

Remote Waste Audits

2021 Australian Landfill &
Transfer Stations
Conference

 **Tonkin+Taylor**



Waste Audits

- Timing and frequency of data collection depends largely on financial and resource availability
- The specific aim and purpose of the audit will determine the methods used to collect data



Remote site work and COVID 19

- Challenged to innovate
- Pushed the limits of what can be done remotely
- Explored new applications of data and digital technology



The challenge

- Had secured a large piece of audit work in a series of remote locations.
- COVID-19 restricted travel meaning the audit supervisor could not travel to the audit location.
- Client needed to proceed with the work.

The solution



Training

- Remote training
- Training videos
- Guidance documents
- Video supervision



Digital tools

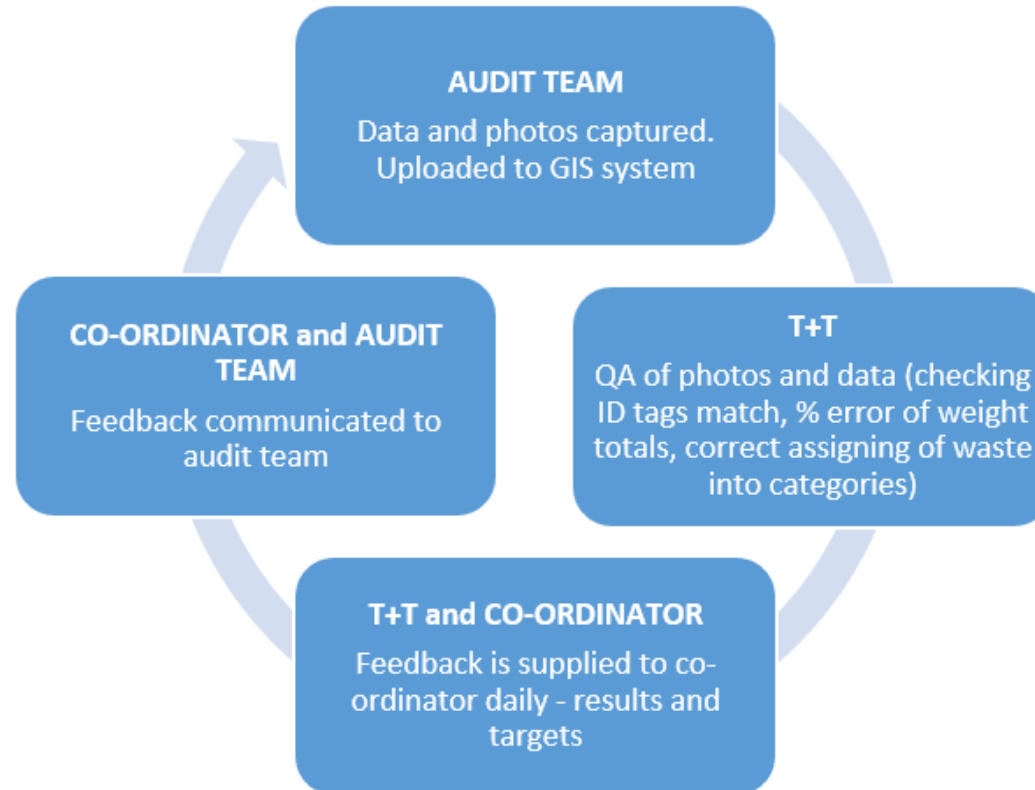
- Survey123 Phone App
- ArcGIS Geospatial Portal
- Video calling
- Training videos
- Photos



Realtime QA

- Photo checks
- Data checks

The solution



Survey123 Phone App and ArcGIS Geospatial Portal

Waste Sample
38
surveys

Sort & Weigh
10
surveys

Interview
24
surveys

Landfill Audit
21
surveys

Stockpile
3
surveys



1) Waste Sample Survey

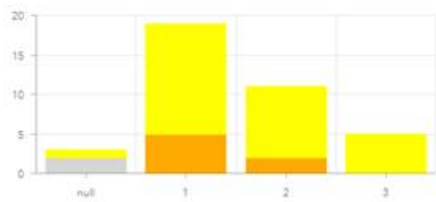
Household or Business



Submitted in last 30 days

No records submitted in the last 30 days.

Bags Collected (Household/Business)



Waste Sample | Sort & Weigh | Interview

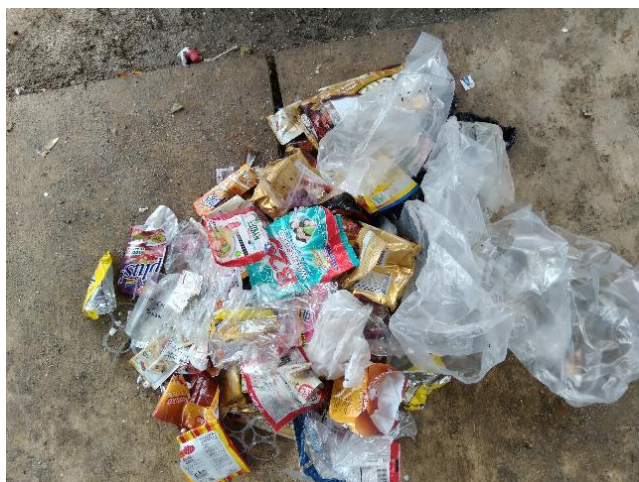
Landfill audit



Stockpiles



Sort and weigh



Challenges

- Risks in delay of receiving information
 - Clear timeframes, early communication
- Building team relationships
 - Utilizing digital capability
- Trouble shooting can be more difficult
 - Creativity especially use of videos
- Oversight of quality
 - Photos, videos, real time data uploads

Key takeaways

- Little development in the way we conduct audits – an area to explore.
- Potential applications for audits where mobilisation of an onsite team is restricted or too costly.
- Audit resources go further, data collected more thorough, work towards addressing concerns of only collecting “snapshots”.
- Need to always come back to is the audit design meeting the desired outcomes.



Thank you

This project was the undertaking of a much larger project team.



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