



**Unloading time:** Time spent unloading vehicle \* # number of people involved in unloading process.

**Total time:** (Paint time\*# of people unloading paint)+(CFL time\*# of people unloading CFLs)+(short tube time\*# of people unloading short tubes)+(long tube time\*# of people unloading long tubes)+(other time\*# of people unloading each set of non-paint, non-bulb materials)+shared time.

**Shared time:** All time spent moving between material drop-off points (“rolling around” time).

**Average per unit and per material type measurements can be calculated by dividing the relevant time by the number of units.**

- e.g. average time per bulb =  $(\text{CFL time} + \text{short tube time} + \text{long tube time}) / (\# \text{ of CFLs} + \# \text{ of short tubes} + \# \text{ of long tubes})$

**A similar process can be used to establish per unit unloading time and shared time, with one difference—the total shared or unloading time must first be divided by the number of material streams, then by the number of units in each material type of interest.**

- e.g. average unloading time per bulb =  $[(\text{total unloading time}) / (\# \text{ of material streams})] / (\# \text{ of CFLs} + \# \text{ of short tubes} + \# \text{ of long tubes})$