

**Ingleburn Resource Recovery Facility**  
**SSD8593 – Bulk Resources Recovery**  
**BRS Response to DPIE Pamela Morales's email dated 9 April 2021**

The latest RTS which was submitted to DPIE in March 2021, included the requested information as a response to the DPIE Traffic sections. The Traffic Impact Assessment (TIA) was updated as requested by DPIE and specific responses were included in the RTS. However, DPIE officers did not consider it to be clear and requested a different presentation of the traffic information such as tables to clearly show the exiting yearly and daily traffic as well as the proposed yearly and daily traffic based on the proposed operating hours. The only difference is that at that time, it was agreed that delivery of liquid waste could occur between 10.00pm -7.00am on weekdays

The recently submitted tables referred to in your email were prepared by Time Baillie and Nicolas Israel based on a teleconference held between Emma Barnet, Sheelagh Laguna, Tim Baillie and Nicolas Israel. These tables excluded the delivery of liquid wastes between the hours of 10.00 pm-7.00 am weekdays.

It appears that there are some variations of the requests from different DPIE officers. This makes it really difficult to ensure that all requests are addressed. Please refer to the DPIE requests and BRS responses included in the above RTS.

In any case, below are our responses to your requests made in your email dated 9 April 2021.

Future traffic generation

1. *While it is useful to see the yearly traffic numbers as per the most recent traffic table (see attached), I would like to see these numbers converted into hourly/daily as per Section 2.5 of the amended TIA so that it is consistent with how the existing traffic numbers have been presented in the report. This will allow us to compare the existing and proposed traffic generation numbers. Please note that we are interested in seeing the proposed traffic generation assuming no delivery of liquid waste between 10pm and 7 am.*

**Response**

Based on the revised proposed waste quantities the cumulative traffic generation calculations are:

1. Solid Waste delivery – 19,000 tonnes per annum / 350 working days / 13.86 average hours per day / 28 tonnes per vehicle = 0.14 vehicle deliveries per hour or 2.10 deliveries per weekday (15 hours) and 1.54 deliveries per day (11 hours) on weekends. This equates to 13.57 deliveries per week.
2. Liquid Waste and Muddy Waste Delivery – 125,000 tonnes per annum / 350 working days per annum / 16.71 average hours per day / average 12 tonnes per vehicle = 2.14 vehicle deliveries per hour or 32.22 deliveries per weekday and 23.63 deliveries per day on weekends. This equates to 208.34 deliveries per week.
3. Solid waste removal – 15,500 tonnes per annum / 350 working days per annum / 13.86 average hours per day / 28 tonnes per vehicle = 0.11 vehicle pick-up per hour or 1.71 vehicle pick-ups per weekday and 1.26 vehicle pick-ups per day on weekends. This equates to 11.08 pick-ups per week.
4. Liquid waste removal - 24,300 tonnes per annum / 350 working days per annum / 13.86 average hours per day / 12 tonnes per vehicle = 0.42 vehicle pick-up per hour or 6.26 vehicle pick-ups per weekday and 4.59 vehicle pick-ups per day on weekends. This equates to 40.5 pick-ups per week.

5. Staff trips – Peak Hour considered to be arrival at work (AM) all inbound trips – 15 incoming cars and departure from work (PM) all outbound trips – 15 outgoing cars.
6. Concrete trucks – Peak hour – 50,000 tonnes/ 350 working days per annum / 19 hrs per day on weekdays and 11 hours per day on weekends / 15 tonne per load = 10.83 pick-ups per weekday and 6.27 pick-ups per day on Weekends. This equates to 66.68 pick-ups per week.
7. Concrete batching material delivery = 1 per weekday and 1 per day on weekends in non-peak periods. This equates to 7 deliveries per week.

The above calculations are presented the tables below.

Existing traffic generation

2. The TIA (pg11 ) notes that existing traffic number for the liquid and muddy waste delivery is approximately 1 (1.16) vehicle trips per hour (delivery) and for liquid waste removal is 1 vehicle per hour (0.05). In reality, would this equate to approximately 1 truck a day for delivery and removal or 2-3 trucks a week? Please clarify

**Response**

The current site has a production output of 30,000 tonnes per annum with the concrete batching plant output remaining the same at 50,000 tonnes per year and storage capacity for only 5,000 tonnes (1,900 tonnes solid waste and 3,100 tonnes liquid waste). Staff numbers for the existing operation is 7. Therefore the current traffic generation is as follows;

1. Solid Waste delivery – 19,000 tonnes per annum / 350 working days / 13.86 average hours per day / 28 tonnes per vehicle = 0.14 vehicle deliveries per hour or 2.10 deliveries per weekday (15 hours) and 1.54 deliveries per day on weekends (11 hours). This equates to 13.58 deliveries per week.
2. Liquid Waste and Muddy Waste delivery – 11,000 tonnes per annum / 350 working days per annum / 13.86 average hours per day / average 12 tonne per vehicle = 0.19 deliveries per hour or 2.85 deliveries per weekday (15 hours) and 2.09 per day (11 hours) on weekends. This equates to 18.34 deliveries per week.
3. Solid waste removal – 17,100 tonnes per annum / 350 working days per annum / 13.86 average hours per day / 28 tonnes per vehicle = 0.126 pick-ups per hour or 1.89 pick-ups per weekday (15 hours) and 1.38 pick-ups per day (11 hours) on weekends. This equates to 12.22 pick-ups per week.
4. Liquid waste removal – 1,580 tonnes per annum / 350 working days per annum / 13.86 average hours per day / 12 tonnes per vehicle = 0.027 pick-ups per hour or 0.41 pick-ups per weekday (15 hours) and 0.297 pick-ups per day (11 hours) on weekends. This equates to 2.64 pick-ups per week.
5. Staff trips – Peak Hour considered to be arrival at work (AM) all inbound trips – 7 incoming cars and departure from work (PM) all outbound trips – 7 outgoing cars.
6. Concrete trucks – Peak hour – 50,000 tonnes/ 350 working days per annum / 19 hrs per day on weekdays and 11 hours per day on weekends / 15 tonne per load = 10.83 pick-ups per weekday and 6.27 pick-ups per day on Weekends. This equates to 66.68 pick-ups per week.
7. Concrete batching material delivery = 1 per weekday and 1 per day on weekends in non-peak periods. This equates to 7 deliveries per week.

The above calculations are presented the tables below.

Queuing on-site

3. Please confirm there are four queuing areas on the site? Can all these areas accommodate the largest vehicle type?

**Response**

Based on the updated quantity of wastes, the updated traffic calculations and the updated “stacking & queuing procedure”, no queuing is expected. However, there is a provision for 4 queuing locations to accommodate for the 4 different types of trucks to be queued in case there are any delays in the processing of deliveries or pick-ups.

In accordance with the updated contingency plan provided in response to DPIE request, if there is an unexpected short delay for any reason, the vehicles will remain at their locations at that time. If the delay is one hour or less they can move to these queuing locations. If the delay is more than one hour, all deliveries will be stopped and vehicles will be diverted to other facilities that can accept that type of waste.

Construction impacts

4. How many additional construction and operational jobs will be created?
5. Please provide an assessment of the construction related traffic impacts?

**Response**

The additional operational jobs will 8 and the additional construction jobs is likely to be 3-5. During the construction stage, there will be an additional 3-5 light vehicles entering and leaving the site during the normal construction hours. These vehicles belong to the construction companies. The construction related traffic impact is expected to be minimal since these light vehicles will be parked at the existing and/or proposed parking spaces during the construction hours.

<b>Materials</b>	<b>Direction</b>	<b>Existing (tonnes)</b>	<b>Proposed (tonnes)</b>	<b>Increase (tonnes)</b>
Solid Waste	In	19,000	19,000	0
Liquid Waste	In	11,000	125,000	114,000
Solid Waste	Out	17,100	15,500	-1,600
Liquid Waste	Out	1,580	24,300	22,720
Concrete Batching Materials	In	5,250	5,250	0
Concrete Batching	Out	50,000	50,000	0

The below calculations are based on the facility operating 50 weeks (350 days) per year. Assuming delivery of liquid waste will occur during normal proposed operating hours and no delivery of liquid waste between 10.00pm-7.00am.

Materials	Existing					Proposed					Increase			
	Quantity	Yearly No of Trucks	Weekly No of Trucks	Daily No of Trucks Weekday	Daily No of Trucks Weekend	Quantity	Yearly No of Trucks	Weekly No of Trucks	Daily No of Trucks Weekday	Daily No of Trucks Weekend	Yearly No of Trucks	Weekly No of Trucks	Daily Increase Weekdays	Daily Increase Weekends
Solid Waste – In	19,000	679	13.58	2.10	1.54	19,000	679	13.58	2.10	1.54	0	0	0	0
Liquid Waste – In	11,000	917	18.34	2.85	2.09	125,000	10,417	208.34	32.22	23.63	9,500	190	29.37	21.54
Solid Waste - Out	17,100	611	12.22	1.89	1.38	15,500	554	11.08	1.71	1.26	-57	-1.14	-0.18	-0.12
Liquid Waste - Out	1,580	132	2.64	0.41	0.297	24,300	2,025	40.5	6.26	4.59	1,893	37.86	5.85	4.29
Concrete Batching – Out	50,000	3,334	66.68	10.83	6.27	50,000	3,334	66.68	10.83	6.27	0	0	0	0
Concrete Batching – In	5,250	350	7	1	1	5,250	350	7	1	1	0	0	0	0
<b>Total (calculated)</b>	N/A	6150	120.46	19.10	12.58	N/A	17,359	347.18	54.12	38.29	11,209	226.72	35.02	25.71
<b>No of Staff</b>	7					15					8			

Note: there could be a very small (less than 0.5%) deviations in the totals due to rounding of 2-3 decimal points