

CITY OF VICTORIA

PHYSICAL DEMANDS ANALYSIS

Effective Date: July 16, 2007

Job Title:	Refuse Collector, Leadhand Refuse Collector, Packer Operator	Date of Job Site Visit:	July 16, 2007
Department:	Solid Waste & Recycling	On-Site Contact Person:	Don Reichert (Supervisor)
Location:	Various Garbage Routes	Classification:	Regular Duty

POSITION FUNCTION

Individuals working in these 'sanitation' positions are responsible for performing manual labour tasks required in the collection of household (residential) refuse.

TOOLS & EQUIPMENT

The Refuse Collector / Leadhand Refuse Collector / Packer Operator use the following tools / equipment to perform their duties:

- Packer – garbage collection truck, which has features such as: power take-off (PTO), toter lift, hopper blade, etc.
- Toter – two-wheeled device used to transport residential solid waste from the residential property (e.g. bags inside of garbage cans) to the packer truck
- Safety Equipment – two-way radio, safety vest, ear protection (as needed), eye protection (as needed), first aid kit, fire extinguisher
- Appropriate Clothing – rubber / leather gloves, safety footwear, long-sleeve shirt, long pants, rain gear (as needed)
- Miscellaneous Items – Standard Job Procedure (SJP) Book, insurance and registration, information calendars, notices of regulations, collections schedules, sharps container, etc.

USUAL METHODS

1. Perform a pre-trip inspection in the Public Works Yard.
2. Drive to the collection zone (i.e. 'garbage route').
3. Drive up right side of street, and Packer Operator stops the packer-truck when necessary for the Refuse Collector / Leadhand Refuse Collector to access residential garbage cans.
4. Pick up garbage cans from homeowners' property, lifting the can to dump the garbage into the toter. Wheel the toter back to the packer-truck once it is full (note: it may take garbage collection from 1 - 3 residences to fill the toter).
5. Place toter onto hydraulic hoist ('totter-lift') on back of packer-truck in order to dump toter contents into external hopper of truck, and then operate hopper blade mechanism.
6. Activate external bin dumping procedure when the truck hopper is full (i.e. this is required every few minutes). This process transfers waste from the smaller external hopper of the packer-truck into the large internal hopper of the truck.
7. Proceed to the next residential property and repeat steps 4 - 6 until route is complete.

8. When the larger internal hopper of the packer-truck is full, the Packer Operator returns the truck to the Transfer Station located at the Public Works Yard, dumps the load, and returns to the route. This usually takes place twice per shift, once at lunch, and again at day-end.
9. Perform a post-trip inspection in the Public Works Yard at day-end.

Note: accessory duties include:

- a) Checking for “extra refuse” tickets as necessary.
- b) Provision of refuse-collection information to residents as required.
- c) Refuse Collector (or Leadhand) acts as guide for Packer Operator during backing-up of truck, or when traffic control is required.
- d) Clean up (as needed) of refuse that has fallen during loading, using shovels / brooms.

ADMINISTRATIVE ISSUES

There are three sanitation workers assigned to each route (i.e. one Packer Operator, one Leadhand Refuse Collector, and one Refuse Collector). The shift for these workers extends from 07:00 am to 15:30 pm. Shifts are scheduled Monday to Friday, and the workers receive two 15-minute rest periods, and one 30-minute lunch break during each shift. There is a five-day cycle of five different routes. Any repairs or mechanical maintenance that vehicles require is recorded on a standard form by the Packer Operator, and is subsequently submitted directly to the mechanics' shop.

WORK ENVIRONMENT

Physical Effort:

Lift and move moderately heavy materials (frequent to continuous basis)

Mental Effort:

Within normal limits

Visual / Auditory Effort:

Within normal limits

Work Environment:

- *Work outside (continuous, for Leadhand Refuse Collector and Refuse Collector)
- Work inside (frequent to continuous within truck cab - only for Packer Operator)
- Exposure to equipment noise (frequent to continuous)
- Exposure to chemical fumes, airborne particulates (occasional)

*Note: the environmental conditions can considerably alter the degree of challenge of this job. It is possible to be exposed to widely varying conditions, including:

- extremely hot conditions (i.e. with implications for dehydration, sunburn, and heat stroke)
- extremely wet conditions (i.e. with implications for less reliable footing, increased lifting loads due to water-logging effect, increased awkwardness of lifting due to wet / slippery garbage bags / cans , and a need for higher grip forces due to increased loads and slipperiness)
- extremely cold conditions (i.e. with implications for less reliable footing as noted above due to snow / ice, increased awkwardness of lifting as noted above due to slipperiness of items, and a need for higher grip forces as noted above due to increased loads and slipperiness of items)

KEY SKILLS AND ABILITIES

- Understand and discuss job-related matters.
- Operate industrial hydraulic equipment (and drive large vehicles in case of Packer Operator).

- Establish and maintain effective working relationships.
- Deal with the public in a courteous and tactful manner.
- Work safely on widely varying job sites (i.e. throughout residential garbage routes).

INDEPENDENCE

- Work according to an assigned weekly schedule (set by supervisor) and verbal instructions.
- If Refuse Collector completes informal “tug-test” and estimates a garbage can exceeds 55 - 60 lbs, they are permitted to leave the can, and document the residential address (i.e. in anticipation of that resident telephoning the City to complain about lack of garbage pick-up).
- Repeat offenders (e.g. repeatedly leaving over-weight cans for pick-up) are issued a yellow notice in their mailbox, identifying the problematic issue with reference to the current refuse bylaws.
- Work quality is formally reviewed by supervisor if a pattern of repeated residential complaints is directed towards a specific sanitation crew.

QUALIFICATIONS

Formal Education, Training and Occupational Certification:

- Grade 10 education minimum, and
- Packer Operator requires a current and valid Class 5 (with ‘Air Endorsement’) B.C. Driver’s Licence.

Experience:

Not required.

REFUSE COLLECTOR, LEADHAND REFUSE COLLECTOR & PACKER OPERATOR SUMMARY TABLE

JOB TASK	JOB TASK DETAILS
Lifting Ground to Mid-Torso	Max = 55 lbs (occasional, this represents the max advisable load for City of Vic Refuse Collectors when lifting residential garbage cans) Avg = 15 - 30 lbs (frequent to continuous)
Lifting Ground to Chest	Max = 55 lbs (rare, as above, except this represents lifting to a higher level such as when squeezing between two parked cars. Officially this is <u>not</u> a formal job demand, but there are instances when it is done as a courtesy to avoid the need to leave garbage behind with an accompanying violation notice for the resident) Avg = 15 - 30 lbs (rare)
Carrying Two-Handed	Max = 55 lbs (rare, when large objects such as cars block the path of the Refuse Collector's toter, and as a result, the garbage cans need to be carried a short distance) Avg = 15 - 30 lbs (rare) Max Distance = carrying a garbage can 50 feet.
Pushing / Pulling	Max = 55 lbs of <u>force</u> (rare, when pushing / pulling an unusually heavy toter in the range of 200 + lbs, and/or when pushing / pulling a toter up-hill) Avg = 20 - 30 lbs of pushing / pulling <u>force</u> (frequent to continuous, when initially tipping the toter, & then transporting the toter to the packer-truck) Max Distance = Varies, pushing / pulling wheeled toter over distances in the range of 50 - 200 feet. <i>Note: it is the Refuse Collector's personal choice as to whether they would rather push vs. pull a toter.</i>
Reaching Below Shoulder	Frequency = frequent to continuous (i.e. reaching to access and dump garbage cans)
Neck Motion - Flexion (look down) - Extension (look up) - Rotation (side turn)	Flexion: Max Duration = 10 seconds (looking down into toter) Extension: Max Duration = 20 seconds (looking upward while dumping toter contents into external hopper of packer-truck, and operating hopper blade) Rotation Max: Duration = 5 sec

Sitting	<p>Packer Operator: 95% of shift is seated (i.e. driving truck)</p> <p>Refuse Collector (inc. Leadhand): < 5% of shift is seated (i.e. primarily when riding in truck from Public Works Yard to start of collection zone, and when riding in truck between neighbourhoods)</p>
Standing / Walking	<p>Packer Operator: 5% of shift is spent on his/her feet</p> <p>Refuse Collector (inc. Leadhand): > 95% of shift is spent on his/her feet (i.e. walking to / from residential properties to access garbage cans, standing while operating hydraulic 'toter-lift' on truck, standing on side of truck, etc.)</p>
Climbing	<p>Max = 3 steps to enter cab of packer-truck from ground level (i.e. first truck-step is 26" above ground level, second truck-step is 38" above ground level, and final step to enter truck cab is 52" above ground level)</p> <p>Frequency = Occasional (on avg. 3 - 4 times per shift entering / exiting truck)</p>
Bending	<p>Max Duration = Very brief (1 - 3 seconds)</p> <p>Bending Depth = shallow stoop to access garbage cans or to access inside of toter (note: bending would only apply to taller than average workers, and could be avoided by simply bending one's knees slightly)</p>
Shovelling	<p>Max Duration = < 1 minute sustained shovelling using flat-shovel (rare, during clean up of refuse that has fallen during loading)</p>
Sweeping	<p>Max Duration = < 1 minute sustained sweeping (rare, during clean up of refuse that has fallen during loading)</p>