



City of Richmond

Report to Committee

To: Community Safety Committee
From: Jim Hancock
Fire Chief
Re: OPEN BURNING – BEACH FIRES

To: Community Safety - July 6/05
Date: June 27, 2005
File: 09-5170-00

Staff Recommendation

That open burning permits for the purposes of beach fire no longer be permitted, except by written permission of the Fire Chief for special events.

Jim Hancock
Jim Hancock
Fire Chief
(2700)

FOR ORIGINATING DIVISION USE ONLY					
ROUTED TO:		CONCURRENCE		CONCURRENCE OF GENERAL MANAGER	
Parks Design, Construction & Programs..		Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	<i>M. [Signature]</i>	
Environmental Programs		Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>		
REVIEWED BY TAG		YES	NO	REVIEWED BY CAO	
		<input checked="" type="checkbox"/> <i>DW</i>	<input type="checkbox"/>		
				<input checked="" type="checkbox"/> <i>[Signature]</i>	
				<input type="checkbox"/>	

Staff Report

Origin

Public complaints, environmental stewardship, and community safety concerns have driven the need for this report on beach fires. The report speaks to these concerns and proposes change for Council's consideration. It has no impact on open burning for agricultural purposes nor the educational-based campfires held at the Scout/Guide camp.

Background

For years the public, through permit, could set recreational beach fires on public beachfront lands at Garry Point Park and MacDonald Beach. On average, 330 beach-fire permits are issued annually, of which 33% are for non-Richmond residents.

The City's Garry Point Park caretaker receives several hundred burning related complaints each year. On average Richmond Fire Rescue extinguishes 42 illegal fires annually, with the majority during the summer months. The crews spend roughly 1 hour on each beach fire.

In addition to the time spent extinguishing unattended beach fires, there are a variety of other concerns as outlined below:

Public Complaints

Most fires are burning during the summer evening months and can last for several hours, with some continuing beyond the 11:00 pm park closure time. Seasonal complaints that include spring break & summer time have been received from individuals residing adjacent to Garry Point Park.

This is a time when the weather is sunny, temperatures are warm, a breeze is usually present, and household windows are open. The smoke, soot, and noise generated from the people participating in this activity can find their way to adjoining households. As the number of residents living adjacent to Garry Point Park increases, one anticipates that the frequency of complaints will grow.

Environmental Stewardship

Environmental concerns exist with beach campfires due to the potential for:

- Contribution to poor air quality;
- Damage of adjacent foreshore vegetation;
- Disruption to aquatic-based animals and their nesting habitat; and,
- Pollutants entering the adjacent tidal waterway.

It is expected that pressure to address environmental issues at the local level will increase as environmental awareness rises.

Community Safety

A variety of community safety concerns exist, such as the:

- Risk of fire spreading to adjacent dry vegetation and onto public or private structures;
- Risk of fire spreading to logs and other naturally deposited materials on the shoreline;
- Intentional burning of naturally deposited logs on the shoreline, to supplement scarcity of materials to burn;
- Risk of injury to persons constructing and using inappropriate fire pits made of materials found on the beach;
- Risk of injury to persons or animals from unattended embers and leftover sharp objects (i.e. glass and nails);
- Intentional damage to City owned wooden structures such piers, signs, trash bins, tables and benches; and,
- High demand placed on Richmond Fire Rescue's services during summer months.

Prevention

A variety of progressive and preventative measures have been taken over the years, including:

- Caretakers introduced at Garry Point and MacDonald Beach;
- Park closure set at 11:00 pm;
- Evening patrols introduced at Garry Point Park by Fire Rescue and RCMP;
- Replacement of wooden items that might be burned;
- Installing signs prohibiting beach fires and,
- Removal of fire pits.

These collective, preventative measures have aided in mitigating some of the issues associated with this activity, however more can be done.

Analysis

Beach fires are prohibited in neighbouring cities including: Surrey, Delta and Vancouver. Richmond appears to be the last local community where public beach burning permits are offered. This may be one of the reasons why Richmond receives a large number of permit requests from non-Richmond residents.

Alternatives

Three alternatives were considered:

1. Prohibition of beach fires;
2. Permit Area Reduction; and,
3. Status Quo.

The following table identifies the alternatives explored and their effectiveness in resolving the issues.

<i>Alternatives</i>	<i>Complaints</i>	<i>Environmental Risk</i>	<i>Person & Property Risk</i>
Prohibition	Eliminated	Eliminated	Eliminated
Permit Area Reduction	Eliminated	Reduced	Reduced
Status Quo	Unchanged	Unchanged	Unchanged

Prohibition is the preferred alternative because:

- It addresses public complaints;
- It contributes in a positive way to the environment;
- The risk of damage to persons, animals, and property is greatly reduced; and,

The high summer time demand on Richmond's Fire Rescue crews will eventually be reduced increasing their ability to respond to other calls.

Permit Area Reduction (elimination of Garry Pt Park in favour of MacDonald Beach) is not a preferred alternative because:

- It has a negative environmental impact; and,
- The risk of damage to persons, animals, and property remains high.

At Garry Point Park beach, the risk of fire damage is greatly reduced. The environmental and public concerns are addressed. The summer time demands on the Steveston Fire Hall will be reduced once the new regulations are generally accepted.

However, at MacDonald Beach, one might expect increased:

- Beach fire activity due to the closure of Garry Point Park;
- Risk to the environmentally sensitive areas and structures at MacDonald Beach;
- Risk to persons and animals; and,
- Fire calls at the Burkeville Fire Station will increase.

The impact on the airport and Vancouver southlands residents is unknown and could generate new complaints. The fighting of fires at MacDonald Beach is difficult because of its remote location and extension of the park/trail into the Canadian Wildlife / SEKA property.

Status Quo. This alternative is not a preferred alternative because:

- It fails to address public complaints;
- It has a negative environmental impact; and,
- The risk of damage to persons, animals, and property remains.

The risk of damage from fire in Richmond's urban setting is of increasing concern, particularly if the trend of dry and hot summer/fall weather conditions in the GVRD continues. A high summer time demand on Richmond's Fire Rescue crews in Steveston and Burkeville remain under this alternative.

Other Implications

Changing Richmond's open burning regulations to prohibit beach fires has other implications. The following information is provided as part of this consideration:

- There would be no local communities where beach fires are permitted. However, those wishing to gather around open campfires in a non-beach setting could visit various Regional and Provincial facilities such as: Deas Island Park in Delta, Anmore, Golden Ears Park in Maple Ridge, Cultas Lake in Chilliwack, and Rolley Lake.
- Richmond's Scout/Guide camp on Dyke Road would continue as a supervised youth learning centre.
- Those wishing to prepare and eat meals outdoors in Richmond City Parks are permitted to use propane barbeques..
- Open burning would be prohibited, except by written permission of the Fire Chief for special events. A special event permit may be issued where the Fire Chief has sufficient evidence of appropriate qualifications of the applicant(s), safety measures and insurance coverage are in place.

An overall improvement results by the replacement of open burning at public beaches with the use of safer appliances and control.

Enforcement & Public Communication

The Fire and Police evening patrols at Garry Point Park and Fire's patrols at MacDonald Beach would continue with an education-based approach to enforcement. An evaluation of the patrol needs at these two locations would be conducted at a future date. Information signs, advising the public of the new burning permit changes, would be introduced into the affected parks. An upcoming issue of the City Page would include an explanatory message on the beach fire changes.

The lighting of an open fire is an offence under the current Fire Prevention Bylaw. A Bylaw Enforcement Officer by way of the Municipal Ticket Authorization Bylaw No.7321 (references attached) may issue a ticket for this offence.

Financial Implications

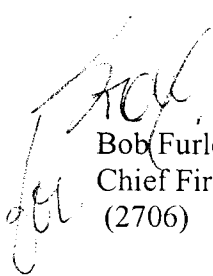
Cost for enforcement is borne by existing resources such as site caretakers and 24/7 emergency providers - Fire Rescue and Police.

Introduction of 3 information signs into affected areas through existing Parks Department budget.

Conclusion

By changing the fire regulations to prohibit beach fires entirely, Richmond is:

- Responding in a positive way to public complaints;
- Reinforcing the City's commitment to improve environmental management;
- Reducing the safety risks to people, animals, and property;
- Aligning its burning practices with other similar regional communities; and,
- Effectively managing its emergency response resources.



Bob Furlong
Chief Fire Prevention Officer
(2706)

Excerpt – MUNICIPAL INFORMATION TICKET BYLAW NO. 7321

SCHEDULE B 6

FIRE PREVENTION BYLAW NO. 4564

Column 1	Column 2	Column 3
Offence	Bylaw	Fine
	Section	
Open Burning	8 (a)	\$ 50
Burning in public place without permit	8 (b)	\$ 50
Burning commercial waste without permit	9 (c)	\$100
Burning construction waste without permit	9 (c)	\$100
Obstructing hydrant, standpipe or Chicago valve	11	\$ 50



FIRE PREVENTION

BYLAW NO. 4564

EFFECTIVE DATE – FEBRUARY 25, 1986

CONSOLIDATED FOR CONVENIENCE ONLY

This is a consolidation of the bylaws listed below. The amendment bylaws have been combined with the original bylaw for convenience only. This consolidation is not a legal document. Certified copies of the original bylaws should be consulted for all interpretations and applications of the bylaws on this subject.

AMENDMENT BYLAW

EFFECTIVE DATE

No. 5360

June 14, 1989

No. 5416

April 10, 1990

No. 6158

September 13, 1993

The bylaw numbers in the margin of this consolidation refer to the bylaws that amended the principal Bylaw No. 4564. The number of any amending bylaw that has been repealed is not referred to in this consolidation.

CITY OF RICHMOND
FIRE PREVENTION
BYLAW NO. 4564

The Municipal Council of The Corporation of the Township of Richmond, in open meeting assembled, enacts as follows:

1. For the purposes of this bylaw:

"FIRE CHIEF" means the Fire Chief of the Municipality of Richmond and shall include Acting or Deputy Fire Chief.

"FIRE DEPARTMENT" means the Richmond Municipal Fire Department.

PART I - FIRE PREVENTION

2. No person, being an occupant or owner of any structure, shall permit therein any chimney, flue, stove, oven, boiler or other apparatus or thing which may be dangerous in causing or promoting fire to become unclean;

PROVIDED THAT it shall be deemed a defence to any action under the provisions of this section if it be proved that such apparatus had been approved by a duly qualified and licenced chimney sweep within a period of six months prior to date of the alleged offence.

3. No person, being an occupant or owner of any structure, shall permit therein any pipe-hole in any chimney, flue, stove, oven, boiler or other like apparatus to remain open, or closed by a stopper of combustible material.

4. No person shall place hot ashes or cinders, or smouldering coals, or any material liable to spontaneous ignition within ten feet of any combustible material, including floors and walls;

PROVIDED THAT, they may be placed within two feet of such material if deposited in a suitable non-combustible container situate:

- (a) on the ground outside the structure, or
- (b) on a non-combustible floor, or
- (c) on a non-combustible stand at least two feet above any combustible floor.

5. (a) No person shall deposit or allow to be deposited any large quantity of lumber, boxes, barrels or other combustible materials upon any lot unless such materials are to be used forthwith in the erection of a structure upon or adjacent to the lot in question.
- (b) No person shall deposit or allow to be deposited any paper, rubbish, or other combustible material in such quantity or in such a manner, in any structure or upon any lot, as to create a fire hazard.
6. No person, being the occupant or owner of any structure or yard, shall allow it to become or remain in a condition to create a fire hazard.
7. Every person upon being advised by the Fire Chief or any person acting under his authority that he or she is causing or allowing anything to be done in contravention of this part shall forthwith abate the hazard;

PROVIDED THAT the failure to be so advised shall not be construed to discharge any person from any duty imposed by this Part.

8. (a) No person shall, at any time, light, ignite, or start or knowingly permit, allow, or cause to be lighted, ignited, or started, any fire of any kind whatsoever in the open air except where such fire is contained in a portable or fixed appliance or device used solely for the preparation of food and except where any such fire is permitted by this bylaw or by a permit issued pursuant to the provisions of this bylaw.
- (b) No person shall, at any time, light, ignite, or start or knowingly permit, allow, or cause to be lighted, ignited, or started, any fire in any street, lane, square or public place unless authorized by a permit issued by the Fire Chief or any person acting under his authority.

Bylaw No. 6158

9. (a) ORIGINALLY AMENDED BY B/L 5360, BUT SUBSEQUENTLY DELETED BY BYLAW NO. 6158
- (b) No person shall burn or permit, or cause to be burned, any commercial or industrial wastes in the open air except as permitted by the Waste Management Act, and the GVRD Air Pollution Control Bylaw No. 92.
- (c) No person shall burn or permit, or cause to be burned in the open air, any commercial wastes or any materials resulting from the demolition of a structure or building, or surplus to the construction of a building.
- (d) The Fire Chief, or any person under his authority, may when the Fire Chief or such authorized person considers it safe to do so, issue a permit valid for twenty-four (24) hours duration, allowing the burning in the open air of wastes resulting from land clearing, land grading or tilling or on land used for bona fide agricultural purposes, weeds, crops, stubble or like materials resulting from agricultural operations, and any burning done pursuant to such a permit shall be done under the following conditions:

- (i) The materials permitted to be burned shall not include rubber tires, roofing materials, petroleum products, plastic compositions or any like substances which produce heavy black smoke or noxious odours when burned;
 - (ii) A fire used for such burning shall be under the control of a person to whom such permit has been issued or under the control of a competent adult person appointed by the permit holder, who shall at all times be in charge of such fire while the same is burning or smouldering and until the same is completely extinguished;
 - (iii) Any permit-holder or person authorized by a permit-holder to burn pursuant to the provisions of the permit shall have available at the fire site efficient appliances and equipment to effectively prevent such fire from getting beyond the control of such permit-holder or of such person authorized by a permit-holder, or from causing damage, or from becoming dangerous to life or property.
- (e) When the Fire Chief, or any person under his authority issues a permit under the provisions of Subsection 9(d) the Fire Chief, or any person under his authority shall specify the minimum distance from roads, lanes, highways, buildings, structures and other combustible materials at which such burning may be carried out.
- (f) Notwithstanding the provisions of subsection 8(a) hereof and the "Forest Act" camp fire permits may only be issued for camp fires within those portions of the Municipality designated and approved by the Fire Chief, or any person under his authority and only when the Fire Chief, or any person under his authority considers it safe to do so.
- (g) Where the Fire Chief, or any person under his authority deems it expedient to do so and where hazardous fire conditions exist or such fires create a public nuisance the Fire Chief, or any person under his authority may suspend, cancel or restrict any and all burning permits issued by the Fire Chief, or any person under his authority pursuant to this bylaw and to the "Forest Act" within the Municipality, or in the alternative attach to any or all such permits such conditions and restrictions deemed necessary for safety and to prevent the spread of fire.
10. Notwithstanding any other provisions of this bylaw, the Fire Department may burn buildings, structures or other materials for the purpose of training its personnel or for the purpose of eliminating hazards.

PART II - FIRE FIGHTING

11. No person shall use, damage, alter or obstruct any standard hydrant, standpipe, chicago valve or like device which has been installed for fire use without written permission to so do from the Fire Chief.
12. No person shall, without reasonable excuse, make or circulate, or cause to be made or circulated, any false alarm of fire by message, outcry, ringing of bells, siren, or other act.

- 13. All movable apparatus of the Fire Department shall have the paramount right-of-way at all times through all streets, lanes, and alleys in the Township of Richmond and no person shall wilfully or carelessly permit any vehicle to obstruct the progress of the apparatus of the Fire Department going to or returning from a fire, alarm or drill.
- 14. No person shall impede in any way or hinder any fireman or other person under the direction of any officer in command at any fire.
- 15. No person, save and except the police, firemen and owners or occupiers, and employees or owners or occupiers of structures endangered by fire shall be permitted to enter any burning structure or structure endangered by fire or within the lines designated by ropes or guards across any streets, lanes, or alleys.
- 16. The Fire Chief or other person in charge of the Fire Department at any fire is hereby empowered to cause to be pulled down or demolished buildings or other structures when it is necessary to do so in order to prevent the spread of any fire.

PART III - PERMITS AND INSPECTION SERVICE

- 17. No person either as owner, tenant, agent, contractor, sub-contractor, or otherwise, shall install, erect, or alter, or cause or permit to be installed, erected or altered any of the following devices without having first obtained a written permit from the Fire Chief; for which the following fees shall be paid to the Municipality:
 - 1. Oil Burners and Related Equipment:

(a)	Tank only - underground (any size)	\$10 per tank
(b)	Tank only - above ground	\$10 per tank
(c)	Furnace or boiler with underground tank	\$35 per tank
(d)	Furnace or boiler with above ground tank	\$35 per tank
(e)	Space heater, range or similar equipment	\$ 5 per appliance
(f)	Space heater, range or similar equipment with tank	\$10 per unit

- 2. Flammable Liquid Storage:
 - (a) Installation of tank or tanks over 1,000 gallon (4,546.1) capacity \$25 per tank
 - (b) Installation of metres or computers \$10 per appliance
 - (c) Installation of tank or tanks under 1,000 gallon (4,546.1) capacity \$10 per tank

- 18. The Fire Chief, upon receiving notice of the intention of any person to make any installations set forth in Section 17 herein, may cause an inspection or inspections to be made to see that the provisions of this bylaw are being adhered to and to insure that the installation is being carried out in a workmanlike manner consistent with safety from fire hazard and explosion under the particular circumstances of each installation.
- 19. The Fire Chief may order a stoppage of work on any installation for which a permit is required at any time that it appears to him that the provisions of this bylaw are not being adhered to; and where any installation is made or appears to be made in contravention of this bylaw, he may give the owner or other persons responsible under this Part, fourteen days notice to correct same and failing such correction being made within the time specified the Fire Chief may cause the complete or partial dismantling, excavating or removal of such device at the expense of the owner thereof; and the cost of dismantling, excavating, and removal shall be recoverable by the Municipality.

Bylaw No. 5416

- 19(a) No person carrying on the business of a flammable auto fuel service station shall employ any person as an attendant unless that person has successfully completed a training program in fire safety and protection designed for service station employees that has been approved by the Fire Chief."

"UNDERGROUND FLAMMABLE & COMBUSTIBLE LIQUID STORAGE TANKS"

- 19(b) The occupant of any lands of property who installs or has any other person install underground storage tanks without meeting all the requirements of this bylaw or fails to test any tank as required by this bylaw is guilty of an offence under this bylaw and is subject to the penalties under Part IV of this bylaw.
- 19(c) No supplier shall deliver petroleum products to an underground storage tank unless the tank installation has been approved by the Fire Department.
- 19(d) All steel tanks or tanks constructed of any material subject to corrosion or electrolysis by subject to leakage test every two years, after they have been in ground for ten years. The type of test is to be approved by the Fire Department.

- 19(e) All tests and corrective measures are to be carried out in conformance with the Fire Services Act and Regulations. Written results of all liquid medium leak detection tests of underground petroleum storage tank systems shall be forwarded by the testing agent to the Fire Department within three days of the test.
- 19(f) Maintenance checks on the proper operation of corrosion protection systems shall be conducted in accordance with National Standard of Canada CAN 4S 603.1 for sacrificial anode systems (SAS) and with the National Association of Corrosion Engineers (NACE) Standard RP-02-85 for impressed current systems (ICS).
- 1) Sacrificial anode systems maintenance checks shall be conducted:
 - (i) immediately after installation;
 - (ii) six months after installation, and
 - (iii) every two years thereafter.
 - 2) Impressed current systems maintenance checks shall be conducted:
 - (i) after completion of installation (before energizing and immediately after installation);
 - (ii) one month after energizing;
 - (iii) once yearly thereafter; and
 - (iv) the Impressed Current System system is to be checked monthly to ensure the system is energized.
- 19(g) When the test results carried out as per Section (19f) of this bylaw, for tanks equipped with anodes or impressed current indicate that the anodes or impressed current are failing to perform their designed function, these storage tanks systems shall be repaired to confirm to their original approval standards or replaced within thirty (30) days.
- 19(h) When any repair to an underground petroleum storage tank system or its dispenser is necessary to correct product loss, the occupant shall immediately notify the Fire Department.
- 19(i) When a tank is to be removed and not replaced, the Fire Department is to be notified at least three working days prior to the removal of the tank.
- 19(j) When underground storage tanks will not be reused, or have been out of service for three years, whichever comes first, the owner shall:
- (i) notify the Fire Department in writing;
 - (ii) remove flammable and combustible liquids from the storage tank and disconnect any piping and dispensing equipment;
 - (iii) remove storage tank from ground and purge tank of any vapours;
 - (iv) replace any piping from the ground or purge all flammable liquids or vapours and permanently seal the pipes by capping or plugging;
 - (v) replace any contaminated soil around or under the storage tank with clean fill.

- 19(k) All used tanks removed from the ground shall be destroyed or disposed of in a manner approved by the Fire Department.
- 19(l) When the ground around an installed tank is disturbed by an earthquake, tremor or shifting of the earth, for any other reason which changes the integrity of the tanks, an officer may require the tank to be tested for leakage or part failure including all piping. The test is to be carried out to the satisfaction of the Fire Department.
- 19(m) An officer acting under these regulations is not personally liable for any loss or damage suffered by any person by reason of anything in good faith done or omitted to be done in the exercise or enforcement of this bylaw.
- 19(n) The Fire Department of the Corporation of the Township of Richmond are not responsible for any loss of business or other expenses incurred by an owner or operator consequent upon a leak detection test or any other works required under this bylaw.

PART IV - SCOPE AND PENALTY

- 20. In the event of there being any repugnancy between the terms and provisions of this bylaw and the terms and provisions of the Fire Services Act, Forest Act of the Province of British Columbia and/or any regulations made thereunder, the terms and provisions of the said acts, the said regulations, or any amendment or amendments thereto shall prevail.
- 21. Any person who violates any of the provisions of this bylaw shall be guilty of an offence punishable as provided in the Offence Act.
- 22. Bylaw No. 1424 being the "Fire Prevention Bylaw" of The Corporation of the Township of Richmond is hereby repealed.
- 23. This bylaw is effective and in force and binding on all persons as from the day following the date of its adoption.