Fire Chiefs' Association of BC and BC Wildfire Service

MEMORANDUM OF AGREEMENT
for
INTER-AGENCY OPERATIONAL PROCEDURES AND REIMBURSEMENT RATES

Revised April 6, 2023

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1. Definitions

In this Inter-Agency Agreement, the following words have the following meaning, unless the context dictates otherwise:

a) "Apparatus" includes equipment that goes with the engine or tender.
b) "Engine Boss" means someone qualified to supervise engines and tenders.
c) "Expense Authority" means the provincial employee who has been granted the authority to make purchases on the Governments' behalf.
d) "Fire Department Initial Attack" (FD IA) means authorized response approved by BCWS to undertake initial attack on a wildfire.
e) "Fire Departments" means fire departments formed by First Nations, local government or societies that meet minimum standards as set out by this agreement.
f) "Ministry Zone Operations Centre" is implemented to respond to specific geographic area.
g) "On standby" means ready to deploy within 30 minutes of receiving deployment instructions.
h) "PWCC" means the BCWS Provincial Wildfire Coordination Centre
i) "SPCO" means… Structure Protection Coordination Officer as defined under ICS.
j) "Structure Protection Crews" contain 5 personnel.
k) "Structure Protection Unit" contains equipment to set up on structures ("Sprinkler trailer").
l) "ZWCO" is a weekly rostered Zone Wildfire Coordination Officer who provides support to incidents, fire bases and the zone office within their zone.

2. Purpose

This Inter-Agency Operational Procedures and Reimbursement Rates Agreement (the "Inter-Agency Agreement") guides and facilitates the collaboration between the Province and fire departments or by outlining key information regarding resource requests, deployment and response procedures, remuneration guidelines, and other necessary details to effectively manage the partnership.

The intent of this Agreement is to further improve the operating procedure, strengthening capacity while providing increased flexibility to share resources in British Columbia, with clear rules of engagement and reimbursement requirements.

3. Scope

This Inter-Agency Agreement pertains to fire departments that provide a response to a BCWS request or respond to a request for resources. Where the BC Wildfire Service ("BCWS") engages other personnel or organizations to assist with wildfire suppressions, they will be paid at the current BC Government rates.

These operational procedures will ensure that there is an understanding of roles and responsibilities for wildfire and wildland-urban interface ("WUI") fire response. All personnel deployed under the auspices of this agreement will adhere to the Inter-Agency Operational Procedures Code of Conduct found at Appendix A. This document will be reviewed annually and revised as required.

This Agreement contains a provision indicating that all parties must comply with all applicable laws, and any policies communicated by the Province regarding access to and/or attendance at facilities owned,

controlled or occupied by the Province (each, a "Province Workplace"), and that the parties must ensure that all of its employees, agents and subcontractors comply with such laws and policies.

The BCWS is tasked with managing wildfires through a combination of wildfire prevention and mitigation, preparedness, response activities on both Crown and private lands outside fire protection areas. Although infrequent and uncommon, the BCWS also has management responsibilities of Crown land within local government area.

Where local government provides fire protection services through municipal, regional or improvement district governments (e.g. fire department), it is understood by the parties that the fire department is responsible for fire suppression action on all fires within its legislated fire protection area.

4. Responsibility for Response

Management of wildfires in the WUI can present complex and challenging operating environments for responders. These types of fires are increasingly common with the expansion of the wildland urban interface, the impacts of climate change, accompanied by the increased occurrence of significant wildfires on the land base. Additional complexities include the number of agencies and levels of government involved, and the different levels of expertise required to manage these incidents safely and effectively. The need for inter-agency collaboration between the Province and fire departments to accomplish this has never been more in the forefront than it is at present.

It is recognized that wildland firefighters are trained and equipped to respond to fires composed of wildland fuels and vegetation and are not trained or equipped to address structure fires, such as residential buildings. Structure firefighters are trained to control and extinguish fire in structures, such as residential fires. Some structure firefighters – but not all – have training and/or equipment to suppress wildland fire. Both wildland and structure firefighting expertise are needed to respond to WUI fire events. It is recognized that local authorities are responsible for their structure fire departments, other resources engaged by the Province are provincial resources.

5. Management of Structural Firefighting Resources

BCWS will manage the deployment of structural firefighting resources in response to WUI fire events and other incidents. Structure Protection Units ("SPU") and all other requested fire department resources will be managed, resourced and deployed by the BCWS Structure Protection Coordination Office ("SPCO"). Wildland firefighters and resources will be managed, resourced and deployed by the BCWS. This is not to limit the practice where BCWS may engage appropriately trained single resources directly from fire departments to assist in wildland fire response or standby when BCWS resources may be limited.

6. Deployment

Apparatus and personnel deployed by the Province and reimbursed by the Province are considered a provincial resource and any decisions to re-deploy or release from an incident are determined by the Province after consultation with the involved parties.

While statutory immunity WorkSafeBC coverage is provided on provincial deployments, it is recommended that departments sending resources, personnel and equipment, consult their local

authority bylaws (and respective insurers such as ICBC) to ensure there are not any limitations preventing them from assisting in an out of jurisdiction deployments.

Resources brought into a fire protection area by BCWS will be covered under a BCWS fire number. Resources brought in to support BCWS for outside of fire protection area will be covered under a BCWS fire number.

All resources will be requested and verified using a "Drawdown" form issued via the SPCO at the Provincial Wildfire Coordination Centre ("PWCC") and upon the request of BCWS staff at the site. All crew supervisors must ensure Daily Time Records are completed for each crew, day and/or night, while on deployment as outlined in the Record Keeping section below.

6.1 Activation Process

BCWS will maintain a database of fire resources from fire departments in British Columbia that have pre-identified themselves as available for deployment. Fire departments registered to be deployed must meet the minimum qualifications for apparatus, Firefighters and Fire Officers as established by BCWS.

Depending on the geographical location of an incident, apparatus transport options such as commercial transport will be mutually determined prior to deployment. Apparatus deployed by the Province may be required to report to a fire camp or staging location where mechanical safety inspections, proof of insurance, equipment inventories, Personal Protective Equipment ("PPE") inventories, crew qualifications and crew briefings will be verified prior to assignment to any task. Each fire department supplying apparatus for provincial deployment must provide an equipment checklist for each vehicle. Provincial staging locations will be established, with provincial resources managed by BCWS representatives.

Physical capability will be at the discretion of BCWS Incident Commander ("IC") or Structure Protection Specialist ("SPS"). Firefighters not physically capable of performing their duties and deemed to be a safety risk will be demobilized.

6.2 Personnel Transport

With prior Expense Authority approval, personal and department vehicles used to transport personnel will be reimbursed as outlined in per diem rates in this document.

The Province reserves the right to recommend and pay for other economical alternatives for apparatus and crew transport. The Province will cover extraordinary costs such as ferry fares and highway tolls (receipts must be provided).

6.3 Personal Protective Equipment

Personnel responding to a provincial request for resources will report to a pre-designated location with all PPE. Apparatus/crew may be withheld from deployment and sent home at their expense if not adequately equipped. Staging Managers will be conducting/coordinating truck and trailer checks. A list of the required personal protective equipment is in the Appendix.

6.4 Deployment Periods

The deployment periods discussed in this agreement are intended for use from a Provincial request for resources.

On deployment and demobilization days (travel days), reimbursement will be for actual hours worked and travelled to or from the fire hall. Subsequent days will be reimbursed at a minimum of 12 hours per day or for actual hours worked if greater than 12 hours. Fire department personnel and apparatus returning to their home jurisdiction daily (one-hour travel time maximum, ½ hour each way) will be reimbursed for actual hours travelled and worked each day.

Deployment periods for emergency events requiring provincial resourcing of apparatus and personnel will be for a maximum of 14 days (including travel days). Shorter deployments may be considered by BCWS and should be discussed prior to deployment.

The Province will reimburse fire departments for costs associated with crew rotations falling within the 6 to 14-day deployments (including transportation, wages and authorized expenses). Where a fire department wishes to rotate personnel prior to completing 6 days of deployment, it must request and receive prior approval from the Provincial representative on site, and all costs related to the early rotation will be at the fire department's own expense.

Costs associated with backfilling of personnel are not covered. However, under extraordinary circumstances, these costs may be covered only if agreed to in consultation with the SPCO as required, prior to deployment.

6.5 Food and Lodging

Fire department personnel are expected to stay in a fire camp or structural apparatus staging area camp during their deployment to wildland urban interface events, unless it is a local deployment within one hour of travel time (½ hour each way) from the fire hall to the staging area. Crews must be self-sufficient for a minimum of 48 hours and are required to provide their own provisions as per the mandatory requirement in the Appendix.

The Provincial/Regional Logistics Section or local Emergency Operations Centre ("EOC") may arrange for provision of meals and lodging for responders during deployment. This will be communicated to responding personnel at local briefings at the EOC, incident command post, fire camp and/or staging area. Alternative accommodation and meals must have prior written approval from the Provincial Expense Authority.

When meals are not explicitly provided, the provincial government Group 1 per diem reimbursement rates apply (Appendix).

Where lodging is not explicitly provided, the provincial government approved accommodation rates will apply (double occupancy where possible). In areas where meals and/or accommodation are in excess of provincially approved rates, prior approval by a Provincial Expense Authority is required. The accommodation rates are available for lodging only and do not cover additional costs such as long-distance telephone calls, room service, hotel food service meals, and liquor or pay-per-view television services.

Receipts for all approved expenses must be provided for reimbursement. The Province is not responsible for any unauthorized expenses incurred by personnel responding on behalf of the Province. Unauthorized expenses include, but not limited to, in-between meal snacks, toiletries, and personal comfort items.

6.6 Record Keeping

The use of Daily Time Reports ("DTR" FS247B) and daily activity reports (ICS 214) are required for all apparatus and personnel deployed by BCWS to support fire department deployments. Travel time, staging time and active time will be recorded.

Daily Time Reports (DTR) must be completed by the crew supervisors and must be signed off daily by a provincial government employee (SPS or IC/Ops Chief), with appropriate signing authority, and be provided to the incident Finance and Administration section for all personnel and apparatus costing.

6.7 Post-Deployment Procedures

Provincially deployed apparatus and personnel will only be released by BCWS representative inside a fire protection area after consultation with the Incident Commander. Provincially deployed apparatus and personnel outside a fire protection area will only be released by the BCWS Incident Commander or designate. Apparatus and personnel that is re-deployed will be coordinated through the SPCO. Released apparatus and personnel will follow demobilization check-out procedures through the Staging Manager or a Senior Provincial representative.

On the occasion when an SPU unit is being released and its' equipment is still being utilized, at the discretion of the SPS, substitute items may be provided until actual items are returned. At the conclusion of the fire season after the BCWS has had the opportunity to return utilized equipment, an invoice may be submitted to BCWS for reimbursement of any outstanding equipment lost or damaged.

6.8 Billing

Invoices may be submitted to BCWS for reimbursement bi-weekly during deployment or within 60-days following provincial deployment. Exceptions to this timeframe should be discussed with BCWS representatives within the 60-day period. Submission guidance is in the Appendix.

6.9 Damaged Apparatus and Apparatus Equipment

ALL equipment lost or damaged during deployment, over and above normal wear and tear, must be reported to the BCWS representative immediately or in their absence to the BCWS Operations Section Chief. A signed list of those items must be provided by provincial representatives prior to departure. BCWS may reimburse for uninsured losses suffered to fire department equipment while in the service of the BCWS. Claims will be based on the age, kind and quality of equipment, and any claim will be verified by a BCWS provincial representative before it is released, to ensure the damage was during tactical engagement and not a result of accidental undue care and attention by personnel.

6.10 Mutual Aid

This agreement maintains an established commitment to mutual aid on all wildfires which are beyond the capability of a local fire department. Suppression efforts undertaken by the BCWS and costs associated with those efforts will be the responsibility of the BCWS, on behalf of the Province. Fire departments will be responsible for their own costs which they incur in response to fires within their jurisdiction.

6.11 BCWS Local Government Standard Operating Procedure

Responsible Agency	Jurisdiction		
	Fire Protection Area	Crown Land Within Fire Protection Area	Outside Fire Protection Area
Local Government	Yes- Responsible Party	Voluntary	Voluntary
BCWS	If requested by Local Government	Yes- Responsible Party	Yes- Responsible Party
Compensation from BCWS	No	Yes, ONLY if prior approval from RWCO	Yes, ONLY if prior approval from RWCO

6.12 Voluntary Response

In the case of a voluntary response during an evolving interface-fire situation where jurisdiction is not clearly defined, the fire department will not claim compensation for their resources for the first operational period (to a maximum of 24 hours) unless through written authorization from the RWCO or the formal establishment of unified command.

6.13 Reporting and Requesting Assistance

Outside of Fire Department jurisdiction, Fire Department Initial Attack is only undertaken at the request of BCWS.

The BCWS will, upon receipt of a fire report in an area deemed to be the responsibility of a fire department, forward known information to the appropriate fire department without delay. When a fire department is reporting a wildfire and/or requesting assistance (see appendix), it is expected to provide key information to the BCWS as follows:

- Fire department name and location of fire,
- What is burning and what is threatened,
- Access to the fire location and what resources and agencies on route or on scene,
- Type of assistance required, fire potential and fire behavior,
- Key contact at the scene able to be contacted on OFC1 and 2, plus RR and BCWS Silver radio frequency,
- Water sources at or near the fire, if known, and
- Power lines, gas lines, or other known safety concerns.

6.14 Communications and Command Structure

Fire departments are required to have their mobile and portable radios pre-programmed to include the BCWS radio channels (see BCWS Radio Frequency Approval Letter, Appendix). In addition, resource road radio channels are required to be pre-programmed in mobile and portable radios. Radio programming will be verified by a Staging Manager or Structure Protection Specialist.

Tactical interagency communications will be on OFC frequency OFC1 (155.460 MHz) and OFC2 (repeated frequency: 155.460 MHz send and 150.350 MHz receive). Fire departments are required to have their mobile and portable radios pre-programmed to the OFC frequencies. This will be verified at staging prior to deployment. Jurisdictional authority and incident command will be the responsibility of the responsible agency. Should unified command be activated, explicit line authority must be documented in an ICS 207 or similar Incident Organization Chart.

6.15 Crown Lands or Unorganized Areas

Where Provincial Crown lands exist within a fire department's protection areas and wildfire occurs whereupon the fire department takes action, the fire department is entitled to compensation from the Province provided that the action was approved by the appropriate RWCO. Similarly, where a fire department takes pre-approved wildfire suppression action on a wildfire outside its jurisdiction, in areas where there is no local fire department protection, the fire department is entitled to compensation. This approval process is facilitated through a phone call to the appropriate RWCO who is available 24 hours each day during fire season.

6.16 Compensation

Where approved by a BCWS representative, compensation will be based on the current rates contained within this document. These rates will be all-found rate and are considered inclusive of administrative wages, mileage and fire line consumables. Deployment times will be rounded to the nearest half hour and will be inclusive of fueling, clean up and refurbishment of fire line apparatus daily. The fire department will be compensated through submission of an itemized invoice to the approving Regional Wildfire Coordination Centre ("RWCC") based on the resource type used. Supporting documentation (Daily Time Report) must be submitted with the itemized invoice.

6.17 Relieving a Fire Department

Where a wildfire occurs in an area that is outside of an established fire protection area and a fire department has taken voluntary fire response action, the BCWS will take over fire response efforts at the earliest opportunity.

Where a fire department anticipates extended duration wildfire suppression and mop-up within its jurisdiction, the fire department may request assistance from the BCWS with the objective of being assisted to the containment stage of that wildfire event.

It is recognized by the BCWS that it is in the best interest of the public for the fire department to maintain emergency response capabilities within its jurisdiction. This will be considered when determining whether final mop-up will be completed by the BCWS. It is common practice to require a

landowner, where deemed capable by the Province, to aid in extinguishment and patrolling duties, on that landowner's fee simple lands.

6.18 Fire Origin and Cause Investigation

It is the responsibility of the agency with jurisdictional authority to identify fire origin and cause on all wildfire events. Agencies may request fire investigators from partnering agencies to support or lead wildfire investigations if required. The agencies will cooperate to the fullest extent possible in providing fire origin and cause investigation expertise recognizing the importance of timely investigation.

Where wildfire control measures are undertaken by the BCWS, the Province maintains the right to recover costs incurred, through an administrative billing process to landowners. The BCWS reserves the right to apply fines and/or administrative penalties and/or proceed with charges against those parties who are determined to be in contravention of the Wildfire Act or Wildfire Regulation.

6.19 Training

All personnel taking action on wildfires on behalf of the BCWS must be trained to the appropriate standards as per the BCWS and be physically capable of performing their duties safely and effectively.

6.20 Jurisdictional Boundary and Personnel Updates

Annually, prior to May, the BCWS Fire Centre/Zone personnel will confirm all fire department contacts for fire reporting, requesting assistance and other information deemed relevant to wildfire management.

To ensure that information is current and consistent, fire departments are requested to annually provide a digital map file outlining the external boundaries of their fire protection area, a list of key 24-hour contacts, fire apparatus and relevant equipment within the fire department.

7. Contract Agreement with Fire Department Initial Attack

7.1 Objective

Initial attack success remains highest priority and the use of fire department personnel and equipment is a valuable, accessible resource that will assist BCWS in meeting program targets for initial attack success in times of extreme fire activity and resource shortages.

7.2 Deliverable

Fire department personnel are willing and capable of providing initial attack resources for BCWS. Notwithstanding the staffing listed in the appendix, resources will be configured as a self-contained three-person crew, with crew leader, two Firefighters and fire apparatus, suitable for wildfire response.

Upon activation, the FD IA crews will be integrated into the command structure of the BCWS Zone Coordination Centre and be given instruction and direction through the BCWS Zone command structure.

The focus of FD IA crews is interface initial attack fires outside of their established fire protection area during periods where external surge capacity is required. BCWS crews are principally focused on remote wildland fires.

7.3 Requirements for Crews

Fire Department IA Crew personnel will be physical fit and meet the required training and equipment as outlined in the Appendix.

7.4 Compensation and Hours of Work

Personnel and equipment will be compensated through the IAA for crew leader, Firefighter and wildland engine type. Standby rates will be compensated at ½ of the All Found rate. Crews and equipment will be expected to be ready for response within 30 minutes of activation when on standby.

Hours of availability, including regular and standby, will be set in advance by the BCWS ZWCO or RWCO. Regular shifts will be 8 hours in duration which includes a one-hour lunch break. Standby hours typically occur after the regular work shift ends but can also be in advance of it, and during lunch breaks. Standby rates will only be paid when mutually agreed upon by both parties (standard Standby time frames: 0800 – 2000 or 0600-2300 as indicated when notified of standby).

7.5 Prioritization

BCWS agrees to release the fire department personnel and equipment if fire department resources are required to respond to emergencies within their fire protection areas. Fire department personnel will advise BCWS immediately if they are required to disengage from BCWS, and availability and compensation will cease at that time. The fire department will provide an update to the Zone Wildfire Coordination Officer (officer at a BCWS Zone Office or MZOC) or the Regional Wildfire Coordination Centre (officer at a BCWS Fire Centre or Area Command) on the status and availability of the crew.

8. Apparatus and Personnel Remuneration Guidelines

Fire departments providing apparatus requested by the Province will be reimbursed by the Province according to the information provided in this Inter-Agency Agreement and the accompanying appendices. Apparatus has been typed according to the Canadian Interagency Forest Fire Centre (CIFFC) Mutual Aid Resources Sharing Agreement (MARS) and the US National Interagency Fire Center (NIFC) Mobilization Guide. Minimum requirements for equipment and capabilities have been listed (all capacities are listed in US and Imperial Gallons). Apparatus must be equipped with appropriate appliances, nozzles, spanners, and hand tools to be operationally ready.

The remuneration rates contained in this agreement apply to fire departments and personnel responding to a provincial deployment of fire apparatus and personnel. The rates will be reviewed annually and adjusted where required.

9. Summary

The Inter-Agency Operational Procedures and Reimbursement Rates Agreement has been reviewed by representatives of the undersigned agencies. The agencies agree to the use of the terms and rates as set out in this agreement until such time that the agreement is revised and updated, or notification is given to all parties that they are no longer a participant in the agreement.

Signature	Title	Date signed
	President Fire Chiefs' Association of BC	April 5, 2023
	Director, Provincial Operations BC Wildfire Service	April 3, 2023

10. Appendices

10.1 Apparatus Rates

The following rates are to identify equipment hourly rates for invoicing purpose.

Engine Repair Reimbursement	Rate
Engines defined by CIFFC MARS Agreement 2017 Appendix J – & the US National Interagency Fire Center, National Mobilization Guide 2017.	
Engine Repair Reimbursement, 0-20 year apparatus	100%
Engine Repair Reimbursement, 21+ year apparatus	75%

Apparatus	$ / period
Aerial Apparatus, Type 1, all found (elevated stream)	$885/hr
Aerial Apparatus, Type 2, all found (elevated stream)	$761/hr
Boat only; engine 25 to 90 HP; minimum 1 staff	$118/hr
Boat, pump 1000 USGPM; engine 350 to 450 HP; minimum 3 staff	$508/hr
Boat, pump 125 USGPM; engine 90 to 150 HP; minimum 4 staff	$349/hr
Boat, pump 1500 USGPM; engine 450+ HP; minimum 4 staff	$562/hr
Boat, pump 250 USGPM; engine 125 to 250 HP; minimum 3 staff	$403/hr
Boat, pump 500 USGPM; engine 250 to 450 Hp; minimum 3 staff	$482/hr
Mechanic's Truck, 1 mechanic, all found	$241/hr
Mobile Command, 2 personnel, all found	$455/hr
Mobile Command, 3 personnel, all found	$536/hr
Mobile Communication, Type 1, all found	$333/hr
Mobile Communication, Type 2, all found	$272/hr
Mobile Communication, Type 3, all found	$167/hr
Rescue Vehicle, all found	$364/hr
SPU, equipment only, deployed rate, Type 1	$3911/day
SPU, equipment only, deployed rate, Type 2	$3768/day
SPU, personnel only – deployed rate, Type 1 or 2	$4916/day with up to12hr staff work time & add $410 per hour of work over 12 hrs.
SPU, personnel only – standby rate, 4 personnel	$168/hr
SPU, personnel only – standby rate, 5 personnel	$204/hr
SPU, Unit Closed, All Found Rate, Type 1	$7340/day
SPU, Unit Closed, All Found Rate, Type 2	$7059/day
SPU, unit only (no crew), standby rate at Home Station or Staged location, Type 1	$1869/day
SPU, unit only (no crew), standby rate at Home Station or Staged location, Type 2	$1725/day
SPU, Unit Opened, All Found Rate, Type 1	$8828/day with up to 12hr staff work time & $410 per hour staff work over 12 hrs.

SPU, Unit Opened, All Found Rate, Type 2	$8683/day with up to12hr staff work time & $410 per hour staff work over 12 hrs.
Structure Engine, Type 1, all found	$638/hr
Structure Engine, Type 2, all found	$535/hr
Truck Company, Type 1, all found	$885/hr
Truck Company, Type 2, all found	$761/hr
Water Tender, Support Type 1, all found	$395/hr
Water Tender, Support Type 2, all found	$322/hr
Water Tender, Support Type 3, all found	$301/hr
Water Tender, Tactical Type 1, all found	$395/hr
Water Tender, Tactical Type 2, all found	$332/hr
Wildland Engine, Type 3, all found	$506/hr
Wildland Engine, Type 4, all found	$389/hr
Wildland Engine, Type 5, all found	$373/hr
Wildland Engine, Type 6, all found	$342/hr
Wildland Engine, Type 7, all found	$225/hr

STRUCTURE PROTECTION UNITS /RATES

SPU/SPC rates	Per kilometer
Tow vehicle (SPU)	$0.99 from station
Structural Protection Crew (SPC)	$0.99 after first 250 kilometer per day
SPC moving SPU trailer not their own, at the direction of BCWS	$0.99

- SPU/SPC are to be deployed with 2 support vehicles (tow and crew).
- The SPU and SPC are covered under the all found rates.

OTHER APPARATUS:

Fire department vehicles andor apparatus not included on the schedules above are not compensated unless agreed to in writing by a Provincial Coordination Officer (BCWS) and approved by an Expense Authority. In these cases, the Province of British Columbia will pay reimbursement by contractual agreement where the equipment is not specified in these rates.

10.1.1 Travel Per Diem Rates

On the date of departure, Travel Status must start before 7:00 a.m. to claim breakfast; before 12:00 noon to claim lunch; and, on the date of return, Travel Status must end after 6:00 p.m. to claim dinner. Meal and per diem allowances effective April 1, 2023 are as follows, and will increase if there are any increases in travel rates during the Term.

Breakfast only (B)	Lunch only (L)	Dinner only (D)	Maximum Full Day	B & L only	L & D only	B & D only
$14.16	$16.38	$28.31	$58.85	$30.54	$44.69	$42.47

10.1.2 Single Resource Response Per Deim Rates for Vehicles

Vehicle Per Deim rates are effective April 1, 2023 are as follows, and will increase if there are any increases in travel rates during the Term.

Vehicle Per Deim	Per kilometer
Half-ton pickup trucks/SUVs	$0.61
Three-quarter-ton pickup trucks/SUVs	$0.82
One-ton pickup trucks/SUVs	$0.99

10.2 Personnel Wage Rates

The Province may require Firefighters and management personnel as additional resources during major emergency events. Those Firefighters and management personnel who are conscripted, seconded or contracted will be reimbursed according to the following schedules:

10.2.1 Firefighter Wages:

In some circumstances, Firefighters may be required to respond as single resources without apparatus. In addition, it may be necessary to assign personnel to apparatus to increase the minimum staffing identified in the tables above. Additional and single resource personnel will be reimbursed according to the following table.

Firefighter Wage Rates	
Volunteer Fire Department Personnel	Salary/wages at their regular place of employment or $49.00/hour whichever is greater
Career Fire Department Personnel	Fire Fighter Collective Agreements (wages and benefits)
For personnel covered by Firefighter Collective Agreements, overtime entitlement and rates will be paid according to their Collective Agreements. This rate table will only be applicable for deployment purposes and where personnel are not considered part of an “all found rate” apparatus crew or Structure Protection Crew.	

10.2.2 Specialist Position Wages:

Fire Service members may be required to fill positions within a local EOC and or at site level. Personnel who are seconded, conscripted or contracted will be reimbursed according to the following schedule.

Specialists will be reimbursed for actual hours travelled or worked on initial day of deployment and minimum 12 hours per day or actual hours worked if greater than 12 hours for subsequent days.

Where Collective Agreements, Management Contract rates, or regular hourly rates vary from the rates listed in this document, the higher rate will apply. All rates for specialist positions are hourly, reviewed annually and revised as required.

Specialtiy position wages if no collective agreement/contract in place	Per hour
Incident Commander (Unified Command)	$67
Other positions created to manage the incident	$67

10.3 Mandatory Crew Requirements

All personnel will be physically fit and meet the requirements below. All crews include 1 Crew Leader.

Training Requirements	Crew Leader	Structural Protection Crew Member	Apparatus Member
Incident Command training	ICS 200	ICS 100	ICS 100
SPC Crew Leader training Apparatus Crew Leader training	NFPA equivalent Fire Officer 1, BCWS IC4 certification, or Engine Boss. SPC requires WSPP-115	WSPP-115	
Safety Training & Equipment	Fire Officer 1 recommended Appropriate first aid training and equipment (OFA 3, EMA Level 1, FR3). Annual Fireline Safety refresher training WSPP-115 WSPP-WFF-1 or S-100 Basic fire suppression and S-185 Fire entrapment Avoidance and Safety	Appropriate first aid training and equipment (OFA 3, EMA Level 1, FR3). Annual Fireline Safety refresher training WSPP-115 WSPP-WFF-1 or S-100 Basic fire suppression and S-185 Fire entrapment Avoidance and Safety	Appropriate first aid training and equipment (OFA 3, EMA Level 1, FR3). Annual Fireline Safety refresher training WSPP-WFF-1 or S-100 Basic fire suppression and S-185 Fire entrapment Avoidance and Safety
Radio Training	S212 or equivelent	S212 or equivelent	S212 or equivelent

Equipment Requirements	Crew Leader	Crew Member
Cell phone	Yes: crew leader must be competent to use	no
Wildland Personal Protective Equipment	Yes	Yes
Radios	Yes: Radios preprogrammed with OFC1 and 2 radio frequencies, plus resource roads and all BCWS channels outlined in the appendix	

10.4 Mandatory Apparatus Requirements

Reimbursement rates listed are for All-Found and Bare apparatus. All-Found apparatus includes vehicles, equipment, and applicable insurance, all minimum required equipment and appliances, minimum personnel, fuel and routine maintenance costs. Bare apparatus rates cover the same basic requirements as All-Found with the exception of personnel.

NOTE: Costs for additional personnel above the minimum number will not be covered unless authorized in advance by a BCWS representative.

In some circumstances, bare rates have not been listed due to specialized knowledge required to safely operate the apparatus (i.e. Truck Company). If fuel is not readily available or accessible from commercial or retail sources, the Province will arrange access to fuel supplies that will then be available for purchase.

For both All-Found and Bare rates, routine maintenance costs are the responsibility of the supplying department (this includes maintenance done during deployments). However, damage as a result of a provincial deployment, not covered by vehicle and equipment insurance as part of the all-found rate, that is reported to a BCWS representative prior to departure and release may be reimbursed by the Province with Expense Authority approval in accordance with the pro-rated apparatus repair reimbursement rate.

Reimbursement rates for deployment damaged apparatus not covered by vehicle insurance as part of the all-found rate, or by ICBC are listed in the Reimbursement section. Engines are defined by CIFFC MARS Agreement 2017 Appendix J and the US National Interagency Fire Center, National Mobilization Guide 2017.

Apparatus Minimum Requirements:

All Apparatus will be suitable for off-road use. Commercial vehicle inspection must be current, and decal displayed. Apparatus older than 25 years will be considered for deployment only if it certified by a qualified Technician as mechanically sound. Documentation of the apparatus mechanical certification must be made available upon request.

Engine Minimum Requirements

Engine Type	Staff / crew	Tank Size USG	Pump USGPM	Pump PSI	Pump & Roll	Ladders	Master Stream	2.5” hose	1.5” hose	¾” hose
Type 1 (structure)	4	300	1000	150	No	Yes per NFPA 1901	Yes	1200’ BAT	500’ NPSH or QC	200’ GHT
Type 2 (structure)	4	300	500	150	No	Yes per NFPA 1901	No	1000’ BAT	500’ NPSH or QC	200’ GHT
Type 3 (wildland)	3	500	150	250	Yes	No	No	No	1000’ NPSH or QC	500’ GHT
Type 4 (wildland)	3	750	50	100	Yes	No	No	No	300’ NPSH or QC	300’ GHT
Type 5 (wildland)	3	400	50	100	Yes	No	No	No	300’ NPSH or QC	300’ GHT
Type 6 (wildland)	3	150	50	100	Yes	No	No	No	300’ NPSH or QC	300’ GHT
Type 7 (wildland)	2	50	10	100	Yes	No	No	No	No	200’ GHT

Engine Equipment Minimum Inventory

Equipment	Engine Type						
	1	2	3	4	5	6	7
Adjustable Hydrant Wrench	1	1	1	1	1	1	0
3 way wye – 1 1/2” ¼ turn	2	2	2	2	2	2	2
3 way wye – Econoflow ¾”	3	3	3	3	3	3	3
Backpack Pumps	2	2	2	2	2	2	2
Chain File	1	1	1	1	1	1	1
Chainsaw (minimum 18” Bar)	1	1	1	1	1	1	1
Chaps	1	1	1	1	1	1	1
Double Female, 1.5” FNPSH	1	1	1	1	1	1	0

Double Female, 2.5” FBAT	1	1	1	1	1	0	0
Double Male, 1.5” MNPSH	1	1	1	1	1	1	0
Double Male, 2.5” MBAT	1	1	1	1	1	0	0
Forestry Adapters, 1.5” QC x ¾ MGHT	1	1	1	1	1	1	0
Forestry Adapters, 1.5” QC x 1.5” FNPSH	3	3	3	3	3	1	0
Forestry Adapters, 1.5” QC x 1.5” MNPSH	3	3	3	3	3	1	0
Forestry End Cap, 1.5” QC	1	1	1	1	1	1	0
Fuel/Bar Oil Container TC approved	1	1	1	1	1	1	1
Gate Valve 2.5” FBAT x MBAT	2	2	2	2	2	2	0
Gated Wye, ¾” GHT	2	2	2	2	2	2	2
Gated Wye, 2.5” FBAT x 1.5” MNPSH	1	1	1	1	1	0	0
Hose Strangler 1.5” (forestry hose clamp)	0	0	1	1	1	1	0
Hose, Econoflow – ¾” (50’)	12	12	12	12	12	12	12
Hose, gaskets, 1 ½”	6	6	6	6	6	6	6
Hose, washers, ¾”	6	6	6	6	6	6	6
Nozzles, Combination Fog/Straight Stream ¾” FGHT	2	2	2	2	2	2	2
Nozzles, Combination Fog/Straight Stream 1.5” FNPSH	2	2	2	2	1	1	0
Nozzles, Forestry, Multi Aperture 1.5” FNPSH or QC	2	2	2	2	2	2	1
Reducer, 1.5” QC x ¾” MGHT	2	2	2	2	2	2	0
Reducer, 2.5” FBAT x 1.5” MNPSH	1	1	1	1	1	0	0
Spanner Wrenches, Combination 2.5” & 1.5”	4	4	4	4	4	2	0
Spare Chain	1	1	1	1	1	1	1
Suction Lines, 10’ Hard with Strainer or Screened Foot Valve	2	2	2	2	2	2	2
Tape, Flagging, rolls	2	2	2	2	2	2	2
Threaded adapter, 1 ½” quarter turn	4	4	4	4	4	4	4
Three-Way Valve 1.5” QC	1	1	1	1	1	1	0
Tool, Felling Axe	1	1	1	1	1	1	1
Tool, Felling Wedge	1	1	1	1	1	1	1
Tool, Pulaski	2	2	2	2	2	1	1
Tool, Spade Shovels / Grub Hoe	3	3	3	3	3	2	2
Water Thief 1.5” QC x ¾” GHT Shut-off	4	4	4	4	4	4	0

Tender Minimum Requirements

Tender Type	crew	Tank Minimum Capacity / USGal	Pump Minimum Flow (USGPM)	@ Rated Pressure (PSI)	Maximum Refill time (Minutes)	Pump and Roll	Pump Discharge Minimum
Water Tenders, Support, Type 1	2	4000	300	50	30	No	1-2.5” Discharge MBAT
Water Tenders, Support, Type 2	2	2500	200	50	20	No	
Water Tenders, Support, Type 3	2	1000	200	50	15	No	2-1.5” Discharge

Water Tenders, Tactical, Type 1	2	2000	250	150	X	Yes	MNPSH
Water Tenders, Tactical, Type 2	2	1000	250	150	X	Yes	

Tender Equipment Minimum Inventory

Equipment	Quantity
Nozzle-1.5” combination fog/straight stream FNPSH	1
Double male-1.5” MNPSH	1
Double female-1.5” FNPSH	1
Double male-2.5” MBAT	1
Double female-2.5” FBAT	1
Reducer-2.5” FBAT x 1.5” MNPSH	1
Reducer 4” Stortz x 2.5” MBAT	1
Gated wye-2.5” FBAT x 1.5” MNPSH	1
Gate valves-2.5” BAT	2
Fire hose clamp-2.5”	1
Forestry Adapter-1.5” MNPSH x 1.5” QC	2
Forestry Adapter-1.5” FMPSH x 1.5” QC	2
Spanner wrench combination 1.5” x 2.5”	2
Adjustable hydrant wrench	1
Fire hose 1.5”, cotton/synthetic jacket, NPSH couplings	200’
Fire hose 2.5”, cotton/synthetic jacket, BAT couplings	200’
Suction hoses-10’ (for on-board pump)	2
Suction strainer, barrel or low level (for on-board pump)	1
Spade shovels	1
Pulaski Tools	1
6 mil poly sheet or tarp approx. 6’ x 12’ (for creek damming)	1
Chainsaw (minimum 18” bar)	1
Chainsaw chaps	1
Spare chain	1
Chain file	1
Felling axe	1
Felling wedge	1
Fuel/bar oil container (TC Approved)	1

Consumables such as foam will be supplied or reimbursed by the Province

Truck Company Minimum Requirements

Aerial Apparatus		
	Type 1	Type 2

Aerial (Specify Aerial, Platform or Elevated Stream)	75’	50’
Elevated Stream	500 USGPM / 425 IGPM	500 USGPM / 425 IGPM
Ground Ladders	115’ (Total)	115’ (Total)
Personnel	4	4

Rescue Vehicle Minimum Requirements

Rescue Vehicles	
Extrication Equipment	Yes
Stabilization Equipment	Yes
Medical Equipment	Yes
Embankment Equipment	Optional
Personnel	2-4

Mobile Communications Minimum Requirements

Mobile Communications			
	Type 1	Type 2	Type 3
ConsolesWorkstations	2	2	1
Frequency Capability	Multi-Range*, Programmable	Multi-Range*, Programmable	Single Range**, Programmable
Power Source	Internal	Internal	External
Telephone Systems	6 Trunk / 16 Extension Lines		
Personnel	2	2	1

*Multi-Range: 150 174 MHz, 450-470 MHz, 800 MHz (Simplex & Repeated)

**Single Range: 150-174 MHz only

Mobile Command Unit Minimum Requirements

Mobile Command Unit	
Workstations	Yes - supplied with computers and telephone system (cellular or external)
Satellite phone capacity	Yes
Internet	Yes
Climate control	Yes
Self-contained	Yes
Personnel	2 or 3

10.5 Other Mandatory Requirements

10.5.1 Self-Sufficient

Crews are expected to be self-suffient and will arrive with:

- Food and water (for emergency) sufficient for 48 hours defined as a minimum of 3000 calories of non-perishable food and 10 litres of water per day.
- Appropriate clothing - Sometimes freezing or rain conditions.

- Overnight gear including: sleeping bag, tent and sleeping mat.

10.5.2 Fire Department Responsibilities for SPU Equipment:

- Fire Departments must ensure all equipment is clearly marked or identified with the Fire Department's name, and ensure portable tanks or relay tanks are clearly marked or identified on the top rim and all hose within two (2) feet of the couplings.
- The Fire Department must provide trailer loaded weight for all SPUs submitted.
- The equipment listed above will be contained in an appropriately sized SPU that can safely and securely transport the equipment anywhere in the province.
- A complete listing of the equipment will be contained in the SPU.
- Only items on the equipment list will be eligible for replacement if lost or damaged. The equipment may be inspected by the Province prior to issuing a Service Request. The SPUs may be moved by the Province's personnel (or contract crews) in and around the fire location.
- As of March 1, 2024, only a SPU trailer of 20 foot (not including tongue) with a minimum of 9800 lbs GVW will be accepted.

10.6 Required Equipment

10.6.1 Fire Department Owned Equipment

The Fire Department must provide the following:

- SPU(s) that contain the equipment provided in this document.
- Make and model of trailer, gross vehicle weight rating and actual loaded vehicle weight.
- The trailer must contain one spare tire complete with rims, jack, tire wrench and roadside emergency markers (reflective triangles).
- Towing vehicle, which must meet all legal requirements including insurance to tow the trailer.

All necessary mechanical and/or commercial vehicle inspections must be maintained in good standing and will comply with the provisions, rules and regulations of the Motor Vehicle Act.

10.6.2 Personal Protective Equipment

Apparatus crew may be withheld from deployment and sent home at their expense if not adequately equipped; Staging Managers will be conducting/coordinating truck and trailer checks.

The required personal protective equipment will include:

- Leather work Gloves.
- CSA Approved Eye Protection.
- CSA Approved Hearing Protection.
- N95 masks or appropriate respirator respiratory protection.
- CSA Approved Hard hat (with chinstrap).
- NFPA 1977 compliant Coveralls or wildland shirtspants made of Cotton or Nomex, (Nomex preferred).
- High Lace or Zip-up Leather Work Boots (6" minimum).

- Personal Flashlight.

Additionally, Type 1-Type 3 Engines will have personal protective equipment as follows:

- Full Turn-Out Gear including, structure firefighter boots, structure firefighter gloves, balaclava, pants, coat and structure Firefighter helmet (Not required for SPC crews).
- CSA Approved SCBA (on apparatus where applicable).

10.6.3 SPU Inventory List

SPU Inventory List			
Category	Item	Description	Quantity
Pump Tool Kit boxes	Each box contains all the items in the SPU Pump Toolbox Content list below.		6
Pumps	High Pressure Mark 3 and Wick 375	Either: 6 Mark 3's or Wicks **or** 5 Mark 3's or Wicks and 1 BB 4 Pumps recorded on list provided to BCWS	6
Suction Hoses	2"/51mm Suction hose x 10' / 3.2m	with aluminum foot valve & strainer	7
Fuel Cans	Fuel Cans	25 Litre Jerry Cans	12
Fuel Lines	Fuel Lines	Single Can	8 single lines total; 1 in each pump box and 2 spares
Fuel Lines, extra	Extra Fuel lines	Dual fuel line for pumps	7
Motor Oil	Mixed oil	12 Litre Case 2 cycle synthetic oil	2
Berms	Portable Berms	4' x 4' for pump site containment	2
Hose, BCT = BC Thread	2.5"/64mm diameter Non-percolating	50' / 15.2m BCT couplings 600 psi 4200 kPa to BCWS specifications	20 see note below
Hose, QC = Quick Couple	1.5"/ 38mm diameter percolating	100' / 30.5m QC 300 psi to BCWS specifications 2100 kPa	25 see note below
	1.5"/38mm diameter percolating	50' /15.2m QC 300 psi to BCWS specifications 2100 kPa	50 see note below
Hose, GHT = Garden Hose Thread	Econo 5/8"/16mm or ¾" / 19mm diameter hose	50' /15.2m with ¾"/19mm GHT couplings 300 psi 2100 kPa	150
	Econo 5/8"/16mm or ¾" diameter hose	25' / 7.62m or 30 ' / 9.1m with ¾" 19mm GHT couplings 300 psi 2100 kPa	100
Nozzles	¾"/19mm GHT thread	Brass	5
Valves	1.5"/ 38mm	3 way QC with shutoff	30

Sprinklers	Roof butterfly ½”/ 13mm head	39.5”/ 1m overall length aluminum pole with ¾” / 19mm M x FGHT threads (4.3 USGPM / 19.5 LPM @ 50 psi / 345 kPa = 26’ / 7.9m wetted radius)	30
	Washing Machine Hoses	5’ or 6’	15
	End Caps	¾” FGHT	15
	Impact Sprinkler	Large 1” / 25mm or ¾” / 19mm, ½” / 13mm steel dual step spike, brass head, full circle impact 7/32” / 5.6mm nozzle, 7.8 USGPM / 35.5 LPM @ 50 psi / 345 kPa = 55’ / 16.8m wetted radius), **or** 3/16” / 4.8mm nozzle, 5.8 USGPM / 26.4 LPM @ 50 psi / 345 kPa = 51’ / 15.5m wetted radius	50 (up to 25 can be offset sprinklers if have 50% as step spike, also can substitute medium for large)
	Impact Sprinkler	Small ½” / 13mm, steel dual step spike, brass head, full circle impact 5/32” / 4mm nozzle, 4.3 USGPM / 9.5 LPM 50 psi / 345 kPa = 41’ /12.5 m wetted radius) **or** 764” / 2.8mm nozzle, 2.0 USGPM / 9.1 LPM @ 50 psi / 345 kPa = 36’ / 11 m wetted radius	50 up to 25 can be offset sprinklers if have 50% as step spike; can substitute medium sprinklers for small but smaller nozzles are required
	WASP Gutter Mount Sprinkler	Large, 5.0 USGPM @ 50 PSI Gutter Mount	25
	WASP Gutter Mount Bracket	Fascia/Fence Brackets	25
	Painter’s Pole	Adjustable 12’	1
Water thieves	2.5”/ 64mm M x F BAT thread x 1.5”/ 38mm QC	Pyrolite	15
	1.5”/ 38mm QC x ¾”/ 19mm male GHT with shutoff	Pyrolite or plastic	100
Adapters	Valves, couplers, wyes	2.5”/ 64mm hydrant gate valve F x M BCT	2
		2.5” / 64mm BCT double female coupling	1
		2.5” / 64mm BCT double male coupling	1
		2.5” / 64mm BCT gated wye	1
		2.5” / 64mm BCT to 1.5” 38 mm QC	5
		Hydrant wrench	2
	Miscellaneous ¾” / 19mm GHT (Econo)	3-way ¾” / 19mm GHT individually gated	20
		¾” / 19mm GHT double female adaptor	25
		1.5” / 38mm QC x 3/4” / 19mm GHT male reducers	5
		1.5” / 38mm QC x 3/4” / 19mm GHT female increasers	5
		3/4” / 19mm GHT Ball valve shutoffs	10

Portable Tank (Relay Tank)	Portable tank	2500 imperial gallon / 11,365 Litre	2
	Drain valve kit	3” / 76mm M to 2” / 64mm M drain valve assembly with shutoff	2
Ladders	Extension	24’ / 7.3m Grade A	1
Lighting Kit	Generator	2,500 watts minimum	1
	Halogen or LED yard light	Double head with stand or similar	2
	Extension cord	50’ / 15.2m 12 gauge	2
	Power bar	Exterior Rated	1
Fire Fighting tools	Shovel	Spade	1
	Pulaski		1
	McLeod Tool		1
	Axe	2.5 lb / 1.1kg 28” / 71cm handle	1
	Backpack pump	5 gal / 22L collapsible	1
Impact Tool Kit	Impact driver only	with case, charger, 2 batteries, bit set	2
Two Carpenters Tool Kits boxes: Each Tool Kit must contain these items in each box	Tool belt	4 pockets	1
	Claw hammer		1
	Pry bar	18”/ 46cm	1
	Staple gun	(or hammer) with staples	1
	Pliers	Channel lock 10” / 25cm	1
	Screwdriver	Multi	1
	Wrench	Crescent 6” / 15cm	1
	Wrench	Crescent 10” / 25cm	1
	Wrench	Pipe 14” / 36cm	1
	Conduit clamps	50 – 3/8” / 9.5mm in bag 2 hole	4
	Pipe strapping	100 feet	1
	Tin snips	+- 10”/ 25cm	1
	Screws	100 – 1 ¾”/ 44mm	4
	Screws	100 – 2 1/2”/ 64mm	4
	Nails	50 – 2 1/2”/ 64mm duplex	4
Poly	Rolls	2000 square foot 61m x 6ml Heavy (roll is 20’ x 100’)	2
Sign boards	Chloroplast / Felt marking pens	2’ / 61cm x 2’ / 61cm blank	20
Tape	Flagging Tape Rolls	Red, orange, yellow, blue, green (2” including corresponding identification wording clearly legible “SPU” in black)	5 of each colour
	Teflon		2 rolls
	Duct		2 rolls
	Electrical		2 rolls
Rags	Rags	Box (1 kg)	2 boxes

Miscellaneous Tools	Rake	Leaf	1
	Broom	24” Push	1
	Cutters	Bolt 24”/ 61cm or 36” / 91cm	1
	Saw	Carpenter hand	1
	Circular saw, wood	Electric - cordless	1
Trailer Misc.	Tie down straps	15” / 38cm bungee cords	5
		20” / 51cm bungee cords	5
		30” / 76cm bungee cords	5
		Cargo shelf strap 6’ / 1.8m	5
		Ratchet (Pair)	1
Rope	Poly rope -3/8”/9.5mm	500’ Roll	1
Safety items	Fire extinguisher	5 lb / 2.2 kg ABC	1
	First Aid Kit	Level 1 Minimum	1
	Cones	Safety marker 18” / 46cm	2
	PFDs	Personal Floatation Devices	2
Chainsaw Kit	Chainsaw	Min. 57 cc with 20” / 51cm bar	1
	Chainsaw gas can	5 L	1
	Chain oil	4 L	1
	PPE	Chaps, regular	1
	Tool kit	Bar wrench, grease gun, spare spark plug, chain filing gauge	1
	Files	Chain & Raker	2
Miscellaneous	Machete	24” / 60cm	1
	Wheelbarrow or Cart	Contractor Grade	1

AS OF MARCH 1, 2023, THE FOLLOWING HOSE SPECIFICATION REQUIREMENTS MUST BE MET:

- 15 ft econo hose will no longer be accepted and hose length must be 25 foot or 30 foot.

HOSE DESCRIPTION SPECIFICATIONS – 1 ½”

Hose must meet the following specifications:

- FIREBREAK II, percolating hose, manufactured by Mercedes Textiles Limited: is the current BCWS hose standard.
- Hose must be 38mm in diameter, 100% synthetic, percolating forestry hose and must meet ULC – S519.1-14 “Standard for Synthetic Percolating Forestry Hose”.
- Hose must be in 30.5m lengths or 15.25m and coupled with two (2) forged, external-lug quarter turn couplings, complete with face washers and must meet ULC-S551-13 “Standard for Forged External-Lug, Quick Connect Couplings and Adapters for Forestry Fire Hose”. Couplings must have ULC Stamp.
- Hose must have a 27mm long expansion ring with back up and face washers for the couplings.

- Hose will have ULC stamp, hose type identification, the year of manufacture and batch number. The identifiers are to be placed immediately after the specification marking, approximately one meter from each end of the hose in addition to being placed at the center of the hose.

HOSE DESCRIPTION SPECIFICATIONS – 2 ½”

Hose must meet the following specifications and other manufactured hose will not be considered.

- Each hose end must have: aluminum coupling 2 ½” X 2 ¾” BAT, (Right/Left set) one end is the Female threaded coupling and the other end is Male Threaded.
- FORESTGUARD II hose, manufactured by Mercedes Textiles Limited: is the current BCWS hose standard.

Specifications of this hose are:

- Hose must be 64mm in diameter, 100% synthetic, non-percolating forestry hose and must meet ULC – S518.1.
- Coupled with Two (2) extruded aluminum and hard coat anodized male & Female threaded couplings - 2½” X 2¾” BAT, (Right/Left set).

10.6.4 SPU Pump Toolbox Contents:

TOOLBOX, FOR STORAGE OF FOLLOWING:

- Aluminum ball back check valve for discharge side of pump QC.
- Spark plug, spare for pump.
- Rewind rope, spare for pump.
- Mesh wire screen to wrap foot valve.
- Water thief 1.5” / 38mm QC to ¾” / 19mm GHT with shutoff.
- ¾” / 19 brass nozzle.
- 1.5” / 38mm QC 10’ 3.2m high pressure (450 psi 3150 kPa) “pony” hose for tandem hookup or first length before back check valve.
- 1.5”/38mm QC nozzle, 4 in 1 multi-orifice (i.e. Hansen).
- Priming bucket, collapsible.
- 3-way valve with shutoff 1.5”/ 38mm QC.
- Mini grease gun for pump.
- Tool kit appropriate for pump (consult MFG and need to be listed).
- Hose wrench for suction hose.
- Tandem adaptor 2” / 51mm F NPSH x 1.5” QC to run 2 pumps in series.
- 1.5” / 38mm male adaptor NPSH x QC.
- 1.5” / 38mm female adaptor NPSH x QC.
- Single fuel line for pump.
- Gasket kit (spares for GHT fittings, pump, suction hose, discharge hoses).

10.6.5 SPU Crew Equipment List

SPU/SPC Vehicle Minimum Requirements:

- Fire Departments agree to supply a minimum of two – ¾ ton 4x4 pickup trucks for its own SPC transportation to, from and throughout the worksite.
- Vehicles which are seven (7) years old, or older, will have a valid Government Motor Vehicle Inspection sticker.
- Pick-up trucks that are deploying with canopies that cannot be easily removed will have a suitable ladder rack installed.
- Trucks with canopies will have equipment roll out trays to access SPU equipment.
- Trucks must be rated and insured to meet the Ministry of Transportation requirements to tow SPU's.
- Trucks with Flat deck will have sides to secure loads to meet Ministry of Transportation requirements.
- Equipped with the same make and model of all terrain, E load rated tires, on all four wheels and equipped with a spare tire.

SPU/SPC Vehicle Equipment Minimum Requirements in each vehicle:

- Trailer package 2" and 2 5/16" ball (equalizer hitch preferred).
- Mobile radio with FLNRO, OFC, and provincial road frequencies (back board or suitcase type acceptable).
- Level 1 First Aid kit.
- Cargo net.
- 2x Pair ratchet tie downs.
- Chainsaw minimum 57cc with 20" / 51cm bar.
- Chainsaw gas 5L.
- Chainsaw oil 4L.
- Chaps.
- Bar wrench, grease gun, and spare spark plug.
- Files for chain and rakers; and a chain filing gauge.
- 1x 24' Grade A extension ladder in one of the trucks.
- 1x impact drill kit complete with 2 batteries and chargers.
- 1x Ladder rack fabricated of metal on one of the pickups.
- 1x iPads with Avenza Pro App installed (per SPC vehicle).
- 1x Digital cameras (per SPC vehicle).
- 1x Handheld compass.
- 2x Firefighting shovels.
- 2x Pulaskis.
- 1x MacLeod tool.
- 1x Backpack pump.
- 1x Handheld GPS unit.

EQUIPMENT FOR EACH SPU CREW MEMBER:

- 1x Fire Line backpack.
- Flame resistant coveralls, or pants and shirt.
- Headlamp with spare batteries.
- Hardhat.
- Hi visible vest.
- Work gloves.
- Hearing protection.
- Eye protection.
- Whistle.
- CSA approved footwear, minimum 6" boot.
- 2x Insect repellants.
- 1x Sunscreen.
- 1x 4" / 10cm compress dressing.

10.6.6 Replacement for Damaged Fire Department Equipment

Lost or damaged Fire Department equipment may be replaced in the following ways:

- items may be replaced with similar quality material from provincial wildland fire inventory (i.e. sprinklers and hose).
- Pumps may be re-imbursed on a case-by-case basis pro-rated with following age criteria 0-5 years 100%, 5- 10 years 75%, over 10 years 50%.
- Fire departments may be reimbursed for damaged or lost equipment provided they submit a reimbursement rate sheet to the Province as part of their submission.
- The Province will reimburse for lost or damaged equipment based on its own cost estimates.

Consumable items (i.e. flagging tape, poly, etc.) will not be replaced and will be the responsibility of the Fire Department to restock.

10.7 INTER-AGENCY AGREEMENT CODE OF CONDUCT

This policy statement applies to all persons and organizations operating under the Inter-Agency Operational Procedures and Reimbursement Rates agreement (herein known as the IAA), and the requirements herein are in addition existing terms of employment, code of conduct, laws, bylaws and other policies, rules, or requirements existing outside of this IAA.

The requirement to comply with these standards of conduct is a condition of deployment. Persons who fail to comply with these standards may also be subject to disciplinary action. All persons operating under this agreement must:

- Exhibit the highest standards of conduct.
- Instill confidence and trust and not bring the BC Wildfire Service, Fire Chiefs Association of BC and their respective Fire Departments into disrepute.
- Act honestly and in good faith.

- Not disclose, release, or transmit confidential information in any form to anyone other than persons who are authorized to receive the information.
- Not use for the purpose of furthering any private interest, or as a means of making personal gains, any confidential information received through deployment.
- Not engage in any activity or speak publicly where this could be perceived as an official act or representation (unless authorized to do so).
- Not jeopardize the perception of impartiality in the performance of their duties through making public comments or entering into public debate, including via social media channels, regarding government, ministry or fire department policies.
- Provide service to the public in a manner that is courteous, professional, equitable, efficient, and effective.
- Be sensitive and responsive to the changing needs, expectations, and rights of a diverse public in the proper performance of their duties.
- Treat all persons with respect and dignity and not engage in discriminatory conduct prohibited by the Human Rights Code of BC. The prohibited grounds are race, colour, ancestry, place of origin, religion, family status, marital status, physical disability, mental disability, sex, sexual orientation, gender identity or expression, age, political belief or conviction of a criminal or summary offence unrelated to the individual's employment.
- Contribute to a safe workplace.
- Not engage in bullying, harassment, violence, or any other inappropriate conduct compromising the integrity of the BC Wildfire Service, or the Fire Chiefs Association of BC. Violence, harassment, or bullying in the workplace is unacceptable. Violence is any use of physical force on an individual that causes or could cause injury and includes an attempt or threatened use of force. Any incident or threat of violence or bullying must be addressed immediately.
- Report a safety hazard or unsafe condition or act, in accordance with the provisions of the WorkSafeBC Occupational Health and Safety Regulations, including any incident or threat of bullying, harassment, or violence. Anyone who becomes aware of a threat must report the threat if there is reasonable cause to believe that it poses a risk of injury.
- Not solicit a gift, benefit, or service on behalf of themselves or others.
- Objectively and loyally fulfill their assigned duties and responsibilities, regardless of the party or persons in power and regardless of their personal opinions.
- Disclose and cooperate to resolve conflicts of interest or potential conflict of interest situations in which they find themselves.
- Check with their supervisor or manager when they are uncertain about any aspect of this policy

10.8 Natural Resource Ministries (NRM) Radio System Operating Rules

Industry, Science and Economic Development Canada (ISED) has rules that must be observed. In summary the following must be adhered to:

- You will not deliberately interfere with another station.
- You will not transmit superfluous signals. Communications on Natural Resource Ministries' (NRM) channels will be for NRM business or safety purposes only.
- You may not divulge or use information you overhear other than from a public broadcast.

Note: The Natural Resource Ministries (NRM) prohibit the discussion of official policy or personal matters over the radio.

INSTRUCTIONS FOR NATURAL RESOURCE MINISTRY (NRM) RADIO CHANNELS

Before using a radio on the NRM radio system, you must adhere to the following:

- Identify yourself: You need to know the call sign or station name by which you or your station will be identified. You also need to know the call signs or names of the stations you with which you will be communicating. If you do not have a call sign, one can be assigned to you by your local fire center dispatch.
- Know your check in times and keep them.
- Know the frequencies andor channel numbers you will be using in your communications. If you are working through a repeater, you will also need to know the CTCSS Tone for access to that repeater.
- All non-Ministry users must have a 'Letter of Authority' (LOA) issued by the Radio Operations Section of the NRM. These LOAs are valid for up to five years.

Operators must ensure that their radio equipment is operation on the correct frequency or channel. If you are uncertain contact the Regional NRM Radio Operations shop.

NOTE: Any improper use of the NRM radio network may result in the cancelation of the LOA and/or a fine to the user imposed by ISED. System uses may be held liable for the property damage or injury to Ministry personnel resulting from the misuse of the radio network.

10.8.1 Use of Natural Resource Ministries' (NRM) Tone Access System

The Natural Resource Ministries (NRM) use a sub-audible tone access system on their radio repeater network. The purpose of Contiuous Tone Coded Squelch System (CTCSS) is to reduce the interference between the radio networks in adjacent forest districts. To access the NRM radio repeater network you will require CTCSS on your equipment.

Each district has been allocated a specific tone frequency for use in their area. These frequencies have been chosen to prevent inter-district interference.

Note: These tones are only used on duplex repeater channels, not on simplex (metal named) channels. Please refer to the provincial radio repeater site map for the specific tone used in each district. Maps can be found in the Radio Communication Field Handbook which can be found on our website at: https:www2.gov.bc.cagovcontentgovernmentsservices-for- governmentinformation-management-technologyprovincial-natural-resource-sector-radio- system

The tones are as follows:

Tone	Frequency
T1	114.8 Hz
T2	123.0 Hz
T3	131.8 Hz

Tone	Frequency
T6	162.2 Hz
T7	173.8 Hz
T8	186.2 Hz

T4	141.3 Hz
T5	151.4 Hz

T9	192.8 Hz

The 100 Hz tone is no longer used.

GROUND RADIO COMMUNICATION WITH AIRCRAFT

Fire Department personell will use the following frequencies when communicating with Aircraft from the ground.

Channel	Frequency
OFC1	155.460 MHz
OFC2	Repeated frequency: 155.460 MHz send & 150.350 MHz receive

10.8.2 NRM's Frequencies Authorized for Use

Transmit Frequency	Receive Frequency	Channel name
163.83	163.83	Gold
163.89	163.89	Silver
164.91	164.91	Copper
159.27	159.27	Nickel
163.98	163.98	Bronze
168.885	168.885	Iron
155.85	155.85	Zinc
163.065	163.935	Red
163.095	163.965	Purple
163.125	163.995	Green
163.185	164.055	Pink
163.215	164.085	Blue
163.275	164.145	Orange
163.305	164.175	Brown
163.335	164.205	Yellow
163.365	164.235	Grey
163.395	164.265	Black
163.53	162.585	White
163.245	164.115	Maroon
164.835	166.335	Lime
154.965	159.465	Navy
162.93	167.67	Fire - A1
162.69	166.71	Fire - A2
163.905	167.07	Fire - A3
169.95	169.95	Fire - B1
171.03	171.03	Fire - B2
172.05	172.05	Fire – B3

10.8.3 Natural Resource Ministries (NRM) Radio System Conditions of Use

1. The access and use of any system, radio or frequency will not impair the operational use of the system or frequency by the Natural Resource Ministries (NRM). Improper use may result in the termination of access and the user will be held liable for any injury andor damages.
   - No additional costs will be incurred by, or accrue to, the Ministry through such authorized access.
2. This Ministry bears no responsibility to provide:
   - Continuity of service;
   - Extension of radio coverage into areas not presently served:
   - Continuous monitoring of frequencies, or check-in system;
   - Radio equipment, training or technical assistance or advice.
3. The user covenants and agrees to release the Province from any and all claims, demands, actions and damages arising from or out of any act or omission on the part of the Province or its employees, contractors or agents in the exercise, or purported exercise, of the rights conferred by this agreement.
4. In the event an application is not approved, the applicant will be entitled to a review of the application by the Ministry. To Initiate a review please write to the Manager of Radio Operations, Ministry of Land, Water and Resource Stewardship, 343-B Bay St., Victoria BC V8T 1P5.
5. All users will comply with all appropriate Innovation, Science and Economic Development Canada (ISRD) requirements. These regulations are available from any ISED office.
6. Any user of the Ministry radio system will adhere to the Ministry's Radion System Operating Rules attached to the Letter of Authorization, which will be issued upon approval of the request for access.
7. All users must possess the knowledge and skills required by Industry Canada. Applicants and users will be held liable for damage or injury caused by non-compliance.
8. Authorization of access will be based on the user's operational requirements and may be restricted to locations required under this agreement.
9. All NRM frequencies will be removed from radios upon termination of access, and proof of the removal will be supplied upon request.
10. The user will indemnify and save harmless the Province, its employees and agents from and against any and all losses, claims, damages, actions, causes of action, costs and expenses that the Province may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this agreement, where the same or any of them are based upon, arise out of or occur, directly or indirectly, by reason of any act or omission of the user or of any agent, employee, officer or director of the user pursuant to this agreement.
11. The maximum period for a Letter of Authority will be 5 years.

10.9 Forms, Templates, Samples, References

10.9.1 Drawdown form sample

A partially filled in Drawdown will be sent to the Fire Department when they are requested. The following is a sample of the form for reference.

BC Wildfire Service

STRUCTURE PROTECTION DRAWDOWN

RESOURCE REQUEST # 47-30740-6

MINISTRY SECTION

COMPANY NAME: Kelowna Fire Department EMAIL:

BUSINESS LOCATION:

CONTACT NAME: PH #: ALT #:

☐ STRUCTURE PROTECTION CREW ☐ STRUCTURE PROTECTION UNIT TYPE II

☒ ENGINE Wildland Type 5 ☐ TENDER Select Type ☐ OTHER Select Resource Type

☐ STANDBY TERM: DATE/TIME FROM: TO:

☒ DEPLOYED TO INCIDENT #: G72178 Bearhole Lake REQUIRED DATE/TIME: Sep 5

ON-SITE CONTACT: PHONE #:

DIRECTIONS/COMMENTS: Please call prior to arrival for further detail.

Check in Chetwynd Rec Centre: 4512 N Access Road. SPS on-site

REQUESTED BY: PHONE: EMAIL: SPCO@gov.bc.ca

FIRE DEPARTMENT SECTION

Manifest for applicable resources are attached

Personnel manifest and signed drawdown must be emailed to BCWS.SPPLogistics@gov.bc.ca within one hour (60 minutes) of receiving the request

Invoices are to be submitted to the following email for the selected Fire Centre:

☐	Cariboo Fire Centre	Email to: BCWS.CAFCCWS@gov.bc.ca
☐	Coastal Fire Centre	Email to: BCWS.COFCCWS@gov.bc.ca
☐	Kamloops Fire Centre	Email to: BCWS.KFCCWS@gov.bc.ca
☐	Northwest Fire Centre	Email to: BCWS.NWFCCWS@gov.bc.ca
☒	Prince George Fire Centre	Email to: BCWS.PGFCCWS@gov.bc.ca
☐	Southeast Fire Centre	Email to: BCWS.SEFCCWS@gov.bc.ca
☐	PWCC – STANDBY Only	Email to: BCWS.HQCWSAdmin@gov.bc.ca
☐	Lost / Damaged Equipment	Email to: SPCO@gov.bc.ca

By signing below, I confirm the following;

Personnel and equipment being supplied meet the requirements of the Interagency Agreement. Personnel fatigue will be managed by myself and I confirm that I will provide adequate coverage that meets the Interagency requirements.

Fire Department Representative (Please print or type):

Fire Department Signature:

Ministry Representative (Please print or type):

Ministry Signature:

10.9.2 Wildland Urban Interface Incidents Resource Request Flow Chart

Wildland Urban Interface Incidents
Resource Request Flow Chart

Local Governments, EOC Directors, Incident Commanders requesting additional fire department resources for WUI incidents follow these steps:

Site / Incident

- Regardless of jurisdiction, Local authority (IC) requires structure protection and / or defence resources.
- BCWS representative (Initial Attack Crew / Response Officer / Structure Protection Specialist) supports IC and communicates resource request to Zone or Fire Centre Coordination Centre.

Coordination Centre

- Zone or Fire Centre CC receives / reviews requests
- Submits resource request to Structure Protection Coordination Office at Provincial Wildfire Coordination Centre

SPCO / PWCC

- Sources and deploys structure protection and defence resources from IAA using closest, best deployment
- Resource request supported with draw downs, tracking, DTR's, financial chain of custody

Changes:
*eliminates resource requests being directed through the PREOCS / PECC
*for fire department resources only, local governments are no longer required to get a task number from the PECC

If you have any questions, please contact SPCO@gov.bc.ca

10.9.3 ICS 214 Daily Activity Log form sample

ICS

Activity Log (ICS 214)

1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

4. NAME	5. ICS POSITION	6. OPERATIONAL PERIOD
		From:Date _____ Time _____ To: Date _____ Time _____

7. PERSONNEL ASSIGNED

Name	ICS Position	Home Base

SAMPLE

8. ACTIVITY LOG

Time	Major Events

9. PREPARED BY (Name and Position)	SIGNATURE

ICS 214-CAN

Page ___of___

10.9.4 BCWS FS 247B Daily Time Report sample

BRITISH COLUMBIA — BC WildFire Service

DAILY TIME REPORT # 330568

FULL LEGAL COMPANY OR INDIVIDUAL NAME: Penticton Fire Dept.

INCIDENT#: 71W19GC DATE: Aug 30/2018

HAS EVACUATION ORDER/ALERT BEEN PUT INTO PLACE: ☑ YES ☐ NO

REHABILITATION: ☐ YES Type: _____ (i.e. Crown Land, Private, IR etc)

PERSONNEL & EQUIPMENT BILLABLE HOURS

Name/Equipment	Fireline Position	24 Hr Clock Start	24 Hr Clock Stop	Break Time Taken	Total Work Hours	Total Hours Standby Travel/Travel pt	Total Hours Standby On-Site	Vehicle Km/day or standby	Initial
[illegible]	TFL	0600	2330	1hr	16.5			227	[illegible]

EQUIPMENT INFORMATION

Make: Chev. Type: Pick-up. Unit Assigned #: TFL #1 Year: 2018

Model/Size: 1500 4X4 Operator: (only if one) Point of Hire Location: Penticton.

Lowbed Company Used:

Equipment Hauled For: Equipment Hauled:

ATTACHMENTS/MISCELLANEOUS EQUIPMENT

☐ TANK Size_____ PUMP Size_____ ☐ CHAINS Size_____ # of Sets

List all BCWS requested/required attachments and Industry Equipment:

The above noted attachments are billable as per FS101 and Schedule A or other attached forms.

FUEL DEDUCTION: # of Ltrs _____ MINISTRY SUPPLIED ACCOMMODATION: ☐ YES MEALS: ☐ B ☐ L ☐ D

SIGNATURES

Contractor Rep or Individual | | Time Recorder

Ministry Qualified Receiver (approved ROIP IVT) | Print Name | Employee Number

Comments

FS 257B Revised FEB 14/2018 SEE REVERSE FOR SAMPLES Printed in BC 4803-4046

Distribution: White – Receiver Yellow – Owner Green – Contractor, Attach to Invoice Pink – Contractor, for your records

SAMPLE

10.10 NRM WILDFIRE RADIO FREQUENCY APPROVAL LETTER FOR REFERENCE

File: 6890-08/LOA

18 July 2022
Fire Chiefs Association of BC6059 – 190th St
Victoria BC V9Z 0M4

Phone: (250) 387-6650 Email: hqradio@gov.bc.ca

Re: Letter of Authority to Access the British Columbia Natural Resource Ministries' Radio System

This letter constitutes authority for your Association members to access and use the British Columbia Natural Resource Ministries' (NRM) Radio Communications System on the frequencies listed below while providing service to the Province for wildfire services under the Inter-Agency Agreement between BC Wildfire Service (BCWS) and the Fire Chiefs Association of BC (FCABC). This authority is non transferable and replaces and / or supersedes any previous authority issued by any officeof the British Columbia Natural Resource Ministries' or any other Provincial Government Agency.
Details of the authorization and the frequencies over which this authority applies is as follows:

LETTER OF AUTHORITY NUMBER: **H22FIRE**
AREA OF OPERATION: Province of British Columbia
RADIOS AUTHORIZED: Narrowband Mobiles,Narrowband Portables
RESTRICTIONS: 100 Hz Provincial Tone is discontinued
NRM channels are not permitted in base stations.
LETTER OF AUTHORITY
EXPIRY DATE **March 31, 2030**
Call Signs: N/A
Industry Canada License No. Individually Required by dept
BC Gov't Contract No. N/A

With the acceptance of this authority, the holder agrees to ensure that the British Columbia Natural Resource Ministries' frequencies herein authorized are removed from all radio equipment at the expirationof service to the Ministry or upon expiry of this *Letter of Authority.*

Also, all radio equipment that is replaced by your Agency during the term of service to the Ministry will have the authorized frequencies removed prior to disposal of the equipment.

10.11 ACRONYMS

Acronym	Term
>	Indicates “greater than”
ABC	Fire Extinguisher rated A,B,C class fires. A = ordinary combustibles; B = flammable liquids and gases; C = energized electrical sources
BAT	B.C. / Alberta Thread (2.5”)
BCWS	British Columbia Wildfire Service
cc	cubic centimetre
CIFFC	Canadian Interagency Forest Fire Centre
cm	Centimetre
DTR	Daily Time Report
EMCR	Emergency Management and Climate Readiness
EOC	Emergency Operations Center
FBAT	Female B.C./Alberta Thread (2.5”)
FCABC	Fire Chiefs’ Association of British Columbia
FD IA	Fire Department Initial Attack
FGHT	Female Garden Hose Thread
FNPSH	Female National Pipe Straight hose thread (1.5”)
GHT	Garden Hose Thread (5/8” , ¾”)
IC	Incident Commander
IG	Imperial Gallons
IGPM	Imperial Gallons Per Minute
kPa	Kila-Paskals
L	Liter
LPM	Litres Per Minute
m	metre
Max GVWR	Maximum Gross Vehicle Weight Rating
MBAT	Male B.C./Alberta Thread (2.5”)
ml	millilitre
mm	millimetre
MNPSH	Male National Pipe Straight Hose thread (1.5”)
MZOC	Ministry Zone Operations Centre
NFPA	National Fire Protection Association
NIFFC	National Interagency Fire Center
NPSH	National Pipe Straight Hose thread (1.5”)
NRM	Natural Resouce Ministries of BC
OFC	Office of the Fire Commissioner
PECC	Provincial Emergency Coordination Center
PPE	Personal Protective Equipment
PREOC	Provincial Regional Emergency Operations Center
PSI	Pounds per Square Inch

PWCC	Provincial Wildfire Coordination Center
PWCO	Provincial Wildfire Coordination Officer
QC	Quick Couple
RWCC	Regional Wildfire Coordination Center
RWCO	Regional Wildfire Coordination Officer
SCBA	Self-Contained Breathing Apparatus
SPC	Structure Protection Crews
SPCO	Structure Protection Coordination Officer
SPU	Structure Protection Unit
ULC	Underwriters Laboratories of Canada
USGal	U.S. Gallons
USGPM	U.S. Gallons Per Minute
WUI	Wildland Urban Interface
ZWCO	Zone Wildfire Coordination Officer, usually located in a Zone or MZOC