

APPENDIX 8.7 - Detailed NO_x Process Calculations

A) 99.8thile hourly background total oxidant (O₃ & NO₂) + 0.05 x (99.8thile process contribution NO_x)

| Year | 99.8 th ile hourly background total oxidant (O ₃ & NO ₂) | 99.8 th ile process contribution NO _x | NO ₂ PEC | |
|------|--|---|---------------------|----------------|
| 2007 | 192.4 | 90.9 | 197.0 | |
| 2014 | 192.4 | 85.4 | 196.7 | |
| 2015 | 192.4 | 86.7 | 196.8 | |
| 2016 | 192.4 | 82.9 | 196.6 | |
| 2017 | 192.4 | 78.5 | 196.4 | |
| 2018 | 192.4 | 77.9 | 196.3 | |
| | | | | Minimum |
| | | | | 138.7 |
| | | | | 133.1 |
| | | | | 134.4 |
| | | | | 130.6 |
| | | | | 126.3 |
| | | | | 125.7 |

B) 1 99.8thile process contribution NO_x + 2 x (annual mean background NO₂)

| Year | 99.8 th ile process contribution | Annual Mean Background NO ₂ | NO ₂ PEC | |
|------|---|--|---------------------|----------------|
| 2007 | 90.9 | 23.87 | 138.7 | |
| 2014 | 85.4 | 23.87 | 133.1 | |
| 2015 | 86.7 | 23.87 | 134.4 | |
| 2016 | 82.9 | 23.87 | 130.6 | |
| 2017 | 78.5 | 23.87 | 126.3 | |
| 2018 | 77.9 | 23.87 | 125.7 | |
| | | | | Maximum |
| | | | | 138.7 |
| | | | | 133.1 |
| | | | | 134.4 |
| | | | | 130.6 |
| | | | | 126.3 |
| | | | | 125.7 |

B) 2 99.8thile hourly background NO₂ + 2 x (annual mean process contribution NO_x).

| Year | 99.8 th ile hourly background NO ₂ | Annual Mean Process NO _x | NO ₂ PEC |
|------|--|-------------------------------------|---------------------|
| 2007 | 105.10 | 1.19 | 107.5 |
| 2014 | 105.10 | 1.34 | 107.8 |
| 2015 | 105.10 | 1.23 | 107.6 |
| 2016 | 105.10 | 1.16 | 107.4 |
| 2017 | 105.10 | 1.35 | 107.8 |
| 2018 | 105.10 | 1.31 | 107.7 |