

#### Introduction to the Demolition Package for the Village of Anmore

Welcome to the Demolition Package for the Village of Anmore. This comprehensive guide is designed to assist you in successfully completing your demolition application process. It is essential that you carefully read through the entire document to ensure compliance with all local regulations and safety requirements.

#### Steps to Complete Your Demolition Package Application:

- 1. **Read Through the Document**: This document contains vital information and instructions that you must follow. Please take the time to read it thoroughly to avoid any omissions or errors in your application.
- 2. **Application Forms**: Please ensure that you complete and submit both these forms to the Village of Anmore as part of your application process.
  - Contractor Compliance Application
  - Pre-Contract Hazard Application
- 3. **Follow the Checklist**: Review Appendix A on page 2 for a detailed checklist that outlines all the necessary steps and documentation required for your demolition project. Make sure you follow each item on the checklist to ensure your application is complete and accurate.
- 4. Submit Your WorkSafe BC Form: You are required to submit a <u>Notice of Project WorkSafe BC form</u> as part of your application. Review pages 3-13 for details on why this form is crucial to ensure that all safety and health regulations are adhered to during the demolition process.
- 5. **Fulfill Fire Safety Planning Steps**: Safety is a top priority for the Village of Anmore. Review pages 14-18 of for Fire Safety Planning for construction and demolition sites
- Decommission Your Septic System: If your property includes a septic system, you must follow the decommissioning guide provided in this document. Proper decommissioning of septic systems is essential to prevent environmental contamination and ensure public health and safety. Review pages 19-21 for our Decommissioning Septic Tanks Information guide.

By following these steps and submitting all required forms and documentation, you will be well on your way to obtaining the necessary approvals for your demolition project. Should you have any questions or require further assistance, please do not hesitate to contact the Village of Anmore's building and planning department.

Thank you for your attention to detail and commitment to safety. We look forward to working with you to ensure a smooth and successful demolition process.



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## CONTRACTOR HEALTH & SAFETY CHECKLIST AND PROGRAM GUIDE

This health and safety checklist is to be used only as a guide. The contractor is solely responsible for ensuring that the requirements set out in the Occupational Health and Safety Act and Regulations are complied with and that the health and safety of the workers at the worksite are protected.

Do you have copies of the British Columbia Occupational Health and Safety Regulations posted at the workplace?	YES	NC
Is all written documentation (e.g. procedure manuals, traffic protection plans, policies, notes, records, inspections, meeting minutes, etc) on all health and safety issues available for review at your workplace, including documentation for any sub-contractors?	YES	NC
Have you identified all possible hazards in the workplace and have you taken measures to control or eliminate the hazards?	YES	NC
Are your employees trained and competent to perform the duties that they are assigned to?	YES	NC
Do all new workers receive an orientation to the workplace and hazard awareness training?	YES	NC
Are tailgate/safety talks held on a regular basis?	YES	NC
Are workplace inspections performed on a regular basis and documented as outlined in the Occupational Health and Safety Act and Regulations?	YES	NC
Are employees supplied with the correct personal protective equipment needed to perform their job in a safe manner?	YES	NC
Do you have proper first aid coverage and supplies?	YES	NC
Do you have a health and safety representative present in the workplace?	YES	NC
Are health and safety issues reviewed at workplace meetings?	YES	NC
Do you contact utility companies for safety matters when required?	YES	NC
Do you report all critical injuries to the Workers' Compensation Board?	YES	NC
Do you record all incidents/accidents and perform investigations?	YES	NC
Has a Notice of Project been submitted to the Workers' Compensation Board, if required?	YES	N

For more information regarding your health and safety program please contact the WCB (276-3100) www.worksafebc.com



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# Submit a Notice of Project form

Before starting work activity on certain projects, owners, prime contractors, and/or employers are required by the Occupational Health and Safety Regulation to send us written notice. You can do this online with our Notice of Project (NOP) form. How much notice we require depends on the type of project you're planning.

Type of project	Notice required
Construction (OHS Regulation 20.2 (/en/law-policy/occupational-health- safety/searchable-ohs-regulation/ohs- regulation/part-20-construction- excavation-and- demolition#SectionNumber:20.2))	At least 24 hours
Asbestos, lead or other similar exposure work activity (OHS Regulation 20.2.1 (1) (/en/law- policy/occupational-health- safety/searchable-ohs-regulation/ohs- regulation/part-20-construction- excavation-and- demolition#SectionNumber:20.2.1))	At least 48 hours (as of May 1, 2017)

5/17/2018

Type of project	Notice required			
Forestry projects expected to last more than 5 working days (OHS Regulation 26.4 (/en/law- policy/occupational-health- safety/searchable-ohs-regulation/ohs- regulation/part-26-forestry- operations#SectionNumber:26.4))	At least 24 hours but not more than 30 days			
Diving (OHS Regulation 24.9(1)(a) to (f) (/en/law-policy/occupational- health-safety/searchable-ohs- regulation/ohs-regulation/part-24- diving-fishing-and-other-marine- operations#SectionNumber:24.9))	At least 24 hours			
Aircraft operations (forestry) (OHS Regulation 29.16 (/en/law- policy/occupational-health- safety/searchable-ohs-regulation/ohs- regulation/part-29-aircraft- operations#SectionNumber:29.16))	At least 2 weeks			
Underground workings (OHS Regulation 22.6 (/en/law- policy/occupational-health- safety/searchable-ohs-regulation/ohs- regulation/part-22-underground- workings#SectionNumber:22.6))	At least 30 days			
Submit NOP form →				
Key changes to asbestos, lead and other similar exposure work + activity as of May 1, 2017				
Information you need before starting the NOP form +				

#### 20.112 Hazardous materials

(1) In this section:

"hazardous material" means a hazardous substance, or material containing a hazardous substance, including

(a) asbestos-containing material,

(b) lead or any other heavy metal, or

(c) toxic, flammable or explosive material,

that may be handled, disturbed or removed in the course of the demolition or salvage of machinery, equipment, a building or a structure, or the renovation of a building or structure;

"qualified person", except in subsections (7) and (8), means a person who

- (a) has, through education and training, knowledge of the management and control of the hazardous materials that the qualified person is made aware of by the employers, and the owner, or that are reasonably foreseeable by the qualified person, as being
- (i) on or in the machinery, equipment, building or structure that is the subject of the demolition, salvage or renovation, or

(ii) at the worksite, and

(b) has experience in the management and control of those hazardous materials.

- (2) Before work begins on the demolition or salvage of machinery, equipment, a building or a structure, or the renovation of a building or structure, all employers responsible for that work, and the owner, must ensure that a qualified person inspects the machinery, equipment, building or structure and the worksite to identify the hazardous materials, if any.
- (3) In conducting an inspection and identifying the hazardous materials, if any, under subsection (2), a qualified person must do the following:

(a) collect representative samples of the material that may be hazardous material;

(b) identify each representative sample and determine whether it is hazardous material;

- (c) if the actions under paragraphs (a) and (b) are not practicable, or not appropriate in the circumstances, use other sufficient means to identify the hazardous materials, if any;
- (d) based on the actions taken under paragraphs (a) and (b) or (c), determine the location of each of the hazardous materials identified;
- (e) make a written report of the inspection, including,
- (i) if the actions under paragraphs (a) and (b) were taken,
- (A) the location of each representative sample, and
- (B) the identity of each representative sample and whether it is hazardous material,
- (ii) if the actions under paragraph (c) were taken, the identity of each of the hazardous materials, if any,
- (iii) a description of the methods used under paragraph (b) or (c),
- (iv) the location, as determined under paragraph (d), of each of the hazardous materials identified, including by using drawings, plans or specifications, and
- (v) the approximate quantity of each of the hazardous materials identified.
- (4) All employers responsible for work being carried out on the worksite where the demolition or salvage of the machinery, equipment, building or structure, or the renovation of the building or structure is taking place, and the owner, must ensure that the following information is available at the worksite:
- (a) a report made under subsection (3)(e);
- (b) a report made under subsection (6)(e);
- (c) a written confirmation under subsection (8).
- (5) All employers responsible for containing or removing any of the hazardous materials identified under subsection (2) or (6) must safely contain or remove those hazardous materials.
- (6) If, after written confirmation is provided under subsection (8), a person discovers material that may be hazardous material on or in the machinery, equipment, building or structure or at the worksite, not previously determined to be hazardous material under this section, all employers responsible for the demolition or salvage of the machinery,

equipment, building or structure, or the renovation of the building or structure, and the owner, must ensure that a qualified person does the following:

- (a) collects representative samples of the material;
- (b) identifies each representative sample and determines whether it is hazardous material;
- (c) if the actions under paragraphs (a) and (b) are not practicable, or not appropriate in the circumstances, uses other sufficient means to determine if the material is hazardous material;
- (d) based on the actions taken under paragraphs (a) and (b) or (c), determines the location of the hazardous material, if any;
- (e) makes a written report, including,

(i) if the actions under paragraphs (a) and (b) were taken,

(A) the location of each representative sample, and

- (B) the identity of each representative sample and whether it is hazardous material,
- (ii) if the actions under paragraph (c) were taken, the identity of the hazardous material, if any, and
- (iii) if hazardous material was identified, the location of the hazardous material, including by using drawings, plans or specifications.
- (7) All employers responsible for the demolition or salvage of the machinery, equipment, building or structure, or the renovation of the building or structure, and the owner, must ensure that, with respect to the hazardous materials identified under subsection (2) or (6),
- (a) no demolition, salvage or renovation work that may disturb the hazardous materials, other than work necessary to safely contain or remove the hazardous materials, is carried out until the hazardous materials are safely contained or removed, and
- (b) a qualified person complies with subsection (8).
- (8) A qualified person must ensure, and confirm in writing, that the hazardous materials identified under subsection (2) or (6) are safely contained or removed.

[Enacted by B.C. Reg. 199/2014, effective February 1, 2015.]

## Section 8.1. General

#### 8.1.1. Scope

#### 8.1.1.1. Scope

**1)** The scope of this Part shall be as described in Subsection 1.3.3. of Division A.

**2)** This Part applies to fire safety and the protection of the public during the construction, *alteration* or demolition of every *building*, including any incompleted or abandoned *building*.

**3)** Fire safety at construction and demolition sites shall conform to CAN/CSA S350-M, "Code of Practice for Safety in Demolition of Structures," and Section 5.6. of Division B of the British Columbia Fire Code.

#### 8.1.1.2. <u>Reserved</u>

#### 8.1.1.3. Demolition Procedures

**1)** Measures shall be taken during demolition to protect the public in conformance with Section 5.6. of Division B of the British Columbia Fire Code.

#### 8.1.2. Application

#### 8.1.2.1. Application

**1)** Where a *building* is undergoing construction, *alteration* or demolition, measures shall be taken at the *building* site in conformance with this Code. (See Note A-8.1.2.1.(1).)

#### 8.1.2.2. Protection from Risk

1) Precautions shall be taken to ensure that no person is exposed to undue risk.

## **Section 8.2. Protection of the Public**

#### 8.2.1. Fencing and Barricades

#### 8.2.1.1. Covered Way Exceptions

**1)** Where the construction may constitute a hazard to the public, work shall not commence on the construction, *alteration* or repair of a *building* until a covered way has been provided as described in Article 8.2.1.2. to protect the public, except where

- a) the work is done within a solid enclosure,
- b) the *building* is at a distance of 2 m or more from a *public way* used by pedestrians, or
- c) site conditions warrant a distance greater than provided in Clause (b).

#### 8.2.1.2. Covered Way Construction

- 1) A covered way shall
- a) have a clear height of not less than 2.5 m,
- b) have a clear width of not less than 1.5 m or the width of the *public way*, whichever is the lesser,
- c) be designed and constructed to support safely all loads that may be reasonably expected to be applied to it, but in no case less than 2.4 kPa on the roof,
- d) have a weathertight roof sloped towards the site or, if flat, be equipped with a splash board not less than 300 mm high on the *street* side,
- e) be totally enclosed on the site side with a structure having a reasonably smooth surface facing the *public way*,
- f) have a railing 1 070 mm high on the *street* side where the covered way is supported by posts on the *street* side, and
- g) be adequately lighted when the *public way* is lighted.

#### 8.2.1.3. Fencing, Boarding or Barricades

**1)** When a construction or demolition activity may constitute a hazard to the public and is located 2 m or more from a *public way*, a strongly constructed fence, boarding or barricade not less than 1.8 m high shall be erected between the site and the *public way* or open sides of a construction site.

**2)** Barricades shall have a reasonably smooth surface facing the *public way* and shall be without openings, except those required for access.

- 3) Access openings through barricades shall be equipped with gates that shall be
- a) kept closed and locked when the site is unattended, and
- b) maintained in place until completion of the construction or demolition activity.

#### 8.2.1.4. Special Hazards

1) Where any special hazard exists from which it is not possible to protect the public by other means, persons shall be employed to prevent the public from entering the danger zone at any time of the day or night.

#### 8.2.1.5. Work Shutdown

1) When work on a construction site is suspended or ceases so that it will not be occupied during normal working hours, the hazardous part of the construction site shall be protected by

- a) covering all windows, doors and other openings located within 3 m of the ground which may give access to the *building* with a securely fastened barricade, or
- b) a fence or barricade constructed according to the requirements of Article 8.2.1.3.

#### 8.2.2. Excavation

#### 8.2.2.1. Water Removal

1) *Excavations* shall be kept reasonably clear of water.

#### 8.2.2.2. Protection of Adjoining Property

**1)** If the stability of adjoining *buildings* may be endangered by the work of excavating, adequate underpinning, shoring and bracing shall be provided to prevent

- a) damage to, or movement of, any part of the adjoining *building*, and
- b) the creation of a hazard to the public.

#### 8.2.3. Use of Streets or Public Property

#### 8.2.3.1. Safe Passage Past Site

**1)** Except as provided in Article 8.2.3.2., provisions shall be made at all times for the safe passage of pedestrian and vehicular traffic past the site.

2) Material or equipment shall not be placed on any *street* or other public property except as authorized.

**3)** Except as provided in Sentence (4), where a sidewalk exists adjacent to the site it shall be kept clear of obstructions at all times.

4) Where construction operations necessitate the obstruction of a sidewalk, a temporary sidewalk shall be provided and it shall be kept clear of obstruction at all times.

#### 8.2.3.2. Overhead Activities

**1)** Operations such as the hoisting of major components onto a tall *building* or other overhead activities that constitute a hazard to pedestrians below from which the public cannot be protected by barricades, covered ways or similar means shall not be carried out until the *street* or other *public way* is closed.

#### 8.2.3.3. Barricades

1) *Excavations* in *streets* or public property shall

- a) be adequately barricaded, and
- b) have warning signs or lights installed on each section of the barricades referred to in Clause (a).

#### 8.2.3.4. Restoration and Repair

1) All sidewalks, *streets* or other public property that have been damaged shall be restored to a safe condition.

**2)** All obstructions on sidewalks, *streets* or other public property shall be removed when the need for such obstructions is ended.

#### 8.2.3.5. Warning Lights

**1)** Warning lights shall be placed and shall be in operation during the hours of darkness at all obstructions on *streets* or other *public ways*.

#### 8.2.4. Direction of Vehicular Traffic

#### 8.2.4.1. Hazards to Vehicular Traffic

**1)** Where a hazard to vehicular traffic on a *public way* is created by work on a construction site, the following shall be provided to direct the traffic:

- a) one or more workers,
- b) warning signs,
- c) barriers,

- d) lane control devices, or
- e) flashing lights or flares located at a suitable distance from the hazard.

#### 8.2.4.2. Flags Used for Directing Traffic

- **1)** A flag used to direct traffic shall be
- a) red,
- b) not less than 450 mm by 500 mm,
- c) mounted on a staff not less than 1 m long, with the long side of the flag attached securely to the staff along its entire length, and
- d) maintained in a clean and untorn condition when being used.

#### 8.2.4.3. Signs Used for Directing Traffic

- 1) A sign used to direct traffic shall be
- a) diamond-shaped and of material not less rigid than 6 mm thick plywood,
- b) not less than 450 mm by 450 mm in size and mounted at one corner on a substantial pole not less than 1.2 m long,
- c) red on one side with black corner areas so that the red area is a regular 8-sided figure, and with the word "STOP" in clearly distinguishable white letters not less than 150 mm high located centrally on the sign,
- d) yellow on the other side with the word "SLOW" in clearly distinguishable black letters not less than 150 mm high located centrally on the sign, or symbols recognized by the International Traffic Code, and
- e) maintained in a clean condition when being used.

#### 8.2.4.4. Worker Directing Traffic

- **1)** A worker who is directing traffic shall
- a) be equipped as required by Article 8.2.4.5.,
- b) be instructed in the signals to be used in controlling traffic,
- c) be provided with a copy of written instructions on the correct methods for traffic direction, and
- d) direct traffic by using either a flag or sign.

#### 8.2.4.5. Clothing While Directing Traffic

**1)** A worker while directing traffic shall wear the following clothing which shall be fluorescent and coloured either blaze orange or red:

- a) a vest, or
- b) sleeves that extend from above the elbow to the wrist.

#### 8.2.5. Waste Material

#### 8.2.5.1. Control of Waste Material

1) Waste material or other material shall not be permitted to fall freely from one *storey* to another.

#### 8.2.5.2. Removal of Waste Material

- 1) Waste material shall be removed as quickly as possible by means of
- a) appropriate containers,
- b) an enclosed shaft or chute conforming to Sentence 8.2.5.4.(1), or
- c) a hoisting apparatus if large pieces or objects are involved.

#### 8.2.5.3. Enclosures for Waste Material

- 1) Waste material cleared as provided in Sentence 8.2.5.2.(1) shall be deposited in an enclosure
- a) so arranged as to prevent waste material from being projected beyond the confines of the enclosure, and
- b) not accessible to the public.

#### 8.2.5.4. Chutes for Waste Material

**1)** The chute described in Clause 8.2.5.2.(1)(b) shall be closed if it is inclined more than 45° to the horizontal.

# Notes to Part 8 Safety Measures at Construction and Demolition Sites

**A-8.1.2.1.(1) Application.** The use of streets or public property and vehicular traffic during construction or demolition is normally controlled by regulations of authorities other than the building department (e.g., police department).



## INFORMATION BULLETIN

Date: April 17, 2009 (Revised: April 9, 2013)

Ministry of Justice Emergency Management BC

### Fire Safety Planning for Construction and Demolition Sites

The purpose of this Information Bulletin is to provide the construction and demolition industry with an easy to follow checklist to assist them in meeting the fire safety requirements of British Columbia's Building and Fire Codes. The goal is to prevent fires in and around construction/demolition sites and reduce the fire risk to life and property.

This bulletin only covers provincial building and fire code requirements. Specifically:

- British Columbia Building Code, Division B, Section 8.1 makes reference to the British Columbia Fire Code (BCFC), Division B, Section 5.6 which applies to buildings, parts of buildings, and associated areas undergoing construction or demolition operations, including renovations.
- BCFC, Division B, Section 5.6.1.3 (1) states: "...**prior to the commencement** of construction, alteration or demolition operations, a fire safety plan shall be prepared for the site..."

The owner or owner's authorized agent is responsible for carrying out the provisions of the BCFC, which includes establishing a work site fire safety plan to ensure that:

- Fire hazards will be controlled.
- Emergency responders will be notified of a fire emergency.
- Emergency responders will not be delayed in carrying out their duties.
- Firefighting operations will be managed effectively, without unnecessary delays.
- Designated supervisory staff will be appointed and organized to respond to fire emergencies.
- Instructions including schematic diagrams describing the type, location and operation of building fire emergency systems will be established.
- Building facilities, systems, equipment and devices will be properly inspected and maintained.

The fire safety plan not only reflects the unique characteristics of building, operation and construction techniques (including the construction/demolition trades), but also considers the available firefighting infrastructure. For this reason, the fire safety plan must be prepared by the owner or owner's authorized agent in cooperation with the <u>local fire department</u> and other applicable regulatory authorities.

Prior to commencing any work at a site, it's important for the owner or authorized agent of the owner to:

- ensure they are also in compliance with the laws, regulations and requirements of the BCBC, the BCFC, local government and other regulatory authorities; and
- contact the local fire department and other regulatory authorities such as the <u>British Columbia Safety Authority</u> and <u>WorkSafeBC</u>.

Fire safety planning and risk management assessments of the site done prior to, during and after building construction/demolition is completed, are essential to prepare for and manage fire hazards. Planning and assessment will identify and lead to methods and processes that will minimize or contain potential fire hazards. All site safety activities should be coordinated through the planning and assessment process.

BCFC provisions are included in the fire safety plan and are applied depending on the project's scope and conditions of the site, e.g. the size and type of the building and its proximity to adjacent buildings.

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

#### **1.** Emergency procedures and information needed to plan for an emergency:

- □ Who is the designate and backup person responsible to sound the fire alarm (horn)?
- □ Who is the designate and backup person responsible to notify the fire department (9-1-1)?
- □ Is instruction given to site personnel on the procedure to follow when an alarm is sounded?
- □ Are exit routes clearly visible within the site and on all floors?
- □ Is the muster point (or meeting place) known by all site personnel?
- □ Is there a list of on-site personnel, and is it updated and current? (Can everybody on-site be accounted for?)
- □ Are there assigned personnel to meet the fire department upon arrival and give information, such as the location of the fire or injury?
- □ Are there persons assigned as site fire wardens (ensuring various trades are represented)?
- □ Are there personnel directed and trained to confine or control the fire?

#### 2. Training of site personnel on evacuation procedures:

- □ Is site orientation provided?
- □ Are regular site fire safety meetings a part of regular safety meetings?
- □ Are simulated fire drills conducted when applicable and warranted?

# 3. Assigned site personnel must be responsible to install and maintain fire safety duties such as:

- □ Controlling combustibles on the site and around the buildings.
- □ General site housekeeping.
- □ Removing excess pallets, garbage/waste material and other combustibles on a regular basis.
- □ Maintaining separation of combustibles from open flame devices.
- □ Maintaining clear unobstructed access route(s) for fire department apparatus and to fire hydrants.
- Designating and maintaining at least one exit from every floor.
- □ Separating access routes from materials stored on-site, combustibles, etc.
- Parking of vehicles or delivery trucks should not obstruct fire department access to the site, and
- □ Adjacent buildings (off-site parking and storage may be considered).

#### 4. Firefighting Services – Hydrant, Siamese Connection, Sprinkler, Access Route:

- □ Are they installed, tested and activated at the start of construction?
- □ Are firefighter access route(s) to the building provided?
- □ Are firefighting services (standpipes, hydrants) maintained and accessible?
- □ Do drawings provided to the fire department show the location of firefighting systems as they become operational?
- □ Is the site address sign visible and legible to emergency crews form the street? (If they must be provided according to bylaw).

#### 5. Fire Extinguishers:

- □ Is there 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?
- □ Is the servicing up–to-date (within the last year)?
- □ Are they provided at or near fuel operated equipment?
- □ Are they mounted with proper signage at exit locations within the required travel distance?
- □ Are they adjacent to any hot works operations (e.g. cutting torch, welding, torching, etc)?

#### 6. Hot Works Operations:

- □ Is the area clear of flammable and combustible materials?
- □ Is a fire watch assigned during a hot works operation and for 60 minutes after its completion?
- □ Is there a final inspection of the hot works area 4 hours after completion?
- □ Are the hot works in the proximity of combustible or flammable materials?
- □ Have provisions been made for protection of such materials by non-combustible materials, thermal barrier or other means?
- □ Is the work being performed by trained or certified personnel?

- □ Is a fire extinguisher present at all times? Such as:
  - 2-A:10-B:C on movable equipment?
  - 4-A:40-B:C in all other locations?
- □ Is proper ventilation provided as required?
- □ Are the hot tar pots on-site complete with fire extinguishers, trained personnel, and located away from combustible materials?

#### 7. Flammable and Combustible Storage:

- □ Are flammable and combustible liquids properly stored, handled and used in and around the building?
- □ Are non-petroleum based compressed gases properly stored, handled and used in and around the building?
- □ Is the storage area separated from combustible material by 3 metres?
- □ Is the storage area locked and vented?
- □ Is the storage area protected from vehicular/ industrial motorized traffic?
- Do containers and/or storage areas have proper signage/placards in place?
- □ Is there a current or updated list of dangerous goods on-site such as material safety data sheets (MSDS), as per the <u>Workplace Hazardous Materials</u> <u>Information System (WHMIS)</u>?
- □ Are portable extinguishers provided in close proximity to storage and work areas such as:
  - 2-A:10-B:C on movable equipment?
  - 4-A:40-B:C in all other locations?
- □ Is the storage area away from egress and access routes to the site?

#### 8. Electrical Installations and Petroleum Gases:

□ Do the electrical installations, 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.)

#### 9. Security:

- □ What type of on-site security is provided: e.g. locked gate, monitored alarm and/or CCTV, 24 hour or nightly walk around?
- □ Do security personnel have knowledge of and understand their role in the site's fire safety plan?
- □ Can the fire department effectively communicate with the security personnel during an emergency?
- □ Do security personnel have access (keys) to locked areas?

#### 10. Contact Personnel:

- □ Is there 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?
- □ Are the contact personnel able to respond in a timely fashion?
- □ What is their estimated response time?

#### **11. Building Diagrams:**

- □ Are diagrams 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.

The fire safety plan must be reviewed and updated as construction/demolition progresses and then periodically afterwards to provide the greatest value. The plan that is developed for a building construction site should evolve into the plan that will be used to maintain and protect the building and its occupants after completion. It's very important that all supervisory staff remain familiar with the plan throughout the process so they are familiar with how it pertains to their responsibilities.

It may be beneficial to owners to obtain the services of a consultant who specializes in fire safety planning. This consultant would oversee the fire safety plan's development and implementation. This is especially useful to owners who have neither the time nor the expertise to develop their own plan as well as when a fire department isn't available to them.

# The contents of OFC Bulletins are not intended to be provided as legal advice and should not be relied upon as legal advice.

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Ministry of Justice

Office of the Fire and Emergency Management Commissioner Office of the Fire Commissioner Mailing Address: PO Box 9201 STN PROV GOVT Victoria BC V8W 9J1

Block A – Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 Telephone: 1-888-988-9488 Facsimile: 250-952-4888

Location:



## **Decommissioning Septic Tanks Information Guide**

- 1. Locate the septic tank and uncover the top of the tank (generally 12-24" below ground level).
- 2. Remove the lid and have the septic tank effluent (liquid and sludge) pumped out by an approved sanitary septic Hauler. This is important, as the effluent will contain bacteria and viruses that could make you or your family ill. If you can't have the tank pumped immediately, mark the location of the tank so it is clearly visible (cover the hole and flag it).
- 3. Fill in the septic tank completely with soil (sand or gravel works best) and put the lid back in place, or break the lid and the top of the tank apart, put the pieces into the bottom of the tank, and fill in the open tank with soil.
- **4.** Backfill the soil around the septic tank slightly higher than ground level to allow for settling.
- **5.** Disconnect the power at the source to all electrical controls and remove all tank accessories (pump, float switches).
- 6. Remove all electrical lines, (including buried service line) that will not be used for other purposes. Devices containing mercury (float switches) must be disposed of at a Licensed Hazardous Waste Facility.

The Village of Anmore requires all registered property owners decommission damaged and / or abandoned septic tanks / sewage systems when hooking up to municipal services or replacing an existing sewage system.

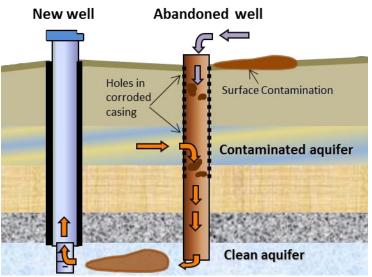
A Decommissioning <u>Inspection is required</u> to be completed by the Village of Anmore Building Department to confirm the steps above have been completed



### **Best Management Practices for Decommissioning Water Supply Wells**

Why do wells have to be decommissioned? Abandoned or unused wells can deteriorate over time and become a threat to groundwater. Near

the ground surface, failures in a well casing, cap or surface seal can allow surface contaminants into the well. Deeper in the well, holes in a well casing can allow water from different aquifers to mix (see Figure 1). Abandoned wells may also represent a potential hazard to human safety. As a well owner, you must make sure your well is compliant with legislation so that it does not pose a risk to groundwater. The *Water Sustainability Act* (the Act) and Groundwater **Protection Regulation** (GWPR) state that unused wells that have no plans for future use must be decommissioned. Unused wells intended for future use must be deactivated.



**FIGURE 1** Potential groundwater contamination pathways in an abandoned well

#### When does a well have to be deactivated or decommissioned?

The *GWPR* states that if a well has not been used for a period of 5 years it must be **deactivated**. A deactivated well has a secure cap or cover, has no power to the pump, is maintained in a safe and sanitary condition, and is accessible to inspection. If a well has been deactivated for 5 years, or not in use for 10 years, and if there is no intent to use the well in future, the well must be decommissioned.

#### The basics of well decommissioning

Well **decommissioning** involves completely filling in the well. This work can only be done by, or under direct supervision of, a Registered Well Driller, Registered Pump Installer or a qualified professional (Professional Engineer or Professional Geoscientist with expertise in hydrogeology). Note that a well owner can do this work themselves ONLY on drilled wells less than 5 metres deep or excavated/dug well less than 15 metres deep. See the "Best Practices for Dug Wells" link at the end of this brochure for more information on decommissioning dug wells.

#### Well decommissioning specifics

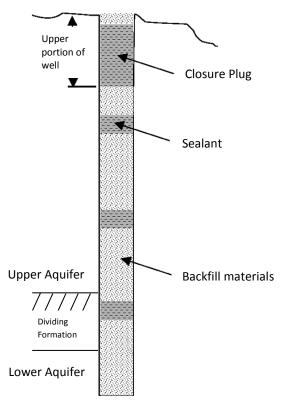
The person responsible for decommissioning a well is required to follow the standards of the GWPR. The summary overleaf is for the benefit of home owners who are curious about the requirements. However, it is not intended as a technical guide for contractors. The full text of the GWPR is available at: <a href="http://www.bclaws.ca/civix/document/id/complete/statreg/39">http://www.bclaws.ca/civix/document/id/complete/statreg/39</a> 2016

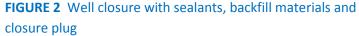
Disclaimer: This document is intended for the owner of a private water well to understand the well decommissioning requirements. It is meant as a guide to the Groundwater Protection Regulation (GWPR) in plain language. In the event of any inconsistency between this text and the GWPR, the Regulation prevails.

The GWPR requires the following to decommission a well (see Figure 2):

- If feasible, all equipment (e.g. pumps, pipes, etc.) and instrumentation should be removed.
- The well must be completely filled with layers of clean backfill and sealant, and finished with a closure plug.
- The backfill material can be any clean fill that is available. The sealant and closure plug is a nontoxic, low-permeability material, such as mixtures of bentonite clay, cement and/or concrete.
- Backfill layers must not exceed 6 metres long and each sealant layer must be at least 1 metre long. The closure plug must be at least 5 metres long, or as long as possible. For shallower wells, the entire well can also be filled completely with sealant.
- Every attempt should be made to seal off two different aquifers (e.g. install a sealant layer at the same depth as the formation dividing two aquifers).
- The well casing may be left in place and cut down to below ground level.
- The performance of bentonite, a swelling-clay often used in well closure, is hindered in salty water. If you have issues with high salt content in your well, advise the person closing the well.

 The person who does the work must complete a well closure report and submit it to the Province of BC (see link below). The contractor should also provide a copy to the well owner.





Attention should be paid when installing sealant because it can stick to the sides of the well casing before it reaches the bottom, causing a backup, or "bridging". One method to overcome bridging is to use a large hose, called a tremie-line, which fills the well from the bottom up with a pre-mixed sealant. Another method is to slowly pour bentonite chips across a coarse mesh screen, to remove the finer particles, before the chips enter the well.

#### **Useful Links**

Best Practices for Dug Wells: <u>https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/best\_practices\_for\_dug\_wells.pdf</u>

**Construction, Alteration and Decommissioning Reports:** <u>https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells/information-for-well-drillers-well-pump-installers</u>

**Registries of Well Drillers and Pump Installers:** <u>https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells/information-for-property-owners</u>

**Regional Groundwater Staff Contacts:** <u>https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells/regional-groundwater-contacts</u>