

INDIGO ACOUSTICS

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Attention: Paul Godsell

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RE: CENTRAL WEST REGIONAL ROAD/RAIL FREIGHT TERMINAL
RESPONSE TO INDEPENDENT ASSESSMENT

Existing L_{Aeq} Noise Levels

The existing averaged $L_{Aeq,15min}$ noise levels are summarised in Table 3-2.

Table 3-2 Summary of Measured $L_{Aeq,15min}$ Noise Levels

Location	Daytime 7am-6pm	Evening 6pm-10pm	Night time 10pm-7am
House on site	58	58	58
Gold Panner Motor Inn	59	58	56
13 Ashworth Drive	56	54	51
The Scots School	62	59	59
22 Cross Street Raglan	58	58	55

Train Noise Over Prediction

I agree that the RIC noise model over predicts train noise at these distances and have revised the predictions based on the train sound power levels contained in the EIS for the International Logistics Centre at Enfield. The predictions are shown in the tables in the section below for each of the four stages.

Predicted Noise Levels for the Four Stages**Stage 1 Private Siding and Hardstand Loading Area****Table 1 Predicted Noise Levels from Combined Operations Stage 1 (dBA)**

Predicted $L_{Aeq,15min}$	Gold Panner	Diamond Close	Sundowner Drive	Ashworth Estate	Scots School
Train on the private siding	31	35	33	27	23
Loading	35-40	38-43 (1)	34-39	28-33	26-31
Combined noise level	36-40	40-44 (2)	37-40	31-34	28-32
$L_{Aeq,15min}$ daytime noise goal	47	42	42	42	45

The numbers in brackets indicate the level of exceedence above the daytime noise goals.

Stage 2 Private Siding, Hardstand Loading Area and Warehousing**Table 2 Predicted Noise Levels from Combined Operations Stage 2 (dBA)**

Predicted $L_{Aeq,15min}$	Gold Panner	Diamond Close	Sundowner Drive	Ashworth Estate	Scots School
Train on the private siding	21	24	33	15	23
Loading	25-30	27-32	33-38	19-24	26-31
Warehouse	44	44(2)	37	37	23
Combined noise level	44	44(2)	40-42	37	29-33
$L_{Aeq,15min}$ daytime noise goal	47	42	42	42	45

Stage 3 Private Siding, Hardstand Loading Area, Warehousing and Service Station**Table 3 Predicted Noise Levels from Combined Operations Stage 3 (dBA)**

Predicted $L_{Aeq,15min}$	Gold Panner	Diamond Close	Sundowner Drive	Ashworth Estate	Scots School
Train on the private siding	21	24	33	15	23
Loading	25-30	27-32	33-38	19-24	26-31
Warehouse	44	44(2)	37	37	23
Service Station	4	15	9	6	0
Combined noise level	44	44(2)	40-42	37	29-33
$L_{Aeq,15min}$ daytime noise goal	47	42	42	42	45

Stage 4 Fully Constructed**Table 4 Predicted Noise Levels from Combined Operations Stage 4 (dBA)**

Predicted $L_{Aeq,15min}$	Gold Panner	Diamond Close	Sundowner Drive	Ashworth Estate	Scots School
Train on the private siding	21	24	33	15	23
Loading	25-30	27-32	33-38	19-24	26-31
Warehouse	44	44(2)	37	37	23
Highway Uses	39	36	28	28	10
Service Station	4	15	9	6	0
Combined noise level	46	45 (3)	41	38	32
$L_{Aeq,15min}$ daytime noise goal	47	42	42	42	45

The above predictions generally meet the noise criteria. The exception is at the closest houses in Diamond Close where noise levels could be up to 3dBA above the criteria. The noise source is trucks at the warehouses. There is no practical noise control which can be applied to reduce this noise. This location is already impacted by truck noise from the Great Western Highway. Table 3-2 above, shows that existing LAeq,15min noise levels are already higher than these predicted noise levels so the predicted exceedence from truck noise is unlikely to be noticed.

Figure Showing Assumed Location of Plant

It is not practical to show the locations of all plant and equipment on a plan as I have assumed different scenarios for each residential location. I have done this so as to predict the worst case for each receiver. The descriptions of plant locations are summarised below.

Train - A train at 20kph will take approximately two minutes to run onto the siding on the site. At different receiver locations a different section of the track will dominate the noise level.

Loading area - Predictions have been made based on two forklifts operating simultaneously, one at the closest point to each residence and the other 300m further along the loading strip or half way along the 600m long loading strip.

Warehouses - Trucks would arrive at the front (northern side) and be unloaded using small forklifts. Inside the warehouses the containers would be filled prior to being moved out to the hardstand area. Each warehouse may have an office area which may be air conditioned. There may also be other items of mechanical equipment. It has been assumed that each warehouse will, in any 15 minute period, have 2 trucks, a forklift operating and an air conditioner running.

Service Station – The mechanical plant includes building air conditioning, refrigeration and compressor are assumed to be housed in an enclosure behind the building. One truck and one car in any 15 minute period has been assumed.

Highway uses - Trucks would unload on the southern side and so be significantly shielded by the buildings. It has been assumed that the air conditioners will be located on the southern side of the buildings so significantly shielded from the residential locations. Car parking would be on the northern side between the stores and the highway. This will be the main noise source and it has been assumed that each will, in any 15 minute period, have 5 cars arriving and departing.

Regards