



# ***Inkerman Landfill Community Reference Group***

## ***Alternative Litter System Trial***

*29<sup>th</sup> November 2018*

**ILCRG**

**Inkerman Landfill  
COMMUNITY REFERENCE GROUP**



**CLEANAWAY**



# *Alternative Litter System Trial*

*Why change from Somernet system?*

- *HSE risk*
  - *Mast can fall in high winds or contact with equipment*
  - *Can get bogged in wet conditions and require unsafe practices to move them*
  - *Nets cannot accommodate an increase in traffic and vehicle movements i.e. 15m separation required for semi tippers (Landfill Standards)*
- *Operational Efficiency*
  - *Nets impair compaction rates and effective cover on batters*
  - *Unable to achieve final contours working under nets*
  - *Inefficient to keep moving nets in line with advancing tip face*
- *Trial approved by EPA and commenced Aug-17*
- *Trial extended 3 months with EPA approval until end Oct-18*

# Alternative Litter System Trial

- *Additional control measures implemented include:*
  - *Improved primary litter net placement plan*
  - *Fill plan updated to include litter net placement*
  - *Purchased Litter Master 9000 vacuum*
  - *Increased frequency of manual litter pickers*
  - *Increased external boundary inspections*
  - *Cease operations in extreme conditions*
  - *Updated protocols to take into account wind conditions*
  - *Engaged engineering group to optimise litter management initiatives*
  - *Grader now onsite to assist with daily cover and site operations*



# ***Alternative Litter System Trial***

## ***Daily Cover (Tarp Deployment Systems)***

- *Capital Application Approved and Purchase Order Raised*
  - *Reduced exposure to flagging*
  - *Litter in daily reclaimed cover*
  - *In use at MRL*



# *Alternative Litter System Trial*

## *Additional Litter Nets*

- *Seeking quotations for Capital Expenditure Application*
- *Confident will be approved*
- *Included in FY19 capital budget*
- *Second line of defence*
- *Finalising design specification with suppliers*
- *Significant capital investment*
- *Approximately 650m long*
- *Height 6m*

# Alternative Litter System Trial

- *MRL 3.5km of nets currently being installed*
- *Propose to use same supplier*
- *Still to be tensioned and gaps eliminated*
- *Semi permanent structure*



# Alternative Litter System Trial



Netting overlapped and clipped at each post



Gripper to tension the 6mm wire core cable – can be re-tensioned or released to relocate the nets



Litter fence being installed at MRL



New litter nets being installed at MRL



Clipped net with 6mm wire cables and tensioned using gripples.



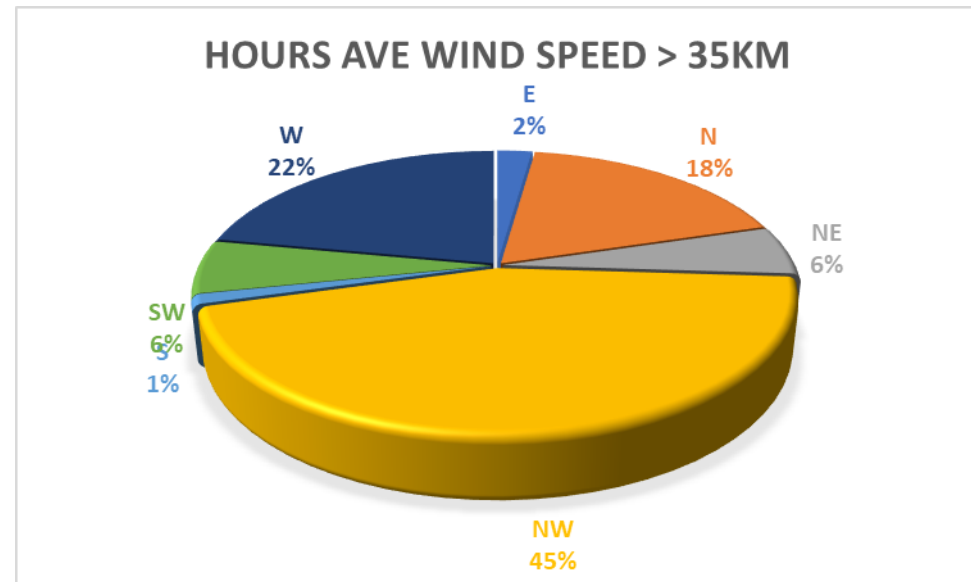
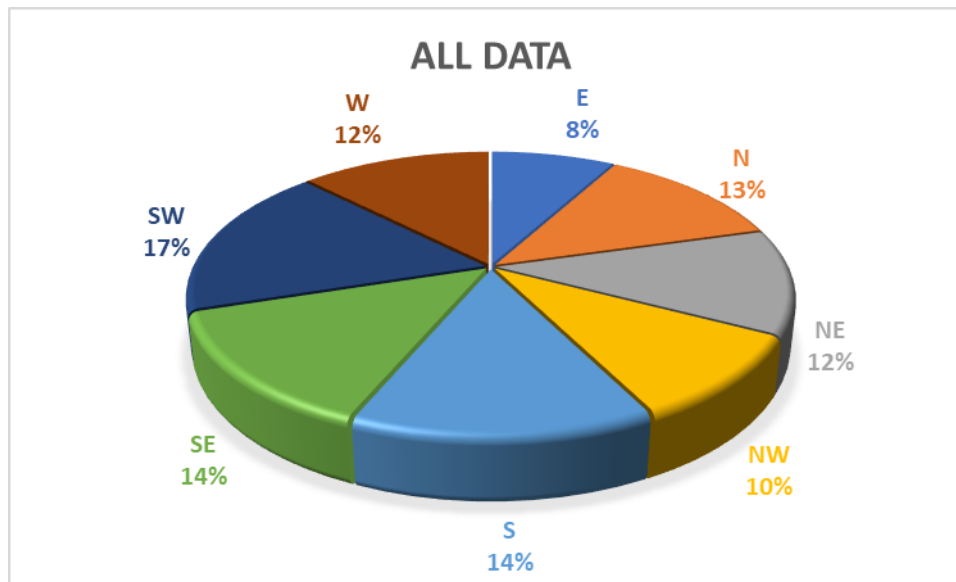
Posts slip into concrete base sleeves – Bases 1.5 in diameter and weight 2.5 ton



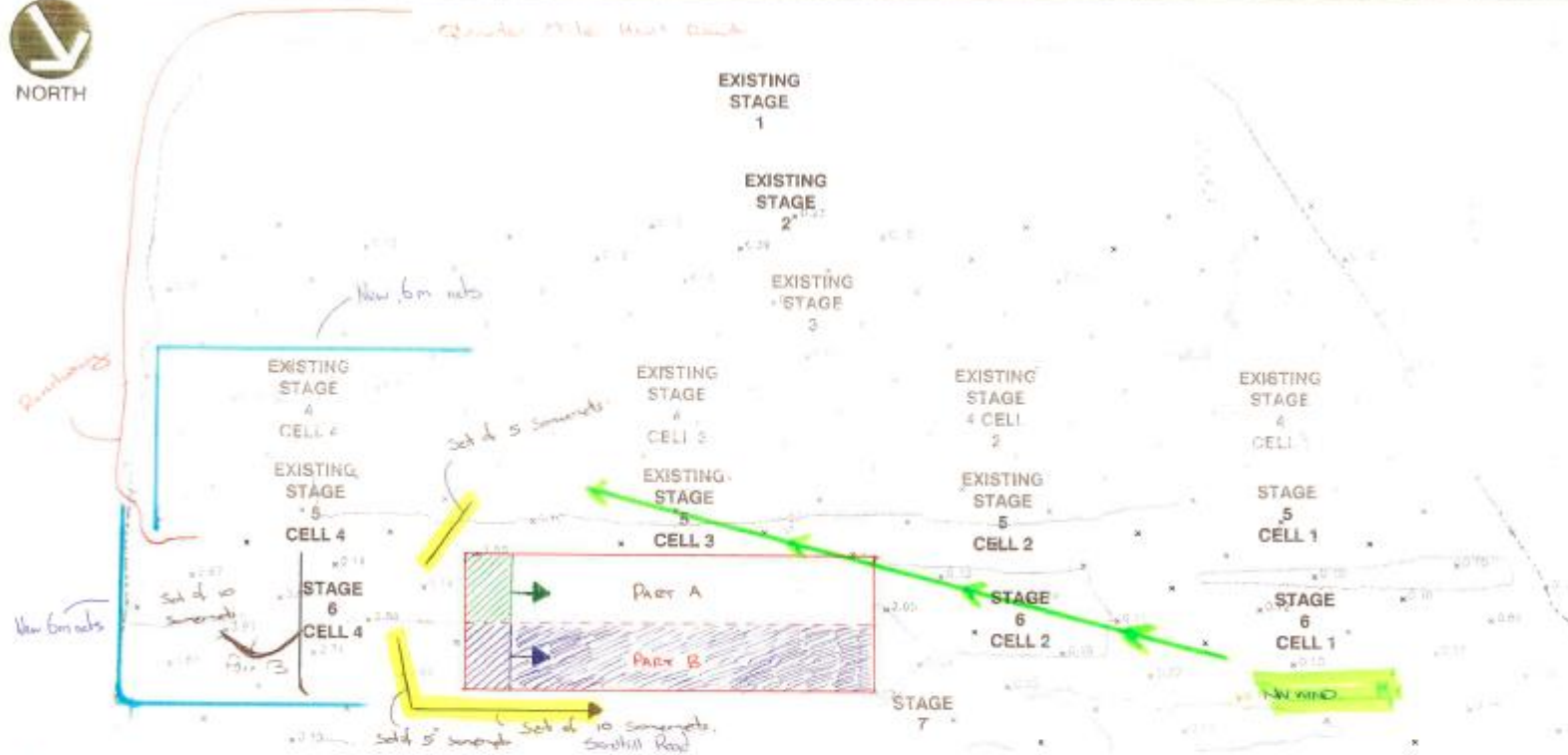
Netting overlapped and clipped at each post

# Alternative Litter System Trial

Prevailing wind direction & offsite litter locations used to plan net placement







### SECOND LIFT PART B 4M HIGH

- Will continue to work with Sonanets the way they are until the new 6m nets arrive in FEB 2019 - MAR 2019.
- Will work PART B Tipline in a westerly direction from the halfway point. Will complete PART B then move into PART A once PART B is at height.
- Will use PART B as a raised platform to run nets on whilst filling PART A.
- Once the 6m nets we installed the set of 10 Sonanets will be shifted onto South Hill road and follow the tipline in a westerly direction.
- The 2 sets of 5 Sonanets will stay in close proximity to the active tipline as a primary defence to the expected wind direction.
- Third lift will be done in similar fashion but will reassess when we come to that lift.

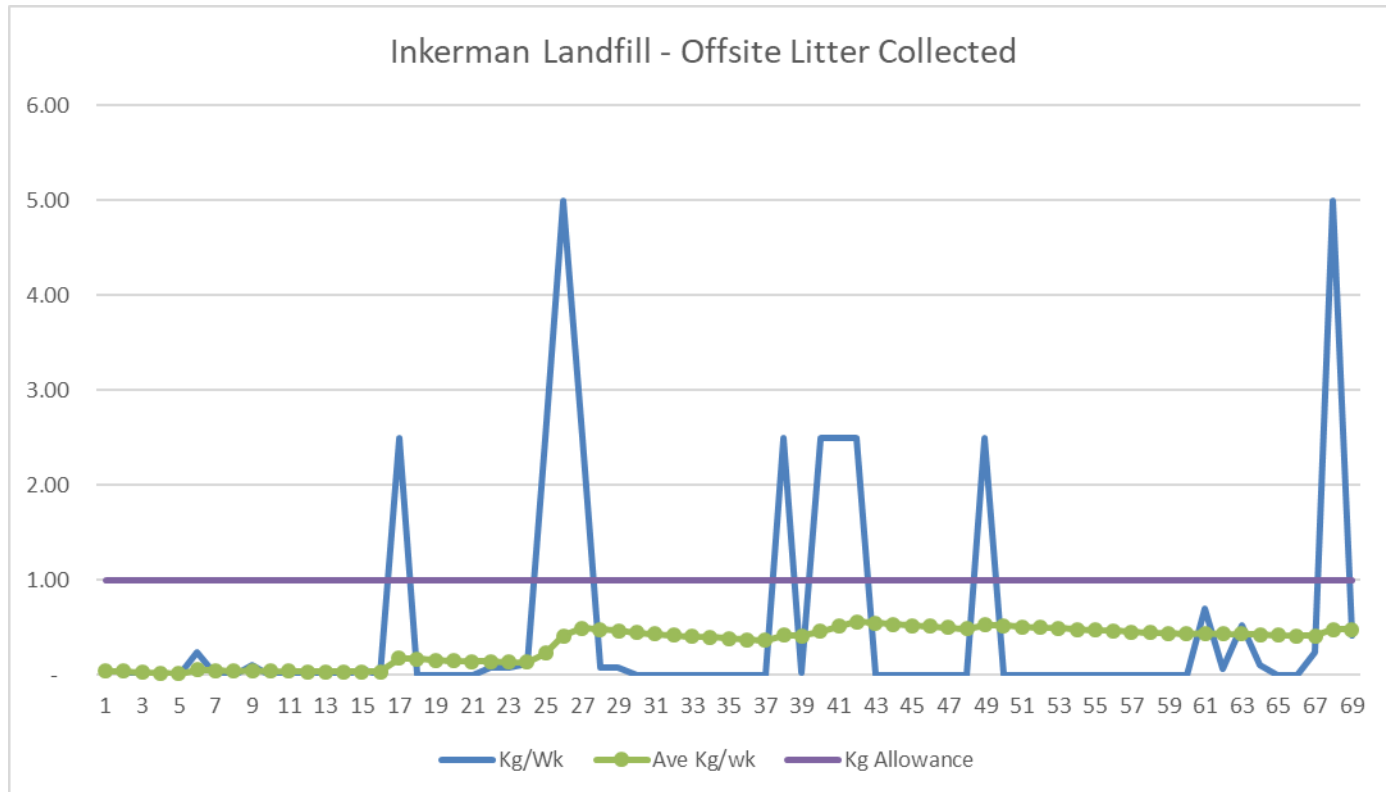
# *Alternative Litter System Trial*

## *Summary of Trial Results*

- *First line of defence: Somernets*
  - *Set of 10 Somernets will be shifted to sandhill road once 6m nets installed*
  - *2 sets of 5 nets will stay in close proximity to the active tip face*
- *Second line of defence: 6m nets (Feb19-Mar19)*
  - *Additional 650m x 6m nets*
  - *Placement determined by assessment of historical wind conditions and litter location*
  - *Fill Part B first which will provide an elevated platform for nets & wind break when filling Part A*
- *Third line of defence: Perimeter fencing*

# Alternative Litter System Trial

## Litter Collected



# *Alternative Litter System Trial*

## *Summary of Trial Results*

- *Target Mass of litter controlled outside boundary > 1kg per week :*
  - *Extreme conditions reduce the effectiveness of the Alternative Litter System*
  - *Actual 0.45kg per week*
  - *10 days > 1.0kg per week*
- *Maintain current trend of litter complaints*
  - *Have experienced an increase in litter complaints (predominately Menadue & Prime Road)*
  - *Worked outside of nets prior to trial*
  - *Change in nature of waste due to diversion strategies*
- *Bird Activity*
  - *Improved surface water management on site: pump away excess water and improved drainage in borrow pit*
  - *No noticeable change to bird activity on site*



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