

Job Demands Analysis Ops II Worker (Landfill)

Purpose

The Ops II (Landfill) job entails monitoring and managing municipal solid waste (MSW) at each of 4 landfill areas: RDO (residential drop off), compost, main dump and demolition dump.

Essential Duties

The Ops II worker (landfill) has 2 essential duties:

Duty #1: Operating Equipment

Duty #2: Labouring

% of shift or # hrs

75%

25%

NOTE: the percentage breakdown of essential duties is an estimate across all areas of the landfill and all shifts; however, depending on seniority, staffing and location these percentages may vary between 100% equipment operation for senior workers and almost 100% labouring for very junior staff.

Description of Non-essential Tasks

The Ops II worker (landfill) may be required to perform other work tasks on an occasional basis. Examples of the tasks that may be performed are:

- Picking up litter around the general area

Summary of Demands

| | Sedentary | Light | Medium | Heavy | Very Heavy | Comments |
|-----------------------------|-----------|-------|--------|-------|------------|--------------------------------------|
| Physical (strength) | | | | ✓ | | Based on strength requirements |
| Physical (endurance) | | | | ✓ | | Stand/walk 50%-75% of shift |
| Cognitive | | | ✓ | | | Based on equipment operating demands |

Shift Structure

All Ops II (landfill) workers work an 8.5 hour shift 5 days/week, although the start times and days vary since the landfill is open long hours 7 days/week. There is a 30 minute lunch break and one 20 minute coffee break that may be taken at any time.

Frequency Rating Definitions

The frequency rating definitions used in the Summary Table are from the Dictionary of Occupational Titles (DOT, 1991, 4th edition) published by the US Department of Labor. A similar classification is used for each Essential Duty, but the percentages are changed to reflect % of Duty rather than % of shift.

| | Time per Day | Percentage of Shift |
|-------------------|------------------------|----------------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes – 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |

| STRENGTH | |
|--------------------------|-----------------------|
| Strength Category | Weight Handled |
| 1. Limited | Up to 5 kg. |
| 2. Light | 5 kg. to 10 kg. |
| 3. Medium | 10 kg. to 20 kg. |
| 4. Heavy | >20 kg |

Job Demands Analysis – Ops II Worker (landfill) - Summary Table

| a. Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | | |
|---------------------|----------------------------|------------------------|------|------------|------------|----------|----------|------------|----------|--|---|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) | |
| Strength | Lifting – Floor to Knuckle | | | x | | | | <5 | 72 | D2 - Large batteries, other MSW, tools | |
| | Lifting – Knuckle to Waist | | | x | | | | <5 | 24 | D1,D2 - Items on ledge of RDO bins, stacked propane tanks, jerry cans of gas/oil | |
| | Lifting – Over Shoulder | | x | | | | | <5 | 24 | D2 - Stacking propane tanks | |
| | Carrying – with Handles | | x | | | | | <5 | 23 | D1,D2 - Jerry cans, oil buckets, paint cans | |
| | Carrying – without Handles | | x | | | | | <5 | 25 | D2 - MSW, tools | |
| | Pushing – Upper Extremity | | | x | | | | <10 | 23 | D2 - clear cardboard jams | |
| | Pushing – Hips/Legs assist | | | x | | | | <5 | 40 | D2 - Sweeping, moving appliances | |
| | Pulling – Upper Extremity | | x | | | | | <1 | 10 | D1,D2 - dipsticks, retrieving MSW from piles | |
| | Pulling – Hip/Leg Assist | | | x | | | | 10 | 45 | D1,D2 - Moving appliances, pulling hoses, pulling cable (stuck truck) | |
| Mobility | Reach - Shoulder or Above | | | x | | | | | | D1,D2 - pre-trip inspection, equipment operation, climbing in/out, handling MSW | |
| | Reach - Below Shoulder | | | | x | | | | | D1,D2 - pre-trip inspection, equipment operation, handling MSW | |
| | Handling | | | | | x | | | | D1,D2 - Handling tools and MSW, equipment controls | |
| | Fine finger movements | x | | | | | | | | | |
| | Neck - Static Flexion | | x | | | | | | | D1,D2 - look down from equipment, or down into RDO bins when inspecting MSW | |
| | Neck – Static Neutral | | | | x | | | | | D1,D2 - operating equipment, interacting with public | |
| | Neck – Static Extension | | x | | | | | | | | |
| | Neck – Static Rotation | | x | | | | | | | | |
| | Throwing | x | | | | | | | | | |
| | Sitting | | | | x | x | | | | | D1,D2 - in equipment cab or when resting between labouring, time varies depending on time spent operating vs. labouring |
| | Standing | | | | | x | | | | | D1, D2 - during pre-trip and when labouring |
| | Walking | | | | | x | | | | | D1, D2 - during pre-trip and when labouring |
| | Running/Jumping | x | | | | | | | | | |
| | Climbing | | | x | | | | | | | D1,D2 - stairs at RDO, in/out of equipment |
| | Bending/Stooping | | | | x | | | | | | D1,D2- getting in/out of cab and when sweeping and shovelling |
| Crouching | | x | | | | | | | | D1,D2- check tire pressure, inspect MSW | |
| Kneeling | | x | | | | | | | | D1,D2 | |

| | | | | | | | |
|------------|---|---|---|---|--|--|--|
| Crawling | x | | | | | | |
| Twisting | | | x | | | | D1,D2 |
| Balancing | | x | | | | | D1, D2 |
| Travelling | | | | x | | | D1 - out/back to worksite from main bldg |

Job Demands Analysis – Ops II worker (landfill) - Summary Table (continued)

| a. Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|------------------------------------|-----------------------------|------------------------|---|---|---|---|---|--|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | | | | x | D1,D2 - over radio or with co-workers |
| | Hear/Other Sounds | | | | | | x | D1,D2 |
| | Vision/Far | | | | | | x | D1,D2 |
| | Vision/Near | | | | | | x | D1,D2 |
| | Vision/Colour | | | | | | x | D1,D2 |
| | Vision/Depth | | | | | | x | D1,D2 |
| | Perception/Spatial | | | | | | x | D1,D2 - looking in mirrors, watching MSW for banned substances, etc |
| | Perception/Form | | | | | | x | D1,D2 - looking in mirrors, watching MSW for banned substances, etc |
| | Feeling | x | | | | | | |
| | Speech | | | | | | x | D1,D2 - over radio or with co-workers |
| Work Environment | Inside Work | | | | | | x | D1,D2 - inside equipment or buildings |
| | Outside Work | | | | x | | | D1,D2- pre-trip and labouring |
| | Slippery | | | x | | | | D2 - during wet weather or if MSW has been hosed down to keep dust down, etc |
| | Congested worksite | | | | x | x | | D1, D2 - varies on time of day and how busy |
| | Chemical Irritants | | | | x | | | D1, D2 - chemicals at RDO, asbestos at main dump, fibreglass insulation, etc |
| | Confined Space Entry | x | | | | | | |
| | Vapour Fumes | | | | | x | | D1,D2-from compost and MSW during labouring or pre-trip and in/out equipment |
| | Noise | | | | | | x | D1,D2 |
| | Proximity to moving objects | | | | | x | | D1,D2 |
| Hazardous Machines | Hazardous Machines | | | | | x | | D1, D2 - large equipment |
| | Electrical hazard | | x | | | | | |
| | Sharp/Hazardous Tools | | | x | | | | D2 - Pitchforks, chainsaws |
| | Radiant/Thermal Energy | | | x | | | | D1 - certain parts of the equipment |
| | Hot/Cold | | x | | | | | D1, D2 - weather dependent |
| | Humid | | x | | | | | D1, D2 - weather dependent |
| | Environmental Dust | | | | x | | | D1, D2 - pre-trip, in/out of cab, labouring |
| | Organic Substances | | | | x | | | D1, D2 - pre-trip, in/out of cab, labouring |
| | Medical Waste | | x | | | | | D2 |
| | Blood Products | | x | | | | | D2 |
| | Lighting Issues – Direct | | x | | | | | D1, D2 - dark mornings in winter |
| | Lighting Issues – Indirect | x | | | | | | |
| | Vibration – Whole Body | | | | | x | | D1 - operating equipment |
| | Vibration – Hand/Arm | | x | | | | | D2 - operating power washer or chainsaw |

Job Demands Analysis – Ops II worker (landfill) - Summary Table (continued)

| b. Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | | x | | D1, D2 |
| Time Pressure | | x | | D1, D2 |
| Attention to Detail | | x | | D1, D2 |
| Memory Requirements | | | x | D1, D2- what are banned substances, what are the procedures for managing MSW, etc |
| Interact with co-workers | | | x | D1, D2 |
| Interact with public | | x | | D1, D2 |
| Work Alone | x | | | D1, D2 |
| Reading | x | | | D1, D2 |
| Writing | x | | | D1, D2 |
| Irregular Hours | x | | | D1, D2 |
| Operating Equipment | | | x | D1, D2 |

Physical Environment

The work takes place outside in the 4 areas of the Vancouver landfill (RDO, Compost, Main Dump, and Demolition Dump) and inside the cabs of equipment in these areas.

Staffing Levels

The Ops II worker (landfill) usually works as part of a team but may work alone on certain shifts or at the demolition dump if there are staffing shortages.

Tools and Equipment Used

The Ops II worker (landfill) primarily uses brooms, hoses, shovels, pry bars, pressure washer and may drive loaders, bulldozers, excavators, roll off truck and garbage compacters.

Other Equipment

CSA Approved boots and safety vest are required and safety glasses, hearing protection and gloves may also be worn for certain tasks.

Data Collection

Mandy Gallant, an ergonomic consultant from ErgoRisk Management Group conducted the JDA assessment on Aug 20th, 2008. Data was collected using a tape measure, industrial scale, Chatillon push/pull force gauge, digital camera and through observation and discussion with selected employees and the acting superintendent.

Contact for the on-site assessment

Ken Withers was the contact for the on-site assessment.

Description of Essential Duties

This section describes the work tasks that comprise the 2 essential duties of the job. Tables 1 & 2 (located at the end of this report) provide the physical, cognitive and psychosocial demands for performing each of the essential duties.

Essential Duty 1: Operating Equipment

There are a variety of different pieces of heavy equipment in the different areas of the landfill, and Ops II workers may be required to operate any particular piece of equipment at different times during the day. The first worker to interact with any piece of equipment during the day performs a pre-trip inspection which entails checking fluid levels, lights, tires/tracks and other safety procedures (Fig 1). When he leaves the equipment the Ops II worker also performs a brief post-trip inspection. If the equipment has been inactive for a period of time another pre-trip is done when the next worker begins to use the equipment. If necessary upon inspection, workers will fill the vehicles with diesel fuel or other fluids which are picked up in the main yard and brought out to the worksite.



Fig 1: Ops II worker performing a pre-trip inspection on an excavator.



Fig 2: Ops II worker climbing out of the bulldozer at the demolition dump.

The Ops II worker may climb in and out of the vehicle multiple times over the course of the shift to interact with co-workers or perform other duties (Fig 2). Operators use the

equipment to move and manage MSW. In the case of the RDO the MSW is being separated into different recyclables and non-recyclables, at the main and demolition dumps the MSW is being disposed of in the landfill and at the Compost area it is moved around in the process of being made into compost (Fig 3). The heavy equipment may also be used to pull an identified banned substance out of a pile of MSW. At the compost area Ops II workers also use a remote control to operate the grinder (Fig 4).



Fig 3: Ops II worker using a front end loader to move green waste for compost.



Fig 4: Grinder operating in the compost site.

Depending on seniority and the area of the landfill where they are working, some Ops II workers may spend their whole shift operating heavy equipment. Newer workers spend less time operating. Ops II workers are also required to keep the equipment clean (Fig 5) which may entail washing it with a pressure washer or cleaning the tracks or tread with other tools.



Fig 5: Ops II worker cleaning equipment.

Essential Duty 2: Labouring

Ops II workers perform a variety of labouring duties. At the compost site, and main and demolition dump most of the work is done by heavy equipment but Ops II workers may be required to set up cones (Fig 6) or set up portable lights (Fig 7). At the compost site Ops II workers also climb the piles of grindings to set up sprinklers on top (Fig 8). Although this is a heavy job to pull hoses around, it is done quite infrequently and only at certain times of the year.



Fig 6: Ops II worker setting up cones to indicate road to main dump.



Fig 7: Portable lights in main dump are set up by Ops II workers.

At the RDO there is more manual labour that occurs. Workers also interact with the public and direct them to the appropriate drop off areas. The Ops II workers may be required to move around appliances, batteries, computer equipment and other specific items to organize them in their specific areas (Fig 9 & 10). In the case of propane tanks, they are stacked up above shoulder height (Fig 11). Ops II workers also inspect garbage in the roll off container to make sure there are no banned substances or recyclables that have been dumped. If there are, Ops II workers manually remove the

items. As roll off trucks arrive to take the roll off containers to the main dump the Ops II worker manages hooks and cables to attach the containers to the roll off truck.



Fig 8: Worker walking past pile of grindings with sprinkler on top. Workers climb the piles to set up the sprinklers.



Fig 9: Ops II worker moving appliances in the RDO area.



Fig 10: Ops II worker sorting batteries in the RDO area.



Fig 11: Ops II worker stacking propane tanks in the RDO area.

Ops II workers may also use long poles to clear cardboard jams in the cardboard drop off area (Fig 12). They are also responsible for sorting the hazardous waste and pouring residual oil into a central drum (Fig 13).



Fig 12: Ops II worker clearing cardboard jam with long pole.



Fig 13: Ops II pouring oil into main drum for recycling.



Fig 14: Ops II working cleaning grindings from under equipment.

When not managing MSW, Ops II workers keep the site clean by sweeping, shovelling or using a pressure washer to clear away dirt and debris (Fig 14).

Essential Duty 1: Ops II worker (landfill) – Equipment Operation

| a. Physical Demands | | Frequency During Duty | | | | | Weight | | Comments | |
|---------------------|----------------------------|-----------------------|------|------------|------------|----------|----------|------------|---|---|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting – Floor to Knuckle | x | | | | | | | | |
| | Lifting – Knuckle to Waist | | x | | | | | <10 | 23 | Jerry cans of oil and fluids |
| | Lifting – Over Shoulder | x | | | | | | | | |
| | Carrying – with Handles | | x | | | | | <10 | 23 | Jerry cans |
| | Carrying – without Handles | x | | | | | | | | |
| | Pushing – Upper Extremity | | x | | | | | <5 | >5 | Close cab doors |
| | Pushing – Hips/Legs assist | x | | | | | | | | |
| | Pulling – Upper Extremity | | x | | | | | <1 | <5 | Dipsticks to check fluid levels, opening hood |
| | Pulling – Hip/Leg Assist | x | | | | | | | | |
| Mobility | Reach - Shoulder or Above | | | x | | | | | | Climbing in/out of vehicle, controls up high |
| | Reach - Below Shoulder | | | x | | | | | | Pre-trip inspection, seat controls, etc |
| | Handling | | | | | | x | | | Equipment controls |
| | Fine finger movements | x | | | | | | | | |
| | Neck – Static Flexion | | | x | | | | | | Looking down from cab |
| | Neck – Static Neutral | | | x | | | | | | Driving to/from worksite |
| | Neck – Static Extension | | x | | | | | | | |
| | Neck – Static Rotation | | x | | | | | | | |
| | Throwing | x | | | | | | | | |
| | Sitting | | | | | | x | | | |
| | Standing | | | x | | | | | | Pre-trip and post-trip inspections |
| | Walking | | | x | | | | | | Pre-trip and post-trip inspections |
| | Running/Jumping | x | | | | | | | | |
| | Climbing | | | x | | | | | | In/out of equipment multiple times/day |
| | Bending/Stooping | | x | | | | | | | To get in/out of some pieces of equipment |
| | Crouching | | x | | | | | | | Pre-trip and post trip inspections |
| | Kneeling | x | | | | | | | | |
| | Crawling | x | | | | | | | | |
| | Twisting | | | x | | | | | | Inspections, looking behind when reversing |
| Balancing | | x | | | | | | | When climbing in/out of some equipment | |
| Travelling | | | x | | | | | | To/from worksite for breaks, end shift, etc | |

Frequency Rating Definition for % of Duty

The definitions for frequency ratings are contained at the end of the Table (page 14).

Essential Duty 1: Ops II worker (landfill) – Operating Equipment

| a. Physical Demands (continued) | | Frequency During Duty | | | | | | Comments |
|------------------------------------|-----------------------------|-----------------------|---|---|---|---|---|---|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | | | x | | Information coming through radio |
| | Hear/Other Sounds | | | | | | x | Other equipment, horns, alarms |
| | Vision/Far | | | | | | x | |
| | Vision/Near | | | | | | x | |
| | Vision/Colour | | | | | | x | |
| | Vision/Depth | | | | | | x | |
| | Perception/Spatial | | | | | | x | Looking in mirrors |
| | Perception/Form | | | | | | x | Low visibility conditions |
| | Feeling | x | | | | | | |
| | Speech | | | | x | | | |
| Work Environment | Inside Work | | | | | | x | Inside cab of equipment |
| | Outside Work | | | x | | | | Pre and post-trip inspections |
| | Slippery | | | x | | | | Climbing in/out of cab in wet weather |
| | Congested worksite | | | | x | | | Other equipment and vehicles and workers |
| | Chemical Irritants | | x | | | | | |
| | Confined Space Entry | x | | | | | | |
| | Vapour Fumes | | | x | | | | May be present, but cab is pressurized and often HEPA filtered so actual exposure is low unless door open or during inspections |
| | Noise | | | | | | x | |
| | Proximity to moving objects | | | | | x | | Other equipment and vehicles |
| | Hazardous Machines | | | | | x | | Other equipment and vehicles |
| | Electrical hazard | x | | | | | | |
| | Sharp/Hazardous Tools | | x | | | | | |
| | Radiant/Thermal Energy | | | x | | | | Certain parts of machinery may heat up |
| | Hot/Cold | | x | | | | | Weather dependent |
| | Humid | | x | | | | | Weather dependent |
| | Environmental Dust | | x | | | | | May be present, but cab is pressurized and often HEPA filtered so actual exposure is low unless door open or during inspections |
| | Organic Substances | | x | | | | | May be present, but cab is pressurized and often HEPA filtered so actual exposure is low unless door open or during inspections |
| | Medical Waste | | x | | | | | |
| | Blood Products | | x | | | | | |
| | Lighting Issues – Direct | | x | | | | | Dark early mornings in winter |
| Lighting Issues – Indirect | x | | | | | | | |
| Vibration – Whole Body | | | | | | x | | |
| Vibration – Hand/Arm | x | | | | | | | |

Essential Duty 1: Ops II worker (landfill) - Operating Equipment

| b. Cognitive and Psychosocial Demands | Frequency During Duty | | | Comments |
|---------------------------------------|-----------------------|-------------------------|---------------------|----------|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | | X | | |
| Time Pressure | | X | | |
| Attention to Detail | | X | | |
| Memory Requirements | | X | | |
| Interact with co-workers | | X | | |
| Interact with public | X | | | |
| Work Alone | | | X | |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | X | | | |
| Operating Equipment | | | X | |
| | | | | |

Frequency Rating Definitions for % of Duty

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4th edition) published by the US Department of Labor.

| | Percentage of Duty |
|-------------------|--------------------|
| Never | 0 % |
| Rare | 0-1 % |
| Infrequent | 2-5 % |
| Occasional | 6-33 % |
| Frequent | 34-66 % |
| Constant | 67-100 % |

| STRENGTH | |
|-------------------|------------------|
| Strength Category | Weight Handled |
| 5. Limited | Up to 5 kg. |
| 6. Light | 5 kg. to 10 kg. |
| 7. Medium | 10 kg. to 20 kg. |
| 8. Heavy | >20 kg |

Essential Duty 2 – Ops II worker (landfill) - Labouring

| a. Physical Demands | | Frequency During Duty | | | | | Weight | | Comments | |
|---------------------|----------------------------|-----------------------|------|------------|------------|----------|----------|------------|----------|---|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting – Floor to Knuckle | | | x | | | | <5 | 72 | Batteries, other MSW, tools |
| | Lifting – Knuckle to Waist | | | x | | | | <5 | 24 | Items on ledge of RDO bins, stacked propane tanks |
| | Lifting – Over Shoulder | | x | | | | | <5 | 24 | Stacking propane tanks |
| | Carrying – with Handles | | | x | | | | <5 | 23 | Oil buckets, paint cans, other hazardous waste containers |
| | Carrying – without Handles | | | | x | | | <5 | 25 | Pieces of MSW, shovel, brooms |
| | Pushing – Upper Extremity | | | x | | | | <5 | 23 | Sweeping, clearing cardboard jams |
| | Pushing – Hips/Legs assist | | | | x | | | <5 | 40 | Sweeping, moving appliances |
| | Pulling – Upper Extremity | | | x | | | | <1 | 10 | Retrieving banned or misplaced substances from piles of MSW |
| | Pulling – Hip/Leg Assist | | | x | | | | 10 | 45 | Moving appliances, pulling hoses |
| Mobility | Reach - Shoulder or Above | | x | | | | | | | Stacking propane tanks, retrieving MSW from big piles |
| | Reach - Below Shoulder | | | | x | | | | | Sweeping, shovelling, picking up MSW |
| | Handling | | | | x | | | | | Brooms, shovels, other tools, MSW |
| | Fine finger movements | x | | | | | | | | |
| | Neck - Static Flexion | | | | x | | | | | Looking down when working |
| | Neck – Static Neutral | | | x | | | | | | Watching and interacting with incoming vehicles |
| | Neck – Static Extension | | x | | | | | | | |
| | Neck – Static Rotation | | x | | | | | | | |
| | Throwing | x | | | | | | | | |
| | Sitting | | | x | | | | | | Slow periods at RDO |
| | Standing | | | | | x | | | | |
| | Walking | | | | | x | | | | |
| | Running/Jumping | x | | | | | | | | |
| | Climbing | | x | | | | | | | steps |
| | Bending/Stooping | | | | x | | | | | Sweeping, shovelling, handling MSW |
| | Crouching | | | x | | | | | | Inspecting some aspect of the MSW |
| | Kneeling | | | x | | | | | | Inspecting some aspect of the MSW |
| | Crawling | x | | | | | | | | |
| Twisting | | | x | | | | | | | |
| Balancing | x | | | | | | | | | |
| Travelling | x | | | | | | | | | |

Frequency Rating Definition for % of Duty

The definitions for frequency ratings are contained at the end of the Table (page 17).

Essential Duty 2 – Ops II worker (landfill) - Labouring

| a. Physical Demands (continued) | | Frequency During Duty | | | | | | Comments |
|------------------------------------|-----------------------------|--------------------------|---|---|---|---|-----------------|--|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | | | x | | |
| | Hear/Other Sounds | | | | | | x | Vehicles, alarms, etc |
| | Vision/Far | | | | | | x | |
| | Vision/Near | | | | | | x | |
| | Vision/Colour | | | | | | x | |
| | Vision/Depth | | | | | | x | |
| | Perception/Spatial | | | | | | x | |
| | Perception/Form | | | | | | x | |
| | Feeling | x | | | | | | |
| | Speech | | | | | x | | |
| Work Environment | Inside Work | | | x | | | | Inside RDO hut |
| | Outside Work | | | | | | x | |
| | Slippery | | | x | | | | If ground not kept clear of debris, wet weather, etc |
| | Congested worksite | | | | x | x | | Depends on time of day, and how busy |
| | Chemical Irritants | | | x | | | | Hazardous waste area of RDO |
| | Confined Space Entry | x | | | | | | |
| | Vapour Fumes | | | | | | x | |
| | Noise | | | | | | x | |
| | Proximity to moving objects | | | | | x | | Heavy equipment, other vehicles |
| | Hazardous Machines | | | | | x | | Heavy equipment, other vehicles |
| | Electrical hazard | | x | | | | | |
| | Sharp/Hazardous Tools | | | x | | | | Saws, long poles |
| | Radiant/Thermal Energy | | x | | | | | |
| | Hot/Cold | | x | | | | | Weather dependent |
| | Humid | | x | | | | | Weather dependent |
| | Environmental Dust | | | | | x | | |
| | Organic Substances | | | | | x | | |
| | Medical Waste | | x | | | | | |
| | Blood Products | | x | | | | | |
| | Lighting Issues – Direct | | x | | | | | May be dark early mornings in winter |
| Lighting Issues – Indirect | x | | | | | | | |
| Vibration – Whole Body | x | | | | | | | |
| Vibration – Hand/Arm | | | x | | | | Pressure washer | |

Essential Duty 2 – Ops II worker (landfill) - Labouring

| b. Cognitive and Psychosocial Demands | Frequency During Duty | | | Comments |
|---------------------------------------|-----------------------|-------------------------|---------------------|----------|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | | X | | |
| Time Pressure | | X | | |
| Attention to Detail | | X | | |
| Memory Requirements | | X | | |
| Interact with co-workers | | | X | |
| Interact with public | | | X | |
| Work Alone | X | | | |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | X | | | |
| Operating Equipment | X | | | |
| | | | | |

Frequency Rating Definitions for % of Duty

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4th edition) published by the US Department of Labor.

| | Percentage of Duty |
|-------------------|--------------------|
| Never | 0 % |
| Rare | 0-1 % |
| Infrequent | 2-5 % |
| Occasional | 6-33 % |
| Frequent | 34-66 % |
| Constant | 67-100 % |

| STRENGTH | |
|-------------------|------------------|
| Strength Category | Weight Handled |
| 9. Limited | Up to 5 kg. |
| 10. Light | 5 kg. to 10 kg. |
| 11. Medium | 10 kg. to 20 kg. |
| 12. Heavy | >20 kg |