything to add?

~karen

From: Tomaz, David C JAG:EX
Sent: Friday, April 10, 2015 2:25 PM
To: Rothe, Karen J CSCD:EX
Subject: In OHS Regulations

I.C. Reg. 296/97 **OCCUPATIONAL HEALTH AND SAFETY REGULATION 296/97**

Part 4: Emergency Preparedness and Response

Part 4: Emergency Preparedness and Response

Risk assessment

4.13 (1) The employer must conduct a risk assessment in any workplace in which a need to rescue or evacuate workers may arise.

(2) If the risk assessment required by subsection (1) shows a need for evacuation or rescue, appropriate written procedures must be developed and implemented, and a worker assigned to coordinate their implementation.

(3) Written rescue and evacuation procedures are required for but not limited to

(a) work at high angles,

(b) work in confined spaces or where there is a risk of entrapment,

(c) work with hazardous substances,

(d) underground work,

(e) work on or over water, and

(f) workplaces where there are persons who require physical assistance to be moved.

Emergency procedures

4.14 (1) Emergency means of escape must be provided from any work area in which the malfunctioning of equipment or a work process could create an immediate danger to workers and the regular means of exit could become dangerous or unusable.

(2) Emergency exit routes must be designed and marked to provide quick and unimpeded exit.

(3) At least once each year emergency drills must be held to ensure awareness and effectiveness of emergency exit routes and procedures, and a record of the drills must be kept.

Repealed

4.15 *Repealed*. [B.C. Reg. 312/2003]

Training

4.16 (1) All workers must be given adequate instruction in the fire prevention and emergency evacuation procedures applicable to their workplace.

(2) Workers assigned to firefighting duties in their workplace must be given adequate training, by a qualified instructor, in fire suppression methods, fire prevention, emergency procedures, organization and chain of command, firefighting crew safety and communications applicable to their workplace.

(3) Retraining for firefighting duties must be provided periodically, but not less than once a year.

(4) A worker not covered by Part 31 (Firefighting), who is assigned to firefighting duties, must be physically

capable of performing the assigned duties safely and effectively before being permitted to do them.

Notification of fire departments

4.17 (1) An employer having at a workplace controlled products covered by WHMIS, explosives, pesticides, radioactive material, consumer products or hazardous wastes in quantities which may endanger firefighters, must ensure the local fire department is notified of the nature and location of the hazardous materials or substances and methods to be used in their safe handling.

(2) Subsection (1) does not apply to a workplace

(a) where materials are kept on site for less than 15 days if the employer ensures an alternative effective means for notification of fire departments is in place in the event of fire or other emergency, or

(b) which is not within the service area of a fire department.

Notification of utility service providers

4.18 If work activities conducted by or on behalf of an employer cause a utility service to be hit or damaged, the employer must notify the owner of the utility service without delay.

[en. B.C. Reg. 312/2010, App. D.]

Hope that helps you....
Still linked to the local authority in the end.

David C Tomaz
Emergency Planning Officer; Policy and Legislation
Plans and Mitigation Unit
Emergency Management British Columbia (EMBC)
Block A – Unit 200
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24 Hour Emergency Line 1-800-663-3456

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Monday, May 4, 2015 9:01
To: Ree, Terrance TRAN:EX
Cc: Anderson, Gordon A TRAN:EX; Filmer, Cam A TRAN:EX
Subject: RE: Camps

Thank you, Terry. I was aware they were putting in infrastructure for the camp, but there were only accommodations for about 500 so far. No one living there as far as I know, but it changes so quickly up here.

M. ☺

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Ree, Terrance JAG:EX
Sent: Monday, May 4, 2015 08:54
To: Hurst, Maurie L JAG:EX
Cc: Anderson, Gordon A JAG:EX; Filmer, Cam A JAG:EX
Subject: Camps

Good Morning Maurie , I attended Regional Fire Chiefs meeting here in Prince George this weekend , The Fire Chief from Thorne hill had mentioned that terrace will have a 3500-4000 LNG man camp just outside Terrace located beside airport facilities . No other details available
FYI
Cheers Terry

TERRY REE
FIRE SERVICE ADVISOR | OFFICE OF THE FIRE COMMISSIONER
EMERGENCY MANAGEMENT BC
MINISTRY OF JUSTICE
O: 250.612.4148 | C: 250.640.6263 | E: TERRANCE.REE@GOV.BC.CA
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24 EMERGENCY REPORTING 1.888.988.9488

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Friday, June 19, 2015 14:01
To: Duffy, Chris D TRAN:EX
Cc: Filmer, Cam A TRAN:EX
Subject: FW: APP D in the BN on Work Camps - WorkSafe BC contact
Attachments: Industrial Work Camps Info Note_LGs MM.DOCX

Hello there, Chris.

As we discussed, it turns out there was no consultation with WorkSafe BC on the work camp BN. Cam has suggested, given your extensive work with WorkSafe BC, that you would know who best to discuss this issue with to determine responsibilities, etc. Could I leave this with you?

Thank you so much, Chris. I've attached the BN electronically for your convenience.

M.

Maurie L. Hurst, BA(Crim), MBA
Regional Manager, Northwest

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From: Filmer, Cam A JAG:EX
Sent: Friday, June 19, 2015 13:23
To: Hill, Jennifer CSCD:EX
Cc: Hurst, Maurie L JAG:EX
Subject: RE: APP D in the BN on Work Camps - Worksafe BC contact

Thanks Jennifer)

From: Hill, Jennifer CSCD:EX
Sent: Friday, June 19, 2015 13:19
To: Filmer, Cam A JAG:EX
Cc: Hurst, Maurie L JAG:EX
Subject: APP D in the BN on Work Camps - Worksafe BC contact

Hi Cam,

If memory serves me correctly, I didn't actually speak with anyone at Worksafe BC about the briefing note on work camps. I did have one or two conversations with Maurie and my colleague here, Karen Rothe, and then did some digging on the website to pull together Appendix D.

Let me know if there is anything more I can do on my end to help.

Kind regards,
Jennifer

Jennifer Hill, MCIP | RPP
Manager, Intergovernmental Initiatives
Intergovernmental Relations and Planning Branch
Ministry of Community, Sport and Cultural Development
6th Floor, 800 Johnson Street
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Ministry of Community, Sport and Cultural Development
FOR INFORMATION

Date: April 17, 2015

Title: Mitigating the effects of natural resource based industrial work camps

Issue: Understanding the effects of natural resource based industrial work camps on communities and how they are being mitigated, especially in northern BC.

Background:
BC has long relied on natural resources to fuel its economy. Liquified Natural Gas (LNG) presents a rare opportunity for the Province to build a new industry that will generate jobs, revenues to pay for health and education services, and long-term stability for families and communities. The provincial LNG strategy, *Liquefied Natural Gas: A Strategy for B.C.'s Newest Industry,* illustrates the Province's commitment to working with interested investors to have LNG facilities in operation by 2020.

Resource-based industrial development especially in northern B.C. has been accompanied by the establishment of industrial work camps. BC's industrial work camps typically accommodate temporary work forces in the forestry, mining, and oil and gas sectors. A 2012 inventory estimated that there were approximately 1,800 industrial camp sites in northern BC[1]. As LNG investors make Final Investment Decisions (FID) and construction of LNG pipelines and facilities begins, work camps for this new sector will be established.

Industrial work camps near or within communities can deliver benefits to those communities. They can also have adverse effects by placing additional pressure on local community infrastructure and services such as sewer, landfill, emergency and medical services (Appendix A). If the effects are not mitigated in some way, local governments are reliant on conventional mechanisms, including their tax base, to pay for the additional demand on services and infrastructure. In some cases, historical or conventional approaches to development, especially for large construction workforces can become problematic. For example, some communities have identified potential challenges for service delivery in relation to work camps effects because the temporary workers living in camps are excluded from local census counts and are therefore not accommodated in conventional funding models based on population.

Provincial agencies, in their role as service providers, are also concerned about their ability to deliver needed services and infrastructure in the face of increased demands. Proponents have different concerns, including concerns about escalating costs, gaining social license and ultimately building and operating their facilities and pipelines successfully. This note describes the approaches being undertaken to address the uncertainties experienced by the parties involved.

Discussion:
Local governments and service providers in northeast and northwest B.C. have raised concerns about the potential effects of work camps on community-level infrastructure and services. Their key concerns include (Appendix B):

- Understanding and mitigating the adverse effects of work camps on communities.

[1] Northern Health, October 17, 2012. Part 1: Understanding the State of Industrial Camps in Northern BC: A Background Paper.

- Obtaining information about existing and proposed work camps including a camp's location, size, type and amenities.
- Clarifying and understanding the regulatory framework for work camp permits and approvals (Appendix E).

Historical patterns of resource development have been well-served by conventional approaches to planning for land use, infrastructure and service delivery. More recently, increasing new resource development activity is calling for new ways of responding to the need for adequate community-level infrastructure and services.

The Province is undertaking new and regionally tailored approaches to addressing local government and service provider concerns in both the northeast and northwest. In northeast B.C., the expansion of the natural gas extraction industry has raised concerns about the ability of communities to prepare for increased infrastructure needs and sustain the associated population growth and demand for services. In this region, the Province has responded to those issues, which have not otherwise been addressed by conventional taxation and infrastructure funding approaches, through negotiated memorandums of understanding (MOUs).

The Provincial/Peace River MOU has provided more than $259 million to the Peace River communities of Chetwynd, Hudson's Hope, Taylor, Tumbler Ridge, Dawson Creek, Fort St. John and Pouce Coupe since 2005 to provide additional services and infrastructure resulting from demands of industrial growth. Discussions are underway to renegotiate the existing MOU and put in place a new 15-year agreement, providing certainty and stability and enabling MOU communities to adequately plan for future needs. The Infrastructure Development Contribution Agreement between the Province of BC and the Northern Rockies Regional Municipality represents the Province's commitment to reviving aging infrastructure, assisting in the capital growth of the region and the support of the Northern Rockies as the service sector for shale gas in northeast BC, supplying future Liquefied Natural Gas (LNG) developments in the northwest.

The provincial response is not a single uniform response; it is a suite of diverse initiatives that vary according to the scale and type of impact and the capacity in various communities and regions, and is characterized by two important features:

- strives for customized solutions that reflect the unique social and economic characteristics of communities and regions enabling them to make choices about priorities and long-term vision
- recognizes the fundamental role of partnerships in achieving success and prioritizes solutions that build partnerships and enable them to grow

A central initiative of the provincial approach in the northwest is the Socio-Economic Effects Management Plan (SEEMP) process. Some Environmental Assessment Certificate Holders are required to develop a SEEMP to mitigate the economic and social effects of work camps on communities by undertaking a coordinated process that engages the appropriate stakeholders – certificate holders, local governments, provincial agencies and service providers – in a discussion of the potential effects of work camps and related mitigations. In addition to mitigating effects of work camps, the engagement discussions are key to providing local governments with needed information about work camps. SEEMP discussions are expected to occur relatively early in the project planning / application process, providing local governments with time to create partnerships and plan for potential infrastructure and service effects.

In addition to SEEMP, the following initiatives comprise the provincial approach and address the three key concerns raised by local governments (Appendix C):

s.13

- Community Readiness Working Group (CRWG) coordinates provincial actions for services and infrastructure in areas where communities may face extraordinary demands arising from major industrial developments. Members of the CRWG include representatives from the following ministries:
    - Advanced Education, Children and Family Development, Community, Sport and Cultural Development, Education, Environmental Assessment Office, Health, Jobs, Tourism and Skills Training, Justice, Aboriginal Relations and Reconciliation, Natural Gas Development, BC Oil and Gas Commission, Social Development and Social Innovation, Transportation and Infrastructure and the Northern Health Authority.
- Community Readiness Initiative including the Community Land-Use Planning Program (CLUPP), Asset Management Capacity Building (AMCB), Planning Intern Program, and local government/community outreach activities.
- Negotiated, customized tax agreements – e.g. taxation agreement between Pacific Northwest LNG and the District of Port Edward providing for full funding of infrastructure upgrades for sewer, water and main roads, and for a proponent contribution to a ring road bypass.
- Environmental Assessment (EA) conditions requiring proponents to mitigate a wide range of adverse effects arising from the development of major projects, including effects of work camps that are not captured in a SEEMP condition.

Some local governments have proposed resource intensive solutions, such as a provincial one-stop oversight body to track and manage the effects of work camps on community-level infrastructure and services. By comparison, the current provincial approach represents a strategic and measured approach where the onus for solving specific issues resides with those who have the interest, motivation and capacity to address them; it respects the desire of proponents and communities to negotiate their own responses. The provincial approach targets financial contributions to specific local-level infrastructure needs. It shares the responsibility of mitigating effects among proponents, local governments, provincial and other service providers, and through its collaborative engagement approach shifts the discussion away from one that says "*you* should do this" to one of "how can each of us best contribute to the solution".

Next Steps:

The topic of industrial work camps and how they relate to communities is complex, touching on numerous stakeholder groups, regulatory authorities, service providers, and jurisdictions. The Province has built its knowledge of the effects of industrial work camps and in response created tools to facilitate mitigations and move LNG certificate holders toward financial investment decisions (FIDs). Development of this briefing note has expanded the Ministry's understanding of the complexities related to the regulatory context for industrial work camps, the need for partnerships and the kinds of effects and mitigations work camps generate.

Contact: Jennifer Hill
Meggin Messenger
Telephone: 250-387-0078
250-387-4045

Appendix A – An overview of industrial work camps and their potential effects

Industrial work camps have been and continue to be used in many resource extraction industries (e.g. forestry, mining, etc.). They are seen as a cost effective way to provide a combination of workplace and living space settings for companies to accommodate temporary workers. They also serve to mitigate the adverse effects of an influx of new residents requiring accommodation in communities close to industrial sites. There has been considerable discussion about work camps associated with increasing resource development in the Northwest particularly as it relates to the LNG industry; the effects of work camps on communities and service providers in a range of sectors are also experienced in the Northeast.

There are different types of work camps, including:

- closed camps – camps used by one proponent to house their workers;
- open camp – camps where the facilities are open to workers from various projects;
- dry camps – camps where alcohol is restricted;
- self-contained camps – camps that provide all necessary amenities and services; and;
- limited-service camps – camps that rely on other organizations including local governments for services such as medical services, water, entertainment etc.

The form of construction and extent of amenities available at industrial work camps also vary. At the basic end of the spectrum, a work camp can consist of a collection of ATCO trailers. More sophisticated work camps can be lodge- or village-like facilities with private bedrooms and private baths, in-room TVs, "wifi" hot spots or multiple amenities such as movie theatres, libraries, weight rooms etc.

Camps will also vary depending on whether they are built to support pipeline or facility construction. Camps that support pipelines can be situated in very remote locations, and be operational for relatively short periods of time. They can be designed to be easily dismantled, moved and set up again to accommodate work crews as they progress along the length of the pipeline. Pipeline construction crews can be small with a need to accommodate 10s of workers, or larger in size e.g. up to 1500 workers.

The location of a work camp can determine the kind of effect it imposes on a community or service delivery organization. Work camps for industrial facilities may be remotely located but can also be located close to communities, and sometimes within the boundaries of a municipality (e.g. Rio Tinto Alcan's camp for the smelter in Kitimat). They may be temporary in nature, with the intention that they will be dismantled once facility construction is complete, or they may be designed for the longer term, for example, to provide accommodation after construction is complete for community residents (i.e. community legacy) or employees that operate the facility. The impacts of work camps on local governments will also vary depending on the size of the camp and level of services and amenities provided by the camp.

Work camps for the construction of industrial facilities can accommodate thousands of workers. As an example, PacificNorthwest (PNW) LNG, a LNG facility with an EA certificate, indicates that there will be a need to accommodate 3,500 to 4,500 people in a temporary work camp at peak construction. According to PNW LNG's EA application, construction of the facility is estimated to take approximately four years. Camp operators may employ mobile work forces and transport workers in and out of the camps (see Appendix F for an overview of numbers of work camps and workers for LNG facility and pipeline projects). These kinds of camps are typically referred to as fly-in/fly-out, drive-in/drive-out, or bus-in/bus-out depending on the mode of transportation.

Appendix B – Key concerns about the effects of industrial work camps on infrastructure and services

Local governments and service providers have raised concerns about the potential effects of work camps on community-level infrastructure and services. The key concerns include:

1. **Obtaining information about existing and proposed work camps including information about a camp's location, size, type, or amenities**

   Local governments and service providers have expressed concern that they don't know where or when work camps will be constructed or for how long they will be operational. Knowledge of the size, location and timing of the establishment of industrial work camps is essential to local governments to help them plan for development and anticipate the demands on community infrastructure, water, sewer, landfill, housing, emergency services, amenities and facilities. Access to this information will enable local governments to take advantage of the benefits or address the adverse effects of the work camps. The Ministry of Health has also identified the need to know about the location and timing of industrial work camps, and has responded by developing a new Work Camps Regulation and supporting guidance, which is described in Appendix C.

   Local governments are also concerned about the need to respond to emergencies at or near work camps. A lack of information about the location, size and type of work camps could pose a safety risk. An overview of the regulatory framework for emergency response in relation to industrial work camps is provided in Appendix D.

   Responses to concerns related to obtaining information about existing and proposed work camps including information about a camp's location, size, type, or amenities include s.13
   s.13
   s.13 SEEMP, Community Readiness Working Group and Community Readiness Initiative.

2. **Understanding and mitigating work camp effects on communities**

   Local governments and service providers have expressed concern about the additional pressures work camps can place on local community infrastructure and services (e.g. sewer, landfill, emergency, medical services). These pressures often result because the workers living in work camps are excluded from local census counts (and sometimes referred to as a shadow population) and therefore they do not contribute additional revenue to the local government tax base to pay for this additional pressure on services and infrastructure. Research reviewing the literature on work camps reveals that the effects most commonly featured include community-life or social effects, for example, increased real estate prices and home rental costs, increased hospital visits and decreased perception of safety in community[2].

   With respect to mitigating effects of work camps, local governments have indicated an interest in having the authority to impose a tax on work camps. The tax revenue would be used to fund the additional servicing requirements, which result from work camps that do not contribute to the local

[2] W. Beamish Consulting Ltd. & Heartwood Solutions Consulting prepared for Peace River Regional District, June 27/13, p.13.

tax base. In particular, local governments would like to have the authority to impose the up to 2% municipal and regional district tax (MRDT) on industrial work camps, a type of accommodation that is currently exempt from the tax. The MRDT applies to the sale of short-term accommodation in participating areas of B.C. Ministry briefing materials for 2014 UBCM Convention indicated that the Ministry of Finance would be made aware of the local government request and highlighted the usefulness of the proposed new Ministry of Health Work Camps Regulation.

While work camps can create extraordinary pressures on community services and infrastructure, they can also mitigate demand for some services, such as housing and related services. A self-contained work camp with high-quality amenities can reduce the burden on a community's services and amenities. There can also be positive economic benefits, such as the expansion of local businesses that service the needs of work camps or the workers (e.g. fishing charters), or employment and specialized training for local residents, in particular for aboriginal groups and communities with traditionally high unemployment rates.

Responses that address concerns related to understanding and mitigating work camp effects on communities include: SEEMP, proposed new Work Camps Regulation and supporting guidance, Community Readiness Initiative, negotiated, customized tax agreements including Infrastructure Development Contribution Agreement – Northern Rockies Regional Municipality and Provincial / Peace River MOU.

3. Clarifying the regulatory framework for work camp permits and approvals

Local governments have highlighted the challenge of understanding the complex regulatory framework for work camps, noting that multiple agencies are responsible for approvals and issuance of work camp permits and there is no inter-agency coordination supporting the framework. At the 2014 UBCM Convention, local governments put forward resolution A4: Worker Camp Permitting, requesting a single window approval process for industrial work camps. The Ministry response indicated that the issue of work camps is not necessarily a gap in the regulatory framework, but rather a need for improved communication and coordination between local governments, proponents and regulatory agencies to ensure a complete understanding of responsibilities and to ensure fair and appropriate responses. The response also described the SEEMP process as a way of achieving improved communication (see: section on SEEMP in Appendix D). Appendix E provides a description of BC's regulatory framework for industrial work camps.

Responses that address concerns related to clarifying the regulatory framework for work camp permits and approvals include SEEMP, s.13

s.13 Community Readiness Working Group and Community Readiness Initiative.

Appendix C – Provincial approach to mitigating the effects of work camps

The provincial government recognizes the role the province has to play in supporting communities to respond to infrastructure and service demands that arise from major resource development projects. The provincial response is not a single uniform response; it is a suite of initiatives that vary according to the scale and type of impact and the capacity in various communities and regions. Taken together these measures strengthen the capacity of communities and regions to accommodate, and benefit from major resource development projects. The following is a description of the suite of measures in place to respond to the key concerns identified above.

1. Socio-Economic Effects Management Plans (SEEMPs) through Environmental Assessment (EA)

To help mitigate economic and social effects of LNG related industrial work camps on communities, some Environmental Assessment Certificate Holders are required to develop a Socio-Economic Effects Management Plan (SEEMP). The basis for the approach, developed collaboratively by the Ministry and Environmental Assessment Office (EAO), is that the economic and social impacts of industrial work camps on communities will be better understood through a coordinated process that engages the appropriate stakeholders – certificate holders, local governments, provincial agencies, service providers – in a discussion of the potential effects of work camps and related mitigations.

A SEEMP sets out an adaptive management process to identify and manage project related socio-economic effects, with a focus on community services and infrastructure. The desired outcome with the development of a SEEMP is to mitigate project related (e.g. work camps) adverse effects on communities and for a Certificate Holder to have access to services that are required for their business and workers.

In addition to mitigating effects of work camps, the engagement discussions that are a key part of the process to develop and implement SEEMPs provide local governments with needed information about work camps. SEEMP discussions are expected to occur earlier in the project planning and application process and therefore provide local governments with time to plan for potential infrastructure and service impacts.

In its response to the 2014 UBCM Convention resolution A4 Worker Camp Permitting, the Ministry replied that the issue of work camps is not necessarily a gap in the regulatory framework, but rather, a need for improved communication and coordination between local governments, proponents and regulatory agencies. The SEEMP requirement is one way that the Ministry is actively pursuing improved engagement between local governments, Certificate Holders and regulatory agencies to ensure a complete understanding of responsibilities and to ensure fair and appropriate responses.

The requirement for SEEMP discussions is currently limited to LNG facilities and pipelines that are part of the Environmental Assessment process. There is no SEEMP requirement to help address local government concerns about obtaining information for existing work camps, projects that do not require EA approval, or EA projects that do not require a SEEMP. Presently, SEEMPS are focused on LNG projects located in northwest BC and LNG pipelines originating in the northeast.

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3. Environmental Assessment Process (beyond SEEMP conditions)

In addition to Environmental Assessment (EA) conditions requiring proponents to develops SEEMPs, the EA process can require proponents to mitigate a wide range of adverse effects arising from the develop of major projects, including effects of work camps that are not captured in a SEEMP-related condition.

The Environmental Assessment Office (EAO) manages the assessment of proposed major projects in British Columbia as required by the Environmental Assessment Act (Act). The assessment process examines major projects for potentially adverse environmental, economic, social, heritage and health effects that may occur during the life cycle of these projects.

4. Community Readiness Working Group

The Community Readiness Working Group (CRWG) coordinates provincial actions for services and infrastructure in areas where communities may face extraordinary demands arising from major industrial developments. The goal of the CRWG is to enable decisions that support the combined efforts of local governments, provincial service providers and proponents to meet infrastructure, health, safety and social service requirements. The CRWG also monitors and collaborates on local government actions on services and infrastructure and provides feedback on industry actions on services and infrastructure.

Members of the CRWG include representatives from the following ministries: Advanced Education, Children and Family Development, Community, Sport and Cultural Development, Education, Environmental Assessment Office, Health, Jobs, Tourism and Skills Training, Justice, Aboriginal Relations and Reconciliation, Natural Gas Development, BC Oil and Gas Commission, Social Development and Social Innovation, Transportation and Infrastructure and the Northern Health Authority.

5. Community Readiness Initiative

"Community Readiness", which complements the SEEMP, is a broad coordinated response to changing service and infrastructure needs and impacts arising from extraordinary, peak demands during the construction phase of LNG and other major industrial developments. It includes the Community Land-

Use Planning Program (CLUPP), Asset Management Capacity Building (AMCB), Planning Intern Program, local government/community outreach activities.

6. Negotiated, customized tax agreements

The Province is supporting the establishment of customized, negotiated local taxation agreements, where they add the most value. They will be customized to respond to differences among communities, their histories and aspirations and to differences across sectors. To date, a taxation agreement between Pacific Northwest LNG and the District of Port Edward has been successfully negotiated and signed on December 15, 2014. The agreement provides for full funding of infrastructure upgrades for sewer, water and main roads, and for a proponent contribution to a ring road bypass.s.12,s.13
s.12,s.13
s.12,s.13

The Province is also exploring partnership contributions to the ring road bypass through Building Canada. The Province has also committed to regulating a 40% depreciation of capital value of large properties, which requires a regulatory change under the *Assessment Act*.

7. Infrastructure Development Contribution Agreement – Northern Rockies Regional Municipality

The Province has responded to concerns on the part of the Northern Rockies Regional Municipality (NRRM) that the potential growth of the shale gas industry will place significant demands on the community for housing, infrastructure and community services that it will not be able to meet through property taxes. The Infrastructure Development Contribution Agreement (IDCA) was signed in April 2013, allowing the Province to contribute up to $10 million per year for twenty years, towards infrastructure to build a comprehensive service centre for the natural gas industry.

8. Provincial / Peace River Memorandum of Understanding

The Provincial / Peace River Memorandum of Understanding (MOU) was announced in 2005. The MOU provides at least $20 million annually, indexed to changes in the rural industrial assessment base, to the Peace River Regional District. The funds act as "grants-in-lieu", as Peace River communities cannot access what would ordinarily be their municipal industrial property taxes. The funds support communities' ability to provide additional services and infrastructure resulting from demands of industrial growth. Discussion are currently underway to renegotiate the existing MOU and put in place a new 15 year agreement, providing certainty and stability and enabling MOU communities to adequately plan for future needs. It is intended that a renegotiated agreement would extend to 2030.

9. Existing Financial Tools Available to Local Governments to Mitigate Some Effects

Property taxes

Property taxes are a primary source of revenue for local governments, and BC Assessment does reflect property improvements when assessing work camps. The amount of tax increase is dependent on the location, type of improvement and size. As long as BC Assessment is aware of a work camp it will be reflected in the property assessment, and the local government will receive increased taxes.

User fees

In addition to property taxes, most other local government revenue comes from user fees, senior government grants and developer contributions. Typically user fees and charges are used to recover the cost of services (e.g. sewer, water, garbage collection). Fees are often charged to applicants for building permits or licenses and are common when using public transportation, recreational facilities or renting local government property.

Senior government grants

Senior government grants can be conditional – funds transferred for a specific purpose that may not be used for any other project – and unconditional – funds that can be used for any purpose desired by the recipient. Examples of provincially managed conditional grants include infrastructure grants such as the Building Canada Fund and the Infrastructure Stimulus Fund. The primary unconditional grants to local governments are the Small Community Grants, Traffic Fine Revenue Sharing transfers and Regional District Basic Grants.

Developer contributions

There is a range of development finance tools available to local governments to cover at least a portion of growth-related expenditures, including development costs charges (DCCs), local service areas and taxes, density bonusing, latecomer charges and community amenity contributions (when used appropriately). These types of tools could be used by local governments where LNG facilities are being constructed within their jurisdictional boundaries.

In addition to the suite of provincial initiatives, proponents are entering into independent agreements with communities, service providers and First Nations to mitigate potential effects and provide benefits. One example is agreements between a proponent and local educational institutions to incorporate skills training required of employees working to construct and operate LNG facilities. A second example is a service agreement between a proponent and a local government outlining the terms of use of local water for a work camp and facility.

Appendix D – Overview of BC's regulatory framework for emergency response

Emergency management is a continuous and integrated process involving the efforts of individuals, private sector, local, provincial and federal governments to identify threats, determine vulnerabilities and establish required resources to be able to respond effectively to an emergency.

In BC, local authorities including municipalities and regional districts are responsible for planning and responding to emergencies within their jurisdictional areas. Emergency Management British Columbia (EMBC) provides leadership in emergency management on behalf of the Province. EMBC works directly with local governments, provincial ministries, other jurisdictions and volunteers in a coordinated effort to prepare for, respond to and recover from emergencies.

A local authority is responsible for the population within its jurisdiction, which could include industrial work camps. Under the *Emergency Program Act*, a local authority is required to have local emergency plans respecting preparation for, response to and recovery from emergencies and disasters. The Act also requires a local authority to establish and maintain an emergency management organization to develop and implement emergency plans and other preparedness, response and recovery measures.

Workplaces, including industrial work camps to the extent they are workplaces in which workers such as cooks, maintenance people and others work, must comply with the BC Occupational Health and Safety Regulation 296/97 which requires, under Part 3, employers to develop and implement written rescue and evacuation procedures for any workplace in which a need to rescue or evacuate workers may arise. In addition, if and when the new Ministry of Health proposed Work Camps Regulation is adopted, work camps will be required to describe the emergency procedures the camp has in place to deal with medical, health hygiene, natural disasters, facility emergencies, resident related emergencies, and water treatment and sewage disposal failures.

Furthermore, the BC Fire Code requires a fire safety plan for occupancies classified as assemblies, care, treatment or detention; every structure required by the BC Building Code to have a fire alarm system; demolition or construction sites; indoor and outdoor storage areas; areas where flammable liquids and combustible liquids are stored or handled; and areas where hazardous processes or operations occur.

Appendix E – Overview of BC's regulatory framework for industrial work camps

This appendix provides an overview of the regulatory framework for work camps, starting with the BC Oil and Gas Commission (OGC), which regulates, through permits and licenses, oil and gas activities including LNG facilities and pipelines. With respect to work camps, the OGC's regulatory role is limited to approving access to Crown land for camps, for example, pipeline work camps. No OGC permit is required for work camps on private land.

Local government bylaws and provincial legislation both have a role in regulating industrial work camps. The *Local Government Act* (LGA) and *Community Charter* (CC) provide local governments with the authority to regulate land use planning and development, specifically to adopt bylaws such as Official Community Plan (OCP), zoning and subdivision servicing bylaws. Local governments have legislative authority for zoning private land and some authority for managing land use that occurs on Crown land.

Many industrial work camps are and will be located on Crown land. The applicability of local government bylaws on Crown land is guided by the *Interpretation Act*. Section 14(2) of the *Interpretation Act* provides that an enactment (which includes a local government bylaw) may not affect the Crown in the use or development of Crown land. This means that local government OCP and zoning bylaws cannot affect the Crown's use of land. However, other local government bylaws that are not concerned with the regulation of land could apply (e.g. speed limits on local streets).

The provisions of section 14(2) of the *Interpretation Act* do not extend to tenants of the Crown. This means that local governments can enact bylaws regulating the use of the land by the tenants of the crown. For example, local governments may enact bylaws for uses such as recreation fishing lodges, ski operations, and forestry or mining camps.

In addition to the OGC and local government regulatory authority, there is a range of Provincial ministries and Acts involved in regulating industrial work camps (see Table 1 below for more information) including:

- *Public Health Act* (*Industrial Camps Regulation, Sewerage System Regulation*) – siting, floor space requirements, sewage management
- *Drinking Water Protection Act* – drinking water (human consumption, sanitation or food preparation)
- *Workers Compensation Act* – camps with cooks, maintenance people, etc.
- *Environmental Management Act* – waste, sewerage regulations, burning, hazardous waste
- *Water Act* – surface source water supply, water diversion and licenses
- *Fire Services Act* – fuel storage
- *Forest and Range Practices Act* – burning piles, road usage, right to occupy land
- *Agricultural Land Commission Act* – non-farm use in the ALR
- *Industrial Roads Act, Transportation Act* – highway access, permits, road construction approvals
- *Land Act* – approve lease or Crown Grant Land of required land.

From time to time questions arise about which legislative authority takes precedence over another, including questions about the relationship of local government bylaws and provincial legislation.

At time of writing, staff is not aware of situations where local government bylaws regulating industrial work camps have been overridden by provincial legislation. There are cases where local government land use bylaws regulating uses or structures other than industrial work camps have been recognized as not having effect because of provincial legislation. Courts have rules that zoning powers under the LGA

cannot be used to prohibit the extraction of aggregate on Crown or private land – because this is not a "use" of the land but an extraction of a resource. Provisions of the *Private Managed Forest Land Act* (PMFLA s. 21) restrict local governments' authority to adopt bylaws or issue certain permits on private managed forest land. Local governments are restricted in their ability to regulate development given that the Private Managed Forest Land Regulation permits one dwelling per registered parcel.

A legal review of the *Oil and Gas Activities Act* (OGAA) and *Public Health Act* (PHA) did not reveal any sections that provide an override of local government bylaws. A local government bylaw is subordinate legislation to either one of these acts. Therefore, if there is a conflict between a local government bylaw and a section of one of these acts, the provincial law would supersede the bylaw. If a person is able to comply with both the provincial law and the local government bylaw, section 10 of the *Community Charter* provides that the bylaw will not be found to be inconsistent with the provincial law. This is known as the "impossibility of dual compliance" test – if a person cannot comply with both the bylaw and the provincial law, then the bylaw will be found to be of no effect.

A thorough review of all BC legislation to determine whether there are other acts or regulations that might apply to work camps and provide an override of local government bylaws has not been undertaken to date, primarily because it would require significant time and resources. It is a possible next step if interest and resources permit.

Table 1: Acts and Regulations and Enforcement Responsibility

	Act and Regulation	Enforcement Responsibility
1	*Public Health Act* – Industrial Camps Regulation • Siting and size of camps • Water supply • Sanitation • Waste management • Sleeping quarters	Ministry of Health, Health Protection Branch, Northern Health Authority, Environment Health Office
2	*Drinking Water Protection Act* and Regulation • Specifies requirements for drinking water intended for human consumption, food preparation or sanitation.	Ministry of Health, Health Protection Branch, Northern Health Authority, Environmental Health Office, Drinking Water Protection Officer
3	*Public Health Act* – Sewage Disposal Regulation (Sewerage System Regulation) • For camps< 100 persons where treat effluent is to be discharged into the ground through absorption fields or seepage pits	Ministry of Health, Health Protection Branch, Northern Health Authority, Environmental Health Office
4	*Workers Compensation Act* – Occupation Health and Safety Regulation, Part 25 Camps • Applies to camps which have workers such as cooks, maintenance people, etc.	WorkSafeBC
5	*Environment Management Act* Waste (Refuse) must be disposed of by incineration in an approved incinerator and/or transported to a municipal landfill(a landfill permit may be issued in instances where travel to a landfill is impractical).	Ministry of Environment, Regional Environmental Protection Office, Regional Waste Manager Recycling - Recycling Council of BC
6	*Environment Management Act* – Municipal	Ministry of Environment, Environment Protection Office

	Act and Regulation	Enforcement Responsibility
	Sewerage Regulation (MSR) Applies to camps of less than 100 persons; and more than 100 persons and treated sewage is to be discharged onto the land surface. At least 90 days before establishing the camp, applicants must provide the MoE: • Site plan • Design of sewage facility (by a qualified professional) • Operating Plan • Environmental Impact Study	
7	*Environment Management Act* – Open Burning Smoke Control Regulation	Ministry of Environment, Environment Protection Office
8	*Water Act* If water for camp operation is taken away from any surface source other than a well a licence for long term operations or approval for operations up to 12 months is required	Ministry of Environment, Regional Water Management Branch, Northern Health
9	*Environmental Management Act* – Hazardous Waste Regulation (and Guide) • Pertains to the generation storage, transport and disposal of hazardous wastes.	Ministry of Environment, Regional Environmental Protection Office
10	*Fire Services Act* • Fuel storage facilities	BC Fire Commission
11	*Environmental Management Act* – Hazardous Waste Regulation (and Guide) and Spill Reporting Regulation • Spill reporting of petroleum products and other materials	Ministry of Environment, Regional Environmental Protection Office, Provincial Emergency Program
12	*Agricultural Land Commission Act* • Non-farm use in the ALR	Agricultural Land Commission: • Section 26 of the ALC Act delegation of powers under S. 25(1) and (2) – Oil and Gas Commission.
13	*Oil and Gas Commission Act, Petroleum and Natural Gas Act, Pipeline Act*	Oil and Gas Commission • Responsible for regulating oil and gas activities and pipelines • One window review and approval process • ALC Delegation Agreement (NE only)
14	*Electrical Safety Act*	BC Safety Authority
15	*Public Health Act* - Food Premises Regulation • Applies to a place where food intended for public consumption is sold, offered for sale, supplied, handled, prepared, packaged, etc.	Ministry of Health, Health Protection Branch, Northern Health Authority, Environmental Health Office
16	*Forest Act, Forest and Range Practices Act, Environment and Land Use Act, Land Act, Land Titles Act*	Ministry of Forests, Lands and Natural Resource Operations • Delegation agreement in place with the Oil and Gas Commission for some tenures, road use and road access agreements

	Act and Regulation	Enforcement Responsibility
17	Wastewater Systems Effluent Regulations (WSER) • Facilities which collect more than 100 cubic metres	Environment Canada
18	*Industrial Roads Act/Transportation Act* • Highway access, permits, road construction approvals, etc.	Ministry of Transportation and Infrastructure
19	*BC Environmental Assessment Act*	Environmental Assessment Office (EAO) • Manages the environmental assessment process for projects that trigger an assessment under the Act.
20	*Local Government Act*	Local Government • Bylaw amendments (Land use, OCP)
Primary Source: Policy, Communications, Capacity: A Time to Lead (PRRD) Document		

Appendix F – Overview of LNG facilities and pipelines

Table 2: Facilities work camp overview

	Facility	Location	Workers (construction)	Duration (construction)	Workers (operations)
EA Certificate Issued					
1	Pacific NorthWest LNG	Lelu Island, Port Edward, Prince Rupert Port Authority	3,500 - 4,500	2015 - 2018	unknown
Under EA Review					
2	LNG Canada	District of Kitimat (private lands)	4,500 - 7,500 (3,470 yearly av.)	5 - 10 years	350 - 450 (trains 1 & 2) 450 - 800 (full build-out)
3	Woodfibre LNG	District of Squamish (private lands)	600 person-years	2 years	100 (+ unknown # of contracted staff)
Pre-Application					
4	Aurora LNG	Digby Island, 3km SW of Prince Rupert, SQCRD	4,000 - 5,000	2017-2022	400
5	Grassy Point LNG	30km N of Prince Rupert at Grassy Point, SQCRD (Crown land)	1,000 - 6,000	2017 - 2021	unknown
6	Prince Rupert LNG	Ridley Island, BC, 17 km from Prince Rupert and 15 km from Port Edward	2,000 – 3,850 (in camps); 400 in Prince Rupert	2016 – 2021/24+	unknown
7	WCC LNG	Tuck Inlet, in Prince Rupert	unknown	2017 – 2024 (first phase) 2025 – 2030 (other phases)	unknown

Table 3: Pipelines work camp overview

	Pipeline	Location & Length	Duration (construction)	LGs Affected (within 100km)	Workers & Camps
EA Certificate Issued					
1	Prince Rupert Gas Transmission (PRGT)	**Start:** Hudsons Hope **End:** Port Edward (PNW LNG) **Length:** 900 km	**Duration:** 18-42 months **Start date:** 2016	21 local governments	**Early work :** 400 people **Pipeline construction:** 9 main camps: 1100 beds each 3 compressor station camps: 150 beds each
2	Coastal Gaslink Pipeline (CGL)	**Start:** Chetwynd/ Dawson Creek	**Duration:** 4-24 months **Start date:**	19 local governments	**Pioneer work:** 15 camps: 20-200 workers **Clearing, construction:**

		(Ground Birch) **End:** Kitimat **Length:** 650km	Early 2016		10 main camps: 200 - 1,500 workers
EA Certificate Issued					
3	Westcoast Connector Gas Transmission Pipeline	**Start:** 100 km NW Fort St. John **End:** Ridley Island, Prince Rupert (Prince Rupert LNG) **Length:** 860 km (dual line)	**Start date:** Late 2016	36 local governments	**Pipe construction:** 13 main camps **Preparation:** smaller camps **Temporary work camps:** at 5 compressor sites
4	Pacific Trail Pipeline (PTP)	**Start:** Summit Lake (N of Prince George) **End:** Kitimat (Kitimat LNG) **Length:** 470 km	**Start date:** unknown	10 local governments	unknown

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Wednesday, May 6, 2015 15:38
To: Ree, Terrance TRAN:EX
Subject: RE: LNG Work Camp Discussion

Okay.[s.22]

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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-----Original Appointment-----
From: Ree, Terrance JAG:EX
Sent: Wednesday, May 6, 2015 15:37
To: Hurst, Maurie L JAG:EX
Subject: Declined: LNG Work Camp Discussion
When: Friday, May 8, 2015 13:30-14:30 (UTC-08:00) Pacific Time (US & Canada).
Where: 1-877-353-9184, 8485993#

Thanks Maurie .[s.22]
Cheers Terry
<< OLE Object: Picture (Device Independent Bitmap) >>

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Friday, May 8, 2015 15:16
To: Tomaz, David C TRAN:EX
Subject: RE: LNG Work Camp Discussion

And then I read your note! ☺

From: Hurst, Maurie L JAG:EX
Sent: Friday, May 8, 2015 15:15
To: Tomaz, David C JAG:EX
Subject: RE: LNG Work Camp Discussion

No worries. We knew that. Could you take a peek at their interpretation of our Act in Appendix D? It raised some eyebrows on our latest call.

From: Tomaz, David C JAG:EX
Sent: Friday, May 8, 2015 15:14
To: Hurst, Maurie L JAG:EX
Subject: RE: LNG Work Camp Discussion

s.22

David C Tomaz

-----Original Appointment-----
From: Hurst, Maurie L JAG:EX
Sent: Friday, May 8, 2015 13:39
To: Filmer, Cam A JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Tomaz, David C JAG:EX
Subject: LNG Work Camp Discussion
When: Tuesday, May 19, 2015 15:00-16:00 (UTC-08:00) Pacific Time (US & Canada).
Where: s.15,s.17

Discussion re: roles and responsibilities of LA and EMBC in work camp emergency response/management (Appendix D in particular).

<< File: Industrial Work Camps Info Note_LGs MM.DOCX >>

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Wednesday, June 10, 2015 17:02
To: Karger, Kristina TRAN:EX
Subject: Re: Review of Work Camp BN

You are so wonderful! Thank you!

Maurie L. Hurst, Regional Manager
Emergency Management BC, Northwest

Sent from my iPhone; please excuse brevity and typos

On Jun 10, 2015, at 17:00, Karger, Kristina JAG:EX <Kristina.Karger@gov.bc.ca> wrote:

> Hi Maurie,
> Surprisingly Tuesday, June 16th at 2:30pm worked for everyone. I booked the same meeting room that you are meeting Sandra in from 130pm – 230pm.
> **Kristina Karger** | Executive Administrative Assistant
> **Assistant Deputy Minister's Office**
> **Emergency Management BC**
> Block A, Suite 200 - 2261 Keating X Road, Victoria BC V8M 2A5
> Phone: (250) 952-5018 | Fax: (250) 952-4871
>
> http://www.embc.gov.bc.ca
>
> 
> ***Please consider the environment before printing this e-mail***

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Monday, June 22, 2015 15:07
To: Anderson, Gordon A TRAN:EX
Cc: Filmer, Cam A TRAN:EX; Duffy, Chris D TRAN:EX; Ree, Terrance TRAN:EX; Mohrmann, Ralph TRAN:EX; Tomaz, David C TRAN:EX
Subject: Re: Review of Work Camp BN

Many thanks, Gord!

M.

Maurie L. Hurst, Regional Manager
Emergency Management BC, Northwest

Sent from my iPhone; please excuse brevity and typos

On Jun 22, 2015, at 15:53, Anderson, Gordon A JAG:EX <Gordon.A.Anderson@gov.bc.ca> wrote:

> Hi Maurie,
> With respect to the applicability of statutes, it should be noted that there are requirements affecting construction camps. The BC Fire Code references the BC Building Code "Fire Protection for Construction Camps" (Sec 9.10.21) that camps would need to be compliant with. The BC Building Code is applicable to buildings constructed at construction camps. The BC Safety Authority governs electrical, gas and pressure vessels under their act.
> General observations:
> - There is no requirement to have a fire department, nor to have fire protection/rescue services. Any decision to provide these services is a local government decision.
> - Building owners are responsible to be compliant with the code, regardless of the existence (or lack thereof) of fire inspection/suppression services.
> - Through the Fire Services Act the Fire Commissioner and LAFC's have the ability to conduct inspections anywhere in the province (excluding federal lands), either upon complaint or if "deemed advisable".
>
> Please see changes in red below for OFC input.

Appendix D – Overview of BC's regulatory framework for emergency response

Emergency management is a continuous and integrated process involving the efforts of individuals, private sector, local, provincial and federal governments to identify threats, determine vulnerabilities and establish required resources to be able to respond effectively to an emergency.

In BC, local authorities including municipalities and regional districts are responsible for planning and responding to emergencies within their jurisdictional areas. Emergency Management British Columbia (EMBC) provides leadership in emergency management on behalf of the Province. EMBC works directly with local governments, provincial ministries,

other jurisdictions and volunteers in a coordinated effort to prepare for, respond to and recover from emergencies.

A local authority is responsible for the population within its jurisdiction, which could include industrial work camps. Under the *Emergency Program Act*, a local authority is required to have local emergency plans respecting preparation for, response to and recovery from emergencies and disasters. The Act also requires a local authority to establish and maintain an emergency management organization to develop and implement emergency plans and other preparedness, response and recovery measures. It is a local government decision whether or not to provide fire protection, including suppression and inspection related services.

Workplaces, including industrial work camps to the extent they are workplaces in which workers such as cooks, maintenance people and others work, must comply with the BC Occupational Health and Safety Regulation 296/97 which requires, under Part 3, employers to develop and implement written rescue and evacuation procedures for any workplace in which a need to rescue or evacuate workers may arise. In addition, if and when the new Ministry of Health proposed Work Camps Regulation is adopted, work camps will be required to describe the emergency procedures the camp has in place to deal with medical, health hygiene, natural disasters, facility emergencies, resident related emergencies, and water treatment and sewage disposal failures.

Furthermore, the BC Fire Code requires a fire safety plan for occupancies classified as assemblies, care, treatment or detention; every structure required by the BC Building Code to have a fire alarm system; demolition or construction sites; indoor and outdoor storage areas; areas where flammable liquids and combustible liquids are stored or handled; and areas where hazardous processes or operations occur.

In addition, table 1 will need to be updated as indicated:

10	*Fire Services Act (BC Fire Code)* • ~~Fuel storage facilities~~	Officer of the Fire Commissioner - enforcement
#?	*The Building Act (BC Building Code)* • Applies to all buildings constructed • Fire Protection for Construction Camps (sec. 9.10.21)	Local Government – building code compliance

Hopefully this is helpful.
Gord
Gordon Anderson CFO, MIFireE
Fire Commissioner

From: Hurst, Maurie L JAG:EX
Sent: Tuesday, June 16, 2015 17:35
To: Filmer, Cam A JAG:EX
Cc: Duffy, Chris D JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Mohrmann, Ralph JAG:EX; Tomaz, David C JAG:EX
Subject: Re: Review of Work Camp BN

Thanks to everyone for your time today. We spoke with Jennifer about timelines, and we have time to address this over the next week+. Please get our feedback in to me by Friday the 26th and I'll roll everything up first thing Monday.
M.

Maurie L. Hurst, Regional Manager
Emergency Management BC, Northwest
Sent from my iPhone; please excuse brevity and typos

On Jun 16, 2015, at 13:25, Filmer, Cam A JAG:EX <Cam.Filmer@gov.bc.ca> wrote:

Yes – let's do that

From: Hurst, Maurie L JAG:EX
Sent: Tuesday, June 16, 2015 13:01
To: Filmer, Cam A JAG:EX
Cc: Duffy, Chris D JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Mohrmann, Ralph JAG:EX; Tomaz, David C JAG:EX
Subject: Re: Review of Work Camp BN
I think that Terry is the only one not in Victoria. Shall we just call him, save the costs?

Maurie L. Hurst, Regional Manager
Emergency Management BC, Northwest
Sent from my iPhone; please excuse brevity and typos

On Jun 16, 2015, at 12:58, Filmer, Cam A JAG:EX <Cam.Filmer@gov.bc.ca> wrote:

Hi all
Let's go with s.15,s.17
ID #s.15,s.17
-----Original Appointment-----
From: Karger, Kristina JAG:EX
Sent: Wednesday, June 10, 2015 16:57
To: Karger, Kristina JAG:EX; Hurst, Maurie L JAG:EX; Duffy, Chris D JAG:EX; Filmer, Cam A JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Mohrmann, Ralph JAG:EX; Tomaz, David C JAG:EX
Subject: Review of Work Camp BN
When: Tuesday, June 16, 2015 14:30-15:30 (UTC-08:00) Pacific Time (US & Canada).
Where: SG PEP R Nechako Rm (Medium) SG:EX

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Friday, June 19, 2015 15:22
To: Filmer, Cam A TRAN:EX
Cc: Mohrmann, Ralph TRAN:EX
Subject: LNG / Community Readiness Update

Hello Cam.

- Since my last report to you in March, I have attended one NW Community Readiness Working Group meeting on April 23. In that meeting, we were introduced to a work camp information note drafted by CSCD, and have met internally to review and revise the pieces of that note that speaks to emergency management responsibility in those camps. The final review is underway, with a wrap-up of EMBC comments to CSCD anticipated the week of June 29.

- I participated as a facilitator in a multi-agency exercise hosted by the Prince Rupert Port Authority. The overall exercise goal was to practice and improve stakeholder coordination in response to a security-related emergency event within Prince Rupert Port Authority's (PRPA) area of responsibility (AOR). Players included Pacific North West LNG, and spoke to regional emergency management with an industrial focus.

- At the exercise, I was approached by Pacific North West LNG to discuss potential options for a regional emergency planning committee in the Prince Rupert/Port Edward area. Prince Rupert's emergency plan was drafted in 2007 and is not a BCERMS plan, Port Edward's emergency plan was drafted in 1993 and is also not a BCERMS plan, and the Skeena-Queen Charlotte Regional District does not appear to have a north coast emergency plan (though they do have BCERMS plans for parts of rural Haida Gwaii). I'd like to schedule a meeting with you and Heather Lyle upon my return to the office the week of June 29, as there are some opportunities to move this forward with industrial funding.

- Lastly, I have had many outreach opportunities with consultants and LNG organizations on the SEEMP process and emergency management in general, including Spectrum Environmental Consulting Ltd., Pacific North West LNG, LNG Canada, Coastal GasLink Pipeline Project, and Prince Rupert Gas Transmission.

And that is the sum of my involvement on this file to-date. If you have any questions or concerns, please call or email.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, June 23, 2015 15:47
To: Anderson, Gordon A TRAN:EX
Subject: FW: Follow-up on our call

Afternoon Gord ,

For your information:
I have received a couple of calls today regarding possible LNG facilities and gas refineries located here in the north . The first was from the fire chief in Prince Rupert , he stated to me that they have been in conversation with major LNG companies about two LNG plants that are purposed for Prince Rupert and Port Edward .

Their discussion hinged on Prince Rupert Fire/Rescue supplying fire protection response to both locations .
Purposed camp numbers – 5000 per location

The prince Rupert location is within the municipal boundaries and the Port Edward is a fifteen minute run but is covered by Mutual aid agreement .

Second call
From Peter Dalton OCG director of safety inquiring about industrial fire brigades ? or mutual aid agreements with local authorities close by . Major oil Companies coming under the direction of the OCG are purposing to build 2 refineries in the fort St john and ,Dawson Creek Area .
These two LNG plant locations are within the geographical areas of local Government (Prince Rupert and Port Edward)).
Terry

From: Dalton, Peter [mailto:Peter.Dalton@bcogc.ca]
Sent: Tuesday, June 23, 2015 15:24
To: Ree, Terrance JAG:EX
Subject: Follow-up on our call

Terry, thanks so much for helping me to get started on the conversation around requirements for major staffed facilities in the oil and gas sector, and our interest in determining what requirements for firefighting – numbers, training, relationships with local community first responders, etc. may look like. I look forward to any further thoughts you may have in this direction.

Cheers,
Peter

BC Oil & Gas COMMISSION

Peter Dalton
Director, Public Protection and Safety
Peter.Dalton@BCOGC.ca

6534 Airport Road
Fort St John BC V1J 4M6
bcogc.ca

T. 250 794-5231
F. 250-794-5390
M. 250 261-1988

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, June 30, 2015 15:36
To: Anderson, Gordon A TRAN:EX
Cc: Hurst, Maurie L TRAN:EX; Filmer, Cam A TRAN:EX
Subject: Camps

Afternoon Gord ,Maurie :

I have been in contact with the Kitimat fire chief regarding construction camps located within their geographical boundaries. Chief Bossence stated that the impact was huge on their community . Putting a financial strain on Fire , police and public works, and local businesses located in their city .

No monetary compensation was requested by local government or was offered by the Major stake holders for this camp development .

As this was a learning experience for all involved in local government , they have since drafted a local Government bylaw which would require that the major stake holders be required to pay some of the costs to offset the huge capital out lay that Kitimat may be faced with .

Trent will be sending me a final copy of the bylaw once it is vetted and I can forward to the group
Thanks Terry

TERRY REE
FIRE SERVICE ADVISOR | OFFICE OF THE FIRE COMMISSIONER
EMERGENCY MANAGEMENT BC
MINISTRY OF JUSTICE
O: 250.612.4148 | C: 250.640.6263 | E: TERRANCE.REE@GOV.BC.CA
WWW.EMBC.CA
24 EMERGENCY REPORTING 1.888.988.9488

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Tuesday, June 30, 2015 10:24
To: Filmer, Cam A TRAN:EX; Duffy, Chris D TRAN:EX; Mohrmann, Ralph TRAN:EX; Tomaz, David C TRAN:EX
Subject: RE: Review of Work Camp BN

Good morning, all.

Just a brief reminder to get your comments to me as soon as possible so that I can wrap up all your comments to Cam. Thanks in advance!

M. ☺

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Hurst, Maurie L JAG:EX
Sent: Tuesday, June 16, 2015 17:35
To: Filmer, Cam A JAG:EX
Cc: Duffy, Chris D JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Mohrmann, Ralph JAG:EX; Tomaz, David C JAG:EX
Subject: Re: Review of Work Camp BN

Thanks to everyone for your time today. We spoke with Jennifer about timelines, and we have time to address this over the next week+. Please get our feedback in to me by Friday the 26th and I'll roll everything up first thing Monday.

M.

Maurie L. Hurst, Regional Manager
Emergency Management BC, Northwest

Sent from my iPhone; please excuse brevity and typos

On Jun 16, 2015, at 13:25, Filmer, Cam A JAG:EX <Cam.Filmer@gov.bc.ca> wrote:

> Yes – let's do that
>
> ---
>
> **From:** Hurst, Maurie L JAG:EX
> **Sent:** Tuesday, June 16, 2015 13:01
> **To:** Filmer, Cam A JAG:EX

Cc: Duffy, Chris D JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Mohrmann, Ralph JAG:EX; Tomaz, David C JAG:EX
Subject: Re: Review of Work Camp BN

I think that Terry is the only one not in Victoria. Shall we just call him, save the costs?

Maurie L. Hurst, Regional Manager
Emergency Management BC, Northwest

Sent from my iPhone; please excuse brevity and typos

On Jun 16, 2015, at 12:58, Filmer, Cam A JAG:EX <Cam.Filmer@gov.bc.ca> wrote:

> Hi all
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> Let's go with s.15,s.17
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> ID # s.15,s.17
>
> -----Original Appointment-----
> **From:** Karger, Kristina JAG:EX
> **Sent:** Wednesday, June 10, 2015 16:57
> **To:** Karger, Kristina JAG:EX; Hurst, Maurie L JAG:EX; Duffy, Chris D JAG:EX; Filmer, Cam A JAG:EX; Anderson, Gordon A JAG:EX; Ree, Terrance JAG:EX; Mohrmann, Ralph JAG:EX; Tomaz, David C JAG:EX
> **Subject:** Review of Work Camp BN
> **When:** Tuesday, June 16, 2015 14:30-15:30 (UTC-08:00) Pacific Time (US & Canada).
> **Where:** SG PEP R Nechako Rm (Medium) SG:EX

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Friday, July 10, 2015 13:51
To: Filmer, Cam A TRAN:EX
Cc: Duffy, Chris D TRAN:EX; Mohrmann, Ralph TRAN:EX; Anderson, Gordon A TRAN:EX
Subject: RE: Work Camp document - Status on Appendix Etc

Hello again.

When you're talking with Gord, let him know I have some notes from our last meeting which may be of assistance.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Filmer, Cam A JAG:EX
Sent: Friday, July 10, 2015 12:02
To: Hurst, Maurie L JAG:EX
Cc: Duffy, Chris D JAG:EX; Mohrmann, Ralph JAG:EX; Anderson, Gordon A JAG:EX
Subject: RE: Work Camp document - Status on Appendix Etc

And sorry – the commitment was 2 to 3 weeks to CSCD

From: Filmer, Cam A JAG:EX
Sent: Friday, July 10, 2015 12:00
To: Hurst, Maurie L JAG:EX
Cc: Duffy, Chris D JAG:EX; Mohrmann, Ralph JAG:EX; Anderson, Gordon A JAG:EX
Subject: RE: Work Camp document - Status on Appendix Etc

Thanks Maurie

Who was WSBC was contacted?

Anyone from Health, given new legislation there?

s.22

Want to ensure a focused, limited (i.e. to senior policy folks) but strategic sweep has occurred.

Cam

From: Hurst, Maurie L JAG:EX
Sent: Friday, July 10, 2015 11:54
To: Filmer, Cam A JAG:EX
Cc: Duffy, Chris D JAG:EX; Mohrmann, Ralph JAG:EX; Anderson, Gordon A JAG:EX
Subject: RE: Work Camp document - Status on Appendix Etc
Importance: High

Hello Cam.

Regretfully, the only input I have received on the BN was from Gord. Not that I regret Gord's input of course, but I have nothing from WSBC. I have incorporated Gord's comments into the BN, and share it here with you. You will note tracked changes to pages 12, 15, and 16.

Other than the BN, there is nothing outstanding, no deadlines, and s.22
s.22

s.22

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Filmer, Cam A JAG:EX
Sent: Friday, July 10, 2015 11:32
To: Hurst, Maurie L JAG:EX
Cc: Duffy, Chris D JAG:EX; Mohrmann, Ralph JAG:EX; Anderson, Gordon A JAG:EX
Subject: Work Camp document - Status on Appendix Etc

Hi Maurie,

s.22

I need a status on discussions to date on Appendix D and any other aspects of the work camp document. s.22
s.22 and what is the transition plan?

As discussed to all, we owe CSCD an updated document that has been shared that includes input from key players (i.e. Worksafe) by the end of next week. There is no flexibility in that date. Our input has already been delayed from previous commitments to CSCD. This is an important document, and may be used to brief senior officials and form part of over strategies and possible Qs and As.

Thanks,

Cam

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Tuesday, June 30, 2015 15:37
To: Ree, Terrance TRAN:EX; Anderson, Gordon A TRAN:EX
Cc: Filmer, Cam A TRAN:EX
Subject: RE: Camps

Many thanks for this information, Terry. I look forward to seeing the bylaw once it is completed.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Ree, Terrance JAG:EX
Sent: Tuesday, June 30, 2015 15:36
To: Anderson, Gordon A JAG:EX
Cc: Hurst, Maurie L JAG:EX; Filmer, Cam A JAG:EX
Subject: Camps

Afternoon Gord ,Maurie :

I have been in contact with the Kitimat fire chief regarding construction camps located within their geographical boundaries. Chief Bossence stated that the impact was huge on their community . Putting a financial strain on Fire , police and public works, and local businesses located in their city .

No monetary compensation was requested by local government or was offered by the Major stake holders for this camp development .

As this was a learning experience for all involved in local government , they have since drafted a local Government bylaw which would require that the major stake holders be required to pay some of the costs to offset the huge capital out lay that Kitimat may be faced with .

Trent will be sending me a final copy of the bylaw once it is vetted and I can forward to the group
Thanks Terry

TERRY REE
FIRE SERVICE ADVISOR | OFFICE OF THE FIRE COMMISSIONER
EMERGENCY MANAGEMENT BC
MINISTRY OF JUSTICE
O: 250.612.4148 | C: 250.640.6263 | E: TERRANCE.REE@GOV.BC.CA
WWW.EMBC.CA
24 EMERGENCY REPORTING 1.888.988.9488

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Wednesday, August 5, 2015 15:14
To: Tanaka, Sandra TRAN:EX
Subject: Industrial Work Camps Info Note_LGs - EMBC Review
Attachments: Industrial Work Camps Info Note_LGs - EMBC Review.docx

I'll call in a sec.

Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Wednesday, August 5, 2015 15:36
To: Filmer, Cam A TRAN:EX; Tanaka, Sandra TRAN:EX
Subject: Revised Appendix D
Attachments: Industrial Work Camps Info Note_LGs - EMBC Review 2.docx

Take a look, let us know if this works. We've tried to massage any number of ways – this way keeps it clear and simple and takes the local authority responsibility piece off the table (as it should be).

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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Karger, Kristina TRAN:EX

From: Filmer, Cam A TRAN:EX
Sent: Tuesday, August 11, 2015 14:51
To: Hurst, Maurie L TRAN:EX; Tanaka, Sandra TRAN:EX; Duffy, Chris D TRAN:EX; Anderson, Gordon A TRAN:EX; Mohrmann, Ralph TRAN:EX
Cc: Sharpe, Gordon JTST:EX; Tomaz, David C TRAN:EX
Subject: FW: Revised Appendix D
Attachments: Industrial Work Camps Info Note_LGs - EMBC Review 2.docx

Hi Maurie,

I think this looks really good. Thank you.

Two thoughts / questions:

- Note LGs no longer mentioned. Understand why. Worth a one or two liner in there mentioning their possible role (i.e. possibly taking on evacuees, being asked for mutual support arrangements etc)? May provide some high level context if questions arise at places like UBCM.
- Other stakeholders agree with any comments we make? As noted – this will be going to senior levels of government, and most likely used at UBCM etc. Want to make sure if we are mentioning others, they have signed off.

Think Gord A may have had some input in other parts of document. Need to make sure we capture in tracked changes. Any comments we make should go forward in tracked changes.

FYI to others for final comment / feedback if you have not seen.

Cam

From: Hurst, Maurie L JAG:EX
Sent: Wednesday, August 5, 2015 15:36
To: Filmer, Cam A JAG:EX; Tanaka, Sandra JAG:EX
Subject: Revised Appendix D

Take a look, let us know if this works. We've tried to massage any number of ways – this way keeps it clear and simple and takes the local authority responsibility piece off the table (as it should be).

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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Karger, Kristina TRAN:EX

From: Quealey, Pat JAG:EX <Pat.Quealey@gov.bc.ca>
Sent: Wednesday, August 26, 2015 11:39
To: Filmer, Cam A TRAN:EX; Biggs, Jackie FIN:EX
Cc: Hurst, Maurie L TRAN:EX; Duffy, Chris D TRAN:EX; Anderson, Gordon A TRAN:EX; Mohrmann, Ralph TRAN:EX
Subject: Re: Revised Industrial Work Camps Info Note

Please cc JB on all emails and she will hunt me down as appropriate.

I will review this one when I get a chance.

Cheers.

s.22

On Aug 26, 2015, at 11:26, Filmer, Cam A JAG:EX <Cam.Filmer@gov.bc.ca> wrote:

> Hi Pat,
> Before I hit send, given the attached will most likely end up at more senior levels, wanted to provide an update that Maurie has coordinated on the attached Work Camp note. Chris D, Jeff Dolan and Gord A provided great advice as well, with was integrated into Appendix D in particular.
> I think overall the general EM/safety responsibilities around work camps is far better positioned in this update. LG aspects are also more accurate (i.e. they have little pre-defined role)
> Would like to send tomorrow to CSCD if at all possible (appreciate you are on the road)
>
> Cam
>
> **From:** Hurst, Maurie L JAG:EX
> **Sent:** Tuesday, August 25, 2015 11:21
> **To:** Filmer, Cam A JAG:EX
> **Subject:** Revised Industrial Work Camps Info Note
> **Importance:** High
> Good morning, Cam.
> As requested, here is the Revised Industrial Work Camps Info Note. I have revised Appendix D based on input we've received from Gord Anderson, Fire Commissioner, and Jeff Dolan, WorkSafeBC, to reflect the actual regulatory framework for emergency response in relation to industrial work camps. In addition, I have revised Table 1: Acts and Regulations and Enforcement Responsibility Section 10 and added Section 21, based on Gord Anderson's correction/addition.
> Please call or email if you have any questions.
> M.
>
> ***Maurie L. Hurst, BA(Crim), MBA***
> Regional Manager, Northwest
>
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Karger, Kristina TRAN:EX

From: Quealey, Pat JAG:EX <Pat.Quealey@gov.bc.ca>
Sent: Monday, August 31, 2015 15:20
To: Filmer, Cam A TRAN:EX; Hurst, Maurie L TRAN:EX; Duffy, Chris D TRAN:EX; Anderson, Gordon A TRAN:EX; Mohrmann, Ralph TRAN:EX
Subject: RE: Revised Industrial Work Camps Info Note

Great work and thank you, Maurie and team.

Pat

From: Filmer, Cam A JAG:EX
Sent: Wednesday, August 26, 2015 11:26
To: Quealey, Pat JAG:EX; Hurst, Maurie L JAG:EX; Duffy, Chris D JAG:EX; Anderson, Gordon A JAG:EX; Mohrmann, Ralph JAG:EX
Subject: FW: Revised Industrial Work Camps Info Note
Importance: High

Hi Pat,

Before I hit send, given the attached will most likely end up at more senior levels, wanted to provide an update that Maurie has coordinated on the attached Work Camp note. Chris D, Jeff Dolan and Gord A provided great advice as well, with was integrated into Appendix D in particular.

I think overall the general EM/safety responsibilities around work camps is far better positioned in this update. LG aspects are also more accurate (i.e. they have little pre-defined role)

Would like to send tomorrow to CSCD if at all possible (appreciate you are on the road)

Cam

From: Hurst, Maurie L JAG:EX
Sent: Tuesday, August 25, 2015 11:21
To: Filmer, Cam A JAG:EX
Subject: Revised Industrial Work Camps Info Note
Importance: High

Good morning, Cam.

As requested, here is the Revised Industrial Work Camps Info Note. I have revised Appendix D based on input we've received from Gord Anderson, Fire Commissioner, and Jeff Dolan, WorkSafeBC, to reflect the actual regulatory framework for emergency response in relation to industrial work camps. In addition, I have revised Table 1: Acts and Regulations and Enforcement Responsibility Section 10 and added Section 21, based on Gord Anderson's correction/addition.

Please call or email if you have any questions.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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Karger, Kristina TRAN:EX

From: Hurst, Maurie L TRAN:EX
Sent: Tuesday, September 1, 2015 12:53
To: Carswell, Emma CSCD:EX; Filmer, Cam A TRAN:EX
Cc: Messenger, Meggin A FLNR:EX
Subject: RE: Revised Industrial Work Camps Info Note

You are most welcome!

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Fraser, Emma CSCD:EX
Sent: Tuesday, September 1, 2015 11:58
To: Hurst, Maurie L JAG:EX; Filmer, Cam A JAG:EX
Cc: Messenger, Meggin A CSCD:EX
Subject: RE: Revised Industrial Work Camps Info Note

Thanks Maurie!

From: Hurst, Maurie L JAG:EX
Sent: Tuesday, September 1, 2015 11:55 AM
To: Fraser, Emma CSCD:EX; Filmer, Cam A JAG:EX
Cc: Messenger, Meggin A CSCD:EX
Subject: RE: Revised Industrial Work Camps Info Note

Hello Emma.

The only edits I made were to Appendix D and to the table. The changes in the table were made by Gord Anderson, our Fire Commissioner, and are intentional. From my email to Cam, below,

> "I have revised Appendix D based on input we've received from Gord Anderson, Fire Commissioner, and Jeff Dolan, WorkSafeBC, to reflect the actual regulatory framework for emergency response in relation to industrial work camps. In addition, I have revised Table 1: Acts and Regulations and Enforcement Responsibility Section 10 and added Section 21, based on Gord Anderson's correction/addition."

I hope this is of help. Please call or email if you have any other questions.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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From: Fraser, Emma CSCD:EX
Sent: Tuesday, September 1, 2015 11:52
To: Filmer, Cam A JAG:EX; Hurst, Maurie L JAG:EX
Cc: Messenger, Meggin A CSCD:EX
Subject: RE: Revised Industrial Work Camps Info Note

Thanks Cam and Maurie,

We appreciate your input on this note.

Maurie-- I'd like to confirm within which sections edits were made. I understand that the bulk of edits were in Appendix D- very helpful.

And I see in Table 1 in Appendix E you added The Building Act. Can you please confirm if something else was meant to be written for the Enforcement Responsibility of the Fire Services Act? It looks like it was changed from BC Fire Commission to "Fire Services Act (BC Fire Code) Fuel storage facilities." Was this intentional?

Are there any other edits that you made that I've missed?

Also, I look forward to receiving your portion of the Community Readiness Action Planning Table soon.

Cheers,

Emma

From: Filmer, Cam A JAG:EX
Sent: Monday, August 31, 2015 3:41 PM
To: Messenger, Meggin A CSCD:EX; Fraser, Emma CSCD:EX
Cc: Hurst, Maurie L JAG:EX; Duffy, Chris D JAG:EX; Mohrmann, Ralph JAG:EX; Anderson, Gordon A JAG:EX
Subject: FW: Revised Industrial Work Camps Info Note
Importance: High

Hi Meggin and Emma,

Final suggestions on note. Maurie is available as required for further questions. ADM has seen and approved as well.

Thank you for allowing some extra time on this. Emma – other document coming your way tomorrow.

Cam

From: Filmer, Cam A JAG:EX
Sent: Wednesday, August 26, 2015 11:26
To: Quealey, Pat JAG:EX; Hurst, Maurie L JAG:EX; Duffy, Chris D JAG:EX; Anderson, Gordon A JAG:EX; Mohrmann, Ralph JAG:EX

Subject: FW: Revised Industrial Work Camps Info Note
Importance: High

Hi Pat,

Before I hit send, given the attached will most likely end up at more senior levels, wanted to provide an update that Maurie has coordinated on the attached Work Camp note. Chris D, Jeff Dolan and Gord A provided great advice as well, with was integrated into Appendix D in particular.

I think overall the general EM/safety responsibilities around work camps is far better positioned in this update. LG aspects are also more accurate (i.e. they have little pre-defined role)

Would like to send tomorrow to CSCD if at all possible (appreciate you are on the road)

Cam

From: Hurst, Maurie L JAG:EX
Sent: Tuesday, August 25, 2015 11:21
To: Filmer, Cam A JAG:EX
Subject: Revised Industrial Work Camps Info Note
Importance: High

Good morning, Cam.

As requested, here is the Revised Industrial Work Camps Info Note. I have revised Appendix D based on input we've received from Gord Anderson, Fire Commissioner, and Jeff Dolan, WorkSafeBC, to reflect the actual regulatory framework for emergency response in relation to industrial work camps. In addition, I have revised Table 1: Acts and Regulations and Enforcement Responsibility Section 10 and added Section 21, based on Gord Anderson's correction/addition.

Please call or email if you have any questions.

M.

Maurie L. Hurst, ***BA(Crim), MBA***
Regional Manager, Northwest

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Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Thursday, November 12, 2015 15:18
To: 'Ted Vanderwal'
Cc: Anderson, Gordon A TRAN:EX
Subject: RE: remote camps for PRGT pipeline

No worries , If I can be of assistance please forward information for my review and comments .
Terry

Terry Ree
Fire Service Advisor | Office of the Fire Commissioner
Emergency Management BC | Ministry of Transportation
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www.embc.gov.bc.ca/ofc

From: Ted Vanderwal [mailto:tvanderwal@nfcorp.ca]
Sent: Thursday, November 12, 2015 15:11
To: Ree, Terrance TRAN:EX
Subject: remote camps for PRGT pipeline

Terry

You assisted me in when we installed camp north of Ft Nelson and I was hoping to lean on your advice again.

I have attached a google map showing the location of the 3 camps we are currently planning. They span from south of Mackenzie to Lemoray and finish south of Hudson Hope.

It is my understanding that these locations fall under your area.

I don't believe there is any jurisdiction for these camps but we would like to run our design plans by you for comment and recommendation.

If you are open to this let me know and I can send you additional documentation and setup a time to discuss.

Thanks

Ted Vanderwal
Construction Manager
Northern Frontier Facilities LP
Direct: 780 400 0222 Mobile: 780 288 8923
Email: tvanderwal@nfcorp.ca

209 Pembina Road
Sherwood Park, AB T8H 2W8
www.nfcorp.ca
TSXV:FFF

Karger, Kristina TRAN:EX

From: Anderson, Gordon A TRAN:EX
Sent: Thursday, November 12, 2015 16:06
To: Ree, Terrance TRAN:EX
Subject: RE: Site C construction camps

Roger...thanks for keeping me updated on the camps....
Gord

From: Ree, Terrance TRAN:EX
Sent: Thursday, November 12, 2015 15:22
To: Anderson, Gordon A TRAN:EX
Subject: Site C construction camps

Afternoon Gord , I am awaiting contact with Tara Fraser from BC Hydro for her to provide me with more information regarding the Site C construction camps located north of Prince George . Hoping next week
Terry

Terry Ree
Fire Service Advisor | Office of the Fire Commissioner
Emergency Management BC | Ministry of Transportation
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www.embc.gov.bc.ca/ofc

Karger, Kristina TRAN:EX

From: Anderson, Gordon A TRAN:EX
Sent: Tuesday, February 9, 2016 11:57
To: Ree, Terrance TRAN:EX
Subject: RE: Site C

Good to hear the arrangement.... s.22
s.22

From: Ree, Terrance TRAN:EX
Sent: Tuesday, February 9, 2016 11:50
To: Anderson, Gordon A TRAN:EX
Subject: Site C

Morning Again Gord
FYI , Just was on the phone with Fort St John Fire , they have signed an agreement with Hydro to do Fire protection and inspections for construction camps for site C . s.22
s.22

T☺

Terry Ree
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Karger, Kristina TRAN:EX

From: s.22
Sent: Tuesday, July 12, 2016 5:03
To: Ree, Terrance TRAN:EX
Subject: Remote camp

Hello Terry,

Bruce Cousins suggested I get in touch with you in regards to some concerns I have with my former workplace. It is a permanent camp called Aghelh' Nebun, located 14 km down the Bowron forest service road (south), just past Purden lake. I was told that it is on Aboriginal land, and as such is not subject to normal fire and building codes, but Bruce wasn't so sure. Can you advise on this? I can provide the gps coordinates if necessary

Thanks,
Ian Fauchon

Sent from my iPhone

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, October 18, 2016 8:12
To: 'Trent Bossence'
Subject: RE: Water supply

Call me regarding this issue on cell or office number

Terry

-----Original Message-----
From: Trent Bossence [mailto:tbossence@kitimat.ca]
Sent: Monday, October 17, 2016 20:23
To: Ree, Terrance TRAN:EX
Subject: Water supply

Hi Terry,

I have a couple questions for you in regard to using letters of assurance for, in this case, water supply for the purpose of fire suppression. I have a large industrial camp that is currently located within my fire protection area. The industry responsible for the camp has hired an engineer to look at ways to reduce the need for water storage for the purpose of fire suppression. The camp is located on an old pulp and paper mill site located about 10 minutes from downtown Kitimat. Prior to the camp being built on the site, we had worked with the owner to establish a reliable and adequate fire suppression system and storage supply. (it should be noted that since the mill has closed, the hydrant and fire water system was removed from service). Since then, the project has been put on hold and the camp is not being occupied at full capacity at this point (except for personnel walking through the facility and some of the office areas are being used). Their plan is to maintain the suppression system but reduce the storage water requirements by 2/3 (from 120,000 gal to 30,000 gal).

The zoning has been changed (not by the District of Kitimat but by the engineer) from industrial lands to rural to accomplish the required water storage reduction. Giving the square footage (10500sqft) of the unprotected structure, 30,000 gal of water is inadequate for the size of the structure. Keep in mind that this is the square footage of the largest unprotected structure on the site. There are other, larger structure, but they are protected by a sprinkler system from the same storage supply.

The building department will not challenge the letter of assurance put forward by the engineer and in turn I am left with an inadequate water supply for the purpose of fire suppression to protect a million dollar plus property.

Is this something that I should be pursuing through you to have a sufficient amount of water on site for the purpose of fire suppression or are my hands tied in respect to the letter of assurance.

Your advice and guidance would be greatly appreciated.

Trent Bossence
Fire Chief

Kitimat Fire and Ambulance Service

Sent from my iPad

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, October 18, 2016 9:04
To: 'trent Bossence (tbossence@kitimat.ca)'
Subject: FW: BCAB #1579 Re: Water Supply for Fire Fighting, Sentence 3.2.5.7.(1) (Appendix A-3)

Trent ,

After speaking with Stephen from our office we came to the conclusion(our opinion) this may be a risk management case, declare your level of service your dept. can supply for firefighting service in consultation with your solicitor for the industrial camp . (expectation of service)

Firefighting water in storage tanks provided by the owner cannot be relied on for suppression purposes (what if tanks leak and no one notices) . Adequate for sprinkler system if operational

If you declare level of service for response for the site , that's what they will receive. That way there will be no expectations of services beyond your control
If the engineer is using the calculation for rural response this would be cover under part nine of building code 9.10.21

I will keep looking to see if I can come up with something different
Cheers
Terry

Terry Ree
Fire Service Advisor | Office of the Fire Commissioner
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www.embc.gov.bc.ca/ofc

From: Watt, Stephen TRAN:EX
Sent: Tuesday, October 18, 2016 08:26
To: Ree, Terrance TRAN:EX
Subject: BCAB #1579 Re: Water Supply for Fire Fighting, Sentence 3.2.5.7.(1) (Appendix A-3)

http://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/building-code-appeal-board/building-code-appeal-board-decisions/bcab-1579

Appeal Board Decision #1579

The Board cannot determine the capabilities of the local fire department to provide fire protection to this site.

The determination as to the adequacy of a water supply for firefighting purposes rests with the municipality. As indicated in Appendix A3, this determination should be based on the municipal firefighting capabilities and site specific circumstances.

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, July 12, 2016 9:51
To: Ian
Subject: Re: Remote camp

Thanks for the email, I don't know if the business is on First Nations land , if so the property would fall under federal jurisdiction and the province does not authority to conduct inspections or enforce fire code violations Thanks Terry

Sent from my iPhone

> On Jul 12, 2016, at 5:03 AM, Ian s.22 wrote:
>
>
> Hello Terry,
>
> Bruce Cousins suggested I get in touch with you in regards to some
> concerns I have with my former workplace. It is a permanent camp
> called Aghelh' Nebun, located 14 km down the Bowron forest service
> road (south), just past Purden lake. I was told that it is on
> Aboriginal land, and as such is not subject to normal fire and
> building codes, but Bruce wasn't so sure. Can you advise on this? I
> can provide the gps coordinates if necessary
>
> Thanks,
> Ian Fauchon
>
>
> Sent from my iPhone

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, October 18, 2016 7:55
To: Watt, Stephen TRAN:EX
Subject: FW: Water supply

-----Original Message-----
From: Trent Bossence [mailto:tbossence@kitimat.ca]
Sent: Monday, October 17, 2016 20:23
To: Ree, Terrance TRAN:EX
Subject: Water supply

Hi Terry,

I have a couple questions for you in regard to using letters of assurance for, in this case, water supply for the purpose of fire suppression. I have a large industrial camp that is currently located within my fire protection area. The industry responsible for the camp has hired an engineer to look at ways to reduce the need for water storage for the purpose of fire suppression. The camp is located on an old pulp and paper mill site located about 10 minutes from downtown Kitimat. Prior to the camp being built on the site, we had worked with the owner to establish a reliable and adequate fire suppression system and storage supply. (it should be noted that since the mill has closed, the hydrant and fire water system was removed from service). Since then, the project has been put on hold and the camp is not being occupied at full capacity at this point (except for personnel walking through the facility and some of the office areas are being used). Their plan is to maintain the suppression system but reduce the storage water requirements by 2/3 (from 120,000 gal to 30,000 gal).

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Your advice and guidance would be greatly appreciated.

Trent Bossence
Fire Chief
Kitimat Fire and Ambulance Service

Sent from my iPad

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Friday, March 10, 2017 6:57
To: Alexander, Debbie A TRAN:EX
Subject: Fwd: Site c emergency plan

Sent from my iPhone

Begin forwarded message:

> **From:** <Terrance.Ree@gov.bc.ca>
> **Date:** March 10, 2017 at 7:56:08 AM MST
> **To:** Tara Fraser <tara.fraser@bchydro.com>
> **Subject: Site c emergency plan**
>
> Tara , how are you
> Have been asked to see if the camp has a emergency action plan for evacuation from Embc , give me a ring when you have a chance
> Terry
>
> Sent from my iPhone

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 10:07
To: 'Peter Bizarro'; 'Trent Bossence'
Cc: 'Dave Mckenzie'
Subject: RE: Assist

Thanks Peter
Will see if approval for travel comes around Terry

-----Original Message-----
From: Peter Bizarro [mailto:pbizarro@kitimat.ca]
Sent: Thursday, May 25, 2017 10:03
To: Trent Bossence; Ree, Terrance TRAN:EX
Cc: Dave Mckenzie
Subject: RE: Assist

Hello Terry,

It would be great if you could touch base with us in Kitimat. We have a few large scale construction camps that are currently unoccupied at this time and I would like your input into future water supply concerns for a specific camp. The other area I would like to review with you involves Industrial site inspections at the RT site. Lastly it would be a great opportunity for you to tour our industrial work sites to give you a perspective overview of the current site activates.

Please give me a heads up prior to your arrival so I can arrange site specific tours.

Regards

Pete Bizarro
Deputy Fire Chief
Kitimat Fire & Rescue Services
Phone: 250-632-8938
http://www.Kitimat.ca

"Working Smoke Alarms Save Lives: Test Yours Every Month"

-----Original Message-----
From: Trent Bossence

Sent: May-25-17 9:05 AM
To: Ree, Terrance TRAN:EX
Cc: Dave Mckenzie; Peter Bizarro
Subject: RE: Assist

Hi Terry,

In short yes we do have a couple items that we could review with you. I have cc'd my Deputy Chief of Prevention so he can get a hold of you to discuss.

Talk to ya later,

Trent

-----Original Message-----
From: Ree, Terrance TRAN:EX [mailto:Terrance.Ree@gov.bc.ca]
Sent: May-24-17 9:32 PM
To: Trent Bossence
Cc: Dave Mckenzie
Subject: Assist

Trent , trying to get out your way next month , around the 14 June . Rupert and port Edward might need some assistance for inspection. Would you like some help with anything since I might be up your way . Let me know so I can ask the boss to come your way.
I will be in contact with dave and Shawn

Terry

Sent from my iPhone

Karger, Kristina TRAN:EX

From: Watt, Stephen TRAN:EX
Sent: Thursday, May 25, 2017 16:15
To: Ree, Terrance TRAN:EX
Subject: RE: Camp Requirements
Attachments: Camp Requirements.docxswedits(1).docx

Don't use the term fire alarm system it's just an alarm system, no reference to the ULC standard see edits…

Sincerely,

Stephen Watt
Codes and Standards Coordinator
Scientific/Technical Officer

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 16:03
To: Watt, Stephen TRAN:EX
Subject: Camp Requirements

Have quick look
T

BRITISH COLUMBIA | Emergency ManagementBC

The 2012 British Columbia Fire Code requires Construction camp to comply with the fire protection requirements of the 2012 British Columbia Building Code. ~~Regulation~~

--Camps Requirements

BCBC, Div.B, Part 9 Subsection 9.10.21.

1. ***Accommodations for more than 30 persons require hose stations conforming to Article 9.10.21.9.***
2. ***Portable Fire Extinguishers conforming to 9.10.21.8.***
3. ***Smoke Detectors in All Corridors providing access to exit for sleeping over 10 persons conforming to Article 9.10.21.7.***
4. ***Flame Spread ratings for accommodations with corridors shall have surface flame-spread ratings on walls and ceilings conforming to Article 9.10.21.6.***
5. ***Fire separations between corridors and rooms shall have a fire-résistance-rating of not less than 45 minutes conforming to Clause 9.10.21.6.(2)***
6. ***Spatial separations are required in camps with more than one structure. The distance between each other shall not be less than 10m meeting Article 9.10.21.5.***
7. ***Walkways connecting buildings shall be separated from each connected building by a fire separation having a fire-resistance rating of not less than 45 minutes conforming to article 9.10.21.4.***
8. ***Camps with buildings' having more than one storey in building height shall have a fire separation between floors shall have fire separations having a fire resistance rating of not less than 30 minutes conforming to article 9.10.21.3.***
9. ***Separations between sleeping rooms and remainder of the building by fire separations having fire-resistance ratings of not less than 45 minutes conforming to Article 9.10.21.2.***
10. ***Camps with sleeping accommodations for more than 10 in buildings' with corridors shall have a ~~Fire~~ Alarm System conforming to Sub-Clause 9.10.18.***
11. ***Smoke Alarms are required in all sleeping rooms conforming to Sub-clause 9.10.19***

~~The above excerpts are not limited to all the requirements.~~

Terry Ree

Fire Service Advisor
Office of the Fire Commissioner
Northern Region

Karger, Kristina TRAN:EX

From: Watt, Stephen TRAN:EX
Sent: Thursday, May 25, 2017 16:19
To: Ree, Terrance TRAN:EX
Subject: RE: Camp Requirements

There still may be some grammar to look at "camps" and "an" alarm system

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 16:17
To: Watt, Stephen TRAN:EX
Subject: RE: Camp Requirements

Thanks , you could have just corrected and sent back >
T

From: Watt, Stephen TRAN:EX
Sent: Thursday, May 25, 2017 16:15
To: Ree, Terrance TRAN:EX
Subject: RE: Camp Requirements

Don't use the term fire alarm system it's just an alarm system, no reference to the ULC standard see edits...

Sincerely,

Stephen Watt
Codes and Standards Coordinator
Scientific/Technical Officer

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 16:03
To: Watt, Stephen TRAN:EX
Subject: Camp Requirements

Have quick look
T

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Monday, May 29, 2017 8:07
To: 'spettitt@portedward.ca'
Subject: FW: fire safety plan
Attachments: Fire Safety Plan In Word final.docx; LAFC Fire Safety Plan Inspection Review Checklist (Final).docx

FYI
Terry

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 09:44
To: 'spettitt@portedward.ca'
Subject: FW: fire safety plan

FYI
TERRY

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 09:36
To: 'Shawn Pettitt'; Dave Mckenzie; trent Bossence (tbossence@kitimat.ca)
Cc: French, Ron TRAN:EX
Subject: fire safety plan

Shawn:
Please find attached fire safety plan template and check sheet for work camps in your area ,
I am working on coming up on the 12 to assist you , Dave in Rupert and Trent in Kitimat for camp inspection purposes.
Back to you soon
Terry

Terry Ree
Fire Service Advisor | Office of the Fire Commissioner
Emergency Management BC | Ministry of Transportation
T: 250.612.4148 | C: 250.640.6263 | E: Terrance.Ree@gov.bc.ca
OFC 24hr emergency reporting 1.888.988.9488
www.embc.gov.bc.ca/ofc

Fire Safety Plan

This fire safety plan has been developed to help owners and managers of industry maintain compliance with Section 2.8 of the B.C. Fire Code. The plan is intended as a guide only and may be amended where necessary to reflect local conditions

PART 1

For

Address

Plan Accepted By

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PART 3

DEFINITIONS:

Automatic Heat Tape -

Electric wire is wrapped around water-filled piping located in unheated areas. The wire is generally located underneath an insulating layer of fiberglass, and automatically keeps the water in the pipe from freezing.

Building Code Subsection 3.2.6. -

A subsection of the building code which has requirements applicable only to high buildings such as high rises and some large institutions.

Class A fire -

A fire involving combustible materials such as wood, cloth and paper.

Class B fire -

A fire involving flammable or combustible liquid, fat, or grease.

Class C fire -

A fire involving energized electrical equipment.

Closure -

A device or assembly for closing an opening through a fire separation (such as a door), and includes all components such as hardware, closing devices, frames and anchors.

Combustible liquid -

Any liquid having a flash point at or above 37.8 deg. C and below 93.3 deg. C.

Deputy Fire Safety Director (D.F.S.D) -

Appointed supervisory staff member who assumes the duties of the Fire Safety Director during his/her absence.

Dry Automatic Sprinkler System -

A fire sprinkler system which has sprinkler supply piping containing air. Such a system can be installed in areas subjected to freezing conditions as water does not enter the sprinkler piping until a sprinkler activates.

Exit -

That part of a means of egress that leads from the floor area it serves, including any doorway leading directly from a floor area, to an open public thoroughfare or to an exterior open space thoroughfare.

Fire code -

The British Columbia Fire Code 2012, pursuant to the Fire Services Act.

Fire Safety Plan -

A plan which provides occupant information for control of fire hazards, maintenance of fire protection systems, and evacuation procedures for their building.

Fire protection systems -

A general term used in this document which includes sprinkler and fire alarm systems, hose stations, portable fire extinguishers, fire dampers, emergency lights, exit signs, fire doors, smoke control equipment, and voice communication systems.

Fire stop flap -

A device intended for use in horizontal assemblies required to have a fire resistance rating and incorporating protective ceiling membranes, which operates to close off a duct opening through the membrane in the event of a fire.

Flammable liquid -

Any liquid having a flash point below 37.8 E C and having a vapour pressure not exceeding 275.8 kPa (absolute) at 37.8 E C.

Flash Point -

The minimum temperature at which a liquid within a container gives off vapour in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

Flue -

An enclosed passageway for conveying flue gases

Flue pipe -

The pipe connecting the flue collar of an appliance to a chimney.

Fire dampers -

A device intended for use in horizontal assemblies required to have a fire-resistance rating and incorporating protective ceiling membranes, which operates too close off a duct opening through the membrane in the event of a fire.

Group A Occupancy -

An assembly type occupancy such as a hall, theatre, skating rink or other place of public amusement.

Group B Occupancy -

An institutional type occupancy such as a hospital, jail, or care facility for the aged.

Means of egress –

A continuous path of travel provided by a doorway, hall-way, corridor, exterior passage-way, balcony, lobby, stair, ramp, or other egress facility or combination thereof, for the escape of persons from any point in a building, room, or contained open space to a public thoroughfare or other acceptable open space (means of egress includes exits and access to exits).

Qualified Contractor -

Specific service agency, trained industrial safety personnel or maintenance personnel.

Generally

Any trained person with proper equipment

Smoke alarm -

A combined smoke detector and audible alarm device designed to sound an alarm within the room or suite in which it is located upon the detection of smoke within the room or suite.

Standpipe System -

An arrangement of piping, valves, hose connections and allied equipment installed in a building with the hose connections located in such a manner that water can be discharged in streams or spray patterns through attached hose and nozzles, for the purpose of extinguishing a fire and so protecting a building and its contents in addition to protecting occupants. This is accomplished by connections to water supply systems or by pumps, and other equipment necessary to provide an adequate supply of water to the hose connections.

Supervisory staff -

Those occupants of a building who have been appointed to take responsibility for some aspect of the fire safety plan (Fire Safety Director & Deputies).

Wet Sprinkler System –

A fire sprinkler system which has sprinkler supply piping containing water. Such a system cannot be installed in areas subjected to freezing conditions as water is always in the sprinkler piping.

Part 4

OBJECTIVES OF THE FIRE SAFETY PLAN

General

Fire safety planning has 3 primary objectives:

- Fire Hazard Control
- Fire Protection System Maintenance
- Emergency Evacuation

Fire Safety Planning prevents the occurrence of fire by the control of fire hazards in the building, ensures operation of fire protection systems by establishing maintenance procedures, and provides a systematic method of safe and orderly evacuation of the building in the event of fire.

Emergency Evacuation Concept

Trained supervisory staff can be of great value in directing, and assisting the orderly movement of people in the event of a fire, and performing fire control until the fire department arrives.

Evacuation procedures relying heavily on supervisory staff are complex, in that such staff require continued training, frequent drilling, and must be continuously on the premises in order to fulfill their responsibilities during an emergency. Following the implementation of the plan, the time required for continued training and drilling, and the coordination necessary to maintain supervisory staff on the premises is extreme.

Based on these facts, the evacuation objective outlined in this guide is met simply and realistically without evacuation control officers or the fire safety director's involvement in evacuation control.

Evacuation Sequence -

During an emergency, a fire alarm will sound, and all occupants will exit the building via a safe exit. Persons with disabilities should proceed with their assistants (if available) to the nearest safe exit. The Fire Safety Director should be available to respond to the premises after being contacted by the fire department.

The instructions for occupants *In Case of Fire,* posted prominently on each floor area, provide *quickly read* information on procedures to follow in the event of a fire. Use of this concept should/will ensure a systematic method of safe and orderly evacuation of the building in the event of fire.

PART 5

FIRE SAFETY DIRECTOR & DEPUTIES

The Fire Safety Director is appointed in writing by the building owner. The F.S.D. is not in the building on a continuous basis; however, the F.S.D. should be available to respond to the building on notification of a fire emergency, in order to provide assistance as described in this plan. In the event that the F.S.D. is unavailable, a Deputy Fire Safety Director should be available to perform the obligations of the absent director.

The fire code requires that building fire protection and life safety systems receive a variety of regular inspections, service, and maintenance. The majority of inspections are generally *quick checks* to ensure that the particular system is operational and not in need of service. Some inspections do not require a high degree of technical knowledge of the particular system, but rather the ability to check for a specific problem, and have it corrected. Such inspections could be adequately performed by the F.S.D. where he or she is in the building on a *daily* basis. Annual Inspection, Testing and Maintenance procedures generally involve technical procedures and will be performed by qualified individuals or private contractors specializing in the particular field.

Fire Safety Director Responsibilities

General

☐ Administering and maintaining the Fire Safety Plan. This should include:
- Updating the plan when alterations are made to the building.

- ☐ Training of Deputy Fire Safety Directors.

- ☐ Recording information on the following:
  - Fire incidents
  - False alarms
  - Fire drills
  - Discharge or operation of fire equipment
  - Training periods
  - Name, location, and persons requiring assistance and their volunteer assistants.(specify assistance required)
  -Minutes of fire safety meetings (if applicable)

- ☐ Ensuring that fire protection systems are inspected, maintained and serviced in accordance with the plan and the fire code, and where an inspection, maintenance or testing procedure is beyond in-house capabilities, it is their responsibility to have qualified personnel complete the procedure.

- ☐ Ensuring that additional precautions are taken to offset the hazard to occupants where fire protection systems are inoperable. This should include:
  - Checking the fire safety plan and fire code when fire systems are in need of repair.
  - Advising the fire department of the system status.

- ☐ Ensuring that building maintenance, alteration or renovation does not expose the building or occupants to undue fire hazards, and precautions are taken to ensure building and occupant safety. This should include:
  - Checking the fire safety plan and the fire code when such activities take place to ensure that they meet the requirements of the fire safety plan and fire code regulations.

- ☐ Ensuring that supervisory staff are available to respond to the premises in the event of notification of an emergency. This should include:
  - Notifying the Deputy Fire Safety Director when they will not be available.

- ☐ Providing information to occupants on general fire safety and evacuation procedures. This should include:
  - Providing new occupants with Part 11 of the plan.
  - Notifying occupants whenever the Fire Safety Director, or Deputy Fire Safety Director changes.

- ☐ Resolving any fire hazards which are reported by occupants, guests or the fire department.

- ☐ Maintaining familiarity with the building=s fire protection systems.

- ☐ Familiarity with fire regulations. This should include:
  - Obtaining and reviewing a copy of the B.C. Fire Code.
  - Ensuring that the electrical rooms are not used for storage.
  - Ensuring that established policies are adhered to.

- ☐ Considering other emergency situations which could affect the building such as earthquakes, or natural gas leaks.

- ☐ Notifying the alarm monitoring station when the emergency contacts change (when applicable).

Emergency Procedures if on the Premises

IF YOU DISCOVER A FIRE

- ☐ ACTIVATE a fire alarm pull station
- ☐ PHONE 9-1-1 or to report a fire at your address
- ☐ FIGHT the fire ONLY if it is SMALL and you are NOT alone
- ☐ EVACUATE via the nearest safe exit. DO NOT use the elevator.
- ☐ ASSIST persons requiring assistance
- ☐ PROCEED to the main entrance (outside) & Report to the fire department

IF YOU HEAR A FIRE ALARM

- ☐ EVACUATE via the nearest safe exit. DO NOT use the elevator
- ☐ ASSIST persons requiring assistance
- ☐ ASSEMBLE clear of the building and arriving fire apparatus
- ☐ PHONE 9-1-1 or to report a fire at your address

Precautions During Repairs, Alterations & Renovations

Fire Detection & Alarm System

When the system cannot be repaired and returned to full operation, the following precautions should be implemented:

- ☐ Notify the Fire Department of the system status.

- ☐ Have a person remain at the premises until the system is fully operable.

- ☐ Watchperson shall make inspection rounds of all areas of the building every half hour, 24 hours per day.

- ☐ Watchperson shall remain on the property between rounds.

Automatic Sprinkler System

Alterations -

It is the responsibility of the sprinkler contractor to test the system in accordance with the B.C. Fire Code following alteration of the system.

Programmed Repairs -

Where operations require the temporary shutting down of sprinkler protection, such operations shall be programmed by the contractor working on the system to enable completion in the shortest possible time and protection to be restored as promptly as possible.

Additional Precautions During Shut-downs -

During an interruption of normal sprinkler protection, emergency hose lines and portable extinguishers shall be provided, extra watch service shall be placed on duty and temporary water connections shall be made to the sprinkler systems where practicable.

Discontinuance Of Work -

Full sprinkler protection shall be restored or the provisions of additional precautions during shutdowns and maintained when work on the system is discontinued, as at night time or during holidays.

Identification Of Closed Valves -

Closed sprinkler control valves shall be tagged or identified in a manner apparent to the responding fire department.

Portable Fire Extinguishers

Where a service company removes a fire extinguisher from the building for an extended length of time, a fire extinguisher of the same type should be provided temporarily in its place.

Building

During alterations and repairs ensure that the building and its occupants are not exposed to undue fire hazards created by contractors equipment or supplies which are brought into the building. Frequent inspections of the affected area is suggested in order to ensure the following:

- ☐ Exits are free of obstructions.
- ☐ Dangerous work areas are inaccessible to the building occupants
- ☐ Contractors have obtained necessary building and operation permits.
- ☐ Flammable and combustible liquids are handled and stored safely.
- ☐ Heat producing equipment such as welding/cutting equipment and portable heaters are used safely. Where a problem is suspected the Fire Department should be contacted in order to provide advice or perform an inspection.

Procedures After Fire Safety Equipment has Operated

Fire Detection & Alarm System

Procedure for false alarm:

- ☐ ENSURE the fire department is aware of incident.
- ☐ DO NOT SILENCE OR RESET the fire alarm system
- ☐ When the fire department is satisfied that the alarm was false, RESTORE any activated manual pull stations and RESET the system (if qualified).
- ☐ COMPLETE the *Incident/Activity Report*.

Where a fire has occurred and damaged system wiring and/or detection devices, or you are unsure of the reset procedures, it is likely that A trouble@ will be indicating on the

system. In this case a qualified contractor should be contacted to make the necessary repairs.

Wet Automatic Sprinkler System

Where a sprinkler has activated during a fire condition or accidentally through mechanical damage it is necessary to place the system back in operation as soon as possible. This procedure should be conducted by a qualified sprinkler contractor; however, where a contractor is not immediately available, the following procedure could be followed in the interim:

- ☐ Ensure that the fire department is aware of the incident.
- ☐ Close the zone or main system shut-off valve.
- ☐ Open the drain serving the floor.
- ☐ Use the special sprinkler wrench and replace the damaged sprinkler with a new one of the same type.
- ☐ Close the floor drain.
- ☐ Open the floor shut-off valve.
- ☐ Perform an inspection and main drain tests.
- ☐ Reset the fire alarm system.
- ☐ Contact a qualified contractor to check work

Dry Automatic Sprinkler System

Where a sprinkler has activated during a fire condition or accidentally through mechanical damage it is necessary to place the system back in operation as soon as possible. This procedure should be conducted by a qualified contractor however, where a contractor is not immediately available, the following procedure could be followed in the interim:

- ☐ Ensure that the fire department is aware of the incident.
- ☐ Close the main shut-off valve.

- [ ] Turn-off the air compressor.
- [ ] Open the 2" main system drain.
- [ ] Use the special sprinkler wrench and replace the damaged sprinkler with a new one of the same type.
- [ ] Close the main system drain.
- [ ] Slowly open the main shut-off valve.
- [ ] Perform main drain test.
- [ ] Leave the compressor off as the system is fully charged with water. The system should remain this way until properly reset by a qualified contractor.
- [ ] Leave the fire alarm system silenced until the system is properly restored by a qualified contractor.

During freezing weather the system cannot be left charged with water; therefore, the following procedure should be followed:

- [ ] Ensure that the fire department is aware of the incident.
- [ ] Close the main shut-off valve.
- [ ] Turn-off the air compressor.
- [ ] Open the 2" main system drain.
- [ ] Use the special sprinkler wrench and replace the damaged sprinkler with a new one of the same type.
- [ ] Close the main system drain.
- [ ] Leave the main shut-off valve closed and Atag it@ out of service.
- [ ] Leave the compressor off.

- ☐ Notify the fire department that the system is down and that the fire department pumper connection outside the building is available for use while awaiting the qualified contractor.

- ☐ Leave the fire alarm system silenced until the system is properly restored.

- ☐ Have a watchperson make tours as discussed previously in this part until the system is fully restored.

Portable Fire Extinguishers

When extinguishers have been used, they should be serviced by qualified personnel.

Fixed Extinguishing System

Following operation, the system shall be restored by a qualified contractor.

Fire System Repair, Service & Emergency Contacts

Fire Safety Equipment	Company Name	Phone Number
Sprinkler System		
Fire Alarm		
Portable Extinguishers		
Standpipe System		
Emergency Lighting		
Chimneys and Flues		
Exhaust ducts		
Heating, Ventilation &		
Air conditioning		
Watchperson Service		

Building Manager

Building Owner/rep.

Fire Drill Procedures

Annually

Once each year the Fire Safety Director should conduct a fire drill. The drill will not test any evacuation skills of the occupants; however, it will provide the Fire Safety director, Deputies, and Occupants with the opportunity to hear the fire alarm gongs, and consider their actions in the event that the fire were real. Use the following procedure when conducting the fire drill:

- ☐ Notify occupants of the date and time of the drill.
- ☐ Notify the alarm monitoring service (when applicable) and the fire department, on their nonemergency phone numbers, that you are planning to have a non-evacuation fire drill, and that you will call them back when the drill is complete.
- ☐ Discuss evacuation procedures with D.F.S.D. and those occupants *willing* to participate.
- ☐ Have the D.F.S.D. perform the *If You Discover A Fire* scenario and the *In Case of Fire* procedures for occupants. The F.S.D. should perform his or her duties as detailed in the plan.
- ☐ Restore the manual fire alarm pull station, and then reset the fire alarm system.
- ☐ Notify the alarm monitoring company (when applicable) and the fire department that the fire drill is complete.
- ☐ Discuss drill with occupants in an attempt to identify problems.
- ☐ Complete the *Incident/Activity Report.*

Deputy Fire Safety Director Responsibilities

- ☐ Assisting the Fire Safety Director in implementing the fire safety plan.
- ☐ Assuming the position of Fire safety director in the absence of the appointed F.S.D.

APPOINTMENT OF THE FIRE SAFETY DIRECTOR

ANNOUNCEMENT

DATE:

NAME:

TITLE:

WORK ADDRESS:

HOME ADDRESS:

METHODS OF CONTACT:

OFFICE PHONE:

HOME PHONE:

PAGER NUMBER:

CELLULAR PHONE:

WORK HOURS:

I hereby appoint_____as Fire Safety Director, authorized to fulfill the duties as outlined in the fire safety plan for:_____

APPOINTING OFFICER

NAME:

POSITION:

ADDRESS:

PHONE:

APPOINTMENT OF THE DEPUTY FIRE SAFETY DIRECTOR

ANNOUNCEMENT

DATE:

NAME:

TITLE:

WORK ADDRESS:

HOME ADDRESS:

METHODS OF CONTACT:

OFFICE PHONE:

HOME PHONE:

PAGER NUMBER:

CELLULAR PHONE:

WORK HOURS:

I hereby appoint_____as Deputy Fire Safety Director, authorized to fulfill the duties as outlined in the fire safety plan for:_____

APPOINTING OFFICER

NAME:

POSITION:

ADDRESS:

PHONE:

PART 6

BUILDING DESCRIPTION, SAFETY FEATURES & OPERATION OF FIRE SYSTEMS

Building Construction & Occupancy

_____is located at_____. The building is classified as a non-combustible / combustible structure with respect to the building code, and has _____storey's above grade, and Parking levels below grade. Construction is concrete/wood floors with interior room partitions of gypsum on steel stud/wood stud. The building has a combustible/non-combustible roof.

Fire Detection & Alarm System

Manufacturer:	Model:
Stages:	Supervised:
Monitored:	Annunciator location:
# Zones:	Sprinkler valve supervision:

Heat detector locations:

Smoke detector locations:

Smoke alarm locations:

Manual pull station locations:

Adjacent to exterior exit doors and at entrances to stair shafts

Main entrance door:

During an alarm condition the main lobby entrance door latch releases/does not release, allowing fire fighter entry.

Exiting

Number of exits:

Locations:

Required Exits:

Exits as required by the British Columbia Building Code shall be noted on floor plans.

Closures:

Fire rated doors and self closing devices are provided at entrance to the following areas: suites, stair-shafts, storage rooms, service rooms, & vestibules.

Exit signs:

Locations:_____

Connected to emergency power:_____

Emergency Lighting Units

Emergency lighting units connected to battery pack units are installed in the following areas:_____

Emergency Power & Lighting

Emergency generator:_____Fuel:_____

Location:_____

Automatic Battery Charger:_____

Serves:_____

Elevators

Make:_____Make: _____

Type:_____Type: _____

Capacity:_____Capacity:_____

Location:_____Location:_____

Serves:_____Serves:_____

Fixed Extinguishing Systems

Locations:____

Types:_____

Portable Fire Extinguishers

Type:_____

Locations:_____

Type:_____

Locations:_____

Standpipe System

Type:

Riser locations:

Riser isolation valve locations:

Hose connection locations:

Siamese connection location:

Pressure reducing valves

Location:

Type:

Sprinklers

Locations:

Valve types (dry / #, wet / #):

Isolation valve locations:

Main supply shut-off location:

Siamese location:

Test valves locations:

Air pressure maintenance:

The dry sprinkler systems are provided with an air compressor which automatically/manually maintains the air pressure in the piping.

Freezing Protection

Automatic heat tape locations:

Main Natural-gas Supply Shut-off

Location:

Heating, Ventilation & Air Conditioning

Type of heating:

Parking Level Ventilation system:

A mechanical exhaust system located in the_____
automatically / manually exhausts contaminants that may create a fire or explosion hazard.

Electrical Rooms & Equipment
Private Fire Hydrants

Number:

Location:

Fire Pump

Type:

Electrically driven and automatic starting, capable of_____gpm @_____PSI boost.
Connected to the emergency generator and supplies:_____
_____

Location:_____

Test header locations: _____

Fire Department Access Routes

Width:

Marked:

Locations:

Fire Department Access to Roof

Location:

Key Location:

Fire Department Keys

Location:

Access for:

Areas of Refuge

Locations:

Chemical/Flammable/Combustible Storage

Location/Quantity:

PART 7

INSTRUCTIONS TO OCCUPANTS IN CASE OF FIRE

IF YOU DISCOVER A FIRE...

! ACTIVATE a fire alarm pull station.
! PHONE 9-1-1 or to report a fire at your address.
! FIGHT the fire ONLY if it is SMALL and you are NOT alone.
! EVACUATE via the nearest safe exit. DO NOT use the elevator.
! ASSIST persons requiring assistance.
! PROCEED to the main entrance (outside) & report to the fire department.

IF YOU HEAR A FIRE ALARM...

! EVACUATE via the nearest safe exit. DO NOT use the elevator.
! ASSIST persons requiring assistance.
! ASSEMBLE clear of the building and arriving fire apparatus.
! PHONE 9-1-1 or_____to report a fire at your address.

Persons Requiring Assistance Information Sheet

Name:

Disability:

Floor/suite:

Special Information:

Assistant #1:

Assistant #2:

Name:

Disability: Floor/suite:

Special Information: Assistant #1:

Assistant #2:Name:

Disability: Floor/suite:

Special Information: Assistant #1:

Assistant #2:

Name:

Disability: Floor/suite:

Special Information: Assistant #1:

Assistant #2

Name:

Disability:

Floor/suite:

Special Information:

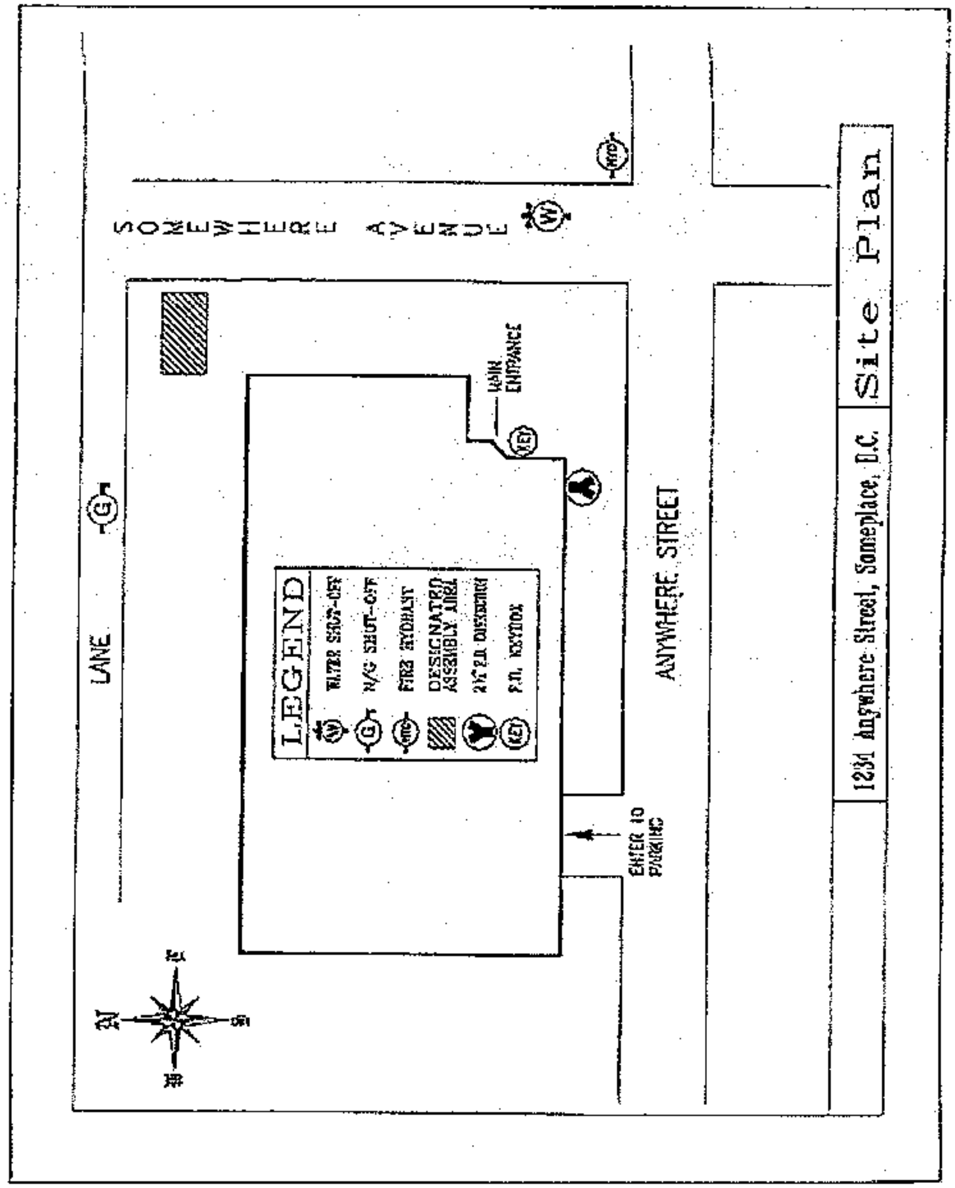
Assistant #1:

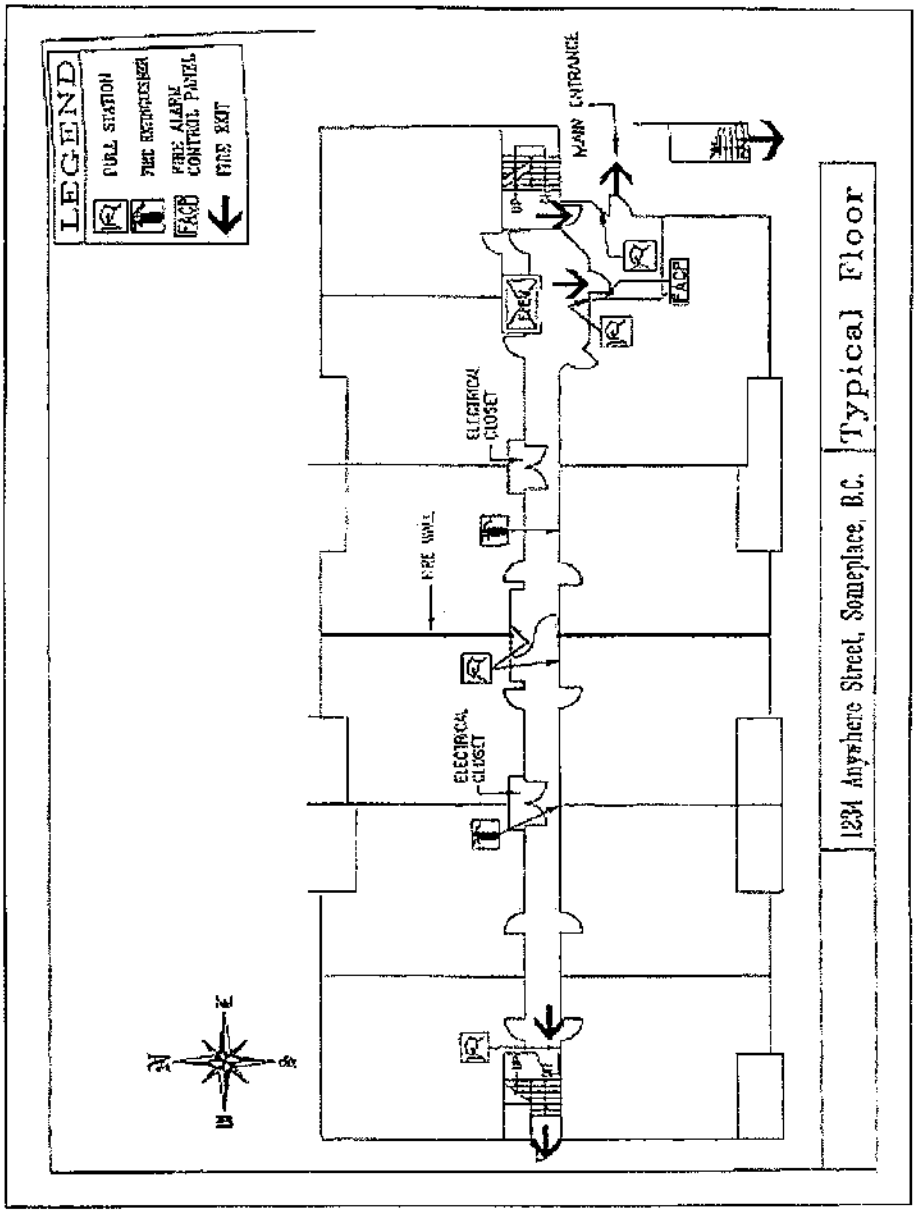
Assistant #2:

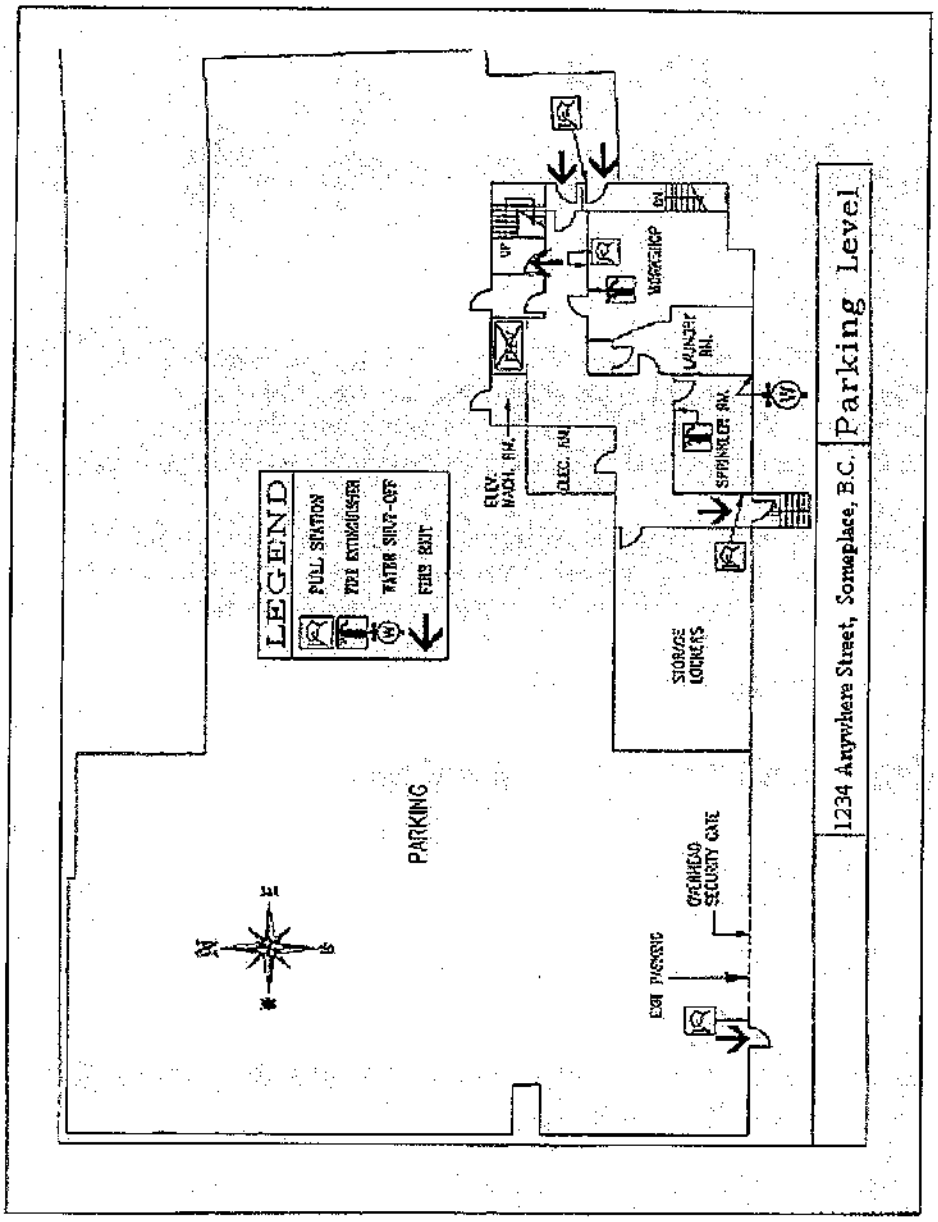
_____will be waiting in stair-shaft.

PART8

FLOOR PLANS
(Samples)


Site Plan
Anywhere Street, Someplace, D.C.
LEGEND
WATER SHUT-OFF
N/G SHUT-OFF
FIRE HYDRANT
DESIGNATED ASSEMBLY AREA
F.D. KEYBOX
LANE
SOMEWHERE AVENUE
ANYWHERE STREET
MAIN ENTRANCE
ENTER TO PARKING


LEGEND
PULL STATION
FIRE EXTINGUISHER
FIRE ALARM CONTROL PANEL
FACP
FIRE EXIT
MAIN ENTRANCE
ELECTRICAL CLOSET
FIRE WALL
ELECTRICAL CLOSET
1234 Anywhere Street, Someplace, B.C.
Typical Floor


LEGEND
PULL STATION
FIRE EXTINGUISHER
WATER SHUT-OFF
FIRE EXIT
1234 Anywhere Street, Someplace, B.C.
Parking Level
PARKING
STORAGE LOCKERS
SPRINKLER RM.
LAUNDRY RM.
ELEV. MACH. RM.
ELEC. RM.
OPENING SECURITY GATE
EXIT PARKING

PART 9

LEGAL BASIS FOR FIRE SAFETY PLANNING

Why Plan?

Every year thousands of fires break out in buildings, causing deaths, injuries and millions of dollars in fire damage. In British Columbia during 1995, there were approximately 3,809 fires in buildings, which resulted in $124,492,632 in property damage, 368 injuries and 34 deaths. Such losses could be reduced if everyone practiced good fire prevention and planned ahead for a fire emergency.
In British Columbia, the Fire Services Act stipulates the requirements for fire prevention within the province. The B.C. Fire Code Regulations are pursuant to the Fire Services Act and require that emergency planning and fire safety planning be done as follows:

British Columbia Fire Code Regulations 2012

Part 2 — Building and Occupant Fire Safety

Section2.8. Emergency Planning

2.8.1. General

2.8.1.1. Application

1) Fire emergency procedures conforming to this Section shall be provided fora)every *building* containing an *assembly* or a *care or detention occupancy*,

b)every *building* required by the British Columbia Building Code to have a fire alarm system,

c)demolition and construction sites regulated under Section 5.6.,

d)storage areas required to have a fire safety plan in conformance with Articles 3.2.2.5. and 3.3.2.9.,

e)areas where *flammable liquids* or *combustible liquids* are stored or handled, in conformance with Article 4.1.5.5., and

f)areas where hazardous processes or operations occur, in conformance with Article 5.1.5.1.

2.8.1.2. Training of Supervisory Staff

1) *Supervisory staff* shall be trained in the fire emergency procedures described in the fire safety plan before they are given any responsibility for fire safety. (See Appendix A.)

2.8.1.3. Keys and Special Devices

1) Any keys or special devices needed to operate the fire alarm system or provide access to any fire protection systems or equipment shall be readily available to on-duty *supervisory staff*.

2.8.2. Fire Safety Plan

2.8.2.1. Measures in a Fire Safety Plan

1) In *buildings* or areas described in Article 2.8.1.1., a fire safety plan conforming to this Section shall be prepared in cooperation with the fire department and other applicable regulatory authorities and shall include

a)the emergency procedures to be used in case of fire, including

i)sounding the fire alarm (see Appendix A),

ii)notifying the fire department,

iii)instructing occupants on procedures to be followed when the fire alarm sounds,

iv)evacuating occupants, including special provisions for persons requiring assistance (see Appendix A),v)confining, controlling and extinguishing the fire,

b)the appointment and organization of designated *supervisory staff* to carry out fire safety duties,

c)the training of *supervisory staff* and other occupants in their responsibilities for fire safety,

d)documents, including diagrams, showing the type, location and operation of the *building* fire emergency systems,

e)the holding of fire drills,

f)the control of fire hazards in the *building*, and

g)the inspection and maintenance of *building* facilities provided for the safety of occupants.

(See Appendix A.)

2) The fire safety plan shall be reviewed at intervals not greater than 12 months to ensure that it takes account of changes in the use and other characteristics of the *building*.

2.8.2.2. Care or Detention Occupancies

1) A sufficient number of *supervisory staff* shall be on duty in *care or detention occupancies* to perform the tasks outlined in the fire safety plan described in Clause 2.8.2.1.(1)(a).

2.8.2.3. Assembly Occupancies

1) In Group A, Division 1 *assembly occupancies* containing more than 60 occupants, there shall be at least one *supervisory staff* member on duty in the *building* to perform the tasks outlined in the fire safety plan in Clause 2.8.2.1.(1)(a) whenever the *building* is open to the public.

2.8.2.4. High Buildings

1) In *buildings* within the scope of Subsection 3.2.6. of the British Columbia Building Code, the fire safety plan shall, in addition to the requirements of Sentence 2.8.2.1.(1), include

a)the training of *supervisory staff* in the use of the voice communication system,

b)the procedures for the use of elevators,

c)the action to be taken by *supervisory staff* in initiating any smoke control or other fire emergency systems installed in a *building* in the event of fire until the fire department arrives,

d)instructions to the *supervisory staff* and fire department for the operation of the systems referred to in Clause (c), and

e)the procedures established to facilitate fire department access to the *building* and fire location within the *building*.

2.8.2.5. Retention of Fire Safety Plans

1) The fire safety plan shall be kept in the *building* for reference by the fire department, *supervisory staff* and other personnel.

2) The fire safety plan for a *building* within the scope of Subsection 3.2.6. of the British Columbia Building Code shall be kept at the central alarm and control facility.

2.8.2.6. Distribution

1) A copy of the fire emergency procedures and other duties for *supervisory staff*, as laid down in the fire safety plan, shall be given to all *supervisory staff*.

2.8.2.7. Posting of Fire Emergency Procedures

1) At least one copy of the fire emergency procedures shall be prominently posted on each *floor area*.

2) In every hotel and motel bedroom, the fire safety rules for occupants shall be posted showing the locations of *exits* and the paths of travel to *exits*.

3) Where a fire alarm system has been installed with no provisions to transmit a signal to the fire department, a sign shall be posted at each manually actuated signaling box requesting that the fire department be notified, and including the telephone number of that department.

4) All *buildings* served by one or more elevators shall have a permanently mounted fire safety sign or symbol on each floor level at each elevator entrance, which indicates that the elevator is not to be used in case of fire.

5) The sign or symbol required by Sentence (4) shall be at least 100 mm in height and width and shall be designed in accordance with NFPA 170 "Standard for Fire Safety Symbols."

2.8.3. Fire Drills

2.8.3.1. Fire Drill Procedures

2.8.3.2. 1) The procedure for conducting fire drills shall be determined by the person responsible in charge of the *building*, taking into consideration

a)the *building occupancy* and its fire hazards,

b)the safety features provided in the *building*,

c)the desirable degree of participation of occupants other than *supervisory staff*,

d)the number and degree of experience of participating *supervisory staff*,

e)the features of fire emergency systems installed in *buildings* within the scope of Subsection 3.2.6. of the British Columbia Building Code, and

f)the requirements of the fire department.

(See Appendix A.)

2.8.3.2. Fire Drill Frequency

1) Fire drills as described in Sentence 2.8.3.1.(1) shall be held at intervals not greater than 12 months for the *supervisory staff*, except that

a)in day-care centres and in Group B *major occupancies*, such drills shall be held at intervals not greater than one month,

b)in schools attended by children, total evacuation fire drills shall be held at least 3 times in each of the fall and spring school terms, and

c)in *buildings* within the scope of Subsection 3.2.6. of the British Columbia Building Code, such drills shall be held at intervals not greater than 2 months.

INSPECTION, MAINTENANCE & TESTING OF FIRE PROTECTION EQUIPMENT

General

The B.C. Fire Code Regulations require that fire protection installations be maintained in operating condition in accordance with Part 6 & 7. In most cases the Fire Code does not specify in detail the necessary inspection, maintenance, and testing procedures; instead, it references standards such as those developed by the National Fire Protection Association, Canadian Standards Association and Underwriters Laboratories of Canada. Where such standards are referenced by the code; they have been identified in this plan as *Reference Standard.*

Records

Records of inspection, testing or maintenance of fire protection equipment, which is completed by the Fire Safety Director, qualified person, or a private contractor shall be retained for at least 2 years from the date of the activity. The records shall be located in the Fire Safety Plan for review by the authority having jurisdiction. The activities on the Daily Inspection Report are exempted from this requirement.

Qualified Contractors

Contractors may perform their own unique inspection and testing procedures; however, their procedures must meet the minimum requirements set by the applicable code. Information pertaining to such procedures is available in Part 10 so that the fire safety director has some idea of what the contractor should be doing.

Fixed Extinguishing System

Reference: NFPA 17, *Dry Chemical Extinguishing Systems*
Reference: NFPA 17A, *Wet Chemical Extinguishing Systems*
Reference: NFPA 12A, *Halon 1301 Fire Extinguishing Systems*

Monthly Inspection

Responsibility: _____

Procedure:

- ☐ The extinguishing system is in its proper location.
- ☐ Manual actuators are unobstructed.
- ☐ Tamper indicators and seals are intact.
- ☐ Maintenance tag or certificate is in place.

- ☐ No obvious physical damage or condition exists that may prevent operation.
- ☐ Pressure gauge(s), if provided, are in operable range.Nozzle blowoff caps are intact and undamaged.

Record Keeping:

- ☐ Monthly Inspection & Testing Report

Semi-annual Maintenance

Responsibility:

- ☐ Qualified Contractor

Procedure:

- ☐ Contractor to perform maintenance in accordance with the reference standard.

Record Keeping:

- ☐ Semi-Annual Inspection & testing Report

Portable Fire Extinguishers

Reference Standard:

NFPA 10, *Standard for Portable Fire Extinguishers*
An inspection of an extinguisher is a *quick check* that an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguisher is fully charged and operable. Maintenance is a *thorough check* of an extinguisher which is intended to give maximum assurance that an extinguisher will operate effectively and safely, and will normally reveal the need for hydrostatic pressure testing. Recharging is the replacement of the extinguishing agent.

Monthly Inspection

Responsibility: _____

Procedure:

- ☐ Check portable fire extinguishers for the following:
- ☐ Located in designated place
- ☐ No obstruction to access or visibility
- ☐ Operating instructions on nameplate legible and facing outward
- ☐ Seals and tamper indicators not broken or missing
- ☐ Determine fullness by weighing or *hefting*
- ☐ Examine for obvious physical damage, corrosion, leakage, or clogged nozzle
- ☐ Pressure gauge reading or indicator in the operable range or position

Record Keeping: Monthly Inspection & Testing Report

- ☐ Serial number of extinguishers requiring maintenance should be recorded on report forqualificd contractor

Fill-out extinguisher tag with following information:

- ☐ Date extinguisher was inspected
- ☐ Initials of person performing inspection

Annual Maintenance

Responsibility: _____

Procedure:

- ☐ Perform maintenance in accordance with the B.C. Fire Code Regulations and NFPA 10, including any necessary hydrostatic pressure testing.

Record Keeping:

- ☐ Annual Inspection & Testing Report

Means of Egress

Daily Inspection

Responsibility: _____

Procedure:

- ☐ Doors in fire separations shall be inspected to ensure that they remain closed and latched unless the door is equipped with an acceptable hold open device that will permit the door to close and latch automatically in the event of fire.
- ☐ Corridors used by the public and exits shall be maintained free of obstructions.
- ☐ Exterior passageway and exterior exit stairs shall be maintained free of snow and ice accumulations.

Record Keeping:

- ☐ None

Monthly Inspection

Responsibility: _____

Procedure:

- ☐ Doors in fire separations shall be operated to ensure that they are properly maintained.
- ☐ Doors equipped with a hold open device must release automatically in the event of a fire.

Record Keeping:

- ☐ Monthly Inspection & Testing Report

Fire Detection & Alarm System

Reference standard: ULC S536, *Inspection and Testing of Fire Alarm Systems.*

Daily Inspection

Responsibility: _____

Procedure:

- ☐ Check Fire Alarm AC power lamp
- ☐ Check Fire Alarm trouble lamps

Record Keeping:

- ☐ None

Monthly Testing

Responsibility: _____

Procedure:

- ☐ Notify the alarm monitoring company, the fire department and the tenants that you are testing the system. Notify all parties when you have completed testing.
- ☐ Under emergency power, one manual alarm initiating device shall be operated on a rotation basis and shall initiate an alarm condition
- ☐ Intended function of all alarm audible signal appliances shall be ensured
- ☐ The annunciator panel shall be checked to ensure that the tested devices annunciate correctly
- ☐ Intended function of the audible and visual trouble signals shall be ensured
- ☐ Fire alarm batteries shall be checked to ensure that:
  - -Terminals are clean and lubricated where necessary
  - -Terminal clamps are clean and tight where necessary
  - -Electrolyte level and specific gravity, where applicable, are specified by the Manufacturer

Record Keeping:

- ☐ Monthly Inspection & Testing Report

Annual Service

Responsibility: _____

Procedure:

- ☐ Contractor shall perform service in accordance with ULC S536

Record Keeping:

- ☐ Annual Inspection & Testing Report

Emergency Lighting Units

Reference Standard:

- ☐ *B.C. Fire Code Regulation 1998, Section 6.7*

Monthly Inspection

Responsibility: _____

Procedure:

- ☐ Self-contained emergency lighting unit equipment shall be inspected to ensure that:
  - Pilot lights are functioning and not obviously damaged or obstructed,
  - The terminal connections are clean, free of corrosion and lubricated when necessary,
  - The terminal clamps are clean and tight as per manufacturer=s specifications, and
  - The battery surface is kept clean and dry.

Record Keeping:

- ☐ Monthly Inspection and Testing Report

Monthly Testing

Responsibility: _____

Procedure:

- ☐ Self-contained emergency lighting unit shall be tested at intervals not greater than one month to ensure that the emergency lights will function upon failure of the primary power supply.

Record Keeping:

- ☐ Monthly Inspection & Testing Report

Annual Testing

Responsibility: _____

Procedure:

- ☐ Self-contained emergency lighting unit equipment shall be tested at intervals not greater than twelve months to ensure that the unit will provide emergency lighting for a duration equal to the design criterion under simulated power failure conditions. Minimum operating time of 30_minutes.
- ☐ After completion of the test, the charging conditions for voltage and current and the recovery period shall be tested to ensure that the charging system is functioning in accordance with the manufacturer's specifications.

Note: Operation time for units is as follows:

- ☐ 60 minutes for Group B occupancies not within the scope of Building Code Subsection 3.2.6.
- ☐ 30 minutes for a building of any other occupancy.

Record Keeping:

- ☐ Annual Inspection and Testing Report

Emergency Generator

Reference Standard:

- ☐ CAN/ CSA-C282-M, *Emergency Electrical Power Supply for Buildings*

Weekly Maintenance Schedule

Responsibility:

- ☐ Examine the following:
  - Fuel tank level
  - Lubricating oil level
  - Engine coolant
  - Heaters, lubricant and/or coolant
  - Engine, generator, fuel tanks and cooling systems for evidence of leakage
  - Operation of fuel transfer pump
  - Starting system-batteries, etc., for leakage, cleanliness and terminal security
  - Air tanks for pressure (air motor system)
  - Valves for leakage (air motor system)
  - Operation of auxiliary engine and compressor (air motor system)
  - Bleed off condensation (air motor system)
  - Louvre settings-control panel settings (ensure the unit is ready for start-up)
  - Battery electrolyte level
  - Battery specific gravity
  - Battery electrical connections (tightness, leaks or sulfation)
  - Battery cleanliness and dryness between terminal posts

- Charger cleanliness and operation of both float and equalize modes
- Engine governor control linkages and oil level
- Engine fuel pump oil sump
- Engine fan belts and protective devices
- Panel covers are secure and annunciator lamps are operational

Monthly Testing

Responsibility: _____

Procedure:

- ☐ Have manufacturer=s maintenance manual and manual of instructions available.
- ☐ Simulate a failure of the normal electrical power supply, arranged so that:
  - an engine-generator set operates under at least 30% of the rated load for 60 minutes;
  - all automatic transfer switches are operated under load
- ☐ Record readings of all instruments associated with engine and generator and verify that they are normal.

Procedure to Operate Generator (simulate power failure):

- ☐ Engage the *emergency power transfer switch*
- ☐ Disengage the switch after completion of test to ensure generator is in normal operating condition.

Record Keeping:

- ☐ Weekly Testing And Maintenance Report

Monthly Maintenance and Inspection Schedule

- ☐ Include an inspection to assess the correct functioning of all auxiliary equipment such as the radiator shutter control, coolant pumps, fuel transfer pumps, oil coolers, and engine room ventilation controls and operation.
- ☐ Generator
  - check brush operation for sparking
  - check for bearing seal leakage

Semi-annual Service

Responsibility: _____

Procedure:

Check/Clean the following:

- ☐ Crankcase breathers
- ☐ Lubricant governor

- ☐ Linkages

Record Keeping:

- ☐ Semi-Annual Testing Report

Annual Maintenance

Responsibility: _____

Procedure:

- ☐ Contractor shall perform checking, testing, and servicing of items which require attention at 1 year intervals as specified in the manufacturer's instructions and CSA Standard C282.
- ☐ Liquid fuel storage tank shall be drained and refilled with a fresh supply of fuel at intervals not greater than 12 months.
- ☐

Record Keeping:

- ☐ Annual Inspection & Testing Report

2 Year Checking

Procedure: Contractor shall perform checking, testing, and servicing of items which require attention at 2 year intervals as specified in the manufacturer's instructions and CSA Standard C282.

Record Keeping:

- ☐ 2 Year Inspection and Testing Report

3 Year Checking

Procedure:

Contractor shall perform checking, testing, and servicing of items which require attention at 3 year intervals as specified in the manufacturer's instructions and CSA Standard C282.

Record Keeping:

- ☐ 3 Year Test Report

5 Year Checking

Procedure: Contractor shall perform checking, testing, and servicing of items which require attention at 5 year intervals as specified in the manufacturer's instructions and CSA Standard C282.

Record Keeping:

- ☐ 5 Year Test Report.

Sprinkler System

Reference Standard:

- ☐ B.C. Fire Code Regulation 1998 Section 6.5
- ☐ Notification - Prior notification of waterflow or other tests to be made to a sprinkler system shall be given to parties who could be affected by an alarm.

Daily Inspection

Responsibility: _____

Procedures:

- ☐ Dry-pipe valve rooms or enclosures in unheated building shall be inspected at intervals not greater than 24 hours during periods of freezing weather and measures shall be taken to ensure that the temperature of the room or enclosure is maintained above 4 degrees C.

Record Keeping:

- ☐ None

Weekly Inspection

Responsibility: _____

Procedures:

- ☐ Valves controlling sprinkler water supplies or alarms shall be inspected at intervals not greater than 7 days to ensure that they are in the open position.
  Note: For valves locked in the open position see Monthly Inspection & Test. For electrical supervised valves see Bi-monthly Test & Inspection.
- ☐ Dry pipe system air pressure shall be read at intervals not greater than 7 days and the system shall be maintained at the required pressure.

Record Keeping:

- ☐ Weekly Inspection Report

Monthly Inspection & Tests

Responsibility: _____

Procedures:

- ☐ When the alarm line discharge is subject to freezing, waterflow alarm tests using the alarm test connection located at the sprinkler valve shall be performed on sprinkler systems at intervals not greater than one month. (This test operates mechanical or electrical gong.)
- ☐ On monitored system, the water flow actuated devices may be tested every two months. See Bi-monthly Test and Inspection.
- ☐ On electrically supervised systems, the water flow actuated devices may be tested annually. See Annual Tests and Maintenance.
- ☐ Valves which are locked open shall be inspected at intervals not greater than one month.
- ☐ Check the priming water supply for dry-pipe systems to ensure that it is at the proper level above the dry-pipe valve.

Record Keeping:

- ☐ Monthly Inspection & Testing Report

Bi-monthly Test and Inspection

Responsibility: _____

Procedures:

All Sprinkler Systems

- ☐ Transmitters & water flow actuated devices shall be tested at intervals not greater than 2 months for system connected to electrical supervisory signal service. (Example: fire alarm system or central station monitoring service.)
- ☐ Inspect all electrically supervised control valves.

Record Keeping:

- ☐ Bi-monthly Testing Report

Semi-annual Tests

Responsibility: _____

Procedures:

All Systems

- ☐ Gate valve supervisory switches, tank water level devices, building and tank water temperature supervisory devices and other sprinkler supervisory devices shall be tested at intervals not greater than 6 months.

Record Keeping:

- ☐ Semi-Annual Inspection & Testing Report

Annual Tests & Maintenance

Responsibility: _____

Procedures:

Wet Systems

- ☐ Waterflow alarm tests using the inspector's test connection shall be performed on wet pipe sprinkler systems at intervals not greater than twelve months.

Dry Systems

- ☐ Dry-pipe valves shall be trip tested at intervals not greater than 12 months with the control valve partially open. (Dry-pipe valves shall be trip tested at least once every 3 years with the control valve fully open using the inspector's test valve.)
- ☐ Auxiliary drains shall be drained before each winter.

All Systems

- ☐ Waterflow tests using the main drain shall be conducted at intervals not greater than 12 months to ensure that water supply available has not deteriorated.
- ☐ Drainage facilities shall be tested to ensure that the drains are capable of taking the full flow from the main drain pipe without causing damage.
- ☐ Sprinkler control valves are accessible.
- ☐ Pits containing sprinkler control valves are free of water and protected from freezing.
- ☐ Sprinkler piping and hangers are in good repair.
- ☐ Sprinklers are inspected for damage, corrosion or accumulations of grease, paint or other deposits and are replaced where such conditions would impair the operation of the sprinkler.
- ☐ Spare sprinklers shall be checked to ensure that the stock on hand is not less than:
  - 6 spare sprinklers (not more than 300 sprinklers)
  - 12 spare sprinklers (between 301 - 1 000 sprinklers)
  - 24 spare sprinklers (more than 1 000 sprinklers)
- ☐ Spare sprinklers shall correspond to the types and temperature ratings of the sprinklers in use.
- ☐ A sprinkler wrench shall be kept in the cabinet where the spare sprinklers are stored.

Record Keeping:

- ☐ Annual Inspection & Testing Report

Three Year Test

Responsibility: _____

Procedure:

Dry System

- ☐ Dry-pipe valve shall be trip tested with the control valve fully open using the inspector=s test pipe (dry-pipe valve shall be trip tested annually with the control valve partially open).

Record Keeping:

- ☐ Three Year Testing Report

Fifteen Year Test

Responsibility: _____

Procedure:
Dry System

- ☐ Entire system shall be test flushed at intervals not greater than 15 years.
  NOTE: Whenever any of the regularly scheduled testing procedures indicate the presence of possible obstructions in the dry pipe system piping, the entire system shall be flushed of foreign material.

Record Keeping:

- ☐ Fifteen Year Testing Report

Fifty Year Test

Responsibility: _____

Procedure:

- ☐ Sample sprinklers from sprinkler systems which have been in service more than 50 years shall be sent to a recognized testing laboratory for testing, and this procedure shall be repeated at intervals not greater than10 years thereafter.
- ☐ When sprinklers are required to be tested in conformance with Sentence (1), no fewer than 6 sprinklers of each type shall be tested, except that no fewer than 2 sprinklers per floor per individual system shall be tested.
- ☐ All sprinklers shall be replaced in sprinkler systems from which sample sprinklers have been tested and found defective.
- ☐

Record Keeping:

- ☐ Fifty Year Test Report

Standpipe & Hose System

Reference Standard:

- ☐ NFPA 14, *Installation of Standpipe and Hose System.*
  Alterations - Standpipe systems that have been modified or extended or are being restored to service after a period of disuse exceeding twelve months, shall be flow and pressure tested at the highest and most remote hose connection to ensure the availability of the water supply for which the system was designed.

Monthly Inspection

Responsibility: _____

Procedure:

- ☐ Hose cabinets shall be inspected to ensure that the hose is in proper position and that all of the equipment is in place and in operable condition.
- ☐ Hose valves shall be checked to ensure they are tight.
- ☐ Main shut off valve shall be checked to ensure that it is open.

Record Keeping:

- ☐ Monthly Inspection & Testing Report

Annual Inspection

Responsibility: _____

Procedure:

- ☐ C All portions of the system shall be inspected.

Record Keeping:

- ☐ Annual Inspection & Testing Report

Five Year Test

Responsibility: _____

Procedure:

- ☐ The standpipe system shall be flow tested at intervals not greater than 5 years to ensure that the design flow can be delivered.
- ☐ If during the flow test there is an identification of the presence of debris in the piping, the entire system shall be flushed of foreign material.

Record Keeping:

- ☐ Five Year Test Report.

Freezing Protection

Annual Inspection

Responsibility: _____

Procedure:

- ☐ Check automatic heat tape to ensure that it is operable

☐ Locations are identified in Part 6

Record Keeping:

☐ Annual Inspection and Test Report

Fire Pumps & Reservoirs

Weekly

Responsibility: _____

Procedure:

☐ The water level in the fire pump reservoir shall be observed at intervals not greater than 7 days and maintained at the proper level.

☐ Operate internal combustion engine fire pump at rated speed and observe the discharge pressure, suction pressure, lubricating oil level, operative condition of relief valve, and general operating conditions at intervals not greater than 7 days.

☐ Internal-combustion engine fire pumps shall be operated for a sufficient time to bring the engines up to normal operating temperatures. The storage batteries and fuel supplies shall be maintained at the correct levels.

Record Keeping:

☐ Weekly Inspection & Testing Report

Monthly Test

Responsibility: _____

Procedure:

☐ Test fire pumps driven by electric motor at rated speed until satisfactory performance of the pump, driver and controller is verified at intervals not greater than one month. (An indication of the satisfactory performance of the controller can be obtained by starting the pump by reducing the water pressure in the controller sensing line. The operating conditions of the relief valve, and the discharge and suction pressures, lubricating oil levels and priming water levels, are further indications of the performance of the fire pump and related equipment.)

Record Keeping:

☐ Monthly Inspection & Testing Report.

Annual Testing

Responsibility: _____

Procedure:

- ☐ Fire pumps shall be tested at full rated capacity at intervals not greater than 12 months to ensure that they are capable of delivering the rated flow.

Record Keeping:

- ☐ Annual Inspection & Testing Report.

Fire Dampers & Fire Stops Flaps

Annual Inspection

Responsibility: _____

Procedure:

- ☐ ensure that the fire dampers and fire stops are in place and are not obviously damaged or obstructed.

Record Keeping:

- ☐ Annual Inspection and Testing Report.

Hoods, Ducts & Filters

Weekly Inspection

Responsibility: _____

Procedure

- ☐ Hoods, ducts and filters subject to accumulations of combustible deposits shall be inspected at intervals not greater than 7 days, and shall be cleaned if the accumulation of such deposits creates a fire hazard.
- ☐ If necessary hoods and filters shall be cleaned by staff.
- ☐ If necessary ducts shall be cleaned by a qualified contractor.

Record Keeping:

- ☐ Weekly Inspection & Testing Report - when equipment is cleaned.

Chimneys, Flues & Flue Pipes

Annual Inspection

Responsibility: _____

Procedure:

- ☐ inspect to identify any dangerous conditions at intervals not greater than twelve months,
- ☐ after any chimney fire,
- ☐ at the time of addition of any appliance,
- ☐ clean as often as necessary to keep them free from dangerous accumulations of combustible deposits.

Record Keeping:

- ☐ Annual Inspection and Testing Report.

Heating Ventilating & Air Conditioning Systems Annual Testing and Servicing

Responsibility: _____

Procedure:

- ☐ Inspect and service as necessary to ensure that these systems do not create a fire hazard.
- ☐ Except for self-contained systems within dwelling units, disconnect switches for mechanical air-conditioning and ventilating systems shall be operated to establish that the system can be shut down in an emergency.

Record Keeping:

- ☐ Annual Inspection & Testing Report.

Fire Department Access to Building

Daily Inspection

Responsibility: _____

Procedure:

- ☐ Streets, yards and roadways provided for fire department access shall be maintained so as to be ready for use at all times by fire department vehicles.
- ☐ Vehicles shall not be parked to obstruct access of fire department vehicles and signs shall be posted prohibiting such parking.
- ☐ Access panels or windows provided to facilitate access for firefighting operations shall be maintained free of obstructions at all times.

Record Keeping:

- ☐ None

Fire Hydrants

Semi-annual Inspection

Responsibility: _____

Procedure:

- ☐ Hydrants shall be inspected to ensure that hydrant caps are in place and caps with worn, rusted or obstructed threads, which might hamper easy removal, are repaired or replaced.
- ☐ Hydrant barrels shall be inspected to determine if water has accumulated as a result of a leaking main valve or a plugged or damaged drain valve.
- ☐ Main valves which are leaking and drains which are plugged or damaged shall be repaired.

Exception: Where it is not practical to repair faulty drain valves or where drain valves are intentionally plugged, measures shall be taken to prevent the freezing of accumulated water.

Record Keeping:

- ☐ Semi-annual Inspection & Testing Report.

Annual Flushing

Responsibility: _____

Procedure:

- ☐ Semi-annual inspection list previously.
- ☐ Hydrants shall be flushed at intervals not greater than 12 months with the main valve and any outlet valves fully opened until the water runs clear.

Record Keeping:

- ☐ Annual Inspection & Testing Report

PART 11

OCCUPANT FIRE PREVENTION, PREPAREDNESS & CONTROL

Fire Prevention

- ☐ Smoke only within designated areas.
- ☐ Use large non-tip ashtrays and empty them only when you are sure the ashes, matches and butts are cold. Make sure that no one, including visitors, has left cigarettes smoldering in waste-baskets or on furniture.
- ☐ Be alert around electrical equipment. If electrical equipment is not working properly or if it gives off an unusual odor - often the first sign of a problem that could cause a fire - disconnect the equipment and call an appropriate maintenance contractor.
- ☐ Promptly replace any electrical cord that is cracked or has a broken connection.

- ☐ When using extension cords, protect them from damage: do not put them across doorways or any place where they will be stepped on or chafed. Check the amperage load specified by the manufacturer or the A listing laboratory@, and do not exceed it. Do not plug one extension cord into another, and do not plug more than one extension cord into one outlet.
- ☐ Keep all heat-producing appliances away from the wall and away from anything that might burn. Leave plenty of space for air to circulate around equipment that normally gives off heat.
- ☐ Make sure all appliances in your area - such as coffee makers and hot plates - are turned off when not in use. It's best to assign one person to make this check every day.
- ☐ Do your part to keep storage areas, stairway landings and other out-of-way locations free of waste paper, empty cartons, dirty rags and other material that could fuel a fire.
- ☐ Report fire hazards to the Fire Safety Director.

Fire Preparedness

- ☐ Know the location of the two exits closest to your area. Count the number of doors between you and each of those exits - in case you must escape through a darkened, smoke filled corridor where you can't read the names on the doors.
- ☐ Learn where the nearest pull station is located and how to activate it.
- ☐ Post the 9-1-1 or Fire Department Emergency Number on your telephone.
- ☐ Learn the sound of your building=s fire alarm.
- ☐ During the annual fire drill which will be conducted by the Fire Safety Director, do the following:
  - Review the basic *IN CASE OF FIRE* procedures posted in the corridors, and Evacuation Procedures.
  - Ensure you know who the Fire Safety Director and Deputies are, and how to contact them.
  - Read the other information provided in *Occupant Fire Prevention, Preparedness, &Control*
- ☐ The **cleaning** of a smoke alarm with a vacuum cleaner at least twice a year is recommended.
- ☐ Volunteer to be one of two designated persons who will assist a person requiring assistance.

Fire Evacuation

- ☐ Use a building telephone only if you are safe from the fire
- ☐ Do not use the elevator.
- ☐ While exiting, walk, and do not run. Shut all doors behind you and alert those who have difficulty hearing that an emergency evacuation of the building is under-way. Proceed along corridors and through exits in a quiet and orderly manner. High heeled shoes are hazardous while proceeding down stairs, and it is advisable to remove them before entering the stairwell. Do not push or jostle.
- ☐ Assist persons requiring assistance to reach the nearest safe exit:

- try to keep exits clear by permitting others to pass. It may be necessary to hold persons requiring assistance in or near the exit, and wait for fire department assistance.

- ☐ If you must use an escape route where there is smoke, stay as low as possible. Crawling lets you breathe the cleaner air near the floor as you move toward the exit.
- ☐ Before you open a closed door, feel it with the back of your hand. If it is hot, leave it closed and use your alternate escape route. If it feels normal, brace your body against the door and open it a crack - be prepared to slam it shut if heat or smoke starts to rush in.
- ☐ If all exits are blocked by fire or smoke, enter a room preferably with an exterior window, and seal the cracks in the door with available materials to prevent smoke entering the room.
- ☐ Phone 9-1-1 or to report your situation, and attract the attention of someone outside the building by any possible means.
- ☐ When you have reached the outside of the building, move away from the exit allowing others behind you to emerge.
- ☐ Do not attempt to drive your vehicle from the parking area.
- ☐ Do not enter the building again until permitted by a fire department officer or the fire safety director.

Portable Fire Extinguishers

Portable fire extinguishers are useful only if you know how to use them, if they are right for the type of fire you are fighting, and if the fire is discovered immediately. You should not attempt to fight even a small fire until people have been evacuated from the area and the Fire Department has been called. Never attempt to fight a fire if any of the following is true:

- ☐ You are uncertain about how to use the extinguisher.
- ☐ The fire is spreading beyond the immediate area where it started.
- ☐ The fire could block your escape route.
- ☐ You are alone.

How To Use A Multi-Purpose Dry Chemical Type Fire Extinguisher

Remember the word: **PASS**

- ☐ **P**ULL the pin
- ☐ **A**IM low... pointing the extinguisher nozzle at the base of the fire
- ☐ **S**QUEEZE the handle... This releases the extinguishing agent
- ☐ **S**WEEP from side to side... at the base of the fire until it appears to be out. Watch the fire area. If fire breaks out again, repeat use of the extinguisher.
- ☐ **R**EPORT to fire department officer

Most portable fire extinguishers work according to these directions, but some do not. Read and follow the directions on the fire extinguishers within your building.

Fire Hose

Fire hoses are useful only if you know how to use them. You should not attempt to fight even a small fire until people have been evacuated from the area and the Fire Department has been called.

Never attempt to fight a fire if any of the following is true:

- ☐ You are uncertain about how to use the hose.
- ☐ The fire is spreading beyond the immediate area where it started.
- ☐ The fire could block your escape route.

How to Use a Fire Hose

- ☐ OPEN hose cabinet
- ☐ PULL all hose out of rack and remove kinks
- ☐ OPEN hose valve FULLY and ensure water flows into hose
- ☐ OPEN nozzle and ADJUST to create a wide spray pattern
- ☐ APPROACH the fire area
- ☐ ADJUST nozzle to produce narrower pattern (NOT a straight stream as this pattern may be less effective)
- ☐ DIRECT the water in a circular motion at the base of the flame
- ☐ BACK away when the fire appears extinguished, but watch for re-ignition
- ☐ REPORT to fire department officer

What to Do in a Severe Earthquake

- ☐ STAY WHERE YOU ARE - Don=t panic
- ☐ SEEK PROTECTION under tables, door frames, stair shafts
- ☐ DO NOT SMOKE or use open flames
- ☐ If natural gas is leaking follow the Natural Gas Leak Procedures in this manual
- ☐ DO NOT use phone to gossip
- ☐ Evacuate the building

Natural Gas Leak

- ☐ IMMEDIATELY notify the fire department
- ☐ PREVENT the operation of electric switches
- ☐ PREVENT smoking or open flame
- ☐ EVACUATE the building

How to Assist Persons Requiring Assistance

Person requiring assistance may be transported using the following technique:

Extremities Carry

The extremities carry is a two-person carry that is easy to do. The steps are as follows:

- One assistant stands at the head of the person requiring assistance, and the second stands at the feet.
- The assistant at the head kneels and slips the arms under the person requiring assistance arms and around the chest, grasping the person=s wrists.
- The assistant at the feet kneels with feet together between the person requiring assistance legs. This assistant grasps the person under or just above the knees.
- The two assistants then stand and carry the person requiring assistance to a place of safety (remember to use your leg muscles when standing up).

PART 12 REPORTS AND

SOURCES INCIDENT/ACTIVITY REPORT

(1) INCIDENT/ACTIVITY

FIRE	FALSE ALARM
FIRE DRILL	TRAINING
FIRE SAFETY MEETING	FIRE EQUIP. OPERATED

(2) DETAIL

DATE_____TIME_____DEVICE/EQUIP_____
FLOOR_____ALARM ZONE_____# OF INJURIES_____
CAUSE/REASON FOR INCIDENT_____
_____ EXPLAIN DAMAGE/LOSS_____
_____

(3) ACTION

WHO DISCOVERED THE FIRE? ___
DID FIRE DEPT ATTEND?____IF NOT, WHY? ____
WHO OPERATED FIRE EQUIPMENT? _____

(4) COMMENTS / RECOMMENDATIONS:

_____
_____
Signed_____Date_____

(5) DISTRIBUTION LIST

FIRE DEPARTMENT	HEAD OFFICE
DEPUTY FIRE SAFETY DIRECTOR	TENANTS
INSURANCE COMPANY	POLICE

DAILY INSPECTION REPORT

RESPONSIBILITY: _____

COMMON PUBLIC AREAS

No flammable or combustible liquid storage

No combustible - refuse accumulations

No worn electrical extension cords

No oily or stain - soaked rags

MEANS OF EGRESS

Doors in fire separations are operable

Corridors & exits are clear of obstructions

Exterior landings and routes leading away from the building are clear of obstructions including snow and ice.

FIRE DETECTION & ALARM SYSTEM

Fire alarm A/C power lamp is on

Fire alarm not indicating trouble

FIRE DEPARTMENT ACCESS TO BUILDING

Access routes are clear of obstructions

SPRINKLER SYSTEMS

Valve enclosures protected from freezing

WEEKLY INSPECTION & TESTING REPORT

RESPONSIBILITY: _____

WEEK 1 2 3 4

Emergency Generator

Fire Pump

Hoods, Filters, & Ducts

Sprinkler Systems

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER MONTH
- ☐ OPERATE FIRE PUMP IN ACCORDANCE WITH PART 6

MONTHLY INSPECTION & TESTING REPORT

RESPONSIBILITY:

Portable Fire Extinguishers

Record the serial number of each extinguisher requiring maintenance by a qualified contractor:

(1)	(2)	(3)
(4)	(5)	(6)
(7)	(8)	(9)

Means of Egress

Fire Detection & Alarm System
Pull station location:_____

Standpipe System

Sprinkler Systems

Fire Pump

Fixed Extinguishing System

Emergency Lighting Units

Emergency Generator

Gauge #1: pressure	Normal
Gauge #2: temperature	Normal
Gauge #3: low coolant	Normal
Gauge #4: low fuel	Normal
Gauge #5: low batt volts	Normal
Gauge #6: over speed	Normal
Gauge #7: high engine temp	Normal
Gauge # 8: low oil pressure	Normal

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER MONTH
- ☐ RETAIN COPY OF CONTRACTORS TEST REPORTS

BI-MONTHLY TESTING REPORT

RESPONSIBILITY: _____

MONTHS:

2	4	6	8	10	12

Sprinkler System

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER YEAR
- ☐ RETAIN COPY OF CONTRACTORS TEST REPORTS

SEMI-ANNUAL TESTING REPORT

RESPONSIBILITY:

MONTHS

months 6	Months 12	Equipment tested
		Emergency Generator
		Sprinkler System
		Fixed Extinguishing System
		Fire Hydrants

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER YEAR
- ☐ RETAIN COPY OF CONTRACTORS SERVICE REPORT

ANNUAL INSPECTION & TESTING REPORT

RESPONSIBILITY:

Portable Fire Extinguishers

Fire Detection & Alarm System (including integrated voice communication system)

Emergency Lighting Units

Emergency Generator (includes fresh supply of fuel)

Sprinkler System - Static Pressure: -Residual Pressure:

Standpipe

Fire Pump

Fire Dampers and Fire Stop Flaps

Heating, Ventilating & Air conditioning

Automatic Heat Tape

Fire Hydrants

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER YEAR
- ☐ RETAIN COPY OF CONTRACTORS REPORT

TWO YEAR TEST REPORT

RESPONSIBILITY

YEARS	2	4	6	8	10	12
Emergency Generator						

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER 10 YEAR PERIOD
- ☐ RETAIN COPY OF CONTRACTORS SERVICE REPORT

THREE YEAR TEST REPORT

RESPONSIBILITY:

YEARS	3	6	9	12	15	18
Emergency Generator						
Sprinkler System						

FIVE YEAR TEST REPORT

YEARS	5	10	15
Emergency Generator			
Standpipe System			

FIFTEEN YEAR TEST REPORT

YEARS	15
Dry Sprinkler System	

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER FIFTEEN YEAR PERIOD
- ☐ RETAIN COPY OF CONTRACTORS TEST REPORT

FIFTY YEAR TEST REPORT

YEARS	50
Sprinkler System	

- ☐ PROCEDURES IN ACCORDANCE WITH PART 10
- ☐ ONE FORM PER FIFTY YEAR PERIOD
- ☐ RETAIN COPY OF CONTRACTORS TEST REPORT
- ☐ FIFTY YEAR TEST WILL BE REQUIRED IN:

ADDITIONAL SOURCES:

Additional sources used to compile this document are available upon request from the Office of the Fire Commissioner.

Fire Safety Plan (FSP) Review Checklist[1]

(Conducted as a BCFC fire safety compliance inspection)

COMPANY INFORMATION

Company name: Building Name:

Address: _____

Street # and name City/Province Postal Code

Instructions: Place a 'check mark' for 'Yes' or and 'X' for 'No' to each statement
Relevant information can be recorded in the Inspection Notes section on last page

At minimum, a fire safety plan (FSP) should include the following information:

1. Fire Safety Plan Review by Building Owner or Occupier (BCFC section 2.8.2.1.(2)):

☐ The fire safety plan current:
- ☐ Reviewed within the past 12 calendar months
- ☐ There has not been any significant process or other operation changes since the last review that should be added to the plan.

☐ The individual(s)/company who prepared the fire safety plan or conducted the review is identified.

Optional: Determine if the preparer(s) or reviewer(s) had the knowledge and experience to adequately prepare or review a fire safety plan. E.g., a strong background in fire prevention, fire code consulting, inspection procedures, planning or fire protection engineering.

Note: Physical site visit can be used to determine if:
- I. Fire Safety Plan implemented as designed.
- II. All reasonably foreseeable fire and explosion hazards, in this building or property, have been identified.

Site visit observations can be recorded on the Fire Prevention Inspection Report

2. Emergency procedures and information needed to plan for an emergency (BCFC section 2.8.2.1.(1)(a)):

☐ Contact personnel in the event of an emergency
- ☐ A list of names and telephone numbers of persons to be contacted during and after normal operating hours or in the event of an emergency is included.
- ☐ Evidence demonstrates the contact personnel are able to respond in a timely fashion. E.g., their estimated response time is known.

☐ FSP includes written instructions on the procedures to follow when an alarm is sounded.

☐ Fire emergency procedures developed for prominent posting on each floor.

☐ Special provisions for persons requiring assistance developed.

☐ Muster point(s) (or meeting place) identified.

☐ List of on-site personnel is regularly updated to remain current – ensures ability to accurate account for everybody on site.

☐ Personnel are assigned to carry out critical tasks:

---

[1] Can be used in conjunction with the one or more following:
Fire Hazard Identification Checklist; Fire Prevention Inspection Report

- ☐ Sound the fire alarm (designate and backup person)
- ☐ Notify the fire department (9-1-1) (designate and backup person)
- ☐ Meet the fire department upon arrival and give information, such as the location of the fire or injury
- ☐ Site fire warden duties (ensuring various trades are represented)
- ☐ Assist persons requiring assistance
- ☐ Confine or control the fire
- ☐ Other (please specify) _____
- ☐ Other (please specify) _____

3. **Appointment and organization of fire emergency supervisory staff** (BCFC section 2.8.2.1.(1)(b)):
(Note: Designated fire emergency "supervisory staff" do not have to be from management or be a supervisor. They do need authority consistent with their assigned duties.)

☐ Managers, supervisors and/or staffs have been appointed and organized to respond to a fire emergency in a pre-determined way.

☐ Appointed personnel are directed and trained to confine or control the fire.

4. **Training of site personnel in their responsibilities for fire safety** (BCFC section 2.8.2.1.(1)(c)):

☐ Managers, supervisors and/or staffs appointed to respond to a fire emergency are trained in their assigned duties, before they are given responsibility for fire safety (BCFC section 2.8.1.2.(1)). For example:
- ☐ fire warden duties to coordinate evacuation
- ☐ duties to provide access and assistance to local government fire fighters
- ☐ duties to lead a fire brigade, trained and equipped to confine and extinguish a fire

☐ Security personnel have knowledge of and understand their role in the site's fire safety plan. For example:
- ☐ Security personnel have access (keys) to locked areas.
- ☐ The fire department can effectively communicate with the security personnel during an emergency.

☐ Site orientation is provided using the Fire Safety Plan. Topics should include:
- ☐ Fire and explosion hazards identified in the fire safety planning and risk management assessments.
- ☐ How to prevent or minimize fire and explosion hazards in the workplace.
- ☐ Familiarization with emergency escape routes, exits, and muster points.
- ☐ What to do upon discovery of a fire.
- ☐ What do upon hearing a fire alarm.
- ☐ Confine or control the fire.

☐ Site fire safety meetings are a part of regular safety meetings. For example, meetings used to review/refresh staff knowledge with a different part of the fire safety plan.

☐ Site personnel are trained to perform fire prevention duties including:
- ☐ Control the amounts of potential fuel sources on the site and around the buildings to mitigate fire and explosion hazards.
- ☐ Carry out general site housekeeping.
- ☐ Carry out maintenance activities based on schedules created and followed for manual management or process system management of potential fuel sources with activity completion records sign off by site supervisor.
- ☐ Removal of excess pallets, garbage/waste material and other potential fuel sources on a regular basis.
- ☐ Separation of potential fuel sources from open flame devices.
- ☐ Maintenance of clear unobstructed access route(s) for fire department apparatus and to fire hydrants.

❒ Maintenance of designated exit routes from every floor.
❒ Separation of access routes from stored combustible materials, equipment, etc.
❒ Provision to park vehicles or delivery trucks so they do not obstruct fire department access routes to site or to adjacent buildings or, otherwise, provision for off-site parking and storage.
❒ Other (please specify)
❒ Other (please specify)

5. Building Fire Emergency Systems (BCFC section 2.8.2.1.(1)(d)):

❒ Diagrams are available on-site. These diagrams should indicate:
- ❒ Plans of each floor area;
- ❒ Muster point(s);
- ❒ Location of nearest hydrant(s);
- ❒ Location of fire protection equipment;
- ❒ Exit paths; and,
- ❒ Service rooms.

❒ Fire Fighting Services – hydrants, Siamese connections, sprinklers, and access routes:
- ❒ FSP contains provisions for accessibility, testing and maintenance of installed services.
- ❒ Firefighter access route(s) to the building are documented.
- ❒ Drawings provided to the fire department are current showing the location of firefighting systems that are operational.
- ❒ Fire suppression and explosion prevention systems incorporated within dust collection systems and duct work are described in the FSP and contains provisions for testing and maintenance.
- ❒ Explosion venting gates on the dust collectors and buildings are described in the FSP, which also contains provisions for site identification, inspection and maintenance.

❒ Fire Extinguishers:
- ❒ There is sufficient quantity and type on-site. Such as:
  - 2-A: 10-B:C on movable equipment
  - 4-A: 40-B:C in all other locations
- ❒ They are provided at or near fuel operated equipment.
- ❒ They are mounted with proper signage at exit locations within the required travel distance.
- ❒ They are adjacent to any hot works work stations (e.g. cutting torch, welding, grinding, etc).

Note: During site tour, check that fire extinguisher servicing in up-to-date (i.e., within the last 12 months)

6. Fire Drills (BCFC section 2.8.2.1.(1)(d)):

❒ Fire drill procedures have been developed in accordance with BCFC section 2.8.3.

❒ Simulated fire drills are conducted when applicable and warranted:
- ❒ For fire emergency "supervisory staff" (BCFC section 2.8.3.1.(1))
- ❒ For all staffs

7. Control of Fire Hazards (BCFC section 2.8.2.1.(1)(f)):
(Refer to the Fire Hazard Identification Checklist for potential fuel sources and potential ignition sources)
(Refer below to Item #13, Additional Information, for applicable BCFC requirements.

❒ Fire and explosion hazards have been identified through a fire safety planning and risk management assessment or other means.
- ❒ Potential Fuel Sources.
- ❒ Potential Ignition Sources.
- ❒ How the fire triangle could be completed.
- ❒ How the explosion pentagon could be completed.

❒ For each identified hazard, the best control option has been used.

Hierarchy of Controls:

I. Elimination for fuel source, ignition source or oxygen source, or
II. Substitution with something less hazardous, and/or
III. Institute Engineering Controls, and/or
IV. Institute Administrative Controls, and/or
V. Use Personal Protective Equipment (PPE).

❒ Where required, safe work procedures have been developed to ensure control measures are used as designed.

❒ Where required, monitoring equipment have been identified and installed to alert when engineering control measures are no longer effective.

❒ Where required, emergency fire and explosion suppression equipment have been identified and installed.

❒ Flammable and Combustible Storage

- ❒ Flammable and combustible liquids are properly stored, handled and used in and around the building.
- ❒ Non-petroleum based compressed gases are properly stored, handled and used in and around the building.
- ❒ The storage area is separated from combustible material by three metres.
- ❒ The storage area is locked and vented.
- ❒ The storage area is protected from vehicular/ industrial motorized traffic.
- ❒ Containers and/or storage areas have proper signage/placards in place.
- ❒ There is a current or updated list of dangerous goods on-site such as material safety data sheets (MSDS), as per the Workplace Hazardous Materials Information System (WHMIS).
- ❒ There are portable extinguishers provided in close proximity to storage and work areas. E.g.,
  - 2-A: 10-B:C on movable equipment
  - 4-A: 40-B:C in all other locations
- ❒ The storage area is away from egress and access routes to the site.

❒ **Electrical Installations and Petroleum Gases**

- ❒ The electrical installations and the storage and use of petroleum gases comply with the requirements of the Safety Standards Act and pursuant regulation? (Contact the British Columbia Safety Authority 1-866-566-7233.)

8. Inspection and Maintenance (BCFC section 2.8.2.1.(1)(g)):

❒ The Fire Safety Plan describes, where required, an effective preventive maintenance program to ensure all measures to control fire and explosion remain effective.

❒ The Fire Safety Plan describes, where required, the inspection and testing of fire and explosion suppression systems.

❒ The Fire Safety Plan describes, where required, the inspection and testing of fire and emergency alarm systems.

9. Security:

❒ On-site security is provided: e.g. locked gate, monitored alarm and/or CCTV, 24 hour or nightly walk around. Other (please describe – _____)

❒ There are provisions to secure vacant buildings against unauthorized entry.

☐ There are provision to keep electrical equipment vaults and electrical service rooms locked so that unauthorized persons will not have access to them.

10. Additional Information: FSP requires additional information if the following specific items exist in the operation

☐ Information, as required by BCFC section 2.8.2.4, is included because of the building height.

☐ Information, as required by BCFC section 3.1.2.6, is included for dangerous goods (e.g., radioactive, explosives, compressed gases, reactive) stored or handled on site.

☐ Information, as required by BCFC section 3.2.1.1, is included for certain products stored indoors.

☐ Information, as required by BCFC section 3.3.1.1, is included for certain products stored outdoors.

☐ Information, as required by BCFC section 4.1.6.1(4), is included for spill control and drainage systems because flammable and combustible liquids are stored, handled, used, and/or processed in the operations.

☐ Information, as required by BCFC 4.3.14.5, is included for storage tanks containing flammable or combustible liquids.

☐ Information, as required by BCFC 5.1.5.1, is included for processes and operations involving a risk from explosion, high flammability or related conditions that create a hazard to life safety. Examples include Hot Works, Dust-Producing Processes, Special Processes involving Flammable and Combustible Liquids and Materials, and Laboratories.

☐ When there are plans for construction, alteration, or demolition, they are being prepared in accordance with BCFC section 5.6.1.3.

Fire Safety Plan Review Details

Item	Remarks

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, May 30, 2017 8:31
To: Owens, Rick TRAN:EX; Cooper, Robert TRAN:EX; Green, Darrell TRAN:EX
Cc: French, Ron TRAN:EX
Subject: constuction Camps
Attachments: Camp Requirements.docxswedits(1).docx

Greetings All ,

Please find attached a cheat sheet that I made up for construction camps that may come in handy if you ever deal with inquires relating to construction camp.

We have quite a few starting to show up in the north.

Cheers
Terry

Terry Ree
Fire Service Advisor | Office of the Fire Commissioner
Emergency Management BC | Ministry of Transportation
T: 250.612.4148 | C: 250.640.6263 | E: Terrance.Ree@gov.bc.ca
OFC 24hr emergency reporting 1.888.988.9488
www.embc.gov.bc.ca/ofc

BRITISH COLUMBIA | Emergency ManagementBC

The 2012 British Columbia Fire Code requires Construction camp to comply with the fire protection requirements of the 2012 British Columbia Building Code.

Camps Requirements

BCBC, Div.B, Part,9 Subsection 9.10.21.

1. ***Accommodations for more than 30 persons require hose stations conforming to Article 9.10.21.9.***
2. ***Portable Fire Extinguishers conforming to 9.10.21.8.***
3. ***Smoke Detectors in All Corridors providing access to exit for sleeping over 10 persons conforming to Article 9.10.21.7.***
4. ***Flame Spread ratings for accommodations with corridors shall have surface flame-spread ratings on walls and ceilings conforming to Article 9.10.21.6.***
5. ***Fire separations between corridors and rooms shall have a fire-résistance-rating of not less than 45 minutes conforming to Clause 9.10.21.6.(2)***
6. ***Spatial separations are required in camps with more than one structure. The distance between each other shall not be less than 10m meeting Article 9.10.21.5.***
7. ***Walkways connecting buildings shall be separated from each connected building by a fire separation having a fire-resistance rating of not less than 45 minutes conforming to article 9.10.21.4.***
8. ***Camps with buildings' having more than one storey in building height shall have a fire separation between floors shall have fire separations having a fire resistance rating of not less than 30 minutes conforming to article 9.10.21.3.***
9. ***Separations between sleeping rooms and remainder of the building by fire separations having fire-resistance ratings of not less than 45 minutes conforming to Article 9.10.21.2.***
10. ***Camps with sleeping accommodations for more than 10 in buildings' with corridors shall have a Alarm System conforming to Sub-Clause 9.10.18.***
11. ***Smoke Alarms are required in all sleeping rooms conforming to Sub-clause 9.10.19***

Terry Ree

Fire Service Advisor

Office of the Fire Commissioner
Northern Region

Karger, Kristina TRAN:EX

From: John Klie <jklie@terrace.ca>
Sent: Tuesday, May 30, 2017 8:46
To: Trent Bossence; Ree, Terrance TRAN:EX; 'Dave Mckenzie'; Peter Bizarro
Cc: 'spettitt@portedward.ca'; 'Keith Stecko'
Subject: RE: fire safety plan

s.22

Jklie

From: Trent Bossence [mailto:tbossence@kitimat.ca]
Sent: Tuesday, May 30, 2017 8:44 AM
To: John Klie; Ree, Terrance TRAN:EX; 'Dave Mckenzie'; Peter Bizarro
Cc: 'spettitt@portedward.ca'; 'Keith Stecko'
Subject: RE: fire safety plan

s.22

Trent

From: John Klie [mailto:jklie@terrace.ca]
Sent: May-30-17 8:43 AM
To: Trent Bossence; Ree, Terrance TRAN:EX; 'Dave Mckenzie'; Peter Bizarro
Cc: 'spettitt@portedward.ca'; 'Keith Stecko'
Subject: RE: fire safety plan

s.22

John Klie

From: Trent Bossence [mailto:tbossence@kitimat.ca]
Sent: Tuesday, May 30, 2017 8:28 AM
To: Ree, Terrance TRAN:EX; 'Dave Mckenzie'; Peter Bizarro
Cc: 'spettitt@portedward.ca'; John Klie; 'Keith Stecko'
Subject: RE: fire safety plan

s.22

Trent

From: Ree, Terrance TRAN:EX [mailto:Terrance.Ree@gov.bc.ca]
Sent: May-30-17 8:17 AM
To: 'Dave Mckenzie'; Trent Bossence; Peter Bizarro
Cc: 'spettitt@portedward.ca'; 'John Klie'; 'Keith Stecko'
Subject: FW: fire safety plan

Morning All :
Please find attached information documents that might come in handy ,
I will be coming to your area June 12, 13, 14 for visit and possible assistance for any issues that you may have, or (coffee and lunch) .
Terry

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 09:44
To: 'spettitt@portedward.ca'
Subject: FW: fire safety plan

FYI
TERRY

From: Ree, Terrance TRAN:EX
Sent: Thursday, May 25, 2017 09:36
To: 'Shawn Pettitt'; Dave Mckenzie; trent Bossence (tbossence@kitimat.ca)
Cc: French, Ron TRAN:EX
Subject: fire safety plan

Shawn:
Please find attached fire safety plan template and check sheet for work camps in your area ,
I am working on coming up on the 12 to assist you , Dave in Rupert and Trent in Kitimat for camp inspection purposes.
Back to you soon
Terry

Terry Ree
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Karger, Kristina TRAN:EX

From: Cooper, Robert TRAN:EX
Sent: Tuesday, May 30, 2017 9:58
To: Ree, Terrance TRAN:EX
Subject: Re: constuction Camps

Thanks Terry

From: Ree, Terrance TRAN:EX
Sent: May-30-17 8:30 AM
To: Owens, Rick TRAN:EX; Cooper, Robert TRAN:EX; Green, Darrell TRAN:EX
Cc: French, Ron TRAN:EX
Subject: constuction Camps

Greetings All ,
Please find attached a cheat sheet that I made up for construction camps that may come in handy if you ever deal with inquires relating to construction camp.

We have quite a few starting to show up in the north.

Cheers
Terry

Terry Ree
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www.embc.gov.bc.ca/ofc

Karger, Kristina TRAN:EX

From: Ree, Terrance TRAN:EX
Sent: Tuesday, June 6, 2017 8:55
To: 'Peter Bizarro'
Cc: 'trent Bossence (tbossence@kitimat.ca)'
Subject: RE: Batteries/Visit

Peter :
Regarding my visit next week, Planning to be in Kitimat Tuesday around lunch if everything goes according to plan . John Klie wanted to join us for information session about camps . Check with boss to see if all ok.
Will e-mail or call you when I am leaving Rupert
Terry

From: Ree, Terrance TRAN:EX
Sent: Thursday, June 1, 2017 14:55
To: 'Peter Bizarro'
Subject: RE: Batteries

Roger that
T

From: Peter Bizarro [mailto:pbizarro@kitimat.ca]
Sent: Thursday, June 1, 2017 14:19
To: Ree, Terrance TRAN:EX
Subject: Batteries

Hey Terry,

We could use the batteries and if they are free and you have the space please bring them along.

Thanks

Pete Bizarro
Deputy Fire Chief
Kitimat Fire & Rescue Services
Phone: 250-632-8938

KITIMAT

http://www.Kitimat.ca

"Working Smoke Alarms Save Lives: Test Yours Every Month"