

## Supplemental Materials

### Emissions Inventory

A great deal of information regarding the base case and the future case emissions inventories and the proposed control scenarios can be found in the documentation of the State Implementation Plan for the Houston/Galveston/Brazoria (HGB) ozone non-attainment area (TCEQ, 2010a). Here we offer only a summary of the impact of existing and proposed control measures on total emissions. Table S.1 below provides an average day total for each of the source categories, for both the base case, and the future case before and after SIP specific controls are applied.

**Table S.1.** Summary of emissions inventory for a representative day for the 2006 Base case, the 2018 baseline, and the 2018 control strategy.

| Source Type | 2006 Base Case |        |         | 2018 Baseline  |         |         | 2018 Control Strategy |         |         |
|-------------|----------------|--------|---------|----------------|---------|---------|-----------------------|---------|---------|
|             | NOx            | VOC    | CO      | NOx            | VOC     | CO      | NOx                   | VOC     | CO      |
|             | (tons per day) |        |         | (tons per day) |         |         | (tons per day)        |         |         |
| Point       | 172.86         | 241    | 132.25  | 154.36         | 292.05  | 222.06  | 154.36                | 289.35  | 222.06  |
| On-Road     | 197.28         | 99.39  | 1115.23 | 50.76          | 50.39   | 733.17  | 49.21                 | 50.39   | 733.17  |
| Non-Road    | 79.33          | 61.41  | 572.37  | 33.62          | 30.18   | 427.56  | 32.92                 | 30.18   | 427.56  |
| Off-Road    | 73.26          | 5.75   | 97.3    | 85.66          | 6.68    | 44.71   | 85.66                 | 6.68    | 44.71   |
| Area        | 36.35          | 528.99 | 134.59  | 42.04          | 650.09  | 158.99  | 42.04                 | 650.09  | 158.99  |
| Totals      | 559.08         | 936.54 | 2051.74 | 366.44         | 1029.39 | 1586.49 | 364.19                | 1026.69 | 1586.49 |

Control measures include a suit of regulations that have previously been enacted in Texas and are being updated to facilitate further emissions reductions. The change in emissions totals between the 2006 base case and the 2018 baseline show the impact of existing control measures on future case emissions. The differences between the 2018 Baseline and the 2018 Control strategy above represent updates to existing control measures designed to further reduce emissions and bring the region into attainment of the 1997 ozone standard of 84 ppb.