# **Submission/Opposition - WHTBL**

The EIS is highly deficient. It contains incorrect statements, baseless and/or false assumptions/starting points, unrepresentative data sets, and omits critical information.

As a result, the conclusions in the EIS significantly misstate the actual real-world impacts, in particular the adverse health impacts of Sensitive Receptors due to changes in air quality.

I therefore ask that the project be either:

- (A) rejected due to gross deficiencies in the EIS, or
- (B) be required to redo the EIS, clearly and fully addressing ALL the identified deficiencies that are detailed on the following pages, and the revised EIS published for community review and comment prior to formal assessment commencing.

#### 1. Critical Information Omitted

There are a number of areas where critical information has been omitted making it impossible to assess the impacts of the project. Some of the areas of particular note are:

#### 1.1 Lack of Vital Detail on Miller/Falcon Street Upgrade and Its Impact on Children

The plans indicate changes to the Falcon and Miller Streets interchange through to Carlow Street in North Sydney as part of the Warringah Freeway upgrade, but provides no detail whatsoever about what those changes are. The EIS itself indicates that they do not yet know what the upgrade will actually be.

This area is a major pedestrian thoroughfare for literally thousands of school students and pre-school aged children every school day, as well as other members of the local community. The "upgrade" runs along St Leonard's Park, which serves as a vital sport and recreation facility for thousands of students at nearby schools as well as hundreds of younger children who live in the local area.

It is impossible to assess any adverse impacts on all these children from this "upgrade" without first knowing what it actually entails.

# 1.2 Sensitive Receptors Omitted in Ridge Street North (WHT9) Construction Impacts

Table 6-22 detailing the construction impacts has only identified a very small section of the Sensitive Receptors directly impacted by the WHT9 Support Site and thus significantly understates the actual impact. The impacts assessment fails to identify many schools that use St Leonard's Park on a regular basis, including use of the impacted area for regular school sporting activities as well as school sporting carnivals. The construction will deprive many of these schools of vital sporting facilities and provides no viable alternative.

The impacted schools that are omitted from the table include: Marist College North Shore, North Sydney Boys High, North Sydney Girls High, Cammeraygal High, Anzac Park Primary, Neutral Bay Public, North Sydney Public, and St Angelo Mercy, as well as KU Grandstand preschool. The total student count of the omitted Sensitive Receptors is around 7,000. This equates to a total impacted student population that is 500% greater than the EIS indicates.

The statements in Human Health incorrectly states that there are alternative venues in close proximity, when no such suitable venue exists or is available for use. The severe undersupply of sporting infrastructure for the 10,000+ school students in the LGA is well documented and presents significant challenges for many of the less well-off schools.

**Requested Action:** The EIS should be redone, ensuring all missing Sensitive Receptors are included and made available to general public for review and comment prior to formal assessment of the EIS commencing.

## 2. Modelled Emissions Impact Based on Incorrect Assumptions/Starting Points

The modelled emissions, air quality, and resultant human health impacts are based on the assumption that advances in combustion engine technology will reduce emissions of nitrogen oxide by 52% and PM2.5 by 21% by 2037. This assumption is directly contradicted by current fact.

Advances in combustion engine emissions are based on the interdependency of the engine technology itself coupled with the prevailing fuel standard that applies to the fuel that the engine combusts. The assumed emissions improvement that has been modelled will not occur if one half of this interdependency is absent.

Historical air quality data from the EPA clearly shows that every significant reduction in vehicle emissions over the past decades has directly followed the introduction of a stricter fuel standard. The current position of the Federal Government is to NOT introduce Euro 6, the fuel standard that is already in used across Europe. Additionally, there has been absolutely no action whatsoever by the Federal Government to look in to the Euro 7 fuel standard (currently under development).

Furthermore, the 2018 Regulatory Impact Statement that examines different fuel options explicitly recommends against adopting Euro6 standards. From the RIS conclusions... "The best option does not propose Australia's fuel parameters be fully aligned with those of Europe or any other jurisdiction."

Any meaningful improvements in emissions from advances in combustion engine technology is directly dependent on the adoption of the fuel standard for which the engine has been designed. There is no logical or scientific basis for making an assumption that emissions will be reduced given current policies. However, this is precisely what the EIS has done in Air Quality and Human Health. The result is air quality modelling that dramatically understates the actual, real-world changes.

**Requested Action:** All Air Quality modelling, analysis, and assessments by the Chief Health Officer should be redone excluding the assumed reductions in emissions due to technology advancements. This should be made available to general public for review and comment prior to formal assessment of the EIS commencing.

#### 3. Modelled Sensitive Receptors Not Representative of Full Set

Section 12.2.3 Air Quality states that 42 Sensitive Receptors around 500-600m either side of the project area were modelled for air quality impacts. Furthermore, it states that these 42 sites, "were taken to be representative of..." the overall set.

The 42 modelled sites detailed in figure 8-10 are not at all representative of the overall set of Sensitive Receptors. The greatest density of adversely impacted Sensitive Receptors have been completely excluded from the air quality and human health modelling, while Sensitive Receptors far outside the stated 500-600m distance from the project have been included....

The area bounded by bounded by Ernest Street, Miller Street, and the Pacific Highway in the North Sydney LGA contains the one of the highest concentration of childcare and kindergartens per m2 anywhere in Australia, the highest concentration of primary schools per m2 anywhere in Australia, as well as the highest concentration of secondary schools per m2 anywhere in Australia. Together, this area that has been excluded from all air quality and health impacts modelling represents more than 50% of all school students and childcare and kindergarten attendees in the locally impacted area. (Source: <a href="www.myschool.edu.au">www.myschool.edu.au</a>) The schools include: St Mary's Primary, Cammeraygal High School, North Sydney Boys High, North Sydney Girls High, Marist College, St Angelo Mercy, and North Sydney Public School. All of these Sensitive Receptors appear to be adversely impacted by an increase in PM2.5 as is indicated in figure I-45 from the Air Quality Appendix.

The modelling has also included Sensitive Receptors that lie far outside the stated 500-600m distance from the project zone. These include Willougby Public School (around 1300m from the project zone), as well as Mosman Public School and Roseville Public School (both around 2400m from the project zone).

By excluding the greatest density and proportion of Sensitive Receptors in close vicinity to the project zone from all air quality and health modelling, while at the same time including Sensitive Receptors far away from the project zone, the EIS presents a completely distorted picture of the likely adverse impacts of the project.

See following pages 5-7 that demonstrate the above.

**Requested Action:** All Air Quality modelling, analysis, and assessments by the Chief Health Officer should be redone so as to: (A) include all Sensitive Receptors in the area bounded by Miller Street, Ernest Street, and the Pacific Highway inclusive (within the "purple cloud" in figure I-45 that shows an increase in PM2.5), and (B) exclude all Sensitive Receptors that are more than 1000m from the project footprint. This should be made available to general public for review and comment prior to formal assessment of the EIS commencing.

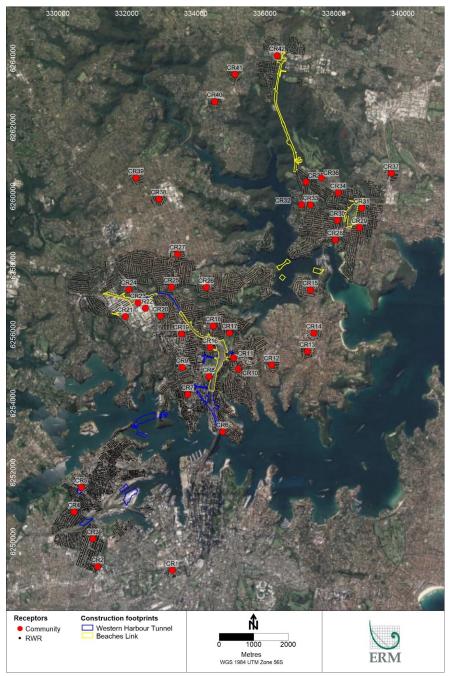


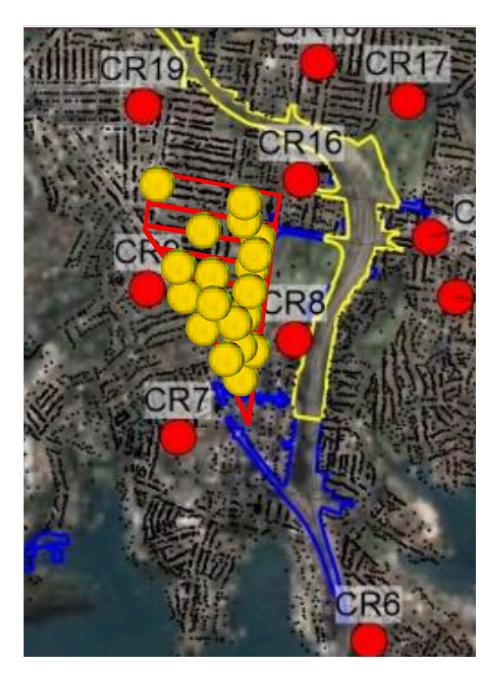
Figure 8-10 Modelled discrete receptor locations and construction footprints

Cumulative Increase in PM2.5. Note: the purple "cloud" covering the area bounded by Miller Street, Ernest Street, and Pacific Highway.



Figure I-45 Contour plot of change in annual mean PM<sub>2.5</sub> concentration in 2027 cumulative scenario (all sources, 2027-DSC minus 2027-DM)

Note: all Sensitive Receivers in the area bounded by Miller Street, Ernest Street, and Pacific Highway have been excluded from modelling, despite this student population representing over 2/3rds of the total in the area.





Area excluded from Air Quality and Human Health impacts modelling.

Sources: MySchool.edu.au, CareforKids,com.au



Sensitive Receptors (19 in total) excluded from Air Quality and Human Health impacts modelling, representing over 2/3rds of all school students and child care attendees in the area.

# 4. Incorrect Assumptions Used in Human Health Assessment

The Chief Health Officer explicitly indicates in the letter dated 8/11/19 that the conclusions made in Human Health are dependent on a number of assumptions. Many of those assumptions are either incorrect or completely without base, including:

4.1 That alternative local sporting facilities exist and are available for use by local schools during the construction period when significant sections of St Leonard's Park will be rendered unsuitable for those activities

(As evidenced in point 1.2 above, there is no factual basis for making this assumption.)

4.2 That advances in combustion engine technology will lead to a significant reduction in emissions in WHTBL impact area

(As is evidenced in point 2 above, there is no factual basis for making this assumption; in fact, the only evidence that currently exists is that this will not be the case in Australia.)

4.3 That the modelled Sensitive Receptors are representative of the full set

(As evidenced in point 3 above, there is no factual basis for making this assumption. The list of modelled Sensitive Receptors is highly unrepresentative of the actual set. It has excluded the vast majority of adversely impacted children who also constitute a clear overall majority of all children within the local area.)

## 4.4 That there will be, "a reduction in traffic on most surface roads"

(The EIS contains provides no evidence from other major road projects to support this assertion. However, assessments done by various leading traffic academics demonstrate the exact opposite to be true: i.e. that any reduction in surface traffic would be purely transitory in nature.)

**Requested Action:** As there is no credible evidence to support any of these assumptions that form the basis of analysis and conclusions in Human Health, all Air Quality modelling, analysis, and assessments by the Chief Health Officer should be redone excluding ALL these incorrect/baseless assumptions. This should be made available to general public for review and comment prior to formal assessment of the EIS commencing.