



Job Demands Analysis
- TRUCK DRIVER 3 (“DUMP TRUCK DRIVER”) -

JOB FUNCTIONS & SCHEDULE

Job Title:	Truck Driver 3 (“Dump Truck Driver”)
Essential Job Functions:	Responsible for operating a Dump Truck to pick-up and deliver loads of materials. Such duties are performed predominantly within the City of Richmond limits. Occasional excursions outside the City of Richmond also occur.
Hours of work:	7:00 a.m. until 4:30 p.m. Occasional overtime.
Breaks:	Two 10-minute breaks, one 39-minute break daily. Breaks designated by onsite foreman if on worksite.
Shifts:	9-day fortnight (5 consecutive work shifts, week-one; 4 consecutive work shifts, week-two).

ENVIRONMENTAL CONDITIONS

Workstation Description:	Automatic transmission 26000 kg dump truck. Various City of Richmond locales.
Lighting:	Outdoor lighting.
Weather:	Occasional exposure to the elements when working outside.
Terrain:	Level or uneven, paved or unpaved outdoor terrain.
Biological Hazards:	No appreciable exposure.
Chemical Hazards:	Must spray diesel fuel at times. No appreciable exposure typically.
Physical Hazards:	Vibration: Vibration exposure when driving on rough roads (e.g., to and from dumping locations). Variable exposure patterns. Mitigated somewhat by driver-behaviors (speed-moderation and/or avoidance of pot-holes). Moving parts: Risk of exposure to moving parts/mechanisms when inspecting the vehicle’s box from underneath. Electrical: Risk of exposure to electrical lines when elevating the

vehicle's box.

Dust: Work is performed in dusty environments at times

Exhaust: Potential exhaust-exposure when driver's window is down.

Heights: Risk of falls when perched on the periphery rail of the vehicle's box to inspect box-contents.

ESSENTIAL WORK TASKS

Frequency: N/A: not done; Rare 0-5%; Occasional 6-33%; Frequent 34-66%, Constant 67-100%

<i>Frequency</i>	<i>Description</i>
1. O	Perform Pre- and Post-Trip Inspections: <i>Ensure the safe operation of the vehicle via performing pre- and post-trip inspections. These actions involve accessing the engine compartment, inspecting tires and other vehicle components, checking brakes, box-operations etc.</i>
2. O - C	Operate/Drive Vehicle: <i>Frequent to Constant during standard operations. Safely drive the automatic transmission vehicle to/from worksites and position it optimally when dumping or receiving loads or performing box-cleaning procedures. Regular trips to city-dump locales (over rough roads: 6 to 8 trips per day commonly) during standard procedures. May only drive Occasionally if performing blacktop operations..</i>
3. O	Dump Loads: <i>Safely operate the vehicle's box to dump loads via hand controls. Open and close the portal in the tailgate at the rear of the box to effectively dump smaller loads via lever control.</i>
4. O	Clean Box: <i>Hose out the box. Shovel and/or rake to remove box debris (small loads only).</i>
5. O	Fasten Inserts and Remove Tailgate: <i>Ensure safe operation of vehicle during road-salting operations via chaining box-insert into place and assisting with removal of tailgate.</i>
6. O – F	Blacktop Operations: <i>May perform blacktop spreading and other related blacktop duties (shoveling, raking, spreading etc.). Blacktop duties are selectively dispatched (not all Truck Driver 3s perform such duties).</i>

TOOLS & EQUIPMENT USED

- Shovel / rake
- Chains (for fastening insert)
- 2-way radio
- Wheelbarrow (blacktop operations only)
- Safety cone
- Hand tools (small sledge hammer)
- Stepladder

Personal protective equipment:

- Hard hat
- High visibility vest
- Steel toed work boots
- Gloves
- Coveralls (for blacktop operations)

PSYCHOSOCIAL & COGNITIVE REQUIREMENTS
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Degree of Self-Supervision/Accountability:	<i>Predominantly self-supervised throughout the shift (contact supervisor to obtain work direction as needed)</i>
Supervision of Others:	<i>No supervisory responsibility</i>
Performance Pressure (machine or other):	<i>Time pressure is low: there is occasional pressure to meet deadlines or work within time constraints, the volume of work and the work pace are moderate</i>
Attention to Detail:	<i>Significant attention to detail or concentration required for driving tasks</i>
Multi-Tasking:	<i>Responsible for performing one task at a time until completion or further direction from supervisor</i>
Level of Collaboration:	<i>Required to work in co-operation with others for some tasks</i>
Working with Public (emotional or confrontational):	<i>No exposure to emotionally stressful circumstances or emotionally distressed individuals in the course of normal duties. No exposure to confrontational situations in the course of normal duties</i>
Literacy (reading/writing/computer/numerical):	<i>Moderate reading ability is required, e.g., to follow written instructions. Required to compose text in which accurate grammatical construction and spelling are not essential, e.g. messages, forms, lists. (safety logs)</i>
Communication Skills:	<i>Basic communication skills are required to comprehend and communicate information at a basic level within well defined parameters e.g. communicate status of job or job task with supervisor</i>
Memory Skills:	<i>Basic memory ability is required to recall information that is applied to work tasks on a regular basis without rigid time constraints.</i>

MOBILITY & POSTURAL DEMANDS
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Frequency: N/A: not done; Rare 0-5%; Occasional 6-33%; Frequent 34-66%, Constant 67-100%

Demand	Frequency	Description
Reaching*	F	<i>Frequent inner range forward reaching to operate vehicle</i>

and box controls (up to 17 inches – 43 cm – away from seat, on right-side). Occasional outer range forward reaching to sweep or shovel. Reach to 64 inches (163 cm) or above to grasp vertical rail (to climb and inspect loads). Reach to 57 inches (145 cm) to grasp vertical rail (to climb into cabin). Reach to 80 inches (203 cm) to grasp lever for portal in tailgate (the “dump-gate”) and to open side of hood for side-inspections of engine compartment.

Handling/Gripping	O	Handle tools and equipment. Grip steering wheel and levers to operate the box.
Fingering	O	Operate vehicle and 2-way radio controls.
Sitting	O - C	Typically Frequent to Constant during standard operations. May only sit Occasionally if performing blacktop operations.
Standing/Walking*	O	<u>Standard Operations:</u> Dynamic standing, brief walking. Pre- and post-trip inspections. Clean box (brief: hose-out, shovel debris), fasten inserts and remove tailgate.
	F – C	<u>Blacktop Operations:</u> Dynamic standing during blacktop duties: may stand/walk for the majority of a work shift (shoveling, spreading/raking asphalt, pushing wheelbarrows etc). No prolonged continuous walking.
Climbing stairs/ladders	O	Climb into cab (21 inches – 53 cm – to first step – facilitated with vertical rail on right). Climb vertical ladder to facilitate box inspections (24 inches – 61 cm – to first step). Climb onto vehicle to inspect engine compartment (22 inches – 56 cm – to step). Climb 12-step steel staircase (handrails available) to platform to hose out the box.
Stooping*	O	<u>Standard Operations:</u> Mild to moderate stooping during pre- and post-trip inspections and when accessing under vehicle to perform low-inspections (brakes, tires etc). Mild stooping when cleaning box (brief: hose-out, may also shovel debris).
	F – C	<u>Blacktop Operations:</u> Mild to moderate stooping during blacktop duties: may perform for the majority of a work shift (shoveling, spreading/raking asphalt, pushing loaded wheelbarrows etc).
Twisting	O	<u>Standard Operations:</u> May twist when hosing out the box.
	O - F	<u>Blacktop Operations:</u> Twisting and other dynamic trunk posturing during blacktop duties: may perform for the majority of a work shift (shoveling, spreading/raking asphalt).
Crouching	O	During pre- and post-trip inspections to access under vehicle, perform low-inspections (brakes, tires etc.)

Kneeling	N/A	None required.
Crawling	Rare	May crawl on back to facilitate particularly close inspection of vehicle under-surface (e.g., if concerns arise during pre- or post-trip regarding the integrity of vehicle components).
Balancing	O	Maintain static posturing on potentially slippery surface whilst perched on balls of feet along the bar that runs the periphery of the vehicle's box – when inspecting box contents.
Driving	O – C	Operate vehicle: variable durations. May only be Occasional if performing blacktop operations.
Hand/Foot Controls	O – C	Operate vehicle.
Awkward Postures	O	Some brief awkward neck postures when performing particularly close inspections of undersurface of vehicle.
Talking	O	Communicate with supervisor(s), City of Richmond staff, worksite workers etc.
Hearing	C	To communicate, to safely operate vehicle.
Tasting	N/A	Not required.
Smelling	N/A	Not required.
Near Acuity	C	Vehicle operation.
Far Acuity	C	Vehicle operation.
Depth Perception	C	Vehicle operation.
Accommodation	C	Vehicle operation.
Color Vision	C	Vehicle operation.

*NB: inner-range reaching: within a forearm's reach; outer-range reaching: the arm extends forward & away from the body; vertical reaching: reaching above shoulder level. Mild stooping = up to approximately 20 degrees of flexion at the waist; moderate stooping = between approximately 20 and 45 degrees of flexion at the waist; severe stooping = greater than approximately 45 degrees of flexion at the waist. Static standing = activities occur within an area approximately 3 feet in diameter or less; dynamic standing = activities incorporate numerous changes of body posture and regular episodes of walking.

STRENGTH DEMANDS

Frequency: N/A: not done; Rare 0-5%; Occasional 6-33%; Frequent 34-66%, Constant 67-100%

Lifting/Carrying	O	<u>Standard Operations</u> : Carry tools equipment and place on rack: less than 10 pounds – 4.5 kg (lift shovel to 60 inches – 152 cm). Carry or drag chain (during insert fastening procedures): 23 pounds – 10 kg. Shovel small loads (less
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- than 10 pounds – 4.5 kg).
- F** Blacktop Operations: Shoveling (typically 5 to 10 pound loads – 2 to 4.5 kg).
- Pushing/Pulling **O** Standard Operations: Push/pull (drag) chains (estimated 10 pounds – 4.5 kg - of pulling force). Pull open and lower vehicle hood: 20 pounds – 9 kg – of force approximately. Pull open and controlled lower of vehicle hood: 30 pounds – 14 kg – of force approximately.
- O** Blacktop Operations: Push/pull loaded wheelbarrows (variable load sizes, possibly over uneven ground and/or obstacles): variable forces up to 40 pounds – 18 kg estimated.

Overall Strength Category (per the Dictionary of Occupational Titles):

Standard Operations: **Light:** Exerting up to 10 lbs. of force occasionally (up to 1/3 of the time) and/or a negligible amount of force frequently (1/3 to 2/3 of the time) to lift, carry, push, pull, or otherwise move objects.

Blacktop Operations: **Medium:** Exerting 20-50 lbs. of force occasionally, and/or 10-25 lbs. of force frequently, and/or negligible to 10 lbs. of force constantly to move objects.