Table 7.6   Quantities of Air Pollutants Generated per Kilometre Travelled by Heavy Goods vehicles (grams)

Pollutant	Emission Factors
NOx	3.84
RSP	0.53
CO_2	1,033

7.5.29   Using the data on changes in truck kilometres presented in Table 7.5 above together with the data on amounts of air pollutant emissions produced per kilometre travelled by heavy goods vehicles, the quantities of air pollutants that could be potentially 'saved' or 'generated' from the change in lorry movements associated with the implementation of the PRL were calculated.

7.5.30   The potential air quality implications are presented in Table 7.7 below.

Table 7.7   Potential Daily Emissions 'Savings' (tonnes)

Scenario	Maximum			Minimum		
	NOx	RSP	CO_2	NOx	RSP	CO_2
High	0.120	0.016	32.2	(0.028)	(0.004)	(7.5)
Central	0.079	0.011	21.3	(0.018)	(0.003)	(4.9)
Low	0.051	0.007	13.8	(0.010)	(0.001)	(2.6)

Note: (1)   Under the 'Minimum' column, figures in brackets represent increases in emissions.

7.5.31   Using an annualisation factor of 333 the potential annual savings in emissions can be calculated. These are presented in Table 7.8.

Table 7.8   Potential Annual Emissions 'Savings' (tonnes per year)

Scenario	Maximum			Minimum		
	NOx	RSP	CO_2	NOx	RSP	CO_2
High	39.9	5.3	10,722.6	(9.3)	(1.3)	(2,497.5)
Central	26.3	3.7	7,092.9	(6.0)	(1.0)	(1,631.7)
Low	17.0	2.3	4,595.4	(3.3)	(0.3)	(865.8)

Note: (1)   Under the 'Minimum' column, figures in brackets represent increases in emissions.

Discussion

7.5.32   It can be seen from the above that there are potential air quality savings (i.e. benefits) that could be accrued from the reduction in lorries associated with scenario whereby there is a maximum shift to transporting Cross Boundary freight from road to rail. Conversely, in the scenario whereby there is a net increase in lorries to transport freight from the PRT to and from the container port berths, there is a consequential potential increase in emissions, and thus a potential adverse impact.