Cornwall Fire Services Firefighter Recruitment Pre-entry Fitness Evaluation - Medical Clearance for Evaluation

This program is designed to evaluate the physical work capacities of healthy, physically active individuals. Each task requires a maximal effort. All of the tasks are completed while wearing firefighting personal protective equipment (PPE) that weighs approximately 22 kg (50 lb). This ensemble includes: helmet, flash-hood, gloves, pants, boots, jacket and self-contained breathing apparatus (SCBA). The applicant is not required to breathe from the SCBA, but must carry it. For safety during the treadmill evaluation, running shoes are substituted for firefighting boots. The evaluation is administered by qualified fitness evaluators and is **not medically supervised**. The evaluation procedures are described briefly below:

Aerobic Endurance

Maximal work capacity will be measured during a progressive, incremental exercise evaluation to exhaustion on a treadmill. During the evaluation, expired gases may be monitored with an automated metabolic measurement system, if available, to calculate the rate of oxygen consumption. Heart rate is monitored continuously with a telemetry system. Depending on fitness level and motivation, this evaluation normally requires the individual to walk on the treadmill for 10 – 20 minutes. Regardless of the fitness level of the individual, the evaluation normally involves a maximal effort and is terminated when the person is too fatigued to continue exercise. Combined with the exercise stress, the weight and heat retention properties of the PPE result in a significant level of fatigue. After completing the treadmill evaluation, the applicant will rest for 60 minutes before moving on to the job-related tasks evaluation.

Job-Related Tasks Evaluation

Prior to completing the job-related tasks evaluation, the applicant will complete a "walk-through" session where they are allowed to practice each of the tasks. This takes approximately 30 minutes and serves to familiarize the applicant with evaluation procedures and provides a suitable warm-up for the demanding evaluation that follows. Each task is followed by a rest period of 3 minutes for

recovery and hydration. Applicants are not permitted to leave the evaluation area or remove the PPE during the rest periods.

Equipment Carry/Vehicle Extrication

The applicant will carry small 18 kg (40 lb) and large 36 kg (80 lb) vehicle extrication tools (the "Jaws of Life") a total distance of 76 m (250'). In addition, the applicant will lift and hold the 18 kg (40 lb) tool in specific positions that simulate the work required to remove a vehicle door. The tools will then be returned to the starting line. This task is designed to evaluate the strength required to lift, carry and use heavy tools in rescue situations.

Charged Hose Advance

The applicant will drag a charged (full of water) 45 mm (1.75 inch) hose a distance of 38.1 m (125'). Three 15.24 m (50') lengths of hose are "snaked" behind the starting line. The nozzle is held over the shoulder and the applicant advances to the finish line as quickly as possible. This evaluation assesses lower body strength and anaerobic power.

High Volume Hose Pull

The applicant will pull a bundle of hose weighing approximately 56 kg (123 lb) a distance of 15.24 m (50') over a smooth concrete floor using a rope. This task is repeated 3 times. During this task, the applicant is stationary and must pull the hose bundle towards them using 16 mm (5/8") rope. This evaluation assesses upper body strength, power, and endurance.

Forcible Entry Simulation

Using a 4.5 kg (10 lb) sledge hammer, the applicant strikes a mechanically braked target as rapidly as possible until the end-of-task buzzer rings (a distance of approximately 30 cm). This evaluation assesses muscle strength, power and endurance, particularly in the upper body.

Victim Drag

The applicant will drag a mannequin weighing 68 kg (150 lb) a total distance of 30.48 m (100'). The task starts with the mannequin lying "face-up" on the floor and the applicant standing. The applicant lifts the mannequin and walks backwards for 15.24 m (50'), turns around a traffic cone and returns to the start line as quickly as possible. This evaluation assesses strength, power, and agility.

Ladder Climb

Verification of Medical information

The applicant will climb a 7.3 m (24') ladder to the 10th rung and returns to the floor as quickly as possible. This task will be repeated five times. This evaluation assesses muscle strength, endurance, and anaerobic capacity.

Resting heart rate:bpm
Resting blood pressuremm Hg
Is this individual taking any medication that could affect normal physiological responses to exercise?
NoYes
If yes, please explain.
Is there any medical reason that this individual should not undertake very strenuous exercise?
NoYes
If yes, please explain.

I certify that this applicant has been given a medical examination and is medically fit to undertake the Cornwall Fire Services Firefighter Pre-Entry Fitness Evaluation described above.

Physician's name:
Date:
Address:
(or stamp)
Telephone:
Signature:

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