

WASKO SA
6 Berbeckiego Street
44-100 Gliwice
Tel.: (+48 32) 33-25-500; fax: (+48 32) 33-25-505
e-mail:wasko@wasko.pl <http://www.wasko.pl>

Project no: DAE/2452/RŚ/2006

Employer: Drogowa Trasa Średnicowa SA
10 Mieszka I Street
40-877 Katowice

**Environmental Impact Report
of Cross-Regional Highway „WEST”
Z2 section from km 13+000 to km 15+800 in Zabrze
ANNEX**

1. Scope of the document

This Annex has been developed in relation to the comments made by the State Voivodeship Sanitary Inspector received in the letter no NZ/531/I/4425/127/06, NZ.524-945/06 of 04.09.2006 on environmental conditions for the project” Construction of Cross-Regional Highway WEST – Z2 section from 13+000 to km 15+800 in Zabrze (Enclosure no 1).

2. Summery

Due to fault assessment made for earlier calculations of pollution and noise spreading from the road under design quoted in the Report, there has been a need to reanalyze its impact range. The calculations for nitrogen dioxide spreading in the Report present the most unfavourable variant, since the following units were analyzed:

- maximum unit indicators of emission from vehicles (stable up to 2015),
- current pollution background in the perspective of 2015,
- condition to meet the excess frequency for maximum concentrations per hour,
- annual average compass card (year, winter, summer),
- maximum traffic volume forecast.

At present there is no forecast data on exhaust fumes emission in 2015. There are commonly known the decisions by the European Commission for Environmental Protection that announces a new standard for limits of exhaust fumes emission, so called Euro standards (currently since 01.01.2005 Euro4 has been valid), from 01.09.2009 Euro5 is planned and further Euro6 from 2014 and 2015. This information was announced in September 2006 on the website of the Committee on the Environmental, Public Health and food Safety. Reduction in emission by 20% in the first phase and 80% in the second one is estimated. For calculations made in this Annex the reduction by 20% was considered.

In the report there were calculations made for 2015 perspective with consideration of pollution background specified by the Voivodeship Inspectorate for Environmental Protection in Katowice based on measurements of 2005.

At present pollution backgrounds were compared over last years and so in the subsequent years there has been recorded a decrease of average concentrations of air pollutants, nitrogen dioxide in particular. Thus, there was assumed in this Annex that pollution background in 2015 is 80% of 2005 pollution background.

Determining the Highway impact scope according to maximum one-hour concentrations is fault-laden . Annual average concentrations are much more representative to determine the impact scope, which was applied in this Annex.

The same traffic forecasts, resulting from fault-laden estimations, were used both in the Report and Annex; the date was not changed in this point as it is hart to foresee the traffic generators in 2015.

The calculations for pollutants spreading show that the scope of excess emission of nitrogen dioxide does not occur within the residential area and is the following:

- from ca 45m to 55m from the road axis to the north and from ca 35m to ca 50m from the road axis to the south – for calculations with pollutions background of 80% of current values,

- maximum ca 25m to ca 35m from the road axis to the north and maximum 20m from the road axis to the south or shall not pass the project boundaries – for calculations not considering pollution background.

In order to reduce the noise level, that is high despite application of noise barriers, at the Highway junction with Piotra Skargi Street near the school and housing buildings there were calculations made for application of pavement of special properties. SMA pavement is recommended, the surface layer of which consists of fine granulation stone with preservation of required durability. Application of this pavement shall reduce noise by 5 dB(a). Calculations of noise level upon application of this special pavement show permissible noise level by the school and housing buildings.

This Annex should be interpreted jointly with the “Environmental Impact Report of Cross-Regional Highway „WEST” Z2 section from km 13+000 to km 15+800 in Zabrze” developed by WASKO SA in May 2006.