

EXHIBIT A



TO: Irvine & Conner, PLLC
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RE: NHHIP Draft Mobile Source Air Toxics Quantitative Technical Report (May 2018)

To Whom It May Concern:

The U.S. EPA has identified nine hazardous air pollutants – called Mobile Source Air Toxics or MSATs – generated by cars, trucks, and other mobile sources that pose a high enough risk to human health to warrant regulation. Seven of the nine are known or suspected human carcinogens. Other potential health effects from exposure include: respiratory diseases; blood diseases; hearing loss; damage to the kidneys; and, damage to the liver.

The Federal Highway Administration (FHWA) requires some highway projects to assess the impact that design alternatives could have on the emission trends of these pollutants. The Texas Department of Transportation (TXDOT) draft technical report (published May 2018) correctly states (p. 4) that a quantitative analysis is required by FHWA to assess the increase and/or reduction in MSAT emissions resulting from the NHHIP project; because, the project adds capacity, and the projected annual average daily traffic (AADT) will exceed 140,000 vehicles per day in the design year (2040).

While TXDOT's draft analysis appears to comply with FHWA minimum requirements, it falls short of assessing the unique health impacts on the communities that will be affected by the expansion.

Specifically:

- **Aggregating or averaging changes in emissions across the entire study area fails to identify 'hot spots' where hazardous air pollutants are projected to surpass allowed levels.** By aggregating emissions across the 8-county transportation network, the assessment does not address the areas along the corridor where MSATs are projected to increase by 5% or more. It is possible that sensitive groups – such as children, the elderly, and people suffering from chronic diseases like asthma or heart disease – congregate in some locations where MSAT concentrations are projected to increase substantially.

- **The analysis fails to disclose baseline MSAT emissions along each segment of roadway. This information is necessary to interpret the significance of a percentage increase or reduction in the likelihood of exposure.** The percentage increase is displayed section-by-section on a map (Figure 2, p. 10) without providing estimates of current MSAT emissions at that scale to allow for comparison. It is important to understand whether sensitive populations are located in areas that are already exposed to high levels of toxic air pollution and whether the NHHIP project expects to increase or reduce that exposure.
- **A more detailed estimate of exposure to communities is needed.** The analysis also fails to provide a more detailed estimate of the percentage increase/decrease of these concentrations beyond the FHWA required $\pm 5\%$. Based on the May 2018 report, it is impossible to know whether some areas will experience double digit increases or decreases in emissions. This is a particularly important consideration along the NHHIP corridor, because increases in MSAT concentrations would overwhelmingly affect environmental justice communities; and, an analysis of the impacts to these communities is also a requirement of the NEPA process.

These oversights should be resolved by:

1. adding additional categories to the quantitative analysis (beyond 0%-5% and 5% or more) to demonstrate the distribution of higher levels of MSAT emissions;
2. making all information used to perform the quantitative analysis public – including the model, data, and shapefiles used to create Figure 2: Affected Network Roadway Links (p.10); and,
3. conducting further investigation into the distribution of MSAT increases to determine if the project reinforces conditions of environmental inequality.

Finally, Air Alliance Houston has been funded to perform a Health Impact Assessment (HIA) of the NHHIP. A HIA is an objective methodology designed to establish ways in which a proposed policy or project could benefit and/or harm community health. We encourage TXDOT's participation in the assessment process and strongly recommend incorporating the assessment findings and recommendations into the Final EIS.