

TRANSPORT REVIEW

The existing planning consent shows an allowance of 100 HGV visits to site per day – or 200 HGV vehicle movements.

Current Position

Please note all figures below are visits.

To get the baseline figure, we reviewed the year's volumes to date (1st March 2012 to 14th January 2013).

This showed that the average receipt for Elkesley was 1342 tonnes per week. Annualised this is 69,784 tonne.

The week of the 23/4/12 – 29/4/12 showed the closest to the average receipts @ 1344 tonnes. This week has therefore been carefully and thoroughly analysed in the enclosed sheets.

In summary, it shows that 147 skips visited site, and 210 artics left site in the week – i.e. a total of 357 visits per week – or 64.91 visits per day.

The skips brought in 1344 tonnes, and that averages 9 tonnes per visit.

Anticipated Transport Movement

Due to several uncertainties, it has been deemed prudent to provide 3 varying scenarios that allow for the different levels of wood waste being brought onto site.

The Environmental Permit allows 100,000 tonnes of waste wood to be processed per year, and as such we have allowed for that as the very worst case scenario in terms of transport movements.

However, as can be seen for the “Current Position”, we are currently recycling at an amount of 70,000 tonnes per annum, so this scenario has also been included.

Finally, we have also included an interim scenario of 85,000 tonnes of recycling.

These summarise as follows, but the detail is included in the attachments:

Wood Waste Handled per annum	Visits per day
100,000	86.33 Maximum
70,000	69.43 Current recycling level
85,000	77.88 Middle ground

The analysis shows that should levels be held as they are, then a further 6 visits (less than 1 per hour) will result.

Detailed explanation of component calculation:

A summary of these variables is listed at the top of each page relating to the tonnage calculation, but methodology of calculations is summarised below:

1. Required Visits for wood waste deliveries.

This is calculated from the average weight of deliveries currently experienced, divided by the 52 weeks in the year, and then divided over the current 5 ½ days per week that we accept wood waste.

2. Log / wet sawdust deliveries.

This is calculated by looking at the total drying capability the CHP will have (14.4t / hr), divided by the number of hours in the day that drying will be undertaken in (24 hours) and the number of weeks per year that it will be operated (47 weeks due to 5 weeks downtime / maintenance per annum). We have then allowed for the 7 days available to have the logs delivered and the average weight of the payloads on a log trailer (26 tonnes)

3. Shaving deliveries

These are the remaining dry shavings that will still be brought on site from mills local to the Elkesley site. It is economically unviable to take these shavings to other Plevin sites due to the proximity of the sawmills to the Elkesley depot. The quantities referenced are exactly as per current output.

4. Bales / Product leaving site

This is the final product available once drying has been undertaken. It is calculated by looking at the dried weight left of the material, added to the weight of material brought in via 3 above, and then average payload out is derived. The deliveries out are then assumed to occur over 6 days. This summarises to 8 tonnes per hour being left after drying, a process that occurs 24 hrs per day, 7 days a week, 47 weeks a year. The loads are 672 large bales, each of 25kg.

5. Recycled Leaving Site

This is calculated as total amount brought onto site, less the amount that will be processed in the CHP, divided by average payload out (20 tonnes – again auditable via the detailed current analysis enclosed), 5 ½ days per week.

TRANSPORT CALCULATIONS (70,000 tpa)

VARIABLES

WOODWASTE PROCESSED PER ANNUM	70,000
AVERAGE WEIGHT OF CONSIGNMENT DELIVERED IN (SKIPS)	9
NUMBER OF WEEKS IN YEAR THAT WOODWASTE IS BROUGHT IN	52
NUMBER OF WEEKS IN YEAR THAT SHAVING / SAWDUST PRODUCT IS TAKEN OFF SITE	52
NUMBER OF WEEKS IN YEAR THAT DRYER IS USED (net of maintenance)	47
NUMBER OF WET TONNES PER HOUR THAT DRYER CAN TAKE	14.4
ASSUMED AVAILABILITY OF DRYER	
NUMBER OF DRY TONNES PRODUCED ASSUMING VOLUME OF MOISTURE DRIVEN OFF (%) LEAVES	90%
NUMBER OF DAYS PER WEEK THAT LOGS / WET SHAVINGS / SAWDUST WILL BE BROUGHT IN	55%
HOURS PER DAY THAT PRODUCT CAN LEAVE SITE	7
HOURS PER DAY THAT THE DRYER WILL BE USED	24
WEIGHT OF BALES (KILOS)	24
NUMBER OF LARGE BALES ON A TRAILER	25
NO OF LOADS OF DRY SHAVINGS BROUGHT IN PER WEEK	0.03
RECYCLED USED ON SITE (TONNES PER WEEK)	672
AVERAGE WEIGHT OF LORRY LEAVING WITH RECYCLED (TONNES)	350
AVERAGE WEIGHT OF LORRY LEAVING WITH SAWDUST (TONNES)	420
AVERAGE WEIGHT OF LOG CONSIGNMENT	20
NUMBER OF WEEKS IN YEAR THAT WOOD WASTE IS TAKEN OUT	26
	52

TRANSPORT MOVEMENTS SUMMARY
ANTICIPATED TPORT MOVEMENT MODEL

CURRENT
LOOKED AT WEEK OF 23/4/12 - 29/4/12
THE AVERAGE FOR OUR YEAR TO DATE IS 1342 TONNES PER WEEK ONTO SITE (ANNUALISED = 69 784 TONNES)

147 SKIPS CAME ON SITE
210 ARTICLES LEFT SITE (see MB analysis)

FULL WEEK THIS IS 357 "VISITS"
PER DAY (TAKEN AS 5 1/2 PER WEEK)

POST DEVELOPMENT

REQUIRED VISITS WOOD WASTE DELIVERIES
(volume of wood / number of weeks / weight of load)
LOG / wet skidmt DELIVERIES
(Dryer tonnage capacity per hour / no of hours per day / no of days per week / no of weeks per year)
SHAVING DELIVERIES (metals/polystyrene)
BY PRODUCTS LEAVING SITE (metal & waste = 3 & ash = 2)
BALES / PRODUCT LEAVING SITE
(Dry tonnes produced per hour x no of hours per day x no of days per week x no of weeks produced / full trailer weight of sl
RECYCLED LEAVING
(Total amount brought onto site less amount used on site / average weight of recycled (sawing site)

memo : total available for drier
Logs (via shavings)

Per Week (taken as maximum per week for 52 weeks)
Maximum capacity per week assuming 48 weeks per year availability)

DELIVERED 1344 TONNES	9	TONNES / VEHICLE
357		
64.91		current total per day
149.57	PER WEEK	NO OF DAYS
76	PER WEEK	NO OF DAYS
35	PER WEEK	NO OF DAYS
5	PER WEEK	NO OF DAYS
92	PER WEEK	NO OF DAYS
46	PER WEEK	NO OF DAYS
27.20	PER DAY	244.76
10.81	PER DAY	281.13
7.00	PER DAY	70.00
1.00	PER DAY	4.00
15.35	PER DAY	61.41
8.42	PER DAY	202.07

403.68	new maximum per week	69.78	new maximum total per day
700	allowed per week		

281.13
1.967.93
2.688.00

VARIABLES

WOODWASTE PROCESSED PER ANNUM	85,000
AVERAGE WEIGHT OF CONSIGNMENT DELIVERED IN (SKIPS)	9
NUMBER OF WEEKS IN YEAR THAT WOODWASTE IS BROUGHT IN	52
NUMBER OF WEEKS IN YEAR THAT SHAVING / SAWDUST PRODUCT IS TAKEN OFF SITE	52
NUMBER OF WET TONNES PER HOUR THAT DRYER CAN TAKE	47
ASSUMED AVAILABILITY OF DRYER	14.4
NUMBER OF DRY TONNES PRODUCED ASSUMING VOLUME OF MOISTURE DRIVEN OFF (%) LEAVES	90%
NUMBER OF DAYS PER WEEK THAT LOGS / WET SHAVINGS / SAWDUST WILL BE BROUGHT IN	55%
HOURS PER DAY THAT PRODUCT CAN LEAVE SITE	8
HOURS PER DAY THAT THE DRYER WILL BE USED	7
WEIGHT OF BALES (KILOS)	24
NUMBER OF LARGE BALES ON A TRAILER	24
NO OF LOADS OF DRY SHAVINGS BROUGHT IN PER WEEK	0.03
RECYCLED USED ON SITE (TONNES PER WEEK)	672
AVERAGE WEIGHT OF LORRY LEAVING WITH RECYCLED (TONNES)	350
AVERAGE WEIGHT OF LOG CONSIGNMENT	420
NUMBER OF WEEKS IN YEAR THAT WOOD WASTE IS TAKEN OUT	20
	20
	26
	52

TRANSPORT MOVEMENTS SUMMARY
ANTICIPATED TPORT MOVEMENT MODEL

CURRENT:
LOOKED AT WEEK OF 23/4 /12 -29/4/12
THE AVERAGE FOR OUR YEAR TO DATE IS 1342 TONNES PER WEEK ONTO SITE (ANNUALISED - 69 784 TONNES)

147 SKIPS CAME ON SITE
210 ARTICS LEFT SITE (see MB analysis)
FULL WEEK THIS IS 357 "VISITS"
PER DAY (TAKEN AS 5 1/2 PER WEEK)

DELIVERED 1344 TONNES 9 TONNES / VEHICLE

357
64.91 current total per day

POST DEVELOPMENT :

REQUIRED VISITS WOOD WASTE DELIVERIES (volume of wood / number of weeks / weight of load)	181.62	PER WEEK	NO OF DAYS	5.5	33.02	PER DAY	297.20	TONNES PER DAY
LOG / wet skid DELIVERIES (Dryer tonnage capacity per hour / no of hours per day / no of days per week / no of weeks per year)	76	PER WEEK	NO OF DAYS	7	10.81	PER DAY	281.13	TONNES PER DAY
SHAVING DELIVERIES (metre x metre x metre)	35	PER WEEK	NO OF DAYS	5	7.00	PER DAY	70.00	TONNES PER DAY
BY PRODUCTS LEAVING SITE (metal & waste = 3 & ash =2)	5	PER WEEK	NO OF DAYS	5	1.00	PER DAY	4.00	TONNES PER DAY
BALES / PRODUCT LEAVING SITE (Dry tonnes produced per hour x no of hours per day x no of days per week x no of weeks produced / full trailer weight of sl	92	PER WEEK	NO OF DAYS	6	15.35	PER DAY	61.41	TONNES PER DAY
RECYCLED LEAVING (Total amount brought onto site less amount used on site / average weight of recycled leaving site)	61	PER WEEK	NO OF DAYS	5.5	11.04	PER DAY	265.01	TONNE PER DAY

450.16 new maximum per week 78.23 new maximum total per day

700 allowed per week

memo : total available for drier
Logs (no shavings)

281.13

1,967.93

2,688.00

Per Week (taken as maximum per week for 52 weeks)
Maximum capacity per week assuming 48 weeks per year availability)

VARIABLES

TRANSPORT MOVEMENTS SUMMARY
ANTICIPATED TIPROT MOVEMENT MODEL
CURRENT
LOOKED AT WEEK OF 23/4/12 - 29/4/12
THE AVERAGE FOR OUR YEAR TO DATE IS 1342 TONNES PER WEEK ONTO SITE (ANNUALISED = 69 784 TONNES)

CURRENT:

47 SKIPS CAME ON SITE
10 ARTICLES LEFT SITE (see MB analysis)
FULL WEEK THIS IS 357 "VISITS"
PER DAY (TAKEN AS 5.12 PER WEEK)

REQUIRED VISITS WOOD WASTE DELIVERIES
 Volume of wood (number of weeks / weight of load)
 OQ / wet solid DELIVERIES
 Dry tonnage capacity per hour / no of hours per day / no of days per week / no of weeks per year)
 HAVING DELIVERIES (metre/cycle/metric/ton)
 BY PRODUCTS LEAVING SITE (metal & waste = 3 & ash = 2)
 ALES / PRODUCT LEAVING SITE
 Dry tonnes produced per hour x no of hours per day x no of days per week x no of weeks produced / full trailer weight of at
 Recycled LEAVING
 Total amount brought onto site less amount used on site / average weight of recycled leaving site)

per Week (taken as maximum per week for 52 weeks)
Maximum capacity per week assuming 48 weeks per year availability)

Week (taken as maximum per week for 52 weeks)
maximum capacity per week assuming 48 weeks per year

[illegible]