**TRANSECT SURVEY FORM FOR SOLID WASTE QUANTIFICATION**

## **Transects: Start of transect**

*Guidance: Start by recording details of the transect that you are about to survey. Next steps are:*

1. *Move along the transect, recording scattered waste or hazards every 50 paces.*
2. *Go along the transect again, recording large piles of waste.*
3. *Go along the transect again, recording any areas of waste burning.*
4. *Record the end of the transect and any final comments.*

*Field team member: \_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_ Time: \_\_\_: \_\_\_*

*Enumeration Area ID: \_\_\_\_\_\_\_\_\_\_\_\_ Name of location / field site: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

**Transect ID:** \_\_\_\_

**Type of transect:** STORM-DRAIN / STREAM OR RIVER / ALONG ROAD OR PATHWAY

*If STORM-DRAIN or STREAM OR RIVER*:

**Is there water currently in the storm-drain, stream or river?**

YES / NO

**Record GPS location – transect start**: \_\_\_\_\_\_\_\_\_\_\_ [collected via GPS on Android SurveyCTO device]

**Description of transect (to help somebody else return and walk the same route):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Did it rain?**

ON DAY OF SURVEY / ON THE DAY BEFORE SURVEY / DURING THE WEEK BEFORE SURVEY / NO RAIN IN PAST WEEK / DO NOT KNOW

*Guidance: Start by recording details of the transect that you are about to survey:*

## **Recording scattered waste**

*Guidance: Walk 50 paces along the transect. Stop and look 2 paces around you. Count up how many of the following waste items or hazards you can see within 2 paces of where you are standing. When you have recorded everything, walk another 50 paces along the transect and repeat the observations. Do every 50 paces until you reach the end of the transect.*

*[Press button on survey CTO or similar to add each observation point along the transect:]*

*Observation point ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*Note: for the types of waste below with grey cells, we enter a single overall tally, without splitting out food or beverages from other sources of waste. Add notes particularly for waste electrical and electronic equipment:*

|  |  |  |  |
| --- | --- | --- | --- |
| **SCATTERED WASTE (waste items observed singly or in piles of less than 1m across)** | **TALLY /COUNT OF TYPE OF WASTE** | **TALLY /COUNT OF TYPE OF WASTE** | **TALLY /COUNT OF TYPE OF WASTE** |
| **Uncollected plastics**  | **Food or beverage** | **Not food or beverage** | **Unknown if food or beverage** |
| Plastics – other than PET bottles: |  |  |  |
| PET bottles – transparent |  |  |  |
| PET bottles – coloured |  |  |  |
| Water sachet wrappers |  |  |  |
| Polystyrene containers |  |  |  |
| Organic |  |  |  |
| Wood |  |  |  |
| Rubber / Leather |  |  |  |
| Metal |  |  |  |
| Glass |  |  |  |
| Card / paper |  |  |  |
| electrical items – large (e.g. fridge, computer) |  |  |  |
| Electrical items – small (e.g. phone charger) |  |  |  |
| Other |  |  |  |

|  |  |
| --- | --- |
| **Other items** | **TALLY/ COUNT OF TYPE OF WASTE OR HAZARD** |
| **PPE (COVID-19 response)** |  |
| Face mask |  |
| Gloves |  |
| **Human waste and faeces** |  |
| ‘flying toilet’ (human waste in plastic bag) |  |
| Animal droppings |  |
| Nappy or diaper |  |
| Blocked drain or channel |  |
| Pools of water resulting from waste |  |
| *If you are following a storm-drain transect* |  |
| Buildings constructed directly over storm-drain |  |
| Rodents / vermin | Y / N |

## **SurveyCTO Form buttons for recording large waste piles or waste burning along transect**

*Now go back along the transect a second time, but this time record any large piles of waste / open waste dumps more than 1 metre across. Only record these if part of the waste dump falls within 2 paces of the transect you are walking along.*

*Button on SurveyCTO screen is then used to record any larger waste piles via pop-up form (N.B. Transect ID needs to be linked to each waste pile or burnt area record):*

**Q. Record location of waste pile using GPS on SurveyCTO**

Waste pile ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q. Estimate size of waste pile:

1 TO 5 METRES ACROSS / 5 TO 10 METRES ACROSS / >10 METRES ACROSS

*Place the metre-long stick at random on the surface of the waste, then take a photo of the waste above the metre-long stick from above. Count up how many waste items you can see in the top layer.*

**[TAKE PHOTO IN SURVEYCTO]**

*Count up how many of the following items you can see in the top-most layer of waste in the 1 by 1 metre random square. Add notes particularly for waste electrical and electronic equipment:*

|  |  |  |
| --- | --- | --- |
| **Type of waste** | **Number of items** | **Notes** |
| Plastics – other than PET bottles: |  |  |
| PET bottles – transparent |  |  |
| PET bottles – coloured |  |  |
| Water sachet wrappers |  |  |
| Polystyrene containers |  |  |
| Organic |  |  |
| Wood |  |  |
| Rubber / Leather |  |  |
| Metal |  |  |
| Glass |  |  |
| Card / paper |  |  |
| electrical items – large (e.g. fridge, computer) |  |  |
| Electrical items – small (e.g. phone charger) |  |  |
| Other |  |  |

**Is the waste pile / dump big enough that you can once more count up the waste items on another part of its surface?**

YES / NO

*If YES:*

*Place the metre-long stick at another, second random location on the surface of the waste, then take another photo of the waste above the metre-long stick from above. Count up how many waste items you can see in the top layer. Add notes particularly for waste electrical and electronic equipment:*

Estimate current composition of top layer of waste that you can see now:

|  |  |  |
| --- | --- | --- |
| **Type of waste** | **Number of items** | **Notes** |
| Plastics – other than PET bottles: |  |  |
| PET bottles – transparent |  |  |
| PET bottles – coloured |  |  |
| Water sachet wrappers |  |  |
| Polystyrene containers |  |  |
| Organic |  |  |
| Wood |  |  |
| Rubber / Leather |  |  |
| Metal |  |  |
| Glass |  |  |
| Card / paper |  |  |
| electrical items – large (e.g. fridge, computer) |  |  |
| Electrical items – small (e.g. phone charger) |  |  |
| Other |  |  |

How much of the waste in the pile comes from food or beverages (to nearest 10%): \_\_\_\_\_\_\_ / CANNOT TELL.

## **Areas of waste burning**

*Guidance: Walk along the transect a third time, this time watching out for places where people have been burning waste. Only include an area of waste burning if part of it lies within 2 metres of the transect line you are walking along.*

*Second button on SurveyCTO screen is then used to record any areas where waste burning is happening via pop-up form:*

**Burnt area ID:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Take photo of burning area; place the metre-long stick in the foreground to indicate scale.**

**Record location of burn area using GPS on SurveyCTO**

**Estimate size of burnt area:**

<1 METRE ACROSS / 1 TO 5 METRES ACROSS / 5 TO 10 METRES ACROSS / > 10 METRES ACROSS

If any items of waste are not completely burnt and are identifiable, record the types of identifiable waste:

|  |  |  |
| --- | --- | --- |
| **Type of waste** | **Identifiable and present (yes/no)** | **Notes** |
| Plastics – other than PET bottles: |  |  |
| PET bottles – transparent |  |  |
| PET bottles – coloured |  |  |
| Water sachet wrappers |  |  |
| Polystyrene containers |  |  |
| Organic |  |  |
| Wood |  |  |
| Rubber / Leather |  |  |
| Metal |  |  |
| Glass |  |  |
| Card / paper |  |  |
| electrical items – large (e.g. fridge, computer) |  |  |
| Electrical items – small (e.g. phone charger) |  |  |
| Other |  |  |

## **End of transect:**

*Finally, record details at the end of the transect.*

Notes on any problems when surveying the transect (optional): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Notes on any environmental waste problems not already captured elsewhere (optional):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Record GPS location of transect end: \_\_\_\_\_\_\_\_\_\_\_ [collected via GPS on Android SurveyCTO device]

Record end time for transect survey completion (automatically on form closure)