

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
 Running Exhaust Emission Factor (gram/mile/vehicle) - NO (Year 2033 with e-PC Scenario)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                                   |                                  |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|-----------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles <= 3.5t | 06 - Heavy Goods Vehicles <= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.49310                                | 0.07387                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                           | 2.95122                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 2             | 0.49310                                | 0.07387                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                           | 2.95122                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 3             | 0.49310                                | 0.07387                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                           | 2.95122                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 4             | 0.49310                                | 0.07387                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                           | 2.95122                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 5             | 0.48473                                | 0.07323                | 2.24214   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25533                      | 1.43022                      | 2.94252                           | 2.95089                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 6             | 0.47653                                | 0.07194                | 2.00041   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25453                      | 1.43022                      | 2.94204                           | 2.95057                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 7             | 0.46848                                | 0.07017                | 1.81647   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25389                      | 1.43022                      | 2.94156                           | 2.95025                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 8             | 0.46059                                | 0.06872                | 1.67098   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25324                      | 1.43022                      | 2.94108                           | 2.95009                         | 1.31403                           | 1.98883                          | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 9             | 0.45319                                | 0.06695                | 1.55221   | 1.63719                        | 2.14091                         | 4.78860                         | 4.85475                      | 2.13302                      | 1.33543                      | 2.78239                           | 2.79092                         | 1.24322                           | 1.88116                          | 4.30709                           | 4.42006                        | 2.68825                  | 11.69979                 | 1.38162                |
| 10            | 0.44579                                | 0.06500                | 1.45324   | 1.52888                        | 2.02633                         | 4.78136                         | 4.85475                      | 2.01973                      | 1.25239                      | 2.63353                           | 2.64126                         | 1.17675                           | 1.78042                          | 4.28633                           | 4.38675                        | 2.68825                  | 10.96671                 | 1.31194                |
| 11            | 0.43871                                | 0.06389                | 1.36891   | 1.43682                        | 1.92268                         | 4.57022                         | 4.64247                      | 1.91721                      | 1.18158                      | 2.49899                           | 2.50607                         | 1.11672                           | 1.68981                          | 4.09256                           | 4.18510                        | 2.57077                  | 10.36466                 | 1.25159                |
| 12            | 0.43195                                | 0.06260                | 1.29649   | 1.37664                        | 1.82821                         | 4.10849                         | 4.16997                      | 1.82371                      | 1.12043                      | 2.37604                           | 2.38279                         | 1.06217                           | 1.60741                          | 3.68588                           | 3.77456                        | 2.30925                  | 9.38746                  | 1.19880                |
| 13            | 0.42535                                | 0.06116                | 1.23308   | 1.28876                        | 1.74163                         | 3.72113                         | 3.77391                      | 1.73761                      | 1.06700                      | 2.26322                           | 2.26918                         | 1.01196                           | 1.53177                          | 3.34422                           | 3.42967                        | 2.08973                  | 8.54127                  | 1.15181                |
| 14            | 0.41891                                | 0.05987                | 1.17724   | 1.22809                        | 1.66165                         | 3.39185                         | 3.43724                      | 1.65779                      | 1.01952                      | 2.15877                           | 2.16425                         | 0.96545                           | 1.46209                          | 3.05357                           | 3.13613                        | 1.90337                  | 7.88739                  | 1.10980                |
| 15            | 0.41264                                | 0.05858                | 1.12751   | 1.17418                        | 1.58730                         | 3.10861                         | 3.14772                      | 1.58359                      | 0.97752                      | 2.06189                           | 2.06656                         | 0.92215                           | 1.39723                          | 2.80332                           | 2.88330                        | 1.74292                  | 7.35518                  | 1.07166                |
| 16            | 0.40668                                | 0.05745                | 1.08277   | 1.12574                        | 1.51777                         | 2.86270                         | 2.89650                      | 1.51407                      | 0.93954                      | 1.97096                           | 1.97547                         | 0.88192                           | 1.33688                          | 2.58605                           | 2.66330                        | 1.60387                  | 6.90795                  | 1.03706                |
| 17            | 0.40089                                | 0.05633                | 1.04253   | 1.08228                        | 1.45259                         | 2.64737                         | 2.67634                      | 1.44873                      | 0.90526                      | 1.88583                           | 1.88969                         | 0.84410                           | 1.28023                          | 2.39567                           | 2.47050                        | 1.48204                  | 6.52396                  | 1.00520                |
| 18            | 0.39525                                | 0.05520                | 1.00600   | 1.04269                        | 1.39112                         | 2.45731                         | 2.48225                      | 1.38725                      | 0.87403                      | 1.80552                           | 1.80874                         | 0.80837                           | 1.22696                          | 2.22733                           | 2.30024                        | 1.37470                  | 6.18823                  | 0.97591                |
| 19            | 0.38978                                | 0.05423                | 0.97253   | 1.00664                        | 1.33302                         | 2.28849                         | 2.31005                      | 1.32900                      | 0.84539                      | 1.72956                           | 1.73246                         | 0.77474                           | 1.17659                          | 2.07782                           | 2.14880                        | 1.27911                  | 5.89245                  | 0.94859                |
| 20            | 0.38447                                | 0.05327                | 0.94163   | 0.97365                        | 1.27798                         | 2.13769                         | 2.15604                      | 1.27363                      | 0.81900                      | 1.65762                           | 1.66004                         | 0.74271                           | 1.12895                          | 1.94409                           | 2.01329                        | 1.19381                  | 5.62804                  | 0.92312                |
| 21            | 0.37932                                | 0.05230                | 0.91346   | 0.94324                        | 1.22584                         | 2.00202                         | 2.01763                      | 1.22101                      | 0.79469                      | 1.58923                           | 1.59100                         | 0.71230                           | 1.08373                          | 1.82387                           | 1.89114                        | 1.11737                  | 5.39034                  | 0.89946                |
| 22            | 0.37449                                | 0.05134                | 0.88707   | 0.91507                        | 1.17611                         | 1.87971                         | 1.89275                      | 1.17096                      | 0.77200                      | 1.52389                           | 1.52639                         | 0.68349                           | 1.04660                          | 1.71524                           | 1.78090                        | 1.04817                  | 5.17485                  | 0.87709                |
| 23            | 0.36951                                | 0.05037                | 0.86293   | 0.88900                        | 1.12847                         | 1.76867                         | 1.77961                      | 1.12316                      | 0.75092                      | 1.46177                           | 1.46257                         | 0.65581                           | 0.99940                          | 1.61675                           | 1.68096                        | 0.98556                  | 4.97883                  | 0.85601                |
| 24            | 0.36500                                | 0.04957                | 0.84024   | 0.86470                        | 1.08293                         | 1.66760                         | 1.67678                      | 1.07729                      | 0.73145                      | 1.40206                           | 1.40254                         | 0.62941                           | 0.96030                          | 1.52695                           | 1.58971                        | 0.92843                  | 4.79906                  | 0.83638                |
| 25            | 0.36049                                | 0.04876                | 0.81900   | 0.84201                        | 1.03948                         | 1.57539                         | 1.58263                      | 1.03304                      | 0.71294                      | 1.34477                           | 1.34493                         | 0.60399                           | 0.92264                          | 1.44487                           | 1.50635                        | 0.87645                  | 4.63378                  | 0.81771                |
| 26            | 0.35615                                | 0.04796                | 0.79920   | 0.82077                        | 0.99763                         | 1.49074                         | 1.49637                      | 0.99087                      | 0.69572                      | 1.29005                           | 1.28957                         | 0.57969                           | 0.88627                          | 1.36955                           | 1.42990                        | 0.82865                  | 4.48106                  | 0.79984                |
| 27            | 0.35196                                | 0.04699                | 0.78053   | 0.80081                        | 0.95724                         | 1.41284                         | 1.41703                      | 0.95016                      | 0.67947                      | 1.23710                           | 1.23646                         | 0.55635                           | 0.85166                          | 1.30035                           | 1.35941                        | 0.78472                  | 4.33960                  | 0.78311                |
| 28            | 0.34778                                | 0.04635                | 0.76299   | 0.78214                        | 0.91861                         | 1.34123                         | 1.34396                      | 0.91105                      | 0.66402                      | 1.18625                           | 1.18512                         | 0.53382                           | 0.81819                          | 1.23646                           | 1.29423                        | 0.74416                  | 4.20779                  | 0.76701                |
| 29            | 0.34392                                | 0.04554                | 0.74657   | 0.76444                        | 0.88112                         | 1.27476                         | 1.27637                      | 0.87307                      | 0.64969                      | 1.13716                           | 1.13571                         | 0.51209                           | 0.78600                          | 1.17724                           | 1.23404                        | 0.70682                  | 4.08500                  | 0.75189                |
| 30            | 0.34005                                | 0.04490                | 0.73096   | 0.74770                        | 0.84507                         | 1.21328                         | 1.21377                      | 0.83670                      | 0.63585                      | 1.08985                           | 1.08792                         | 0.49101                           | 0.75494                          | 1.12236                           | 1.17804                        | 0.67206                  | 3.97009                  | 0.73740                |
| 31            | 0.33635                                | 0.04410                | 0.71600   | 0.73193                        | 0.81100                         | 1.15599                         | 1.15551                      | 0.72968                      | 0.62298                      | 0.95209                           | 0.94855                         | 0.43050                           | 0.66675                          | 1.07118                           | 1.12606                        | 0.63988                  | 3.86243                  | 0.72356                |
| 32            | 0.33281                                | 0.04345                | 0.70200   | 0.71696                        | 0.78105                         | 1.10272                         | 1.10272                      | 0.69926                      | 0.61059                      | 0.91250                           | 0.90880                         | 0.41280                           | 0.64084                          | 1.02370                           | 1.07746                        | 0.60978                  | 3.76104                  | 0.71036                |
| 33            | 0.32927                                | 0.04281                | 0.68864   | 0.70280                        | 0.74824                         | 1.05315                         | 1.05074                      | 0.67094                      | 0.59884                      | 0.87581                           | 0.87178                         | 0.39670                           | 0.61654                          | 0.97945                           | 1.03239                        | 0.58194                  | 3.66576                  | 0.69781                |
| 34            | 0.32589                                | 0.04200                | 0.67592   | 0.68912                        | 0.71664                         | 1.00659                         | 1.00359                      | 0.64454                      | 0.58757                      | 0.84169                           | 0.83734                         | 0.38141                           | 0.59401                          | 0.93793                           | 0.98975                        | 0.55587                  | 3.57564                  | 0.68574                |
| 35            | 0.32267                                | 0.04136                | 0.66369   | 0.67641                        | 0.69327                         | 0.96319                         | 0.95933                      | 0.61992                      | 0.57695                      | 0.80966                           | 0.80515                         | 0.36741                           | 0.57923                          | 0.89914                           | 0.95000                        | 0.53124                  | 3.49051                  | 0.67432                |
| 36            | 0.31962                                | 0.04072                | 0.65211   | 0.66402                        | 0.66962                         | 0.92232                         | 0.91797                      | 0.59707                      | 0.56681                      | 0.78005                           | 0.77522                         | 0.35389                           | 0.55329                          | 0.86245                           | 0.91298                        | 0.50823                  | 3.40988                  | 0.66321                |
| 37            | 0.31656                                | 0.04003                | 0.64100   | 0.65243                        | 0.65838                         | 0.88401                         | 0.87902                      | 0.57550                      | 0.55715                      | 0.75205                           | 0.74722                         | 0.34150                           | 0.53479                          | 0.82817                           | 0.87774                        | 0.48683                  | 3.33343                  | 0.65275                |
| 38            | 0.31382                                | 0.03959                | 0.63054   | 0.64116                        | 0.64824                         | 0.84796                         | 0.84233                      | 0.55538                      | 0.54766                      | 0.72581                           | 0.72066                         | 0.33008                           | 0.51740                          | 0.79582                           | 0.84474                        | 0.46639                  | 3.26069                  | 0.64245                |
| 39            | 0.31093                                | 0.03895                | 0.62040   | 0.63038                        | 0.63959                         | 0.81385                         | 0.80789                      | 0.53639                      | 0.53897                      | 0.70135                           | 0.69604                         | 0.31913                           | 0.50099                          | 0.76540                           | 0.81352                        | 0.44740                  | 3.19149                  | 0.63295                |
| 40            | 0.30835                                | 0.03846                | 0.61059   | 0.62008                        | 0.63173                         | 0.78198                         | 0.77522                      | 0.51853                      | 0.53028                      | 0.67818                           | 0.67271                         | 0.30883                           | 0.48570                          | 0.73660                           | 0.78407                        | 0.42921                  | 3.12535                  | 0.62362                |
| 41            | 0.30578                                | 0.03782                | 0.60125   | 0.61026                        | 0.61499                         | 0.75156                         | 0.74448                      | 0.50163                      | 0.52207                      | 0.65629                           | 0.65066                         | 0.29902                           | 0.47122                          | 0.70956                           | 0.75639                        | 0.41231                  | 3.06258                  | 0.61477                |
| 42            | 0.30320                                | 0.03734                | 0.59224   | 0.60061                        | 0.60938                         | 0.72292                         | 0.71551                      | 0.48586                      | 0.51419                      | 0.63569                           | 0.62990                         | 0.28984                           | 0.45738                          | 0.68381                           | 0.73000                        | 0.39622                  | 3.00239                  | 0.60624                |
| 43            | 0.30095                                | 0.03685                | 0.58355   | 0.59159                        | 0.59159                         | 0.69572                         | 0.68799                      | 0.47089                      | 0.50678                      | 0.61622                           | 0.61042                         | 0.28115                           | 0.44434                          | 0.65935                           | 0.70489                        | 0.38093                  | 2.94494                  | 0.59819                |
| 44            | 0.29853                                | 0.03621                | 0.57534   | 0.58274                        | 0.58274                         | 0.67013                         | 0.66192                      | 0.45657                      | 0.49954                      | 0.59787                           | 0.59192                         | 0.27294                           | 0.43227                          | 0.63633                           | 0.68124                        | 0.36661                  | 2.88990                  | 0.59047                |
| 45            | 0.29628                                | 0.03573                | 0.56729   | 0.57421                        | 0.57421                         | 0.65457                         | 0.64390                      | 0.44321                      | 0.49246                      | 0.58049                           | 0.57437                         | 0.26522                           | 0.42052                          | 0.61445                           | 0.65887                        | 0.35277                  | 2.83711                  | 0.58290                |
| 46            | 0.29419                                | 0.03524                | 0.55957   | 0.56617                        | 0.56617                         | 0.63866                         | 0.62800                      | 0.43050                      | 0.48586                      | 0.56391                           | 0.55764                         | 0.25798                           | 0.40942                          | 0.59353                           | 0.63730                        | 0.33973                  | 2.78658                  | 0.57598                |
| 47            | 0.29210                                | 0.03460                | 0.55217   | 0.55828                        | 0.55828                         | 0.62211                         | 0.61143                      | 0.41827                      | 0.47926                      | 0.54814                           | 0.54187                         | 0.25090                           | 0.39880                          | 0.57373                           | 0.61686                        | 0.32750                  | 2.73798                  | 0.56922                |
| 48            | 0.29016                                | 0.03428                | 0.54476   | 0.55056                        | 0.55056                         | 0.60608                         | 0.59549                      | 0.40684                      | 0.47315                      | 0.53334                           | 0.52690                         | 0.24414                           | 0.38898                          | 0.55490                           | 0.59755                        | 0.31591                  | 2.69131                  | 0.56279                |
| 49            | 0.28839                                | 0.03380                | 0.53784   | 0.54331                        | 0.54331                         | 0.59073                         | 0.58007                      | 0.39590                      | 0.46719                      | 0.51901                           | 0.51242                         | 0.23786                           | 0.37932                          | 0.53672                           | 0.57904                        | 0.30465                  | 2.64624                  | 0.55667                |
| 50            | 0.28646                                | 0.03331                | 0.53108   | 0.53623                        | 0.53623                         | 0.57504                         | 0.56438                      | 0.38544                      | 0.46140                      | 0.50549                           | 0.49890                         | 0.23175                           | 0.37015                          | 0.51966                           | 0.56150                        | 0.29387                  | 2.60295                  | 0.55072                |
| 51            | 0.28469                                | 0.03283                | 0.52465   | 0.52947                        | 0.52947                         | 0.56039                         | 0.55023                      | 0.37546                      | 0.45577                      | 0.49262                           | 0.48586                         | 0.22595                           | 0.36146                          | 0.50324                           | 0.54460                        | 0.28373                  | 2.55955                  | 0.54508                |
| 52            | 0.28308                                | 0.03235                | 0.51837   | 0.52271                        | 0.52271                         | 0.54581                         | 0.53515                      | 0.36596                      | 0.44807                      | 0.47347                           | 0.46737                         | 0.22048                           | 0.35325                          | 0.48779                           | 0.52835                        | 0.27407                  |                          |                        |

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Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - NO<sub>x</sub> (Year 2033 with e-PC Scenario)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                                 |                                  |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.02591                                | 0.00418                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 2             | 0.02591                                | 0.00418                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 3             | 0.02591                                | 0.00418                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 4             | 0.02591                                | 0.00418                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 5             | 0.02559                                | 0.00418                | 0.06293   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 6             | 0.02511                                | 0.00402                | 0.05617   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18652                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 7             | 0.02462                                | 0.00402                | 0.05102   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18652                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 8             | 0.02430                                | 0.00386                | 0.04683   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55587                      | 0.51274                      | 0.18652                           | 0.19055                         | 0.51097                         | 0.96577                          | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 9             | 0.02382                                | 0.00386                | 0.04361   | 0.63682                        | 1.05460                         | 2.31762                         | 2.39116                      | 0.52593                      | 0.47685                      | 0.17655                           | 0.18025                         | 0.48345                         | 0.91362                          | 2.02633                           | 2.02472                        | 1.09806                  | 1.44278                  | 0.36275                |
| 10            | 0.02350                                | 0.00370                | 0.04072   | 0.59449                        | 0.99795                         | 2.31713                         | 2.39116                      | 0.49777                      | 0.44514                      | 0.16705                           | 0.17059                         | 0.45770                         | 0.86470                          | 2.02311                           | 2.01957                        | 1.09806                  | 1.42475                  | 0.36275                |
| 11            | 0.02317                                | 0.00370                | 0.03846   | 0.55876                        | 0.94694                         | 2.21558                         | 2.28656                      | 0.47234                      | 0.41843                      | 0.15852                           | 0.16190                         | 0.43436                         | 0.82060                          | 1.93379                           | 1.92976                        | 1.09806                  | 1.40979                  | 0.31849                |
| 12            | 0.02269                                | 0.00354                | 0.03637   | 0.52803                        | 0.90059                         | 1.99044                         | 2.05401                      | 0.44901                      | 0.39542                      | 0.15080                           | 0.15385                         | 0.41296                         | 0.78053                          | 1.73841                           | 1.73584                        | 0.94308                  | 1.20620                  | 0.30095                |
| 13            | 0.02237                                | 0.00354                | 0.03460   | 0.50115                        | 0.85794                         | 1.80150                         | 1.85879                      | 0.42760                      | 0.37530                      | 0.14371                           | 0.14661                         | 0.39348                         | 0.74368                          | 1.57458                           | 1.57297                        | 0.85360                  | 1.02837                  | 0.28582                |
| 14            | 0.02205                                | 0.00338                | 0.03299   | 0.47765                        | 0.81851                         | 1.64089                         | 1.69287                      | 0.40781                      | 0.35776                      | 0.13712                           | 0.13985                         | 0.37546                         | 0.70972                          | 1.43521                           | 1.43441                        | 0.77731                  | 0.90703                  | 0.27246                |
| 15            | 0.02173                                | 0.00338                | 0.03154   | 0.45657                        | 0.78182                         | 1.50297                         | 1.55028                      | 0.39300                      | 0.34199                      | 0.13084                           | 0.13358                         | 0.35872                         | 0.67818                          | 1.31548                           | 1.31532                        | 0.71197                  | 0.81771                  | 0.26055                |
| 16            | 0.02140                                | 0.00322                | 0.03042   | 0.43790                        | 0.74754                         | 1.38307                         | 1.42652                      | 0.37208                      | 0.32798                      | 0.12521                           | 0.12762                         | 0.34295                         | 0.64873                          | 1.21135                           | 1.21200                        | 0.65500                  | 0.74834                  | 0.24977                |
| 17            | 0.02108                                | 0.00322                | 0.02929   | 0.42084                        | 0.71535                         | 1.27814                         | 1.31821                      | 0.35583                      | 0.31527                      | 0.11974                           | 0.12215                         | 0.32831                         | 0.62105                          | 1.12026                           | 1.12139                        | 0.60527                  | 0.69250                  | 0.24028                |
| 18            | 0.02076                                | 0.00322                | 0.02816   | 0.40555                        | 0.68526                         | 1.18560                         | 1.22662                      | 0.34054                      | 0.30368                      | 0.11475                           | 0.11700                         | 0.31447                         | 0.59514                          | 1.03996                           | 1.04141                        | 0.56134                  | 0.64631                  | 0.23142                |
| 19            | 0.02044                                | 0.00306                | 0.02720   | 0.39155                        | 0.65661                         | 1.10337                         | 1.13765                      | 0.32605                      | 0.29222                      | 0.10992                           | 0.11201                         | 0.30127                         | 0.57067                          | 0.96850                           | 0.97027                        | 0.52239                  | 0.60737                  | 0.22354                |
| 20            | 0.02028                                | 0.00306                | 0.02639   | 0.37868                        | 0.62958                         | 1.02998                         | 1.06185                      | 0.31237                      | 0.28357                      | 0.10541                           | 0.10734                         | 0.28888                         | 0.54734                          | 0.90461                           | 0.90670                        | 0.48763                  | 0.57405                  | 0.21613                |
| 21            | 0.01996                                | 0.00290                | 0.02559   | 0.36677                        | 0.60383                         | 0.96400                         | 0.99377                      | 0.29934                      | 0.27472                      | 0.10107                           | 0.10300                         | 0.27713                         | 0.52529                          | 0.84732                           | 0.84973                        | 0.45625                  | 0.54492                  | 0.20938                |
| 22            | 0.01963                                | 0.00290                | 0.02494   | 0.35583                        | 0.57920                         | 0.90445                         | 0.93229                      | 0.28679                      | 0.26651                      | 0.09704                           | 0.09881                         | 0.26586                         | 0.50421                          | 0.79550                           | 0.79623                        | 0.42809                  | 0.51934                  | 0.20326                |
| 23            | 0.01947                                | 0.00290                | 0.02414   | 0.34569                        | 0.55587                         | 0.85054                         | 0.87661                      | 0.27488                      | 0.25894                      | 0.09302                           | 0.09479                         | 0.25508                         | 0.48425                          | 0.74851                           | 0.75140                        | 0.40250                  | 0.49648                  | 0.19747                |
| 24            | 0.01915                                | 0.00290                | 0.02350   | 0.33619                        | 0.53350                         | 0.80145                         | 0.82575                      | 0.26345                      | 0.24385                      | 0.08932                           | 0.09093                         | 0.24478                         | 0.46494                          | 0.70586                           | 0.70892                        | 0.37916                  | 0.47604                  | 0.19199                |
| 25            | 0.01899                                | 0.00274                | 0.02301   | 0.32750                        | 0.51193                         | 0.75655                         | 0.77941                      | 0.25267                      | 0.24526                      | 0.08578                           | 0.08723                         | 0.23496                         | 0.44659                          | 0.66675                           | 0.66997                        | 0.35792                  | 0.45770                  | 0.18701                |
| 26            | 0.01867                                | 0.00274                | 0.02237   | 0.31913                        | 0.49133                         | 0.71535                         | 0.73692                      | 0.24205                      | 0.22547                      | 0.08224                           | 0.08369                         | 0.22495                         | 0.42905                          | 0.63102                           | 0.63424                        | 0.33845                  | 0.44096                  | 0.18234                |
| 27            | 0.01851                                | 0.00274                | 0.02189   | 0.31141                        | 0.47154                         | 0.67753                         | 0.69797                      | 0.23207                      | 0.22335                      | 0.07902                           | 0.08015                         | 0.21630                         | 0.41199                          | 0.59803                           | 0.60141                        | 0.32042                  | 0.42567                  | 0.17799                |
| 28            | 0.01835                                | 0.00257                | 0.02140   | 0.30417                        | 0.45239                         | 0.64261                         | 0.66192                      | 0.22225                      | 0.21278                      | 0.07580                           | 0.07693                         | 0.20761                         | 0.39574                          | 0.56762                           | 0.57116                        | 0.30401                  | 0.41167                  | 0.17381                |
| 29            | 0.01802                                | 0.00257                | 0.02092   | 0.29725                        | 0.43404                         | 0.61042                         | 0.62861                      | 0.21292                      | 0.20273                      | 0.07274                           | 0.07371                         | 0.19908                         | 0.37997                          | 0.53961                           | 0.54315                        | 0.28872                  | 0.39880                  | 0.16995                |
| 30            | 0.01786                                | 0.00257                | 0.02044   | 0.29081                        | 0.41618                         | 0.58049                         | 0.59771                      | 0.20374                      | 0.19191                      | 0.06968                           | 0.07065                         | 0.19103                         | 0.36468                          | 0.51354                           | 0.51724                        | 0.27455                  | 0.38689                  | 0.16625                |
| 31            | 0.01770                                | 0.00257                | 0.02012   | 0.28469                        | 0.36500                         | 0.55281                         | 0.56906                      | 0.17719                      | 0.17124                      | 0.06616                           | 0.06810                         | 0.16737                         | 0.32155                          | 0.48940                           | 0.49310                        | 0.26136                  | 0.37578                  | 0.16270                |
| 32            | 0.01754                                | 0.00241                | 0.01963   | 0.27890                        | 0.35019                         | 0.52690                         | 0.54251                      | 0.16962                      | 0.16387                      | 0.06322                           | 0.06522                         | 0.16061                         | 0.30867                          | 0.46687                           | 0.47073                        | 0.24913                  | 0.36548                  | 0.15933                |
| 33            | 0.01738                                | 0.00241                | 0.01931   | 0.27327                        | 0.33635                         | 0.50276                         | 0.51757                      | 0.16254                      | 0.15683                      | 0.06051                           | 0.06251                         | 0.15418                         | 0.29992                          | 0.44579                           | 0.44945                        | 0.23770                  | 0.35583                  | 0.15627                |
| 34            | 0.01722                                | 0.00241                | 0.01899   | 0.26812                        | 0.32348                         | 0.48023                         | 0.49423                      | 0.15611                      | 0.15005                      | 0.05747                           | 0.05946                         | 0.14838                         | 0.28598                          | 0.42615                           | 0.43018                        | 0.22692                  | 0.34681                  | 0.15321                |
| 35            | 0.01706                                | 0.00241                | 0.01867   | 0.26297                        | 0.31157                         | 0.45915                         | 0.47250                      | 0.14999                      | 0.14425                      | 0.05514                           | 0.05713                         | 0.14275                         | 0.27568                          | 0.40765                           | 0.41183                        | 0.21694                  | 0.33848                  | 0.15031                |
| 36            | 0.01690                                | 0.00241                | 0.01835   | 0.25830                        | 0.30030                         | 0.43935                         | 0.45206                      | 0.14420                      | 0.13844                      | 0.05201                           | 0.05409                         | 0.13776                         | 0.26602                          | 0.39043                           | 0.39445                        | 0.20761                  | 0.33040                  | 0.14758                |
| 37            | 0.01674                                | 0.00225                | 0.01802   | 0.25363                        | 0.28984                         | 0.42084                         | 0.43291                      | 0.13899                      | 0.13316                      | 0.04844                           | 0.05046                         | 0.13293                         | 0.25701                          | 0.37417                           | 0.37836                        | 0.19875                  | 0.32283                  | 0.14500                |
| 38            | 0.01658                                | 0.00225                | 0.01770   | 0.24929                        | 0.27986                         | 0.40330                         | 0.41489                      | 0.13390                      | 0.12864                      | 0.04683                           | 0.04875                         | 0.12826                         | 0.24848                          | 0.35904                           | 0.36307                        | 0.19055                  | 0.31575                  | 0.14259                |
| 39            | 0.01642                                | 0.00225                | 0.01738   | 0.24510                        | 0.27069                         | 0.38689                         | 0.39783                      | 0.12923                      | 0.12408                      | 0.04522                           | 0.04714                         | 0.12408                         | 0.24060                          | 0.34456                           | 0.34874                        | 0.18266                  | 0.30899                  | 0.14191                |
| 40            | 0.01625                                | 0.00225                | 0.01706   | 0.24108                        | 0.26200                         | 0.37128                         | 0.38190                      | 0.12489                      | 0.12003                      | 0.04377                           | 0.04570                         | 0.12006                         | 0.23303                          | 0.33104                           | 0.33523                        | 0.17542                  | 0.30272                  | 0.13792                |
| 41            | 0.01609                                | 0.00225                | 0.01690   | 0.23722                        | 0.25379                         | 0.35663                         | 0.36677                      | 0.12070                      | 0.11783                      | 0.04249                           | 0.04465                         | 0.11636                         | 0.22595                          | 0.31817                           | 0.32235                        | 0.16834                  | 0.29660                  | 0.13562                |
| 42            | 0.01593                                | 0.00209                | 0.01658   | 0.23368                        | 0.24591                         | 0.34279                         | 0.35245                      | 0.11668                      | 0.11510                      | 0.04120                           | 0.04316                         | 0.11282                         | 0.21935                          | 0.30610                           | 0.31028                        | 0.16190                  | 0.29081                  | 0.13358                |
| 43            | 0.01577                                | 0.00209                | 0.01642   | 0.22998                        | 0.23867                         | 0.32975                         | 0.33893                      | 0.11298                      | 0.11298                      | 0.03991                           | 0.04207                         | 0.10944                         | 0.21308                          | 0.29467                           | 0.29886                        | 0.15562                  | 0.28534                  | 0.13148                |
| 44            | 0.01577                                | 0.00209                | 0.01609   | 0.22660                        | 0.23158                         | 0.31720                         | 0.32605                      | 0.10960                      | 0.10960                      | 0.03879                           | 0.04079                         | 0.10622                         | 0.20696                          | 0.28373                           | 0.28807                        | 0.14967                  | 0.28003                  | 0.12955                |
| 45            | 0.01561                                | 0.00209                | 0.01593   | 0.22338                        | 0.22499                         | 0.30545                         | 0.31382                      | 0.10622                      | 0.10622                      | 0.03766                           | 0.03966                         | 0.10316                         | 0.20333                          | 0.27343                           | 0.27761                        | 0.14420                  | 0.27504                  | 0.12778                |
| 46            | 0.01545                                | 0.00209                | 0.01561   | 0.22016                        | 0.21871                         | 0.29419                         | 0.30223                      | 0.10300                      | 0.10300                      | 0.03653                           | 0.03853                         | 0.10026                         | 0.19602                          | 0.26361                           | 0.26796                        | 0.13889                  | 0.27021                  | 0.12585                |
| 47            | 0.01545                                | 0.00209                | 0.01545   | 0.21710                        | 0.21292                         | 0.28357                         | 0.29129                      | 0.10010                      | 0.10010                      | 0.03557                           | 0.03757                         | 0.09753                         | 0.19087                          | 0.25428                           | 0.25862                        | 0.13374                  | 0.26570                  | 0.12408                |
| 48            | 0.01529                                | 0.00193                | 0.01529   | 0.21420                        | 0.20712                         | 0.27343                         | 0.28083                      | 0.09720                      | 0.09720                      | 0.03460                           | 0.03660                         | 0.09495                         | 0.18588                          | 0.24542                           | 0.24977                        | 0.12891                  | 0.26120                  | 0.12247                |
| 49            | 0.01513                                | 0.00193                | 0.01513   | 0.21131                        | 0.20181                         | 0.26377                         | 0.27085                      | 0.09447                      | 0.09447                      | 0.03380                           | 0.03580                         | 0.09254                         | 0.18121                          | 0.23706                           | 0.24124                        | 0.12440                  | 0.25701                  | 0.12086                |
| 50            | 0.01513                                | 0.00193                | 0.01497   | 0.20857                        | 0.19666                         | 0.25460                         | 0.26136                      | 0.09189                      | 0.09189                      | 0.03283                           | 0.03483                         | 0.09012                         | 0.17687                          | 0.22901                           | 0.23319                        | 0.12006                  | 0.25299                  | 0.11925                |
| 51            | 0.01497                                | 0.00193                | 0.01465   | 0.20584                        | 0.19167                         | 0.24591                         | 0.25235                      | 0.08948                      | 0.08948                      | 0.03203                           | 0.03403                         | 0.08787                         | 0.17268                          | 0.22128                           | 0.22547                        | 0.11587                  | 0.24993                  | 0.11780                |
| 52            | 0.01497                                | 0.00193                | 0.01448   | 0.20326                        | 0.18701                         | 0.23754                         | 0.24382                      | 0.08707                      | 0.08707                      | 0.03138                           | 0.03338                         | 0.08578                         | 0.16850                          | 0.21388                           | 0.21                           |                          |                          |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - RSP (Year 2033 with e-PC Scenario)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                                  |                                  |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|----------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >=3.5t | 06 - Heavy Goods Vehicles <= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.01786                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 2             | 0.01786                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 3             | 0.01786                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 4             | 0.01786                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 5             | 0.01770                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 6             | 0.01754                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 7             | 0.01738                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 8             | 0.01738                                | 0.01529                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                          | 0.07001                          | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 9             | 0.01722                                | 0.01529                | 0.00000   | 0.11780                        | 0.07435                         | 0.16737                         | 0.19682                      | 0.01851                      | 0.07371                      | 0.02430                           | 0.02430                         | 0.03541                          | 0.06711                          | 0.12102                           | 0.11571                        | 0.03605                  | 0.39413                  | 0.08980                |
| 10            | 0.01722                                | 0.01529                | 0.00000   | 0.11185                        | 0.07226                         | 0.15772                         | 0.18556                      | 0.01802                      | 0.07017                      | 0.02366                           | 0.02366                         | 0.03396                          | 0.06453                          | 0.11394                           | 0.10895                        | 0.03396                  | 0.37353                  | 0.08546                |
| 11            | 0.01690                                | 0.01497                | 0.00000   | 0.10670                        | 0.07049                         | 0.14919                         | 0.17542                      | 0.01754                      | 0.06679                      | 0.02285                           | 0.02301                         | 0.03267                          | 0.06244                          | 0.10767                           | 0.10284                        | 0.03219                  | 0.35567                  | 0.08143                |
| 12            | 0.01593                                | 0.01416                | 0.00000   | 0.10187                        | 0.06872                         | 0.14162                         | 0.16657                      | 0.01690                      | 0.06389                      | 0.02221                           | 0.02221                         | 0.03154                          | 0.06051                          | 0.10219                           | 0.09753                        | 0.03074                  | 0.34022                  | 0.07789                |
| 13            | 0.01513                                | 0.01352                | 0.00000   | 0.09769                        | 0.06711                         | 0.13486                         | 0.15868                      | 0.01625                      | 0.06132                      | 0.02157                           | 0.02157                         | 0.03042                          | 0.05874                          | 0.09720                           | 0.09286                        | 0.02945                  | 0.32654                  | 0.07467                |
| 14            | 0.01448                                | 0.01271                | 0.00000   | 0.09382                        | 0.06566                         | 0.12875                         | 0.15160                      | 0.01577                      | 0.05874                      | 0.02092                           | 0.02092                         | 0.02945                          | 0.05729                          | 0.09286                           | 0.08867                        | 0.02816                  | 0.31447                  | 0.07178                |
| 15            | 0.01368                                | 0.01207                | 0.00000   | 0.09028                        | 0.06437                         | 0.12328                         | 0.14516                      | 0.01513                      | 0.05623                      | 0.02028                           | 0.02028                         | 0.02865                          | 0.05584                          | 0.08900                           | 0.08497                        | 0.02720                  | 0.30352                  | 0.06904                |
| 16            | 0.01304                                | 0.01159                | 0.00000   | 0.08707                        | 0.06309                         | 0.11829                         | 0.13921                      | 0.01465                      | 0.05456                      | 0.01963                           | 0.01979                         | 0.02784                          | 0.05456                          | 0.08546                           | 0.08159                        | 0.02623                  | 0.29271                  | 0.06647                |
| 17            | 0.01239                                | 0.01094                | 0.00000   | 0.08401                        | 0.06196                         | 0.11378                         | 0.13390                      | 0.01416                      | 0.05263                      | 0.01915                           | 0.01915                         | 0.02704                          | 0.05343                          | 0.08208                           | 0.07854                        | 0.02543                  | 0.28469                  | 0.06421                |
| 18            | 0.01175                                | 0.01046                | 0.00000   | 0.08127                        | 0.06083                         | 0.10976                         | 0.12907                      | 0.01368                      | 0.05102                      | 0.01867                           | 0.01867                         | 0.02639                          | 0.05230                          | 0.07918                           | 0.07564                        | 0.02462                  | 0.27665                  | 0.06212                |
| 19            | 0.01127                                | 0.00998                | 0.00000   | 0.07886                        | 0.05987                         | 0.10589                         | 0.12472                      | 0.01320                      | 0.04941                      | 0.01802                           | 0.01819                         | 0.02575                          | 0.05134                          | 0.07644                           | 0.07306                        | 0.02382                  | 0.26908                  | 0.06003                |
| 20            | 0.01078                                | 0.00950                | 0.00000   | 0.07644                        | 0.05874                         | 0.10252                         | 0.12054                      | 0.01287                      | 0.04780                      | 0.01754                           | 0.01770                         | 0.02511                          | 0.05037                          | 0.07403                           | 0.07065                        | 0.02317                  | 0.26200                  | 0.05826                |
| 21            | 0.01030                                | 0.00901                | 0.00000   | 0.07419                        | 0.05794                         | 0.09930                         | 0.11684                      | 0.01239                      | 0.04651                      | 0.01706                           | 0.01722                         | 0.02462                          | 0.04941                          | 0.07162                           | 0.06856                        | 0.02253                  | 0.25556                  | 0.05649                |
| 22            | 0.00982                                | 0.00869                | 0.00000   | 0.07226                        | 0.05697                         | 0.09624                         | 0.11330                      | 0.01207                      | 0.04522                      | 0.01658                           | 0.01674                         | 0.02398                          | 0.04860                          | 0.06952                           | 0.06647                        | 0.02205                  | 0.24961                  | 0.05488                |
| 23            | 0.00933                                | 0.00821                | 0.00000   | 0.07033                        | 0.05617                         | 0.09350                         | 0.11008                      | 0.01159                      | 0.04394                      | 0.01625                           | 0.01625                         | 0.02350                          | 0.04780                          | 0.06759                           | 0.06453                        | 0.02140                  | 0.24398                  | 0.05343                |
| 24            | 0.00901                                | 0.00789                | 0.00000   | 0.06856                        | 0.05536                         | 0.09093                         | 0.10702                      | 0.01127                      | 0.04281                      | 0.01577                           | 0.01577                         | 0.02301                          | 0.04699                          | 0.06566                           | 0.06276                        | 0.02099                  | 0.23883                  | 0.05198                |
| 25            | 0.00869                                | 0.00756                | 0.00000   | 0.06695                        | 0.05456                         | 0.08851                         | 0.10412                      | 0.01094                      | 0.04184                      | 0.01545                           | 0.01545                         | 0.02269                          | 0.04619                          | 0.06405                           | 0.06116                        | 0.02044                  | 0.23384                  | 0.05069                |
| 26            | 0.00821                                | 0.00724                | 0.00000   | 0.06534                        | 0.05375                         | 0.08626                         | 0.10155                      | 0.01062                      | 0.04088                      | 0.01497                           | 0.01497                         | 0.02221                          | 0.04554                          | 0.06244                           | 0.05971                        | 0.02012                  | 0.22917                  | 0.04941                |
| 27            | 0.00789                                | 0.00692                | 0.00000   | 0.06389                        | 0.05311                         | 0.08417                         | 0.09914                      | 0.01030                      | 0.03991                      | 0.01465                           | 0.01465                         | 0.02189                          | 0.04490                          | 0.06083                           | 0.05826                        | 0.01963                  | 0.22483                  | 0.04828                |
| 28            | 0.00756                                | 0.00660                | 0.00000   | 0.06244                        | 0.05230                         | 0.08224                         | 0.09672                      | 0.00998                      | 0.03911                      | 0.01432                           | 0.01432                         | 0.02157                          | 0.04426                          | 0.05938                           | 0.05681                        | 0.01931                  | 0.22064                  | 0.04715                |
| 29            | 0.00740                                | 0.00644                | 0.00000   | 0.06132                        | 0.05166                         | 0.08047                         | 0.09463                      | 0.00982                      | 0.03830                      | 0.01384                           | 0.01400                         | 0.02124                          | 0.04361                          | 0.05810                           | 0.05552                        | 0.01883                  | 0.21678                  | 0.04619                |
| 30            | 0.00708                                | 0.00612                | 0.00000   | 0.06003                        | 0.05102                         | 0.07870                         | 0.09254                      | 0.00950                      | 0.03750                      | 0.01352                           | 0.01368                         | 0.02092                          | 0.04313                          | 0.05681                           | 0.05440                        | 0.01851                  | 0.21308                  | 0.04522                |
| 31            | 0.00676                                | 0.00595                | 0.00000   | 0.05890                        | 0.05037                         | 0.07709                         | 0.09061                      | 0.00917                      | 0.03669                      | 0.01320                           | 0.01336                         | 0.02060                          | 0.04249                          | 0.05568                           | 0.05327                        | 0.01819                  | 0.20954                  | 0.04426                |
| 32            | 0.00640                                | 0.00563                | 0.00000   | 0.05778                        | 0.04989                         | 0.07548                         | 0.08884                      | 0.00901                      | 0.03505                      | 0.01287                           | 0.01304                         | 0.02028                          | 0.04200                          | 0.05456                           | 0.05214                        | 0.01786                  | 0.20616                  | 0.04345                |
| 33            | 0.00628                                | 0.00547                | 0.00000   | 0.05681                        | 0.04925                         | 0.07403                         | 0.08707                      | 0.00869                      | 0.03541                      | 0.01271                           | 0.01271                         | 0.02012                          | 0.04152                          | 0.05359                           | 0.05118                        | 0.01754                  | 0.20294                  | 0.04265                |
| 34            | 0.00612                                | 0.00531                | 0.00000   | 0.05584                        | 0.04876                         | 0.07274                         | 0.08546                      | 0.00853                      | 0.03476                      | 0.01239                           | 0.01239                         | 0.01979                          | 0.04104                          | 0.05246                           | 0.05021                        | 0.01738                  | 0.19988                  | 0.04184                |
| 35            | 0.00595                                | 0.00515                | 0.00000   | 0.05488                        | 0.04812                         | 0.07145                         | 0.08401                      | 0.00837                      | 0.03428                      | 0.01207                           | 0.01207                         | 0.01963                          | 0.04056                          | 0.05166                           | 0.04941                        | 0.01706                  | 0.19682                  | 0.04120                |
| 36            | 0.00563                                | 0.00499                | 0.00000   | 0.05307                        | 0.04744                         | 0.07017                         | 0.08256                      | 0.00805                      | 0.03380                      | 0.01175                           | 0.01191                         | 0.01931                          | 0.04007                          | 0.05069                           | 0.04844                        | 0.01674                  | 0.19409                  | 0.04056                |
| 37            | 0.00547                                | 0.00483                | 0.00000   | 0.05227                        | 0.04715                         | 0.06904                         | 0.08111                      | 0.00789                      | 0.03315                      | 0.01159                           | 0.01159                         | 0.01915                          | 0.03959                          | 0.04989                           | 0.04764                        | 0.01658                  | 0.19135                  | 0.03991                |
| 38            | 0.00531                                | 0.00467                | 0.00000   | 0.05246                        | 0.04651                         | 0.06791                         | 0.07982                      | 0.00772                      | 0.03267                      | 0.01127                           | 0.01127                         | 0.01899                          | 0.03911                          | 0.04908                           | 0.04683                        | 0.01625                  | 0.18878                  | 0.03927                |
| 39            | 0.00515                                | 0.00451                | 0.00000   | 0.05182                        | 0.04603                         | 0.06679                         | 0.07870                      | 0.00756                      | 0.03235                      | 0.01110                           | 0.01110                         | 0.01883                          | 0.03862                          | 0.04828                           | 0.04619                        | 0.01609                  | 0.18636                  | 0.03879                |
| 40            | 0.00499                                | 0.00435                | 0.00000   | 0.05118                        | 0.04554                         | 0.06582                         | 0.07741                      | 0.00740                      | 0.03187                      | 0.01078                           | 0.01094                         | 0.01867                          | 0.03830                          | 0.04764                           | 0.04554                        | 0.01577                  | 0.18395                  | 0.03814                |
| 41            | 0.00483                                | 0.00418                | 0.00000   | 0.05053                        | 0.04506                         | 0.06486                         | 0.07628                      | 0.00724                      | 0.03138                      | 0.01062                           | 0.01062                         | 0.01851                          | 0.03782                          | 0.04683                           | 0.04474                        | 0.01561                  | 0.18153                  | 0.03766                |
| 42            | 0.00467                                | 0.00402                | 0.00000   | 0.04989                        | 0.04474                         | 0.06389                         | 0.07532                      | 0.00708                      | 0.03106                      | 0.01046                           | 0.01046                         | 0.01835                          | 0.03750                          | 0.04619                           | 0.04410                        | 0.01545                  | 0.17944                  | 0.03718                |
| 43            | 0.00467                                | 0.00402                | 0.00000   | 0.04941                        | 0.04426                         | 0.06309                         | 0.07419                      | 0.00692                      | 0.03074                      | 0.01014                           | 0.01030                         | 0.01819                          | 0.03701                          | 0.04554                           | 0.04361                        | 0.01513                  | 0.17719                  | 0.03685                |
| 44            | 0.00451                                | 0.00386                | 0.00000   | 0.04876                        | 0.04377                         | 0.06228                         | 0.07323                      | 0.00676                      | 0.03042                      | 0.00998                           | 0.00998                         | 0.01802                          | 0.03669                          | 0.04490                           | 0.04297                        | 0.01497                  | 0.17510                  | 0.03637                |
| 45            | 0.00435                                | 0.00370                | 0.00000   | 0.04828                        | 0.04345                         | 0.06148                         | 0.07242                      | 0.00660                      | 0.03009                      | 0.00982                           | 0.00982                         | 0.01786                          | 0.03637                          | 0.04442                           | 0.04249                        | 0.01481                  | 0.17317                  | 0.03605                |
| 46            | 0.00418                                | 0.00370                | 0.00000   | 0.04780                        | 0.04297                         | 0.06067                         | 0.07145                      | 0.00644                      | 0.02977                      | 0.00966                           | 0.00966                         | 0.01786                          | 0.03605                          | 0.04377                           | 0.04184                        | 0.01465                  | 0.17123                  | 0.03557                |
| 47            | 0.00418                                | 0.00354                | 0.00000   | 0.04731                        | 0.04249                         | 0.06003                         | 0.07065                      | 0.00644                      | 0.02945                      | 0.00950                           | 0.00950                         | 0.01770                          | 0.03573                          | 0.04329                           | 0.04136                        | 0.01448                  | 0.16930                  | 0.03524                |
| 48            | 0.00402                                | 0.00354                | 0.00000   | 0.04699                        | 0.04216                         | 0.05938                         | 0.06985                      | 0.00628                      | 0.02913                      | 0.00933                           | 0.00933                         | 0.01754                          | 0.03524                          | 0.04281                           | 0.04088                        | 0.01432                  | 0.16753                  | 0.03492                |
| 49            | 0.00402                                | 0.00338                | 0.00000   | 0.04651                        | 0.04184                         | 0.05874                         | 0.06904                      | 0.00612                      | 0.02897                      | 0.00917                           | 0.00917                         | 0.01754                          | 0.03492                          | 0.04233                           | 0.04039                        | 0.01416                  | 0.16576                  | 0.03460                |
| 50            | 0.00386                                | 0.00338                | 0.00000   | 0.04619                        | 0.04136                         | 0.05810                         | 0.06840                      | 0.00595                      | 0.02865                      | 0.00901                           | 0.00901                         | 0.01738                          | 0.03460                          | 0.04184                           | 0.03991                        | 0.01400                  | 0.16415                  | 0.03444                |
| 51            | 0.00386                                | 0.00322                | 0.00000   | 0.04587                        | 0.04104                         | 0.05745                         | 0.06759                      | 0.00595                      | 0.02849                      | 0.00885                           | 0.00885                         | 0.01738                          | 0.03428                          | 0.04152                           | 0.03975                        | 0.01384                  | 0.16399                  | 0.03412                |
| 52            | 0.00370                                | 0.00322                | 0.00000   | 0.04538                        | 0.04072                         | 0.05697                         | 0.06695                      | 0.00579                      | 0.02832                      | 0.00869                           | 0.00869                         | 0.01738                          | 0.03396                          | 0.04120                           | 0.03                           |                          |                          |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - FSP (Year 2033 with e-PC Scenario)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                                 |                                  |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.01577                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 2             | 0.01577                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 3             | 0.01577                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 4             | 0.01577                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 5             | 0.01577                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 6             | 0.01561                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 7             | 0.01561                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 8             | 0.01545                                | 0.01416                | 0.00000   | 0.11410                        | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                         | 0.06437                          | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 9             | 0.01545                                | 0.01416                | 0.00000   | 0.10831                        | 0.06840                         | 0.15401                         | 0.18121                      | 0.01706                      | 0.06791                      | 0.02237                           | 0.02237                         | 0.03251                         | 0.06180                          | 0.11137                           | 0.10654                        | 0.03315                  | 0.36259                  | 0.08256                |
| 10            | 0.01529                                | 0.01416                | 0.00000   | 0.10300                        | 0.06647                         | 0.14500                         | 0.17059                      | 0.01658                      | 0.06453                      | 0.02173                           | 0.02173                         | 0.03122                         | 0.05938                          | 0.10477                           | 0.10010                        | 0.03122                  | 0.34359                  | 0.07854                |
| 11            | 0.01513                                | 0.01400                | 0.00000   | 0.09817                        | 0.06486                         | 0.13728                         | 0.16142                      | 0.01625                      | 0.06148                      | 0.02108                           | 0.02108                         | 0.03009                         | 0.05745                          | 0.09987                           | 0.09463                        | 0.02961                  | 0.32734                  | 0.07500                |
| 12            | 0.01432                                | 0.01320                | 0.00000   | 0.09382                        | 0.06235                         | 0.13020                         | 0.15321                      | 0.01561                      | 0.05874                      | 0.02044                           | 0.02044                         | 0.02897                         | 0.05568                          | 0.09399                           | 0.08980                        | 0.02832                  | 0.31302                  | 0.07162                |
| 13            | 0.01352                                | 0.01255                | 0.00000   | 0.08980                        | 0.06180                         | 0.12408                         | 0.14597                      | 0.01513                      | 0.05633                      | 0.01979                           | 0.01979                         | 0.02800                         | 0.05407                          | 0.08948                           | 0.08546                        | 0.02704                  | 0.30046                  | 0.06872                |
| 14            | 0.01287                                | 0.01191                | 0.00000   | 0.08626                        | 0.06051                         | 0.11845                         | 0.13937                      | 0.01448                      | 0.05407                      | 0.01915                           | 0.01931                         | 0.02720                         | 0.05263                          | 0.08546                           | 0.08159                        | 0.02591                  | 0.28936                  | 0.06598                |
| 15            | 0.01223                                | 0.01127                | 0.00000   | 0.08304                        | 0.05922                         | 0.11346                         | 0.13358                      | 0.01400                      | 0.05214                      | 0.01867                           | 0.01867                         | 0.02639                         | 0.05134                          | 0.08175                           | 0.07821                        | 0.02494                  | 0.27922                  | 0.06341                |
| 16            | 0.01159                                | 0.01062                | 0.00000   | 0.08015                        | 0.05810                         | 0.10895                         | 0.12810                      | 0.01352                      | 0.05021                      | 0.01819                           | 0.01819                         | 0.02559                         | 0.05021                          | 0.07854                           | 0.07500                        | 0.02414                  | 0.27021                  | 0.06116                |
| 17            | 0.01100                                | 0.01014                | 0.00000   | 0.07741                        | 0.05697                         | 0.10477                         | 0.12328                      | 0.01304                      | 0.04844                      | 0.01754                           | 0.01770                         | 0.02494                         | 0.04908                          | 0.07564                           | 0.07226                        | 0.02334                  | 0.26200                  | 0.05906                |
| 18            | 0.01046                                | 0.00966                | 0.00000   | 0.07483                        | 0.05601                         | 0.10091                         | 0.11877                      | 0.01255                      | 0.04683                      | 0.01706                           | 0.01722                         | 0.02430                         | 0.04812                          | 0.07290                           | 0.06952                        | 0.02253                  | 0.25444                  | 0.05713                |
| 19            | 0.00998                                | 0.00917                | 0.00000   | 0.07242                        | 0.05504                         | 0.09753                         | 0.11475                      | 0.01223                      | 0.04538                      | 0.01658                           | 0.01674                         | 0.02366                         | 0.04715                          | 0.07033                           | 0.06727                        | 0.02189                  | 0.24752                  | 0.05520                |
| 20            | 0.00966                                | 0.00885                | 0.00000   | 0.07033                        | 0.05407                         | 0.09431                         | 0.11088                      | 0.01175                      | 0.04410                      | 0.01625                           | 0.01625                         | 0.02317                         | 0.04635                          | 0.06808                           | 0.06502                        | 0.02140                  | 0.24108                  | 0.05359                |
| 21            | 0.00917                                | 0.00837                | 0.00000   | 0.06824                        | 0.05327                         | 0.09125                         | 0.10750                      | 0.01143                      | 0.04281                      | 0.01577                           | 0.01577                         | 0.02253                         | 0.04538                          | 0.06598                           | 0.06293                        | 0.02076                  | 0.23513                  | 0.05193                |
| 22            | 0.00869                                | 0.00805                | 0.00000   | 0.06647                        | 0.05246                         | 0.08851                         | 0.10429                      | 0.01110                      | 0.04152                      | 0.01529                           | 0.01529                         | 0.02205                         | 0.04474                          | 0.06389                           | 0.06116                        | 0.02028                  | 0.22965                  | 0.05053                |
| 23            | 0.00837                                | 0.00772                | 0.00000   | 0.06470                        | 0.05166                         | 0.08610                         | 0.10123                      | 0.01078                      | 0.04056                      | 0.01497                           | 0.01497                         | 0.02173                         | 0.04394                          | 0.06212                           | 0.05938                        | 0.01979                  | 0.22450                  | 0.04908                |
| 24            | 0.00805                                | 0.00740                | 0.00000   | 0.06309                        | 0.05086                         | 0.08369                         | 0.09849                      | 0.01046                      | 0.03943                      | 0.01448                           | 0.01448                         | 0.02124                         | 0.04329                          | 0.06051                           | 0.05778                        | 0.01931                  | 0.21968                  | 0.04780                |
| 25            | 0.00772                                | 0.00708                | 0.00000   | 0.06148                        | 0.05021                         | 0.08143                         | 0.09592                      | 0.01014                      | 0.03846                      | 0.01416                           | 0.01416                         | 0.02092                         | 0.04249                          | 0.05890                           | 0.05633                        | 0.01883                  | 0.21517                  | 0.04657                |
| 26            | 0.00740                                | 0.00676                | 0.00000   | 0.06019                        | 0.04941                         | 0.07950                         | 0.09350                      | 0.00982                      | 0.03766                      | 0.01384                           | 0.01384                         | 0.02044                         | 0.04200                          | 0.05745                           | 0.05488                        | 0.01851                  | 0.21082                  | 0.04544                |
| 27            | 0.00708                                | 0.00644                | 0.00000   | 0.05874                        | 0.04876                         | 0.07757                         | 0.09125                      | 0.00950                      | 0.03669                      | 0.01352                           | 0.01352                         | 0.02012                         | 0.04136                          | 0.05601                           | 0.05359                        | 0.01802                  | 0.20680                  | 0.04442                |
| 28            | 0.00676                                | 0.00612                | 0.00000   | 0.05745                        | 0.04812                         | 0.07564                         | 0.08900                      | 0.00917                      | 0.03589                      | 0.01304                           | 0.01320                         | 0.01979                         | 0.04072                          | 0.05472                           | 0.05230                        | 0.01770                  | 0.20310                  | 0.04345                |
| 29            | 0.00644                                | 0.00595                | 0.00000   | 0.05633                        | 0.04764                         | 0.07403                         | 0.08707                      | 0.00901                      | 0.03524                      | 0.01271                           | 0.01287                         | 0.01947                         | 0.04023                          | 0.05343                           | 0.05118                        | 0.01738                  | 0.19940                  | 0.04249                |
| 30            | 0.00628                                | 0.00563                | 0.00000   | 0.05520                        | 0.04699                         | 0.07242                         | 0.08513                      | 0.00869                      | 0.03444                      | 0.01255                           | 0.01255                         | 0.01915                         | 0.03959                          | 0.05230                           | 0.05005                        | 0.01706                  | 0.19602                  | 0.04168                |
| 31            | 0.00612                                | 0.00547                | 0.00000   | 0.05423                        | 0.04635                         | 0.07097                         | 0.08336                      | 0.00853                      | 0.03380                      | 0.01223                           | 0.01223                         | 0.01899                         | 0.03911                          | 0.05118                           | 0.04908                        | 0.01674                  | 0.19280                  | 0.04072                |
| 32            | 0.00579                                | 0.00531                | 0.00000   | 0.05327                        | 0.04587                         | 0.06952                         | 0.08175                      | 0.00821                      | 0.03315                      | 0.01191                           | 0.01191                         | 0.01867                         | 0.03862                          | 0.05021                           | 0.04796                        | 0.01642                  | 0.18958                  | 0.04007                |
| 33            | 0.00563                                | 0.00515                | 0.00000   | 0.05230                        | 0.04538                         | 0.06808                         | 0.08015                      | 0.00805                      | 0.03267                      | 0.01159                           | 0.01159                         | 0.01851                         | 0.03814                          | 0.04925                           | 0.04715                        | 0.01625                  | 0.18668                  | 0.03927                |
| 34            | 0.00547                                | 0.00499                | 0.00000   | 0.05134                        | 0.04474                         | 0.06695                         | 0.07870                      | 0.00789                      | 0.03203                      | 0.01143                           | 0.01143                         | 0.01819                         | 0.03766                          | 0.04828                           | 0.04619                        | 0.01593                  | 0.18379                  | 0.03862                |
| 35            | 0.00531                                | 0.00467                | 0.00000   | 0.05053                        | 0.04426                         | 0.06566                         | 0.07725                      | 0.00772                      | 0.03154                      | 0.01110                           | 0.01110                         | 0.01802                         | 0.03718                          | 0.04748                           | 0.04538                        | 0.01561                  | 0.18121                  | 0.03798                |
| 36            | 0.00499                                | 0.00451                | 0.00000   | 0.04973                        | 0.04377                         | 0.06453                         | 0.07596                      | 0.00740                      | 0.03106                      | 0.01078                           | 0.01094                         | 0.01786                         | 0.03685                          | 0.04667                           | 0.04458                        | 0.01545                  | 0.17864                  | 0.03734                |
| 37            | 0.00483                                | 0.00435                | 0.00000   | 0.04908                        | 0.04329                         | 0.06341                         | 0.07467                      | 0.00724                      | 0.03058                      | 0.01062                           | 0.01062                         | 0.01770                         | 0.03637                          | 0.04587                           | 0.04394                        | 0.01513                  | 0.17606                  | 0.03669                |
| 38            | 0.00467                                | 0.00435                | 0.00000   | 0.04828                        | 0.04281                         | 0.06244                         | 0.07355                      | 0.00708                      | 0.03009                      | 0.01046                           | 0.01046                         | 0.01738                         | 0.03605                          | 0.04506                           | 0.04313                        | 0.01497                  | 0.17365                  | 0.03621                |
| 39            | 0.00467                                | 0.00418                | 0.00000   | 0.04764                        | 0.04233                         | 0.06148                         | 0.07246                      | 0.00692                      | 0.02977                      | 0.01014                           | 0.01014                         | 0.01722                         | 0.03573                          | 0.04442                           | 0.04249                        | 0.01481                  | 0.17140                  | 0.03557                |
| 40            | 0.00451                                | 0.00402                | 0.00000   | 0.04699                        | 0.04200                         | 0.06051                         | 0.07129                      | 0.00676                      | 0.02929                      | 0.00998                           | 0.00998                         | 0.01706                         | 0.03524                          | 0.04377                           | 0.04184                        | 0.01448                  | 0.16914                  | 0.03508                |
| 41            | 0.00435                                | 0.00386                | 0.00000   | 0.04651                        | 0.04152                         | 0.05971                         | 0.07017                      | 0.00660                      | 0.02897                      | 0.00982                           | 0.00982                         | 0.01706                         | 0.03476                          | 0.04313                           | 0.04120                        | 0.01432                  | 0.16705                  | 0.03476                |
| 42            | 0.00418                                | 0.00386                | 0.00000   | 0.04587                        | 0.04104                         | 0.05890                         | 0.06920                      | 0.00644                      | 0.02865                      | 0.00950                           | 0.00966                         | 0.01690                         | 0.03444                          | 0.04249                           | 0.04072                        | 0.01416                  | 0.16496                  | 0.03428                |
| 43            | 0.00402                                | 0.00370                | 0.00000   | 0.04538                        | 0.04072                         | 0.05810                         | 0.06824                      | 0.00644                      | 0.02832                      | 0.00933                           | 0.00950                         | 0.01674                         | 0.03412                          | 0.04200                           | 0.04007                        | 0.01400                  | 0.16303                  | 0.03380                |
| 44            | 0.00402                                | 0.00354                | 0.00000   | 0.04490                        | 0.04023                         | 0.05729                         | 0.06743                      | 0.00628                      | 0.02800                      | 0.00917                           | 0.00917                         | 0.01658                         | 0.03380                          | 0.04136                           | 0.03959                        | 0.01384                  | 0.16110                  | 0.03347                |
| 45            | 0.00386                                | 0.00354                | 0.00000   | 0.04442                        | 0.03991                         | 0.05665                         | 0.06663                      | 0.00612                      | 0.02768                      | 0.00901                           | 0.00901                         | 0.01642                         | 0.03347                          | 0.04088                           | 0.03911                        | 0.01368                  | 0.15933                  | 0.03315                |
| 46            | 0.00370                                | 0.00338                | 0.00000   | 0.04394                        | 0.03959                         | 0.05584                         | 0.06582                      | 0.00595                      | 0.02736                      | 0.00885                           | 0.00885                         | 0.01642                         | 0.03315                          | 0.04039                           | 0.03846                        | 0.01352                  | 0.15755                  | 0.03283                |
| 47            | 0.00370                                | 0.00338                | 0.00000   | 0.04361                        | 0.03911                         | 0.05520                         | 0.06502                      | 0.00579                      | 0.02704                      | 0.00869                           | 0.00869                         | 0.01625                         | 0.03283                          | 0.03991                           | 0.03814                        | 0.01336                  | 0.15578                  | 0.03251                |
| 48            | 0.00354                                | 0.00322                | 0.00000   | 0.04313                        | 0.03879                         | 0.05456                         | 0.06421                      | 0.00579                      | 0.02688                      | 0.00853                           | 0.00853                         | 0.01625                         | 0.03251                          | 0.03943                           | 0.03766                        | 0.01320                  | 0.15418                  | 0.03219                |
| 49            | 0.00354                                | 0.00322                | 0.00000   | 0.04281                        | 0.03846                         | 0.05407                         | 0.06357                      | 0.00563                      | 0.02672                      | 0.00837                           | 0.00837                         | 0.01609                         | 0.03219                          | 0.03895                           | 0.03718                        | 0.01304                  | 0.15257                  | 0.03187                |
| 50            | 0.00338                                | 0.00306                | 0.00000   | 0.04249                        | 0.03814                         | 0.05343                         | 0.06293                      | 0.00547                      | 0.02639                      | 0.00821                           | 0.00821                         | 0.01609                         | 0.03187                          | 0.03846                           | 0.03685                        | 0.01287                  | 0.15096                  | 0.03170                |
| 51            | 0.00338                                | 0.00306                | 0.00000   | 0.04216                        | 0.03766                         | 0.05295                         | 0.06228                      | 0.00547                      | 0.02623                      | 0.00805                           | 0.00821                         | 0.01593                         | 0.03154                          | 0.03814                           | 0.03653                        | 0.01271                  | 0.15080                  | 0.03138                |
| 52            | 0.00322                                | 0.00290                | 0.00000   | 0.04184                        | 0.03734                         | 0.05246                         | 0.06164                      | 0.00531                      | 0.02607                      | 0.00805                           | 0.00805                         | 0.01593                         | 0.03138                          | 0.03782                           | 0.036                          |                          |                          |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - NO (Year 2033) (for Sensitivity Test)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                  |                                 |                                 |                                 |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.49310                                | 0.06486                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                          | 2.95122                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 2             | 0.49310                                | 0.06486                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                          | 2.95122                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 3             | 0.49310                                | 0.06486                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                          | 2.95122                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 4             | 0.49310                                | 0.06486                | 2.56867   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25598                      | 1.43022                      | 2.94333                          | 2.95122                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 5             | 0.48473                                | 0.06453                | 2.24214   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25533                      | 1.43022                      | 2.94252                          | 2.95089                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 6             | 0.47653                                | 0.06357                | 2.00041   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25453                      | 1.43022                      | 2.94204                          | 2.95057                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 7             | 0.46848                                | 0.06212                | 1.81647   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25389                      | 1.43022                      | 2.94156                          | 2.95025                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 8             | 0.46059                                | 0.06067                | 1.67098   | 1.76111                        | 2.26338                         | 4.79697                         | 4.85475                      | 2.25324                      | 1.43022                      | 2.94108                          | 2.95009                         | 1.31403                         | 1.98883                         | 4.33091                           | 4.45837                        | 2.68825                  | 12.53003                 | 1.46000                |
| 9             | 0.45319                                | 0.05938                | 1.55221   | 1.63719                        | 2.14091                         | 4.78860                         | 4.85475                      | 2.13302                      | 1.33543                      | 2.78239                          | 2.79092                         | 1.24322                         | 1.88116                         | 4.30709                           | 4.42006                        | 2.68825                  | 11.68979                 | 1.38162                |
| 10            | 0.44579                                | 0.05794                | 1.45324   | 1.52888                        | 2.02633                         | 4.78136                         | 4.85475                      | 2.01973                      | 1.25239                      | 2.63353                          | 2.64126                         | 1.17675                         | 1.78042                         | 4.28633                           | 4.38675                        | 2.68825                  | 10.96671                 | 1.31194                |
| 11            | 0.43871                                | 0.05681                | 1.36891   | 1.43682                        | 1.92268                         | 4.57022                         | 4.64247                      | 1.91721                      | 1.18158                      | 2.49899                          | 2.50607                         | 1.11672                         | 1.68981                         | 4.09256                           | 4.18510                        | 2.57077                  | 10.36466                 | 1.25159                |
| 12            | 0.43195                                | 0.05552                | 1.29449   | 1.35764                        | 1.82821                         | 4.10849                         | 4.16997                      | 1.82371                      | 1.12043                      | 2.37604                          | 2.38279                         | 1.06217                         | 1.60741                         | 3.65858                           | 3.77456                        | 2.30925                  | 9.87246                  | 1.19880                |
| 13            | 0.42535                                | 0.05440                | 1.23308   | 1.28876                        | 1.74163                         | 3.72113                         | 3.77391                      | 1.73761                      | 1.06700                      | 2.26322                          | 2.26918                         | 1.01196                         | 1.53177                         | 3.34422                           | 3.42967                        | 2.08973                  | 8.54127                  | 1.15181                |
| 14            | 0.41891                                | 0.05327                | 1.17724   | 1.22809                        | 1.66165                         | 3.39185                         | 3.43724                      | 1.65779                      | 1.01952                      | 2.15877                          | 2.16425                         | 0.96545                         | 1.46209                         | 3.05357                           | 3.13613                        | 1.90337                  | 7.88739                  | 1.10980                |
| 15            | 0.41264                                | 0.05198                | 1.12751   | 1.17418                        | 1.58730                         | 3.10861                         | 3.14772                      | 1.58359                      | 0.97752                      | 2.06189                          | 2.06656                         | 0.92215                         | 1.39723                         | 2.80332                           | 2.88330                        | 1.74292                  | 7.35518                  | 1.07166                |
| 16            | 0.40668                                | 0.05118                | 1.08277   | 1.12574                        | 1.51777                         | 2.86270                         | 2.89650                      | 1.51407                      | 0.93954                      | 1.97096                          | 1.97547                         | 0.88192                         | 1.33688                         | 2.58605                           | 2.66330                        | 1.60387                  | 6.90795                  | 1.03706                |
| 17            | 0.40089                                | 0.05005                | 1.04253   | 1.08228                        | 1.45259                         | 2.64737                         | 2.67634                      | 1.44873                      | 0.90526                      | 1.88583                          | 1.88969                         | 0.84410                         | 1.28023                         | 2.39567                           | 2.47050                        | 1.48204                  | 6.52396                  | 1.00520                |
| 18            | 0.39525                                | 0.04908                | 1.00600   | 1.04269                        | 1.39112                         | 2.45731                         | 2.48225                      | 1.38725                      | 0.87403                      | 1.80552                          | 1.80874                         | 0.80837                         | 1.22696                         | 2.22733                           | 2.30024                        | 1.37470                  | 6.18873                  | 0.97591                |
| 19            | 0.38978                                | 0.04828                | 0.97253   | 1.00664                        | 1.33302                         | 2.28849                         | 2.31005                      | 1.29000                      | 0.84539                      | 1.72956                          | 1.73246                         | 0.77474                         | 1.17659                         | 2.07782                           | 2.14880                        | 1.27911                  | 5.89245                  | 0.94855                |
| 20            | 0.38447                                | 0.04731                | 0.94163   | 0.97365                        | 1.27798                         | 2.13769                         | 2.15604                      | 1.27363                      | 0.81900                      | 1.65762                          | 1.66004                         | 0.74271                         | 1.12895                         | 1.94409                           | 2.01329                        | 1.19381                  | 5.62804                  | 0.92312                |
| 21            | 0.37932                                | 0.04651                | 0.91346   | 0.94324                        | 1.22584                         | 2.00202                         | 2.01763                      | 1.22101                      | 0.79469                      | 1.58923                          | 1.59100                         | 0.71230                         | 1.08373                         | 1.82387                           | 1.89114                        | 1.11737                  | 5.39034                  | 0.89946                |
| 22            | 0.37449                                | 0.04554                | 0.88707   | 0.91507                        | 1.17611                         | 1.87971                         | 1.89275                      | 1.17096                      | 0.77200                      | 1.52389                          | 1.52534                         | 0.68349                         | 1.04060                         | 1.71524                           | 1.78090                        | 1.04817                  | 5.17485                  | 0.87709                |
| 23            | 0.36951                                | 0.04490                | 0.86293   | 0.88900                        | 1.12847                         | 1.76867                         | 1.77961                      | 1.12316                      | 0.75092                      | 1.46177                          | 1.46257                         | 0.65581                         | 0.99940                         | 1.61675                           | 1.68096                        | 0.98556                  | 4.97883                  | 0.85601                |
| 24            | 0.36500                                | 0.04410                | 0.84024   | 0.86470                        | 1.08293                         | 1.66760                         | 1.67678                      | 1.07729                      | 0.73145                      | 1.40206                          | 1.40254                         | 0.62941                         | 0.96300                         | 1.52695                           | 1.58971                        | 0.92843                  | 4.79906                  | 0.83638                |
| 25            | 0.36049                                | 0.04329                | 0.81900   | 0.84201                        | 1.03948                         | 1.57539                         | 1.58263                      | 1.03304                      | 0.71294                      | 1.34477                          | 1.34493                         | 0.60399                         | 0.92264                         | 1.44487                           | 1.50635                        | 0.87645                  | 4.63378                  | 0.81771                |
| 26            | 0.35615                                | 0.04265                | 0.79920   | 0.82077                        | 0.99763                         | 1.49074                         | 1.49637                      | 0.99087                      | 0.69572                      | 1.29005                          | 1.28957                         | 0.57969                         | 0.88627                         | 1.36955                           | 1.42990                        | 0.82865                  | 4.48106                  | 0.79884                |
| 27            | 0.35196                                | 0.04184                | 0.78053   | 0.80081                        | 0.95724                         | 1.41284                         | 1.41703                      | 0.95016                      | 0.67947                      | 1.23710                          | 1.23646                         | 0.55635                         | 0.85166                         | 1.30035                           | 1.35941                        | 0.78472                  | 4.33960                  | 0.78191                |
| 28            | 0.34778                                | 0.04120                | 0.76299   | 0.78214                        | 0.91861                         | 1.34123                         | 1.34396                      | 0.91105                      | 0.66402                      | 1.18625                          | 1.18512                         | 0.53382                         | 0.81819                         | 1.23646                           | 1.29423                        | 0.74416                  | 4.20779                  | 0.76701                |
| 29            | 0.34392                                | 0.04039                | 0.74657   | 0.76444                        | 0.88112                         | 1.27476                         | 1.27637                      | 0.87307                      | 0.64969                      | 1.13716                          | 1.13571                         | 0.51209                         | 0.78600                         | 1.17724                           | 1.23404                        | 0.70682                  | 4.08570                  | 0.75189                |
| 30            | 0.34005                                | 0.03975                | 0.73096   | 0.74770                        | 0.84507                         | 1.21328                         | 1.21377                      | 0.83670                      | 0.63585                      | 1.08985                          | 1.08792                         | 0.49101                         | 0.75494                         | 1.12236                           | 1.17804                        | 0.67206                  | 3.97009                  | 0.73740                |
| 31            | 0.33635                                | 0.03927                | 0.71600   | 0.73193                        | 0.74110                         | 1.15599                         | 1.15551                      | 0.72968                      | 0.62298                      | 0.95209                          | 0.94855                         | 0.43050                         | 0.66675                         | 1.07118                           | 1.12606                        | 0.63988                  | 3.86243                  | 0.72556                |
| 32            | 0.33281                                | 0.03862                | 0.70200   | 0.71696                        | 0.71085                         | 1.10272                         | 1.10127                      | 0.69926                      | 0.61059                      | 0.91250                          | 0.90880                         | 0.41280                         | 0.64084                         | 1.02370                           | 1.07746                        | 0.60978                  | 3.75104                  | 0.71036                |
| 33            | 0.32927                                | 0.03798                | 0.68864   | 0.70280                        | 0.68284                         | 1.05315                         | 1.05074                      | 0.67094                      | 0.59884                      | 0.87581                          | 0.87178                         | 0.39670                         | 0.61654                         | 0.97945                           | 1.03239                        | 0.58194                  | 3.66576                  | 0.69781                |
| 34            | 0.32589                                | 0.03734                | 0.67592   | 0.68912                        | 0.65677                         | 1.00664                         | 1.00359                      | 0.64544                      | 0.58757                      | 0.84169                          | 0.83734                         | 0.38141                         | 0.59401                         | 0.93793                           | 0.98975                        | 0.55587                  | 3.57564                  | 0.68574                |
| 35            | 0.32267                                | 0.03669                | 0.66369   | 0.67641                        | 0.63247                         | 0.96319                         | 0.95933                      | 0.61992                      | 0.57695                      | 0.80966                          | 0.80515                         | 0.36741                         | 0.57293                         | 0.89914                           | 0.95000                        | 0.53124                  | 3.49051                  | 0.67432                |
| 36            | 0.31962                                | 0.03621                | 0.65211   | 0.66402                        | 0.60962                         | 0.92332                         | 0.91797                      | 0.59707                      | 0.56681                      | 0.78005                          | 0.77522                         | 0.35389                         | 0.55329                         | 0.86245                           | 0.91298                        | 0.50823                  | 3.40988                  | 0.66321                |
| 37            | 0.31656                                | 0.03573                | 0.64100   | 0.65243                        | 0.58838                         | 0.88401                         | 0.87902                      | 0.57550                      | 0.55715                      | 0.75205                          | 0.74722                         | 0.34150                         | 0.53479                         | 0.82817                           | 0.87774                        | 0.48683                  | 3.33343                  | 0.65275                |
| 38            | 0.31382                                | 0.03508                | 0.63054   | 0.64116                        | 0.56842                         | 0.84796                         | 0.84233                      | 0.55538                      | 0.54766                      | 0.72066                          | 0.72066                         | 0.33008                         | 0.51740                         | 0.79582                           | 0.84474                        | 0.46639                  | 3.26069                  | 0.64245                |
| 39            | 0.31093                                | 0.03460                | 0.62040   | 0.63038                        | 0.54959                         | 0.81385                         | 0.80789                      | 0.53639                      | 0.53897                      | 0.70135                          | 0.69604                         | 0.31913                         | 0.50099                         | 0.76540                           | 0.81352                        | 0.44740                  | 3.19149                  | 0.63295                |
| 40            | 0.30835                                | 0.03396                | 0.61059   | 0.62008                        | 0.53173                         | 0.78198                         | 0.77522                      | 0.51853                      | 0.53028                      | 0.67818                          | 0.67271                         | 0.30883                         | 0.48570                         | 0.73660                           | 0.78407                        | 0.42921                  | 3.12525                  | 0.62362                |
| 41            | 0.30578                                | 0.03364                | 0.60125   | 0.61026                        | 0.51499                         | 0.75156                         | 0.74448                      | 0.50163                      | 0.52207                      | 0.65629                          | 0.65066                         | 0.29902                         | 0.47122                         | 0.70956                           | 0.75639                        | 0.41231                  | 3.06258                  | 0.61477                |
| 42            | 0.30320                                | 0.03315                | 0.59224   | 0.60061                        | 0.49938                         | 0.72292                         | 0.71551                      | 0.48586                      | 0.51419                      | 0.63569                          | 0.62990                         | 0.28984                         | 0.45738                         | 0.68381                           | 0.73000                        | 0.39622                  | 3.00239                  | 0.60624                |
| 43            | 0.30095                                | 0.03267                | 0.58355   | 0.59159                        | 0.48441                         | 0.69572                         | 0.68799                      | 0.47089                      | 0.50678                      | 0.61622                          | 0.61042                         | 0.28115                         | 0.44434                         | 0.65935                           | 0.70489                        | 0.38093                  | 2.94494                  | 0.59819                |
| 44            | 0.29853                                | 0.03203                | 0.57534   | 0.58274                        | 0.47041                         | 0.67013                         | 0.66192                      | 0.45657                      | 0.49954                      | 0.59787                          | 0.59192                         | 0.27294                         | 0.43227                         | 0.63633                           | 0.68124                        | 0.36661                  | 2.88890                  | 0.59047                |
| 45            | 0.29628                                | 0.03154                | 0.56729   | 0.57421                        | 0.45705                         | 0.64567                         | 0.63730                      | 0.44321                      | 0.49246                      | 0.58049                          | 0.57437                         | 0.26522                         | 0.42052                         | 0.61445                           | 0.65887                        | 0.35277                  | 2.83711                  | 0.58290                |
| 46            | 0.29419                                | 0.03106                | 0.55957   | 0.56617                        | 0.44434                         | 0.62266                         | 0.61380                      | 0.43050                      | 0.48586                      | 0.56391                          | 0.55764                         | 0.25798                         | 0.40942                         | 0.59353                           | 0.63730                        | 0.33973                  | 2.78658                  | 0.57598                |
| 47            | 0.29210                                | 0.03058                | 0.55217   | 0.55828                        | 0.43211                         | 0.60061                         | 0.59143                      | 0.41827                      | 0.47926                      | 0.54814                          | 0.54187                         | 0.25090                         | 0.39880                         | 0.57373                           | 0.61686                        | 0.32750                  | 2.73798                  | 0.56922                |
| 48            | 0.29016                                | 0.03042                | 0.54476   | 0.55056                        | 0.42068                         | 0.57969                         | 0.57019                      | 0.40684                      | 0.47315                      | 0.53334                          | 0.52690                         | 0.24414                         | 0.38988                         | 0.55490                           | 0.59755                        | 0.31591                  | 2.69131                  | 0.56279                |
| 49            | 0.28839                                | 0.02993                | 0.53784   | 0.54331                        | 0.40974                         | 0.55973                         | 0.55007                      | 0.39590                      | 0.46719                      | 0.51901                          | 0.51242                         | 0.23786                         | 0.37932                         | 0.53672                           | 0.57904                        | 0.30465                  | 2.64624                  | 0.55667                |
| 50            | 0.28646                                | 0.02945                | 0.53108   | 0.53623                        | 0.39928                         | 0.54074                         | 0.53076                      | 0.38544                      | 0.46140                      | 0.50549                          | 0.49890                         | 0.23175                         | 0.37015                         | 0.51966                           | 0.56150                        | 0.29387                  | 2.60295                  | 0.55072                |
| 51            | 0.28469                                | 0.02897                | 0.52465   | 0.52947                        | 0.38930                         | 0.52239                         | 0.51242                      | 0.37546                      | 0.45577                      | 0.49262                          | 0.48586                         | 0.22595                         | 0.36146                         | 0.50324                           | 0.54460                        | 0.28373                  | 2.55955                  | 0.54508                |
| 52            | 0.28308                                | 0.02865                | 0.51837   | 0.52271                        | 0.37981                         | 0.50517                         | 0.49487                      | 0.36596                      | 0.45046                      | 0.48007                          | 0.47347                         | 0.22048                         | 0.35325                         | 0.48779                           | 0.52835                        | 0.27407                  | 2.58                     |                        |



**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - NO<sub>x</sub> (Year 2033) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 1             | 0.02591               | 0.00354                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 2             | 0.02591               | 0.00354                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 3             | 0.02591               | 0.00354                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 4             | 0.02591               | 0.00354                | 0.07210   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 5             | 0.02559               | 0.00354                | 0.06293   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18668                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 6             | 0.02511               | 0.00338                | 0.05617   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18652                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 7             | 0.02462               | 0.00338                | 0.05102   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55603                      | 0.51274                      | 0.18652                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 8             | 0.02430               | 0.00338                | 0.04683   | 0.68494                        | 1.11479                         | 2.31826                         | 2.39116                      | 0.55587                      | 0.51274                      | 0.18652                           | 0.19055                         | 0.51097                         | 0.96577                         | 2.03003                           | 2.03051                        | 1.09806                  | 1.46386                  | 0.38994                |
| 9             | 0.02382               | 0.00322                | 0.04361   | 0.63682                        | 1.05460                         | 2.31762                         | 2.39116                      | 0.52593                      | 0.47685                      | 0.17655                           | 0.18025                         | 0.48345                         | 0.91362                         | 2.02633                           | 2.02472                        | 1.09806                  | 1.44278                  | 0.36275                |
| 10            | 0.02350               | 0.00322                | 0.04072   | 0.59449                        | 0.99795                         | 2.31713                         | 2.39116                      | 0.49777                      | 0.44514                      | 0.16705                           | 0.17059                         | 0.46770                         | 0.86470                         | 2.02311                           | 2.01957                        | 1.09806                  | 1.42475                  | 0.33877                |
| 11            | 0.02317               | 0.00306                | 0.03846   | 0.55876                        | 0.94694                         | 2.21558                         | 2.28656                      | 0.47234                      | 0.41843                      | 0.15852                           | 0.16190                         | 0.43436                         | 0.82060                         | 1.93379                           | 1.92976                        | 1.04994                  | 1.40979                  | 0.31849                |
| 12            | 0.02269               | 0.00306                | 0.03637   | 0.52803                        | 0.90059                         | 1.99044                         | 2.05401                      | 0.44901                      | 0.39542                      | 0.15080                           | 0.15385                         | 0.41296                         | 0.78053                         | 1.73841                           | 1.73584                        | 1.02620                  | 1.30095                  | 0.30095                |
| 13            | 0.02237               | 0.00290                | 0.03460   | 0.50115                        | 0.85794                         | 1.80150                         | 1.85879                      | 0.42760                      | 0.37530                      | 0.14371                           | 0.14661                         | 0.39348                         | 0.74368                         | 1.57458                           | 1.57297                        | 0.85360                  | 1.02837                  | 0.28582                |
| 14            | 0.02205               | 0.00290                | 0.03299   | 0.47765                        | 0.81851                         | 1.64089                         | 1.69287                      | 0.40781                      | 0.35776                      | 0.13712                           | 0.13985                         | 0.37546                         | 0.70972                         | 1.43521                           | 1.43441                        | 0.77331                  | 0.90703                  | 0.27246                |
| 15            | 0.02173               | 0.00290                | 0.03154   | 0.45657                        | 0.78182                         | 1.50297                         | 1.55028                      | 0.38930                      | 0.34199                      | 0.13084                           | 0.13358                         | 0.35872                         | 0.67818                         | 1.31548                           | 1.31532                        | 0.71197                  | 0.81771                  | 0.26055                |
| 16            | 0.02140               | 0.00274                | 0.03042   | 0.43790                        | 0.74754                         | 1.38307                         | 1.42652                      | 0.37208                      | 0.32798                      | 0.12521                           | 0.12762                         | 0.34295                         | 0.64873                         | 1.21135                           | 1.21200                        | 0.65500                  | 0.74834                  | 0.24977                |
| 17            | 0.02108               | 0.00274                | 0.02929   | 0.42084                        | 0.71535                         | 1.27814                         | 1.31821                      | 0.35583                      | 0.31274                      | 0.11974                           | 0.12215                         | 0.32831                         | 0.62105                         | 1.12026                           | 1.12139                        | 0.60527                  | 0.69250                  | 0.24028                |
| 18            | 0.02076               | 0.00274                | 0.02816   | 0.40555                        | 0.68526                         | 1.18560                         | 1.22662                      | 0.34054                      | 0.30368                      | 0.11475                           | 0.11700                         | 0.31447                         | 0.59514                         | 1.03996                           | 1.04141                        | 0.56134                  | 0.64631                  | 0.23142                |
| 19            | 0.02044               | 0.00257                | 0.02720   | 0.39155                        | 0.65661                         | 1.10337                         | 1.13765                      | 0.32605                      | 0.29122                      | 0.10992                           | 0.11201                         | 0.30127                         | 0.57067                         | 0.96850                           | 0.97027                        | 0.52239                  | 0.60737                  | 0.22254                |
| 20            | 0.02028               | 0.00257                | 0.02639   | 0.37868                        | 0.62958                         | 1.02998                         | 1.06185                      | 0.31237                      | 0.28357                      | 0.10541                           | 0.10734                         | 0.28888                         | 0.54734                         | 0.90461                           | 0.90670                        | 0.48763                  | 0.57405                  | 0.21613                |
| 21            | 0.01996               | 0.00257                | 0.02559   | 0.36677                        | 0.60383                         | 0.96400                         | 0.99377                      | 0.29934                      | 0.27412                      | 0.10107                           | 0.10300                         | 0.27713                         | 0.52529                         | 0.84732                           | 0.84973                        | 0.45625                  | 0.54492                  | 0.20938                |
| 22            | 0.01963               | 0.00257                | 0.02494   | 0.35583                        | 0.57920                         | 0.90445                         | 0.93229                      | 0.28679                      | 0.26651                      | 0.09704                           | 0.09881                         | 0.26586                         | 0.50421                         | 0.79550                           | 0.79823                        | 0.42809                  | 0.51934                  | 0.20326                |
| 23            | 0.01947               | 0.00241                | 0.02414   | 0.34569                        | 0.55587                         | 0.85054                         | 0.87661                      | 0.27488                      | 0.25894                      | 0.09302                           | 0.09479                         | 0.25508                         | 0.48425                         | 0.74851                           | 0.75140                        | 0.40250                  | 0.49648                  | 0.19747                |
| 24            | 0.01915               | 0.00241                | 0.02350   | 0.33619                        | 0.53530                         | 0.80145                         | 0.82575                      | 0.26345                      | 0.25186                      | 0.08932                           | 0.09093                         | 0.24478                         | 0.46494                         | 0.70586                           | 0.70892                        | 0.37916                  | 0.47604                  | 0.19199                |
| 25            | 0.01899               | 0.00241                | 0.02301   | 0.32750                        | 0.51193                         | 0.75655                         | 0.77941                      | 0.25267                      | 0.24526                      | 0.08578                           | 0.08723                         | 0.23496                         | 0.44659                         | 0.66675                           | 0.66997                        | 0.35792                  | 0.45770                  | 0.18701                |
| 26            | 0.01867               | 0.00225                | 0.02237   | 0.31913                        | 0.49133                         | 0.71535                         | 0.73692                      | 0.24205                      | 0.23915                      | 0.08224                           | 0.08369                         | 0.22547                         | 0.42905                         | 0.63102                           | 0.63424                        | 0.33845                  | 0.44096                  | 0.18234                |
| 27            | 0.01851               | 0.00225                | 0.02189   | 0.31141                        | 0.47154                         | 0.67753                         | 0.69797                      | 0.23207                      | 0.23335                      | 0.07902                           | 0.08015                         | 0.21630                         | 0.41199                         | 0.59803                           | 0.60141                        | 0.32042                  | 0.42567                  | 0.17799                |
| 28            | 0.01835               | 0.00225                | 0.02140   | 0.30417                        | 0.45239                         | 0.64261                         | 0.66192                      | 0.22225                      | 0.22788                      | 0.07580                           | 0.07693                         | 0.20761                         | 0.39574                         | 0.56762                           | 0.57116                        | 0.30401                  | 0.41167                  | 0.17381                |
| 29            | 0.01802               | 0.00225                | 0.02092   | 0.29725                        | 0.43404                         | 0.61042                         | 0.62861                      | 0.21292                      | 0.22273                      | 0.07274                           | 0.07371                         | 0.19908                         | 0.37925                         | 0.53961                           | 0.54315                        | 0.28872                  | 0.39880                  | 0.16995                |
| 30            | 0.01786               | 0.00225                | 0.02044   | 0.29081                        | 0.41618                         | 0.58049                         | 0.59771                      | 0.20374                      | 0.21791                      | 0.06968                           | 0.07065                         | 0.19103                         | 0.36468                         | 0.51354                           | 0.51724                        | 0.27455                  | 0.38649                  | 0.16625                |
| 31            | 0.01770               | 0.00209                | 0.02012   | 0.28469                        | 0.36500                         | 0.55281                         | 0.56906                      | 0.17719                      | 0.21324                      | 0.06116                           | 0.06180                         | 0.16737                         | 0.32155                         | 0.48940                           | 0.49310                        | 0.26136                  | 0.37578                  | 0.16270                |
| 32            | 0.01754               | 0.00209                | 0.01963   | 0.27890                        | 0.35019                         | 0.52690                         | 0.54251                      | 0.16962                      | 0.20889                      | 0.05858                           | 0.05922                         | 0.16061                         | 0.30867                         | 0.46687                           | 0.47073                        | 0.24913                  | 0.36548                  | 0.15933                |
| 33            | 0.01738               | 0.00209                | 0.01931   | 0.27327                        | 0.33635                         | 0.50276                         | 0.51757                      | 0.16254                      | 0.20471                      | 0.05633                           | 0.05681                         | 0.15418                         | 0.29692                         | 0.44579                           | 0.44965                        | 0.23770                  | 0.35583                  | 0.15627                |
| 34            | 0.01722               | 0.00209                | 0.01899   | 0.26812                        | 0.32348                         | 0.48023                         | 0.49423                      | 0.15611                      | 0.20085                      | 0.05407                           | 0.05456                         | 0.14838                         | 0.28598                         | 0.42615                           | 0.43018                        | 0.22692                  | 0.34681                  | 0.15221                |
| 35            | 0.01706               | 0.00209                | 0.01867   | 0.26297                        | 0.31157                         | 0.45915                         | 0.47250                      | 0.14999                      | 0.19714                      | 0.05214                           | 0.05263                         | 0.14275                         | 0.27568                         | 0.40765                           | 0.41183                        | 0.21694                  | 0.33845                  | 0.15031                |
| 36            | 0.01690               | 0.00193                | 0.01835   | 0.25830                        | 0.30030                         | 0.43935                         | 0.45206                      | 0.14420                      | 0.19344                      | 0.05021                           | 0.05069                         | 0.13776                         | 0.26602                         | 0.39043                           | 0.39445                        | 0.20761                  | 0.33040                  | 0.14758                |
| 37            | 0.01674               | 0.00193                | 0.01802   | 0.25363                        | 0.28984                         | 0.42084                         | 0.43291                      | 0.13899                      | 0.19006                      | 0.04844                           | 0.04876                         | 0.13293                         | 0.25701                         | 0.37417                           | 0.37836                        | 0.19875                  | 0.32283                  | 0.14500                |
| 38            | 0.01658               | 0.00193                | 0.01770   | 0.24929                        | 0.27986                         | 0.40330                         | 0.41489                      | 0.13390                      | 0.18684                      | 0.04683                           | 0.04715                         | 0.12826                         | 0.24848                         | 0.35904                           | 0.36307                        | 0.19055                  | 0.31575                  | 0.14259                |
| 39            | 0.01642               | 0.00193                | 0.01738   | 0.24510                        | 0.27069                         | 0.38689                         | 0.39783                      | 0.12923                      | 0.18363                      | 0.04522                           | 0.04554                         | 0.12408                         | 0.24060                         | 0.34456                           | 0.34874                        | 0.18266                  | 0.30899                  | 0.14017                |
| 40            | 0.01625               | 0.00193                | 0.01706   | 0.24108                        | 0.26200                         | 0.37128                         | 0.38190                      | 0.12489                      | 0.18073                      | 0.04377                           | 0.04410                         | 0.12006                         | 0.23303                         | 0.33304                           | 0.33523                        | 0.17542                  | 0.30272                  | 0.13792                |
| 41            | 0.01609               | 0.00177                | 0.01690   | 0.23722                        | 0.25379                         | 0.35663                         | 0.36677                      | 0.12070                      | 0.17783                      | 0.04249                           | 0.04265                         | 0.11636                         | 0.22595                         | 0.31817                           | 0.32235                        | 0.16834                  | 0.29660                  | 0.13567                |
| 42            | 0.01593               | 0.00177                | 0.01658   | 0.23368                        | 0.24591                         | 0.34279                         | 0.35245                      | 0.11668                      | 0.17510                      | 0.04120                           | 0.04136                         | 0.11282                         | 0.21935                         | 0.30610                           | 0.31028                        | 0.16190                  | 0.29081                  | 0.13358                |
| 43            | 0.01577               | 0.00177                | 0.01642   | 0.22998                        | 0.23867                         | 0.32975                         | 0.33893                      | 0.11298                      | 0.17236                      | 0.03991                           | 0.04007                         | 0.10944                         | 0.21308                         | 0.29467                           | 0.29886                        | 0.15562                  | 0.28534                  | 0.13148                |
| 44            | 0.01577               | 0.00177                | 0.01609   | 0.22660                        | 0.23158                         | 0.31720                         | 0.32605                      | 0.10960                      | 0.16799                      | 0.03879                           | 0.03879                         | 0.10622                         | 0.20696                         | 0.28373                           | 0.28807                        | 0.14967                  | 0.28003                  | 0.12985                |
| 45            | 0.01561               | 0.00177                | 0.01593   | 0.22338                        | 0.22499                         | 0.30545                         | 0.31382                      | 0.10622                      | 0.16737                      | 0.03766                           | 0.03766                         | 0.10316                         | 0.20133                         | 0.27343                           | 0.27761                        | 0.14420                  | 0.27504                  | 0.12778                |
| 46            | 0.01545               | 0.00177                | 0.01561   | 0.22016                        | 0.21871                         | 0.29419                         | 0.30223                      | 0.10300                      | 0.16496                      | 0.03653                           | 0.03669                         | 0.10026                         | 0.19602                         | 0.26361                           | 0.26796                        | 0.13889                  | 0.27021                  | 0.12585                |
| 47            | 0.01545               | 0.00177                | 0.01545   | 0.21710                        | 0.21292                         | 0.28357                         | 0.29129                      | 0.10010                      | 0.16270                      | 0.03557                           | 0.03557                         | 0.09753                         | 0.19087                         | 0.25428                           | 0.25862                        | 0.13374                  | 0.26570                  | 0.12408                |
| 48            | 0.01529               | 0.00161                | 0.01529   | 0.21420                        | 0.20712                         | 0.27343                         | 0.28083                      | 0.09720                      | 0.16045                      | 0.03460                           | 0.03460                         | 0.09495                         | 0.18588                         | 0.24542                           | 0.24977                        | 0.12891                  | 0.26120                  | 0.12247                |
| 49            | 0.01513               | 0.00161                | 0.01513   | 0.21131                        | 0.20181                         | 0.26377                         | 0.27085                      | 0.09447                      | 0.15836                      | 0.03380                           | 0.03380                         | 0.09254                         | 0.18121                         | 0.23706                           | 0.24124                        | 0.12440                  | 0.25701                  | 0.12067                |
| 50            | 0.01513               | 0.00161                | 0.01497   | 0.20857                        | 0.19666                         | 0.25460                         | 0.26136                      | 0.09189                      | 0.15627                      | 0.03283                           | 0.03283                         | 0.09012                         | 0.17687                         | 0.22901                           | 0.23319                        | 0.12006                  | 0.25299                  | 0.11925                |
| 51            | 0.01497               | 0.00161                | 0.01465   | 0.20584                        | 0.19167                         | 0.24591                         | 0.25235                      | 0.08948                      | 0.15433                      | 0.03203                           | 0.03203                         | 0.08787                         | 0.17268                         | 0.22128                           | 0.22547                        | 0.11587                  | 0.24993                  | 0.11780                |
| 52            | 0.01497               | 0.00161                | 0.01448   | 0.20326                        | 0.18701                         | 0.23754                         | 0.24382                      | 0.08707                      | 0.15240                      | 0.03138                           | 0.03122                         | 0.08578                         | 0.16850                         |                                   |                                |                          |                          |                        |

Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
 Running Exhaust Emission Factor (gram/mile/vehicle) - RSP (Year 2033) (for Sensitivity Test)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                             |                                |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|-----------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3 | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.01786                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 2             | 0.01786                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 3             | 0.01786                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 4             | 0.01786                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 5             | 0.01770                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 6             | 0.01754                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 7             | 0.01738                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 8             | 0.01738                                | 0.01545                | 0.00000   | 0.12392                        | 0.07660                         | 0.17799                         | 0.20938                      | 0.01883                      | 0.07757                      | 0.02511                           | 0.02511                         | 0.03685                     | 0.07001                        | 0.12891                           | 0.12328                        | 0.03830                  | 0.41730                  | 0.09447                |
| 9             | 0.01722                                | 0.01545                | 0.00000   | 0.11780                        | 0.07435                         | 0.16737                         | 0.19682                      | 0.01851                      | 0.07371                      | 0.02430                           | 0.02430                         | 0.03541                     | 0.06711                        | 0.12102                           | 0.11571                        | 0.03605                  | 0.39413                  | 0.08980                |
| 10            | 0.01722                                | 0.01545                | 0.00000   | 0.11185                        | 0.07226                         | 0.15772                         | 0.18556                      | 0.01802                      | 0.07017                      | 0.02366                           | 0.02366                         | 0.03396                     | 0.06453                        | 0.11394                           | 0.10895                        | 0.03396                  | 0.37353                  | 0.08546                |
| 11            | 0.01690                                | 0.01513                | 0.00000   | 0.10670                        | 0.07049                         | 0.14919                         | 0.17542                      | 0.01754                      | 0.06679                      | 0.02285                           | 0.02285                         | 0.03267                     | 0.06244                        | 0.10767                           | 0.10284                        | 0.03219                  | 0.35567                  | 0.08143                |
| 12            | 0.01593                                | 0.01432                | 0.00000   | 0.10187                        | 0.06872                         | 0.14162                         | 0.16657                      | 0.01690                      | 0.06389                      | 0.02221                           | 0.02221                         | 0.03154                     | 0.06051                        | 0.10219                           | 0.09753                        | 0.03074                  | 0.34022                  | 0.07899                |
| 13            | 0.01513                                | 0.01368                | 0.00000   | 0.09769                        | 0.06711                         | 0.13486                         | 0.15868                      | 0.01625                      | 0.06132                      | 0.02157                           | 0.02157                         | 0.03042                     | 0.05874                        | 0.09720                           | 0.09286                        | 0.02945                  | 0.32654                  | 0.07467                |
| 14            | 0.01448                                | 0.01287                | 0.00000   | 0.09382                        | 0.06566                         | 0.12875                         | 0.15160                      | 0.01577                      | 0.05874                      | 0.02092                           | 0.02092                         | 0.02945                     | 0.05729                        | 0.09286                           | 0.08867                        | 0.02816                  | 0.31447                  | 0.07178                |
| 15            | 0.01368                                | 0.01223                | 0.00000   | 0.09028                        | 0.06437                         | 0.12328                         | 0.14516                      | 0.01513                      | 0.05665                      | 0.02028                           | 0.02028                         | 0.02865                     | 0.05584                        | 0.08900                           | 0.08497                        | 0.02720                  | 0.30352                  | 0.06904                |
| 16            | 0.01304                                | 0.01159                | 0.00000   | 0.08707                        | 0.06309                         | 0.11829                         | 0.13921                      | 0.01465                      | 0.05456                      | 0.01963                           | 0.01979                         | 0.02784                     | 0.05456                        | 0.08546                           | 0.08159                        | 0.02623                  | 0.29371                  | 0.06647                |
| 17            | 0.01239                                | 0.01110                | 0.00000   | 0.08401                        | 0.06196                         | 0.11378                         | 0.13390                      | 0.01416                      | 0.05263                      | 0.01915                           | 0.01915                         | 0.02704                     | 0.05343                        | 0.08208                           | 0.07854                        | 0.02543                  | 0.28469                  | 0.06421                |
| 18            | 0.01175                                | 0.01046                | 0.00000   | 0.08127                        | 0.06083                         | 0.10976                         | 0.12907                      | 0.01368                      | 0.05102                      | 0.01867                           | 0.01867                         | 0.02639                     | 0.05230                        | 0.07918                           | 0.07564                        | 0.02462                  | 0.27665                  | 0.06212                |
| 19            | 0.01127                                | 0.00998                | 0.00000   | 0.07886                        | 0.05987                         | 0.10589                         | 0.12472                      | 0.01320                      | 0.04911                      | 0.01802                           | 0.01819                         | 0.02575                     | 0.05134                        | 0.07644                           | 0.07306                        | 0.02382                  | 0.26908                  | 0.06003                |
| 20            | 0.01078                                | 0.00950                | 0.00000   | 0.07644                        | 0.05874                         | 0.10252                         | 0.12054                      | 0.01287                      | 0.04780                      | 0.01754                           | 0.01770                         | 0.02511                     | 0.05037                        | 0.07403                           | 0.07065                        | 0.02317                  | 0.26200                  | 0.05826                |
| 21            | 0.01030                                | 0.00917                | 0.00000   | 0.07419                        | 0.05794                         | 0.09930                         | 0.11684                      | 0.01239                      | 0.04651                      | 0.01706                           | 0.01722                         | 0.02462                     | 0.04941                        | 0.07162                           | 0.06856                        | 0.02253                  | 0.25556                  | 0.05649                |
| 22            | 0.00982                                | 0.00869                | 0.00000   | 0.07226                        | 0.05697                         | 0.09624                         | 0.11330                      | 0.01207                      | 0.04522                      | 0.01658                           | 0.01674                         | 0.02398                     | 0.04860                        | 0.06952                           | 0.06647                        | 0.02205                  | 0.24961                  | 0.05488                |
| 23            | 0.00933                                | 0.00837                | 0.00000   | 0.07033                        | 0.05617                         | 0.09350                         | 0.11008                      | 0.01159                      | 0.04394                      | 0.01625                           | 0.01625                         | 0.02350                     | 0.04780                        | 0.06759                           | 0.06453                        | 0.02140                  | 0.24398                  | 0.05343                |
| 24            | 0.00901                                | 0.00789                | 0.00000   | 0.06856                        | 0.05536                         | 0.09093                         | 0.10702                      | 0.01127                      | 0.04281                      | 0.01577                           | 0.01577                         | 0.02301                     | 0.04699                        | 0.06566                           | 0.06276                        | 0.02092                  | 0.23883                  | 0.05199                |
| 25            | 0.00869                                | 0.00756                | 0.00000   | 0.06695                        | 0.05456                         | 0.08851                         | 0.10412                      | 0.01094                      | 0.04184                      | 0.01545                           | 0.01545                         | 0.02269                     | 0.04619                        | 0.06405                           | 0.06116                        | 0.02044                  | 0.23384                  | 0.05068                |
| 26            | 0.00821                                | 0.00724                | 0.00000   | 0.06534                        | 0.05375                         | 0.08626                         | 0.10155                      | 0.01062                      | 0.04088                      | 0.01497                           | 0.01497                         | 0.02221                     | 0.04554                        | 0.06244                           | 0.05971                        | 0.02012                  | 0.22917                  | 0.04941                |
| 27            | 0.00789                                | 0.00692                | 0.00000   | 0.06389                        | 0.05311                         | 0.08417                         | 0.09914                      | 0.01030                      | 0.03991                      | 0.01465                           | 0.01465                         | 0.02189                     | 0.04490                        | 0.06083                           | 0.05826                        | 0.01963                  | 0.22483                  | 0.04828                |
| 28            | 0.00756                                | 0.00676                | 0.00000   | 0.06244                        | 0.05230                         | 0.08224                         | 0.09672                      | 0.00998                      | 0.03911                      | 0.01432                           | 0.01432                         | 0.02157                     | 0.04426                        | 0.05938                           | 0.05681                        | 0.01931                  | 0.22064                  | 0.04715                |
| 29            | 0.00740                                | 0.00644                | 0.00000   | 0.06132                        | 0.05166                         | 0.08047                         | 0.09463                      | 0.00982                      | 0.03830                      | 0.01384                           | 0.01384                         | 0.02124                     | 0.04361                        | 0.05810                           | 0.05552                        | 0.01883                  | 0.21678                  | 0.04619                |
| 30            | 0.00708                                | 0.00628                | 0.00000   | 0.06003                        | 0.05102                         | 0.07870                         | 0.09254                      | 0.00950                      | 0.03750                      | 0.01352                           | 0.01352                         | 0.02092                     | 0.04313                        | 0.05681                           | 0.05440                        | 0.01851                  | 0.21308                  | 0.04522                |
| 31            | 0.00676                                | 0.00595                | 0.00000   | 0.05890                        | 0.05037                         | 0.07709                         | 0.09061                      | 0.00917                      | 0.03669                      | 0.01320                           | 0.01320                         | 0.02060                     | 0.04249                        | 0.05568                           | 0.05327                        | 0.01819                  | 0.20954                  | 0.04426                |
| 32            | 0.00660                                | 0.00579                | 0.00000   | 0.05778                        | 0.04989                         | 0.07548                         | 0.08884                      | 0.00901                      | 0.03605                      | 0.01287                           | 0.01304                         | 0.02028                     | 0.04200                        | 0.05456                           | 0.05214                        | 0.01786                  | 0.20616                  | 0.04345                |
| 33            | 0.00628                                | 0.00547                | 0.00000   | 0.05681                        | 0.04925                         | 0.07403                         | 0.08707                      | 0.00869                      | 0.03541                      | 0.01271                           | 0.01271                         | 0.02012                     | 0.04152                        | 0.05359                           | 0.05118                        | 0.01754                  | 0.20294                  | 0.04265                |
| 34            | 0.00612                                | 0.00531                | 0.00000   | 0.05584                        | 0.04876                         | 0.07274                         | 0.08546                      | 0.00853                      | 0.03476                      | 0.01239                           | 0.01239                         | 0.01979                     | 0.04104                        | 0.05246                           | 0.05021                        | 0.01738                  | 0.19988                  | 0.04184                |
| 35            | 0.00595                                | 0.00515                | 0.00000   | 0.05488                        | 0.04812                         | 0.07145                         | 0.08401                      | 0.00837                      | 0.03428                      | 0.01207                           | 0.01207                         | 0.01963                     | 0.04056                        | 0.05166                           | 0.04941                        | 0.01706                  | 0.19682                  | 0.04120                |
| 36            | 0.00563                                | 0.00499                | 0.00000   | 0.05407                        | 0.04764                         | 0.07017                         | 0.08256                      | 0.00805                      | 0.03380                      | 0.01175                           | 0.01191                         | 0.01931                     | 0.04007                        | 0.05069                           | 0.04844                        | 0.01674                  | 0.19409                  | 0.04050                |
| 37            | 0.00547                                | 0.00483                | 0.00000   | 0.05327                        | 0.04715                         | 0.06904                         | 0.08111                      | 0.00789                      | 0.03315                      | 0.01159                           | 0.01159                         | 0.01915                     | 0.03959                        | 0.04989                           | 0.04764                        | 0.01658                  | 0.19135                  | 0.03991                |
| 38            | 0.00531                                | 0.00467                | 0.00000   | 0.05246                        | 0.04651                         | 0.06791                         | 0.07982                      | 0.00772                      | 0.03267                      | 0.01127                           | 0.01127                         | 0.01899                     | 0.03911                        | 0.04908                           | 0.04683                        | 0.01625                  | 0.18878                  | 0.03927                |
| 39            | 0.00515                                | 0.00451                | 0.00000   | 0.05182                        | 0.04603                         | 0.06679                         | 0.07870                      | 0.00756                      | 0.03235                      | 0.01110                           | 0.01110                         | 0.01883                     | 0.03862                        | 0.04828                           | 0.04619                        | 0.01609                  | 0.18636                  | 0.03874                |
| 40            | 0.00499                                | 0.00435                | 0.00000   | 0.05118                        | 0.04554                         | 0.06582                         | 0.07741                      | 0.00740                      | 0.03184                      | 0.01078                           | 0.01094                         | 0.01867                     | 0.03830                        | 0.04764                           | 0.04554                        | 0.01577                  | 0.18395                  | 0.03814                |
| 41            | 0.00483                                | 0.00418                | 0.00000   | 0.05053                        | 0.04506                         | 0.06486                         | 0.07628                      | 0.00724                      | 0.03138                      | 0.01062                           | 0.01062                         | 0.01851                     | 0.03782                        | 0.04683                           | 0.04474                        | 0.01561                  | 0.18153                  | 0.03766                |
| 42            | 0.00467                                | 0.00418                | 0.00000   | 0.04989                        | 0.04474                         | 0.06389                         | 0.07532                      | 0.00708                      | 0.03106                      | 0.01046                           | 0.01046                         | 0.01835                     | 0.03750                        | 0.04619                           | 0.04410                        | 0.01545                  | 0.17944                  | 0.03718                |
| 43            | 0.00467                                | 0.00402                | 0.00000   | 0.04941                        | 0.04426                         | 0.06309                         | 0.07419                      | 0.00692                      | 0.03074                      | 0.01014                           | 0.01030                         | 0.01819                     | 0.03701                        | 0.04554                           | 0.04361                        | 0.01513                  | 0.17719                  | 0.03685                |
| 44            | 0.00451                                | 0.00386                | 0.00000   | 0.04876                        | 0.04377                         | 0.06228                         | 0.07323                      | 0.00676                      | 0.03042                      | 0.00998                           | 0.00998                         | 0.01802                     | 0.03669                        | 0.04490                           | 0.04297                        | 0.01497                  | 0.17510                  | 0.03637                |
| 45            | 0.00435                                | 0.00370                | 0.00000   | 0.04828                        | 0.04345                         | 0.06148                         | 0.07242                      | 0.00660                      | 0.03009                      | 0.00982                           | 0.00982                         | 0.01786                     | 0.03637                        | 0.04442                           | 0.04249                        | 0.01481                  | 0.17317                  | 0.03605                |
| 46            | 0.00418                                | 0.00370                | 0.00000   | 0.04780                        | 0.04297                         | 0.06067                         | 0.07145                      | 0.00644                      | 0.02977                      | 0.00966                           | 0.00966                         | 0.01786                     | 0.03605                        | 0.04377                           | 0.04184                        | 0.01465                  | 0.17123                  | 0.03557                |
| 47            | 0.00418                                | 0.00354                | 0.00000   | 0.04731                        | 0.04249                         | 0.06003                         | 0.07065                      | 0.00644                      | 0.02945                      | 0.00950                           | 0.00950                         | 0.01770                     | 0.03573                        | 0.04329                           | 0.04136                        | 0.01448                  | 0.16930                  | 0.03524                |
| 48            | 0.00402                                | 0.00354                | 0.00000   | 0.04699                        | 0.04216                         | 0.05938                         | 0.06985                      | 0.00628                      | 0.02913                      | 0.00933                           | 0.00933                         | 0.01754                     | 0.03524                        | 0.04281                           | 0.04088                        | 0.01432                  | 0.16753                  | 0.03492                |
| 49            | 0.00402                                | 0.00338                | 0.00000   | 0.04651                        | 0.04184                         | 0.05874                         | 0.06904                      | 0.00612                      | 0.02897                      | 0.00917                           | 0.00917                         | 0.01754                     | 0.03492                        | 0.04233                           | 0.04039                        | 0.01416                  | 0.16576                  | 0.03460                |
| 50            | 0.00386                                | 0.00338                | 0.00000   | 0.04619                        | 0.04136                         | 0.05810                         | 0.06840                      | 0.00595                      | 0.02865                      | 0.00901                           | 0.00901                         | 0.01738                     | 0.03460                        | 0.04184                           | 0.03991                        | 0.01400                  | 0.16415                  | 0.03444                |
| 51            | 0.00386                                | 0.00322                | 0.00000   | 0.04587                        | 0.04104                         | 0.05745                         | 0.06759                      | 0.00595                      | 0.02849                      | 0.00885                           | 0.00885                         | 0.01738                     | 0.03428                        | 0.04152                           | 0.03975                        | 0.01384                  | 0.16399                  | 0.03412                |
| 52            | 0.00370                                | 0.00322                | 0.00000   | 0.04538                        | 0.04072                         | 0.05697                         | 0.06695                      | 0.00579                      | 0.02832                      | 0.00869                           | 0.00869                         | 0.01738                     | 0.03396                        | 0.04120                           | 0.03943                        | 0.01368                  | 0.16383                  | 0.03396                |

Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - FSP (Year 2033) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3.5t | 06 - Heavy Goods Vehicles<= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|-------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|--------------------------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 1             | 0.01577               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 2             | 0.01577               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 3             | 0.01577               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 4             | 0.01577               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 5             | 0.01577               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 6             | 0.01561               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 7             | 0.01561               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 8             | 0.01545               | 0.01432                | 0.00000   | 0.11410                       | 0.07049                         | 0.16383                         | 0.19264                      | 0.01738                      | 0.07145                      | 0.02301                           | 0.02317                         | 0.03396                        | 0.06437                         | 0.11845                           | 0.11346                        | 0.03524                  | 0.38399                  | 0.08690                |
| 9             | 0.01545               | 0.01432                | 0.00000   | 0.10831                       | 0.06840                         | 0.15401                         | 0.18121                      | 0.01706                      | 0.06791                      | 0.02237                           | 0.02237                         | 0.03251                        | 0.06180                         | 0.11137                           | 0.10654                        | 0.03315                  | 0.36259                  | 0.08256                |
| 10            | 0.01529               | 0.01432                | 0.00000   | 0.10300                       | 0.06647                         | 0.14500                         | 0.17059                      | 0.01658                      | 0.06453                      | 0.02173                           | 0.02173                         | 0.03122                        | 0.05938                         | 0.10477                           | 0.10010                        | 0.03122                  | 0.34359                  | 0.07854                |
| 11            | 0.01513               | 0.01416                | 0.00000   | 0.09817                       | 0.06486                         | 0.13728                         | 0.16142                      | 0.01625                      | 0.06148                      | 0.02108                           | 0.02108                         | 0.03009                        | 0.05745                         | 0.09997                           | 0.09463                        | 0.02961                  | 0.32734                  | 0.07500                |
| 12            | 0.01432               | 0.01336                | 0.00000   | 0.09382                       | 0.06325                         | 0.13020                         | 0.15321                      | 0.01561                      | 0.05874                      | 0.02044                           | 0.02044                         | 0.02997                        | 0.05568                         | 0.09399                           | 0.08980                        | 0.02832                  | 0.31302                  | 0.07162                |
| 13            | 0.01352               | 0.01271                | 0.00000   | 0.08980                       | 0.06180                         | 0.12408                         | 0.14957                      | 0.01513                      | 0.05633                      | 0.01979                           | 0.01979                         | 0.02800                        | 0.05407                         | 0.08948                           | 0.08546                        | 0.02704                  | 0.30046                  | 0.06872                |
| 14            | 0.01287               | 0.01191                | 0.00000   | 0.08626                       | 0.06051                         | 0.11845                         | 0.13937                      | 0.01448                      | 0.05407                      | 0.01915                           | 0.01915                         | 0.02720                        | 0.05263                         | 0.08546                           | 0.08159                        | 0.02591                  | 0.28936                  | 0.06598                |
| 15            | 0.01223               | 0.01143                | 0.00000   | 0.08304                       | 0.05922                         | 0.11346                         | 0.13358                      | 0.01400                      | 0.05214                      | 0.01867                           | 0.01867                         | 0.02639                        | 0.05134                         | 0.08175                           | 0.07821                        | 0.02494                  | 0.27922                  | 0.06341                |
| 16            | 0.01159               | 0.01078                | 0.00000   | 0.08015                       | 0.05810                         | 0.10895                         | 0.12810                      | 0.01352                      | 0.05021                      | 0.01819                           | 0.01819                         | 0.02559                        | 0.05021                         | 0.07854                           | 0.07500                        | 0.02414                  | 0.27021                  | 0.06116                |
| 17            | 0.01110               | 0.01030                | 0.00000   | 0.07741                       | 0.05697                         | 0.10477                         | 0.12328                      | 0.01304                      | 0.04844                      | 0.01754                           | 0.01754                         | 0.02494                        | 0.04908                         | 0.07564                           | 0.07226                        | 0.02334                  | 0.26200                  | 0.05906                |
| 18            | 0.01046               | 0.00982                | 0.00000   | 0.07483                       | 0.05601                         | 0.10091                         | 0.11877                      | 0.01255                      | 0.04683                      | 0.01706                           | 0.01722                         | 0.02430                        | 0.04812                         | 0.07290                           | 0.06952                        | 0.02253                  | 0.25444                  | 0.05713                |
| 19            | 0.00998               | 0.00933                | 0.00000   | 0.07242                       | 0.05504                         | 0.09753                         | 0.11475                      | 0.01223                      | 0.04538                      | 0.01658                           | 0.01674                         | 0.02366                        | 0.04715                         | 0.07033                           | 0.06727                        | 0.02189                  | 0.24752                  | 0.05520                |
| 20            | 0.00966               | 0.00885                | 0.00000   | 0.07033                       | 0.05407                         | 0.09431                         | 0.11088                      | 0.01175                      | 0.04410                      | 0.01625                           | 0.01625                         | 0.02317                        | 0.04635                         | 0.06808                           | 0.06502                        | 0.02140                  | 0.24108                  | 0.05359                |
| 21            | 0.00917               | 0.00853                | 0.00000   | 0.06824                       | 0.05327                         | 0.09125                         | 0.10750                      | 0.01143                      | 0.04281                      | 0.01577                           | 0.01577                         | 0.02253                        | 0.04538                         | 0.06598                           | 0.06293                        | 0.02076                  | 0.23513                  | 0.05199                |
| 22            | 0.00869               | 0.00805                | 0.00000   | 0.06647                       | 0.05246                         | 0.08851                         | 0.10429                      | 0.01110                      | 0.04152                      | 0.01529                           | 0.01529                         | 0.02205                        | 0.04474                         | 0.06389                           | 0.06116                        | 0.02028                  | 0.22965                  | 0.05053                |
| 23            | 0.00837               | 0.00772                | 0.00000   | 0.06470                       | 0.05166                         | 0.08610                         | 0.10123                      | 0.01078                      | 0.04056                      | 0.01497                           | 0.01497                         | 0.02173                        | 0.04394                         | 0.06212                           | 0.05938                        | 0.01979                  | 0.22450                  | 0.04908                |
| 24            | 0.00805               | 0.00740                | 0.00000   | 0.06309                       | 0.05086                         | 0.08369                         | 0.09849                      | 0.01046                      | 0.03943                      | 0.01448                           | 0.01448                         | 0.02124                        | 0.04329                         | 0.06051                           | 0.05778                        | 0.01931                  | 0.21968                  | 0.04780                |
| 25            | 0.00772               | 0.00708                | 0.00000   | 0.06148                       | 0.05021                         | 0.08143                         | 0.09592                      | 0.01014                      | 0.03846                      | 0.01416                           | 0.01416                         | 0.02092                        | 0.04249                         | 0.05890                           | 0.05633                        | 0.01883                  | 0.21517                  | 0.04667                |
| 26            | 0.00740               | 0.00676                | 0.00000   | 0.06019                       | 0.04941                         | 0.07950                         | 0.09350                      | 0.00982                      | 0.03766                      | 0.01384                           | 0.01384                         | 0.02044                        | 0.04200                         | 0.05745                           | 0.05488                        | 0.01851                  | 0.21082                  | 0.04554                |
| 27            | 0.00708               | 0.00644                | 0.00000   | 0.05874                       | 0.04876                         | 0.07757                         | 0.09125                      | 0.00950                      | 0.03669                      | 0.01352                           | 0.01352                         | 0.02012                        | 0.04136                         | 0.05601                           | 0.05359                        | 0.01802                  | 0.20680                  | 0.04442                |
| 28            | 0.00676               | 0.00628                | 0.00000   | 0.05745                       | 0.04812                         | 0.07564                         | 0.08900                      | 0.00917                      | 0.03589                      | 0.01304                           | 0.01320                         | 0.01979                        | 0.04072                         | 0.05472                           | 0.05230                        | 0.01770                  | 0.20310                  | 0.04345                |
| 29            | 0.00640               | 0.00595                | 0.00000   | 0.05633                       | 0.04764                         | 0.07403                         | 0.08707                      | 0.00901                      | 0.03524                      | 0.01271                           | 0.01287                         | 0.01947                        | 0.04023                         | 0.05343                           | 0.05118                        | 0.01738                  | 0.19940                  | 0.04271                |
| 30            | 0.00628               | 0.00579                | 0.00000   | 0.05520                       | 0.04699                         | 0.07242                         | 0.08513                      | 0.00869                      | 0.03444                      | 0.01255                           | 0.01255                         | 0.01915                        | 0.03959                         | 0.05230                           | 0.05005                        | 0.01706                  | 0.19602                  | 0.04168                |
| 31            | 0.00612               | 0.00547                | 0.00000   | 0.05423                       | 0.04635                         | 0.07097                         | 0.08336                      | 0.00853                      | 0.03380                      | 0.01223                           | 0.01223                         | 0.01899                        | 0.03911                         | 0.05118                           | 0.04908                        | 0.01674                  | 0.19280                  | 0.04072                |
| 32            | 0.00579               | 0.00531                | 0.00000   | 0.05327                       | 0.04587                         | 0.06952                         | 0.08175                      | 0.00821                      | 0.03315                      | 0.01191                           | 0.01191                         | 0.01867                        | 0.03862                         | 0.05021                           | 0.04796                        | 0.01642                  | 0.18958                  | 0.04007                |
| 33            | 0.00563               | 0.00515                | 0.00000   | 0.05230                       | 0.04538                         | 0.06808                         | 0.08015                      | 0.00805                      | 0.03267                      | 0.01159                           | 0.01159                         | 0.01851                        | 0.03814                         | 0.04925                           | 0.04715                        | 0.01625                  | 0.18668                  | 0.03927                |
| 34            | 0.00547               | 0.00499                | 0.00000   | 0.05134                       | 0.04474                         | 0.06695                         | 0.07870                      | 0.00789                      | 0.03203                      | 0.01143                           | 0.01143                         | 0.01819                        | 0.03766                         | 0.04828                           | 0.04619                        | 0.01593                  | 0.18379                  | 0.03862                |
| 35            | 0.00531               | 0.00483                | 0.00000   | 0.05053                       | 0.04426                         | 0.06566                         | 0.07725                      | 0.00772                      | 0.03154                      | 0.01110                           | 0.01110                         | 0.01802                        | 0.03718                         | 0.04748                           | 0.04538                        | 0.01561                  | 0.18121                  | 0.03794                |
| 36            | 0.00499               | 0.00467                | 0.00000   | 0.04973                       | 0.04377                         | 0.06453                         | 0.07576                      | 0.00740                      | 0.03106                      | 0.01078                           | 0.01094                         | 0.01786                        | 0.03685                         | 0.04667                           | 0.04458                        | 0.01545                  | 0.17864                  | 0.03734                |
| 37            | 0.00483               | 0.00451                | 0.00000   | 0.04908                       | 0.04329                         | 0.06341                         | 0.07467                      | 0.00724                      | 0.03058                      | 0.01062                           | 0.01062                         | 0.01770                        | 0.03637                         | 0.04587                           | 0.04394                        | 0.01513                  | 0.17606                  | 0.03669                |
| 38            | 0.00467               | 0.00435                | 0.00000   | 0.04828                       | 0.04281                         | 0.06244                         | 0.07355                      | 0.00708                      | 0.03009                      | 0.01046                           | 0.01046                         | 0.01738                        | 0.03605                         | 0.04506                           | 0.04313                        | 0.01497                  | 0.17365                  | 0.03621                |
| 39            | 0.00461               | 0.00418                | 0.00000   | 0.04764                       | 0.04233                         | 0.06148                         | 0.07226                      | 0.00692                      | 0.02977                      | 0.01014                           | 0.01014                         | 0.01722                        | 0.03557                         | 0.04442                           | 0.04249                        | 0.01481                  | 0.17140                  | 0.03557                |
| 40            | 0.00451               | 0.00402                | 0.00000   | 0.04699                       | 0.04200                         | 0.06051                         | 0.07129                      | 0.00676                      | 0.02929                      | 0.00998                           | 0.00998                         | 0.01706                        | 0.03524                         | 0.04377                           | 0.04184                        | 0.01448                  | 0.16914                  | 0.03508                |
| 41            | 0.00435               | 0.00386                | 0.00000   | 0.04651                       | 0.04152                         | 0.05971                         | 0.07017                      | 0.00660                      | 0.02897                      | 0.00982                           | 0.00982                         | 0.01706                        | 0.03476                         | 0.04313                           | 0.04120                        | 0.01432                  | 0.16705                  | 0.03476                |
| 42            | 0.00418               | 0.00386                | 0.00000   | 0.04587                       | 0.04104                         | 0.05890                         | 0.06920                      | 0.00644                      | 0.02856                      | 0.00950                           | 0.00966                         | 0.01690                        | 0.03444                         | 0.04249                           | 0.04072                        | 0.01416                  | 0.16496                  | 0.03426                |
| 43            | 0.00402               | 0.00370                | 0.00000   | 0.04538                       | 0.04072                         | 0.05810                         | 0.06824                      | 0.00644                      | 0.02832                      | 0.00933                           | 0.00950                         | 0.01674                        | 0.03412                         | 0.04200                           | 0.04007                        | 0.01400                  | 0.16303                  | 0.03380                |
| 44            | 0.00402               | 0.00354                | 0.00000   | 0.04490                       | 0.04023                         | 0.05729                         | 0.06743                      | 0.00628                      | 0.02800                      | 0.00917                           | 0.00917                         | 0.01658                        | 0.03380                         | 0.04136                           | 0.03959                        | 0.01384                  | 0.16110                  | 0.03347                |
| 45            | 0.00386               | 0.00354                | 0.00000   | 0.04442                       | 0.03991                         | 0.05665                         | 0.06663                      | 0.00612                      | 0.02768                      | 0.00901                           | 0.00901                         | 0.01642                        | 0.03347                         | 0.04088                           | 0.03911                        | 0.01368                  | 0.15933                  | 0.03315                |
| 46            | 0.00370               | 0.00338                | 0.00000   | 0.04394                       | 0.03959                         | 0.05584                         | 0.06582                      | 0.00595                      | 0.02736                      | 0.00885                           | 0.00885                         | 0.01642                        | 0.03315                         | 0.04039                           | 0.03846                        | 0.01352                  | 0.15755                  | 0.03283                |
| 47            | 0.00370               | 0.00338                | 0.00000   | 0.04361                       | 0.03911                         | 0.05520                         | 0.06502                      | 0.00579                      | 0.02704                      | 0.00869                           | 0.00869                         | 0.01625                        | 0.03283                         | 0.03991                           | 0.03814                        | 0.01336                  | 0.15578                  | 0.03251                |
| 48            | 0.00354               | 0.00322                | 0.00000   | 0.04313                       | 0.03879                         | 0.05456                         | 0.06421                      | 0.00579                      | 0.02688                      | 0.00853                           | 0.00853                         | 0.01625                        | 0.03251                         | 0.03943                           | 0.03766                        | 0.01320                  | 0.15418                  | 0.03219                |
| 49            | 0.00354               | 0.00322                | 0.00000   | 0.04281                       | 0.03846                         | 0.05407                         | 0.06357                      | 0.00563                      | 0.02672                      | 0.00837                           | 0.00837                         | 0.01609                        | 0.03219                         | 0.03895                           | 0.03718                        | 0.01304                  | 0.15257                  | 0.03187                |
| 50            | 0.00338               | 0.00306                | 0.00000   | 0.04249                       | 0.03814                         | 0.05343                         | 0.06293                      | 0.00547                      | 0.02639                      | 0.00821                           | 0.00821                         | 0.01609                        | 0.03187                         | 0.03846                           | 0.03685                        | 0.01287                  | 0.15096                  | 0.03170                |
| 51            | 0.00338               | 0.00306                | 0.00000   | 0.04216                       | 0.03766                         | 0.05295                         | 0.06228                      | 0.00547                      | 0.02623                      | 0.00805                           | 0.00821                         | 0.01593                        | 0.03154                         | 0.03814                           | 0.03653                        | 0.01271                  | 0.15080                  | 0.03138                |
| 52            | 0.00322               | 0.00290                | 0.00000   | 0.04184                       | 0.03734                         | 0.05246                         | 0.06164                      | 0.00531                      | 0.02607                      | 0.00805                           | 0.00805                         | 0.01593                        | 0.03138                         | 0.03782                           |                                |                          |                          |                        |



**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - NO (Year 2036)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                             |                                |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|-----------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3 | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.46735                                | 0.06373                | 2.43075   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27899                      | 1.34799                      | 2.94397                           | 2.95411                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 2             | 0.46735                                | 0.06373                | 2.43075   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27899                      | 1.34799                      | 2.94397                           | 2.95411                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 3             | 0.46735                                | 0.06373                | 2.43075   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27899                      | 1.34799                      | 2.94397                           | 2.95411                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 4             | 0.46735                                | 0.06373                | 2.43075   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27899                      | 1.34799                      | 2.94397                           | 2.95411                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 5             | 0.45947                                | 0.06357                | 2.12160   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27867                      | 1.34799                      | 2.94333                           | 2.95379                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 6             | 0.45126                                | 0.06244                | 1.89275   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27835                      | 1.34799                      | 2.94285                           | 2.95347                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 7             | 0.44370                                | 0.06116                | 1.71846   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27787                      | 1.34799                      | 2.94252                           | 2.95331                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 8             | 0.43597                                | 0.05987                | 1.58070   | 1.58472                        | 2.17422                         | 4.77782                         | 4.70781                      | 2.27738                      | 1.34799                      | 2.94220                           | 2.95331                         | 1.28925                     | 1.91077                        | 4.20634                           | 4.27603                        | 3.05309                  | 4.47365                  | 1.14038                |
| 9             | 0.42889                                | 0.05858                | 1.46837   | 1.47335                        | 2.05674                         | 4.77444                         | 4.70781                      | 2.15523                      | 1.25738                      | 2.78336                           | 2.79382                         | 1.21972                     | 1.80745                        | 4.19620                           | 4.25977                        | 3.05309                  | 4.47365                  | 1.07021                |
| 10            | 0.42181                                | 0.05729                | 1.37454   | 1.37567                        | 1.94618                         | 4.77154                         | 4.70781                      | 2.04033                      | 1.17772                      | 2.63401                           | 2.64383                         | 1.15438                     | 1.71041                        | 4.18767                           | 4.24593                        | 3.05309                  | 4.47365                  | 1.00825                |
| 11            | 0.40829                                | 0.05601                | 1.29488   | 1.29295                        | 1.84640                         | 4.56217                         | 4.50198                      | 1.93636                      | 1.10996                      | 2.49915                           | 2.50832                         | 1.09532                     | 1.62302                        | 4.00179                           | 4.05603                        | 2.91967                  | 4.47365                  | 0.95531                |
| 12            | 0.40829                                | 0.05472                | 1.22632   | 1.22181                        | 1.75531                         | 4.09932                         | 4.04396                      | 1.84141                      | 1.05138                      | 2.37604                           | 2.38457                         | 1.04141                     | 1.54320                        | 3.59865                           | 3.64983                        | 2.62259                  | 3.71697                  | 0.90928                |
| 13            | 0.40201                                | 0.05375                | 1.16645   | 1.15969                        | 1.67146                         | 3.71083                         | 3.65965                      | 1.75402                      | 1.00037                      | 2.26274                           | 2.27078                         | 0.99168                     | 1.46997                        | 3.26037                           | 3.30897                        | 2.37330                  | 3.16783                  | 0.86888                |
| 14            | 0.39574                                | 0.05263                | 1.11351   | 1.10514                        | 1.59389                         | 3.38091                         | 3.33327                      | 1.67291                      | 0.95531                      | 2.15781                           | 2.16553                         | 0.94581                     | 1.40222                        | 2.97262                           | 3.01881                        | 2.16167                  | 2.76002                  | 0.83284                |
| 15            | 0.39878                                | 0.05166                | 1.06635   | 1.05653                        | 1.52163                         | 3.09718                         | 3.05244                      | 1.59776                      | 0.91507                      | 2.06044                           | 2.06752                         | 0.90316                     | 1.33930                        | 2.72526                           | 2.76920                        | 1.91949                  | 2.46423                  | 0.80081                |
| 16            | 0.38383                                | 0.05053                | 1.02403   | 1.01308                        | 1.45420                         | 2.85079                         | 2.80879                      | 1.52711                      | 0.87918                      | 1.96903                           | 1.97579                         | 0.86325                     | 1.28056                        | 2.51042                           | 2.55258                        | 1.82146                  | 2.23811                  | 0.77168                |
| 17            | 0.37820                                | 0.04957                | 0.98588   | 0.97397                        | 1.39063                         | 2.63498                         | 2.59555                      | 1.46096                      | 0.84651                      | 1.88358                           | 1.88969                         | 0.82575                     | 1.22519                        | 2.32228                           | 2.36268                        | 1.68305                  | 2.05851                  | 0.74529                |
| 18            | 0.37272                                | 0.04876                | 0.95128   | 0.93841                        | 1.33093                         | 2.44459                         | 2.40726                      | 1.39852                      | 0.81674                      | 1.80263                           | 1.80858                         | 0.79051                     | 1.17337                        | 2.15620                           | 2.19498                        | 1.56106                  | 1.91174                  | 0.72083                |
| 19            | 0.36575                                | 0.04780                | 0.91974   | 0.90590                        | 1.27428                         | 2.27561                         | 2.24005                      | 1.33946                      | 0.78954                      | 1.72634                           | 1.73182                         | 0.75720                     | 1.12413                        | 2.00862                           | 2.04612                        | 1.45275                  | 1.78895                  | 0.69662                |
| 20            | 0.36226                                | 0.04683                | 0.89061   | 0.87613                        | 1.22069                         | 2.12450                         | 2.09070                      | 1.28329                      | 0.76460                      | 1.65392                           | 1.65891                         | 0.72549                     | 1.07746                        | 1.87666                           | 1.91287                        | 1.35587                  | 1.68466                  | 0.67802                |
| 21            | 0.35744                                | 0.04587                | 0.86373   | 0.84877                        | 1.16967                         | 1.98883                         | 1.95664                      | 1.23002                      | 0.74142                      | 1.58504                           | 1.58971                         | 0.69540                     | 1.03320                        | 1.75821                           | 1.79313                        | 1.26897                  | 1.59454                  | 0.65887                |
| 22            | 0.35261                                | 0.04522                | 0.83895   | 0.82334                        | 1.12107                         | 1.86636                         | 1.83546                      | 1.17933                      | 0.72018                      | 1.51938                           | 1.52389                         | 0.66659                     | 0.99103                        | 1.65119                           | 1.68514                        | 1.19043                  | 1.51584                  | 0.64116                |
| 23            | 0.34794                                | 0.04442                | 0.81594   | 0.79984                        | 1.07456                         | 1.75547                         | 1.72586                      | 1.13056                      | 0.70039                      | 1.45678                           | 1.46064                         | 0.63923                     | 0.95080                        | 1.55430                           | 1.58697                        | 1.11914                  | 1.44648                  | 0.62443                |
| 24            | 0.34343                                | 0.04361                | 0.79437   | 0.77812                        | 1.02998                         | 1.65424                         | 1.62592                      | 1.08405                      | 0.68172                      | 1.39675                           | 1.40029                         | 0.61284                     | 0.91218                        | 1.46579                           | 1.49782                        | 1.05444                  | 1.38468                  | 0.60898                |
| 25            | 0.33909                                | 0.04281                | 0.77442   | 0.75768                        | 0.98749                         | 1.56203                         | 1.53467                      | 1.03948                      | 0.66450                      | 1.33914                           | 1.34235                         | 0.58773                     | 0.87532                        | 1.38516                           | 1.41622                        | 0.99522                  | 1.32916                  | 0.59433                |
| 26            | 0.33474                                | 0.04216                | 0.75559   | 0.73853                        | 0.94646                         | 1.47722                         | 1.45115                      | 0.99651                      | 0.64824                      | 1.28377                           | 1.28683                         | 0.56343                     | 0.83976                        | 1.31113                           | 1.34123                        | 0.94114                  | 1.27895                  | 0.58049                |
| 27            | 0.33088                                | 0.04152                | 0.73805   | 0.72066                        | 0.90703                         | 1.39949                         | 1.37406                      | 0.95531                      | 0.63295                      | 1.23067                           | 1.23324                         | 0.54026                     | 0.80564                        | 1.24290                           | 1.27251                        | 0.89109                  | 1.23356                  | 0.56745                |
| 28            | 0.32686                                | 0.04072                | 0.72147   | 0.70377                        | 0.86888                         | 1.32771                         | 1.30325                      | 0.91539                      | 0.61847                      | 1.17933                           | 1.18174                         | 0.51789                     | 0.77265                        | 1.18013                           | 1.20894                        | 0.84523                  | 1.19172                  | 0.55522                |
| 29            | 0.32300                                | 0.04007                | 0.70570   | 0.68799                        | 0.83235                         | 1.26140                         | 1.23775                      | 0.87725                      | 0.60479                      | 1.12976                           | 1.13201                         | 0.49616                     | 0.74161                        | 1.12203                           | 1.15020                        | 0.80274                  | 1.15358                  | 0.54348                |
| 30            | 0.31929                                | 0.03943                | 0.69105   | 0.67287                        | 0.79695                         | 1.19977                         | 1.17707                      | 0.84008                      | 0.59192                      | 1.08212                           | 1.08389                         | 0.47524                     | 0.71036                        | 1.06828                           | 1.09564                        | 0.76331                  | 1.11849                  | 0.53253                |
| 31            | 0.31575                                | 0.03879                | 0.67689   | 0.65854                        | 0.69331                         | 1.14263                         | 1.12059                      | 0.73145                      | 0.57985                      | 0.94243                           | 0.94324                         | 0.44141                     | 0.62185                        | 1.01807                           | 1.04511                        | 0.72678                  | 1.08582                  | 0.52191                |
| 32            | 0.31221                                | 0.03814                | 0.66353   | 0.64519                        | 0.66369                         | 1.08953                         | 1.06796                      | 0.70055                      | 0.56810                      | 0.90268                           | 0.90316                         | 0.39686                     | 0.59626                        | 0.97156                           | 0.99795                        | 0.69266                  | 1.05557                  | 0.51193                |
| 33            | 0.30883                                | 0.03750                | 0.65098   | 0.63247                        | 0.63633                         | 1.03980                         | 1.01904                      | 0.67206                      | 0.55715                      | 0.86567                           | 0.86599                         | 0.38077                     | 0.57244                        | 0.92811                           | 0.95386                        | 0.66800                  | 1.02741                  | 0.50244                |
| 34            | 0.30561                                | 0.03685                | 0.63891   | 0.62024                        | 0.61075                         | 0.99345                         | 0.97317                      | 0.64519                      | 0.54653                      | 0.83123                           | 0.83139                         | 0.36564                     | 0.55040                        | 0.88739                           | 0.91266                        | 0.63118                  | 1.00101                  | 0.49326                |
| 35            | 0.30256                                | 0.03633                | 0.62748   | 0.60865                        | 0.58709                         | 0.95000                         | 0.93036                      | 0.62024                      | 0.53672                      | 0.79904                           | 0.79904                         | 0.35164                     | 0.52980                        | 0.84925                           | 0.87403                        | 0.60334                  | 0.97639                  | 0.48457                |
| 36            | 0.29950                                | 0.03589                | 0.61654   | 0.59755                        | 0.56488                         | 0.90928                         | 0.89013                      | 0.59707                      | 0.52706                      | 0.76911                           | 0.76894                         | 0.33845                     | 0.51064                        | 0.81368                           | 0.83782                        | 0.57727                  | 0.95321                  | 0.47620                |
| 37            | 0.29660                                | 0.03524                | 0.60592   | 0.58709                        | 0.54396                         | 0.87114                         | 0.85231                      | 0.57534                      | 0.51805                      | 0.74110                           | 0.74078                         | 0.32621                     | 0.49246                        | 0.78005                           | 0.80371                        | 0.55281                  | 0.93133                  | 0.46832                |
| 38            | 0.29371                                | 0.03476                | 0.59594   | 0.57695                        | 0.52449                         | 0.83493                         | 0.81690                      | 0.55490                      | 0.50720                      | 0.71471                           | 0.71423                         | 0.31479                     | 0.47540                        | 0.74851                           | 0.77184                        | 0.52980                  | 0.91089                  | 0.46076                |
| 39            | 0.29097                                | 0.03412                | 0.58628   | 0.56713                        | 0.50614                         | 0.80113                         | 0.78327                      | 0.53559                      | 0.50083                      | 0.68993                           | 0.68928                         | 0.30401                     | 0.45963                        | 0.71873                           | 0.74159                        | 0.50807                  | 0.89142                  | 0.45335                |
| 40            | 0.28839                                | 0.03380                | 0.57695   | 0.55796                        | 0.48892                         | 0.76911                         | 0.75189                      | 0.51757                      | 0.49294                      | 0.66659                           | 0.66595                         | 0.29371                     | 0.44450                        | 0.69073                           | 0.71326                        | 0.48763                  | 0.87307                  | 0.44659                |
| 41            | 0.28598                                | 0.03331                | 0.56826   | 0.54895                        | 0.47250                         | 0.73885                         | 0.72195                      | 0.50051                      | 0.48522                      | 0.64470                           | 0.64390                         | 0.28421                     | 0.43034                        | 0.66402                           | 0.68622                        | 0.46832                  | 0.85553                  | 0.43983                |
| 42            | 0.28341                                | 0.03267                | 0.55973   | 0.54058                        | 0.45721                         | 0.71036                         | 0.69379                      | 0.48457                      | 0.47181                      | 0.62394                           | 0.62314                         | 0.27504                     | 0.41714                        | 0.63907                           | 0.66096                        | 0.44997                  | 0.83879                  | 0.43340                |
| 43            | 0.28099                                | 0.03219                | 0.55152   | 0.53237                        | 0.44289                         | 0.68317                         | 0.66723                      | 0.46928                      | 0.47073                      | 0.60447                           | 0.60350                         | 0.26651                     | 0.40459                        | 0.61525                           | 0.63666                        | 0.43275                  | 0.82302                  | 0.42728                |
| 44            | 0.27874                                | 0.03170                | 0.54364   | 0.52449                        | 0.42921                         | 0.65758                         | 0.64181                      | 0.45512                      | 0.46397                      | 0.58956                           | 0.58848                         | 0.25846                     | 0.39252                        | 0.59288                           | 0.61380                        | 0.41618                  | 0.80805                  | 0.42149                |
| 45            | 0.27665                                | 0.03122                | 0.53607   | 0.51676                        | 0.41618                         | 0.63228                         | 0.61799                      | 0.44144                      | 0.45738                      | 0.56842                           | 0.56729                         | 0.25057                     | 0.38109                        | 0.57148                           | 0.59208                        | 0.40073                  | 0.79357                  | 0.41585                |
| 46            | 0.27439                                | 0.03074                | 0.52883   | 0.50952                        | 0.40378                         | 0.61026                         | 0.59514                      | 0.42857                      | 0.45110                      | 0.55184                           | 0.55056                         | 0.24349                     | 0.37047                        | 0.55120                           | 0.57148                        | 0.38592                  | 0.77989                  | 0.41022                |
| 47            | 0.27246                                | 0.03042                | 0.52175   | 0.50228                        | 0.39220                         | 0.58838                         | 0.57357                      | 0.41618                      | 0.44498                      | 0.53591                           | 0.53462                         | 0.23657                     | 0.36017                        | 0.53173                           | 0.55200                        | 0.37192                  | 0.76669                  | 0.40523                |
| 48            | 0.27049                                | 0.02993                | 0.51483   | 0.49552                        | 0.38109                         | 0.56729                         | 0.55297                      | 0.40459                      | 0.43919                      | 0.52111                           | 0.51950                         | 0.22981                     | 0.35052                        | 0.51354                           | 0.53334                        | 0.35856                  | 0.75414                  | 0.40024                |
| 49            | 0.26876                                | 0.02945                | 0.50823   | 0.48892                        | 0.37047                         | 0.54750                         | 0.53350                      | 0.39348                      | 0.43356                      | 0.50678                           | 0.50517                         | 0.22370                     | 0.34134                        | 0.49600                           | 0.51547                        | 0.34585                  | 0.74207                  | 0.39542                |
| 50            | 0.26699                                | 0.02913                | 0.50195   | 0.48248                        | 0.36033                         | 0.52851                         | 0.51467                      | 0.38302                      | 0.42825                      | 0.49326                           | 0.49149                         | 0.21758                     | 0.33249                        | 0.47926                           | 0.49857                        | 0.33378                  | 0.73032                  | 0.39091                |
| 51            | 0.26522                                | 0.02865                | 0.49568   | 0.47637                        | 0.35068                         | 0.51048                         | 0.49680                      | 0.37289                      | 0.42294                      | 0.48007                           | 0.47846                         | 0.21195                     | 0.32396                        | 0.46349                           | 0.48232                        | 0.32219                  | 0.71938                  | 0.38640                |
| 52            | 0.26361                                | 0.02816                | 0.48972   | 0.47025                        | 0.34166                         | 0.49342                         | 0.47991                      | 0.36323                      | 0.41779                      | 0.46784                           | 0.46607                         | 0.20648                     | 0.31608                        | 0.44820                           | 0.46703                        | 0.31125                  | 0.70859                  | 0.38222                |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - NO2 (Year 2036)

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <= 6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <= 3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3 | 06 - Heavy Goods Vehicles <= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | Temperature :6°C Relative Humidity:18% |                          |                        |
|---------------|-----------------------|------------------------|-----------|---------------------------------|---------------------------------|---------------------------------|------------------------------|-------------------------------|------------------------------|-----------------------------------|---------------------------------|-----------------------------|----------------------------------|-----------------------------------|--------------------------------|--|--------------------------|------------------------|
|               |                       |                        |           |                                 |                                 |                                 |                              |                               |                              |                                   |                                 |                             |                                  |                                   |                                | 14 - Franchised Bus (SD)               | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 0.02462       | 0.00338               | 0.06824                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56504                      | 0.49471                       | 0.16850                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02462       | 0.00338               | 0.06824                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56504                      | 0.49471                       | 0.16850                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02462       | 0.00338               | 0.06824                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56504                      | 0.49471                       | 0.16850                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02462       | 0.00338               | 0.06824                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56504                      | 0.49471                       | 0.16850                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02414       | 0.00338               | 0.05955                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56488                      | 0.49471                       | 0.16850                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02382       | 0.00338               | 0.05311                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56488                      | 0.49471                       | 0.16850                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02334       | 0.00338               | 0.04828                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56488                      | 0.49471                       | 0.16834                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02301       | 0.00322               | 0.04442                | 0.61622   | 0.10786                         | 2.33580                         | 2.31890                         | 0.56488                      | 0.49471                       | 0.16834                      | 0.17799                           | 0.50147                         | 0.93487                     | 2.02826                          | 2.03630                           | 1.24708                        | 1.82709                                | 0.37063                  |                        |
| 0.02253       | 0.00322               | 0.04120                | 0.57293   | 0.10308                         | 2.33564                         | 2.31890                         | 0.53446                      | 0.45995                       | 0.15933                      | 0.16834                           | 0.47443                         | 0.88433                     | 2.02681                          | 2.03389                           | 1.24708                        | 1.82709                                | 0.34456                  |                        |
| 0.02221       | 0.00306               | 0.03862                | 0.53495   | 0.95869                         | 2.33548                         | 2.31890                         | 0.50582                      | 0.42937                       | 0.15080                      | 0.16834                           | 0.47443                         | 0.88433                     | 2.02681                          | 2.03389                           | 1.24708                        | 1.82709                                | 0.32171                  |                        |
| 0.02189       | 0.00306               | 0.03637                | 0.50276   | 0.90944                         | 2.23329                         | 2.21752                         | 0.47975                      | 0.40362                       | 0.14307                      | 0.15112                           | 0.42599                         | 0.79405                     | 1.93652                          | 1.94232                           | 1.19252                        | 1.82709                                | 0.30240                  |                        |
| 0.02157       | 0.00306               | 0.03444                | 0.47508   | 0.86454                         | 2.00605                         | 1.99189                         | 0.45609                      | 0.38141                       | 0.13599                      | 0.14371                           | 0.40491                         | 0.75510                     | 1.74002                          | 1.74566                           | 1.07118                        | 1.54272                                | 0.28582                  |                        |
| 0.02108       | 0.00290               | 0.03267                | 0.45094   | 0.82318                         | 1.81566                         | 1.80263                         | 0.43436                      | 0.36210                       | 0.12955                      | 0.13679                           | 0.38576                         | 0.71922                     | 1.57523                          | 1.58054                           | 0.96947                        | 1.29391                                | 0.27134                  |                        |
| 0.02076       | 0.00290               | 0.03122                | 0.42969   | 0.78504                         | 1.65360                         | 1.64169                         | 0.41425                      | 0.34504                       | 0.12360                      | 0.13052                           | 0.36790                         | 0.68606                     | 1.43521                          | 1.44036                           | 0.88289                        | 1.12735                                | 0.25862                  |                        |
| 0.02044       | 0.00274               | 0.02993                | 0.41087   | 0.74947                         | 1.51439                         | 1.50345                         | 0.39542                      | 0.32992                       | 0.11796                      | 0.12456                           | 0.35132                         | 0.65516                     | 1.31483                          | 1.31982                           | 0.80853                        | 1.00648                                | 0.24720                  |                        |
| 0.02028       | 0.00274               | 0.02881                | 0.39397   | 0.71616                         | 1.39353                         | 1.38339                         | 0.37877                      | 0.31624                       | 0.11282                      | 0.11909                           | 0.33571                         | 0.62636                     | 1.21023                          | 1.21505                           | 0.74400                        | 0.91411                                | 0.23706                  |                        |
| 0.01996       | 0.00274               | 0.02768                | 0.37868   | 0.68494                         | 1.28780                         | 1.27830                         | 0.36130                      | 0.30401                       | 0.10783                      | 0.11394                           | 0.32123                         | 0.59952                     | 1.11866                          | 1.12332                           | 0.68751                        | 0.84072                                | 0.22788                  |                        |
| 0.01963       | 0.00257               | 0.02672                | 0.36484   | 0.65549                         | 1.19446                         | 1.18560                         | 0.34585                      | 0.29290                       | 0.10332                      | 0.10911                           | 0.30738                         | 0.57373                     | 1.03787                          | 1.04253                           | 0.63762                        | 0.78069                                | 0.21968                  |                        |
| 0.01931       | 0.00257               | 0.02575                | 0.35229   | 0.62764                         | 1.11157                         | 1.10337                         | 0.33104                      | 0.28292                       | 0.09897                      | 0.10445                           | 0.29435                         | 0.54975                     | 0.96609                          | 0.97060                           | 0.59337                        | 0.73064                                | 0.21211                  |                        |
| 0.01915       | 0.00257               | 0.02494                | 0.34070   | 0.60125                         | 1.03754                         | 1.02982                         | 0.31720                      | 0.27359                       | 0.09479                      | 0.10010                           | 0.28212                         | 0.52690                     | 0.90204                          | 0.90638                           | 0.55378                        | 0.68799                                | 0.20519                  |                        |
| 0.01883       | 0.00257               | 0.02430                | 0.33008   | 0.57615                         | 0.97108                         | 0.96368                         | 0.30384                      | 0.26506                       | 0.09093                      | 0.09592                           | 0.27037                         | 0.50517                     | 0.84442                          | 0.84877                           | 0.51821                        | 0.65130                                | 0.19875                  |                        |
| 0.01851       | 0.00241               | 0.02350                | 0.32026   | 0.55217                         | 0.91105                         | 0.90413                         | 0.29113                      | 0.25717                       | 0.08723                      | 0.09189                           | 0.25927                         | 0.48441                     | 0.79244                          | 0.79663                           | 0.48618                        | 0.61911                                | 0.19280                  |                        |
| 0.01835       | 0.00241               | 0.02285                | 0.31109   | 0.52931                         | 0.85649                         | 0.85006                         | 0.27906                      | 0.24977                       | 0.08352                      | 0.08819                           | 0.24848                         | 0.46462                     | 0.74529                          | 0.74947                           | 0.45721                        | 0.59079                                | 0.18733                  |                        |
| 0.01802       | 0.00241               | 0.02237                | 0.30256   | 0.50743                         | 0.80709                         | 0.80081                         | 0.26747                      | 0.24301                       | 0.08015                      | 0.08449                           | 0.23834                         | 0.44579                     | 0.70248                          | 0.70634                           | 0.43066                        | 0.56552                                | 0.18218                  |                        |
| 0.01786       | 0.00241               | 0.02173                | 0.29467   | 0.48634                         | 0.76107                         | 0.75591                         | 0.25637                      | 0.23657                       | 0.07693                      | 0.08111                           | 0.22853                         | 0.42760                     | 0.66321                          | 0.66707                           | 0.40652                        | 0.54283                                | 0.17735                  |                        |
| 0.01770       | 0.00225               | 0.02124                | 0.28217   | 0.46623                         | 0.72034                         | 0.71471                         | 0.24575                      | 0.23062                       | 0.07371                      | 0.07773                           | 0.21919                         | 0.41022                     | 0.62732                          | 0.63118                           | 0.38431                        | 0.52239                                | 0.17300                  |                        |
| 0.01738       | 0.00225               | 0.02076                | 0.27809   | 0.44675                         | 0.68220                         | 0.67689                         | 0.23545                      | 0.22499                       | 0.07065                      | 0.07451                           | 0.21018                         | 0.39348                     | 0.59433                          | 0.59803                           | 0.36403                        | 0.50372                                | 0.16882                  |                        |
| 0.01722       | 0.00225               | 0.02028                | 0.27375   | 0.42809                         | 0.64696                         | 0.64197                         | 0.22563                      | 0.21984                       | 0.06775                      | 0.07145                           | 0.20133                         | 0.37739                     | 0.56391                          | 0.56745                           | 0.34520                        | 0.46883                                | 0.16480                  |                        |
| 0.01706       | 0.00225               | 0.01979                | 0.26747   | 0.40990                         | 0.61445                         | 0.60962                         | 0.21597                      | 0.21485                       | 0.06502                      | 0.06840                           | 0.19296                         | 0.36178                     | 0.53575                          | 0.53929                           | 0.32782                        | 0.47122                                | 0.16110                  |                        |
| 0.01674       | 0.00209               | 0.01931                | 0.26168   | 0.39252                         | 0.58435                         | 0.57969                         | 0.20680                      | 0.21018                       | 0.06228                      | 0.06550                           | 0.18491                         | 0.34681                     | 0.50952                          | 0.51306                           | 0.31173                        | 0.45673                                | 0.15755                  |                        |
| 0.01658       | 0.00209               | 0.01899                | 0.25621   | 0.34134                         | 0.55635                         | 0.55184                         | 0.19776                      | 0.20567                       | 0.05440                      | 0.05713                           | 0.16110                         | 0.30320                     | 0.48538                          | 0.48876                           | 0.29676                        | 0.44354                                | 0.15434                  |                        |
| 0.01642       | 0.00209               | 0.01867                | 0.25090   | 0.32686                         | 0.53028                         | 0.52609                         | 0.17204                      | 0.20149                       | 0.05198                      | 0.05472                           | 0.15434                         | 0.29065                     | 0.46269                          | 0.46607                           | 0.28292                        | 0.43114                                | 0.15112                  |                        |
| 0.01625       | 0.00209               | 0.01819                | 0.24591   | 0.31334                         | 0.50598                         | 0.50195                         | 0.16480                      | 0.19747                       | 0.04989                      | 0.05246                           | 0.14806                         | 0.27906                     | 0.44160                          | 0.44498                           | 0.26989                        | 0.41956                                | 0.14806                  |                        |
| 0.01609       | 0.00209               | 0.01786                | 0.24124   | 0.30079                         | 0.48329                         | 0.47942                         | 0.15820                      | 0.19377                       | 0.04796                      | 0.05037                           | 0.14227                         | 0.26812                     | 0.42197                          | 0.42519                           | 0.25782                        | 0.40893                                | 0.14532                  |                        |
| 0.01593       | 0.00193               | 0.01754                | 0.23673   | 0.28904                         | 0.46204                         | 0.45818                         | 0.15208                      | 0.19006                       | 0.04619                      | 0.04844                           | 0.13679                         | 0.25798                     | 0.40362                          | 0.40684                           | 0.24639                        | 0.39880                                | 0.14259                  |                        |
| 0.01577       | 0.00193               | 0.01722                | 0.23239   | 0.27809                         | 0.44209                         | 0.43839                         | 0.14629                      | 0.18668                       | 0.04442                      | 0.04667                           | 0.13164                         | 0.24848                     | 0.38624                          | 0.38946                           | 0.23577                        | 0.38930                                | 0.14001                  |                        |
| 0.01561       | 0.00193               | 0.01706                | 0.22820   | 0.26796                         | 0.42326                         | 0.41988                         | 0.14082                      | 0.18330                       | 0.04281                      | 0.04490                           | 0.12682                         | 0.23963                     | 0.36999                          | 0.37321                           | 0.22579                        | 0.38045                                | 0.13744                  |                        |
| 0.01545       | 0.00193               | 0.01674                | 0.22434   | 0.25830                         | 0.40572                         | 0.40234                         | 0.13567                      | 0.18025                       | 0.04136                      | 0.04329                           | 0.12231                         | 0.23142                     | 0.35470                          | 0.35776                           | 0.21630                        | 0.37192                                | 0.13518                  |                        |
| 0.01529       | 0.00193               | 0.01642                | 0.22064   | 0.24929                         | 0.38914                         | 0.38592                         | 0.13100                      | 0.17719                       | 0.03991                      | 0.04184                           | 0.11813                         | 0.22354                     | 0.34038                          | 0.34343                           | 0.20744                        | 0.36403                                | 0.13293                  |                        |
| 0.01513       | 0.00177               | 0.01625                | 0.21694   | 0.24076                         | 0.37353                         | 0.37031                         | 0.12649                      | 0.17429                       | 0.03862                      | 0.04039                           | 0.11426                         | 0.21630                     | 0.32670                          | 0.32975                           | 0.19908                        | 0.35667                                | 0.13068                  |                        |
| 0.01497       | 0.00177               | 0.01593                | 0.21356   | 0.23287                         | 0.35872                         | 0.35567                         | 0.12231                      | 0.17156                       | 0.03734                      | 0.03911                           | 0.11040                         | 0.20938                     | 0.31398                          | 0.31688                           | 0.19119                        | 0.34939                                | 0.12859                  |                        |
| 0.01491       | 0.00177               | 0.01577                | 0.21018   | 0.22531                         | 0.34472                         | 0.34182                         | 0.11829                      | 0.16882                       | 0.03621                      | 0.03782                           | 0.10702                         | 0.20278                     | 0.30175                          | 0.30465                           | 0.18379                        | 0.34263                                | 0.12666                  |                        |
| 0.01481       | 0.00177               | 0.01545                | 0.20696   | 0.21807                         | 0.33152                         | 0.32863                         | 0.11459                      | 0.16625                       | 0.03508                      | 0.03669                           | 0.10364                         | 0.19650                     | 0.29033                          | 0.29322                           | 0.17671                        | 0.33619                                | 0.12472                  |                        |
| 0.01465       | 0.00177               | 0.01529                | 0.20390   | 0.21131                         | 0.31897                         | 0.31624                         | 0.11088                      | 0.16383                       | 0.03396                      | 0.03557                           | 0.10042                         | 0.19071                     | 0.27938                          | 0.28228                           | 0.17011                        | 0.32992                                | 0.12279                  |                        |
| 0.01448       | 0.00177               | 0.01497                | 0.20101   | 0.20503                         | 0.30706                         | 0.30433                         | 0.10750                      | 0.16142                       | 0.03299                      | 0.03444                           | 0.09753                         | 0.18524                     | 0.26908                          | 0.27198                           | 0.16367                        | 0.32412                                | 0.12102                  |                        |
| 0.01448       | 0.00177               | 0.01481                | 0.19811   | 0.19991                         | 0.29580                         | 0.29322                         | 0.10429                      | 0.15916                       | 0.03203                      | 0.03347                           | 0.09463                         | 0.17992                     | 0.25927                          | 0.26216                           | 0.15772                        | 0.31849                                | 0.11941                  |                        |
| 0.01432       | 0.00161               | 0.01465                | 0.19537   | 0.19312                         | 0.28501                         | 0.28244                         | 0.10139                      | 0.15691                       | 0.03122                      | 0.03251                           | 0.09189                         | 0.17494                     | 0.25009                          | 0.25267                           | 0.15192                        | 0.31318                                | 0.11764                  |                        |
| 0.01416       | 0.00161               | 0.01448                | 0.19264   | 0.18765                         | 0.27480                         | 0.27230                         | 0.09849                      | 0.15482                       | 0.03026                      | 0.03170                           | 0.08948                         | 0.17011                     | 0.24108                          | 0.24382                           | 0.14645                        | 0.30803                                | 0.11603                  |                        |
| 0.01416       | 0.00161               | 0.01432                | 0.19006   | 0.18250                         | 0.26506                         | 0.26264                         | 0.09576                      | 0.15273                       | 0.02945                      | 0.03074                           | 0.08690                         | 0.16560                     | 0.23271                          | 0.23545                           | 0.14130                        | 0.30304                                | 0.11459                  |                        |
| 0.01400       | 0.00161               | 0.01400                | 0.18765   | 0.17751                         | 0.25589                         | 0.25347                         | 0.09302                      | 0.15063                       | 0.02865                      | 0.02993                           | 0.08445                         | 0.16126                     | 0.22466                          | 0.22724                           | 0.13631                        | 0.29837                                | 0.11298                  |                        |
| 0.01400       | 0.00161               | 0.01384                | 0.18524   | 0.17284                         | 0.24703                         | 0.24478                         | 0.09061                      | 0.14870                       | 0.02800                      | 0.02913                           | 0.08240                         | 0.15723                     | 0.21694                          | 0.21968                           | 0.13164                        | 0.29371                                | 0.11169                  |                        |
| 0.01384       | 0.00161               | 0.01368                | 0.18298   | 0.16818                         | 0.23850                         | 0.23641                         | 0.08819                      | 0.14693                       | 0.02720                      | 0.02849                           | 0.08031                         | 0.15321                     | 0.20970                          | 0.21227                           | 0.12714                        | 0.28936                                | 0.11024                  |                        |
| 0.01384       | 0.00161               | 0.01352                | 0.18073   | 0.16399                         | 0.23046                         | 0.22837                         | 0.08594                      | 0.14561                       | 0.02655                      | 0.02768                           | 0.07838                         | 0.14951                     | 0.20262                          | 0.20519                           | 0.12279                        | 0.28518                                | 0.10879                  |                        |
| 0.01368       | 0.00145               | 0.01336                | 0.17848   | 0.15981                         | 0.22273                         | 0.22080                         |                              |                               |                              |                                   |                                 |                             |                                  |                                   |                                |  |                          |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - RSP (Year 2036)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                  |                                 |                             |                                |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|-----------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3 | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.01674                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 2             | 0.01674                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 3             | 0.01674                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 4             | 0.01674                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 5             | 0.01674                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 6             | 0.01674                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 7             | 0.01658                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 8             | 0.01658                                | 0.01545                | 0.00000   | 0.11571                        | 0.07403                         | 0.18395                         | 0.16657                      | 0.01674                      | 0.07548                      | 0.02511                          | 0.02494                         | 0.03653                     | 0.06582                        | 0.12183                           | 0.12360                        | 0.04088                  | 0.06502                  | 0.09688                |
| 9             | 0.01658                                | 0.01545                | 0.00000   | 0.10976                        | 0.07194                         | 0.17300                         | 0.15675                      | 0.01642                      | 0.07162                      | 0.02446                          | 0.02430                         | 0.03508                     | 0.06357                        | 0.11459                           | 0.11619                        | 0.03846                  | 0.06099                  | 0.09189                |
| 10            | 0.01642                                | 0.01545                | 0.00000   | 0.10412                        | 0.07001                         | 0.16303                         | 0.14774                      | 0.01593                      | 0.06808                      | 0.02366                          | 0.02350                         | 0.03380                     | 0.06148                        | 0.10783                           | 0.10944                        | 0.03637                  | 0.05761                  | 0.08723                |
| 11            | 0.01625                                | 0.01513                | 0.00000   | 0.09930                        | 0.06824                         | 0.15418                         | 0.13969                      | 0.01561                      | 0.06486                      | 0.02301                          | 0.02285                         | 0.03251                     | 0.05971                        | 0.10203                           | 0.10348                        | 0.03444                  | 0.05472                  | 0.08320                |
| 12            | 0.01529                                | 0.01432                | 0.00000   | 0.09479                        | 0.06463                         | 0.14629                         | 0.13261                      | 0.01497                      | 0.06196                      | 0.02237                          | 0.02205                         | 0.03138                     | 0.05810                        | 0.09672                           | 0.09817                        | 0.03283                  | 0.05214                  | 0.07950                |
| 13            | 0.01448                                | 0.01368                | 0.00000   | 0.09077                        | 0.06158                         | 0.13937                         | 0.12633                      | 0.01448                      | 0.05938                      | 0.02157                          | 0.02140                         | 0.03026                     | 0.05665                        | 0.09222                           | 0.09350                        | 0.03138                  | 0.04989                  | 0.07612                |
| 14            | 0.01384                                | 0.01287                | 0.00000   | 0.08723                        | 0.06399                         | 0.13309                         | 0.12070                      | 0.01400                      | 0.05697                      | 0.02108                          | 0.02076                         | 0.02929                     | 0.05536                        | 0.08803                           | 0.08932                        | 0.03026                  | 0.04780                  | 0.07306                |
| 15            | 0.01320                                | 0.01223                | 0.00000   | 0.08401                        | 0.06260                         | 0.12746                         | 0.11555                      | 0.01352                      | 0.05488                      | 0.02044                          | 0.02028                         | 0.02849                     | 0.05423                        | 0.08433                           | 0.08546                        | 0.02913                  | 0.04603                  | 0.07033                |
| 16            | 0.01255                                | 0.01159                | 0.00000   | 0.08095                        | 0.06132                         | 0.12231                         | 0.11088                      | 0.01304                      | 0.05295                      | 0.01979                          | 0.01963                         | 0.02768                     | 0.05311                        | 0.08095                           | 0.08208                        | 0.02800                  | 0.04442                  | 0.06791                |
| 17            | 0.01191                                | 0.01110                | 0.00000   | 0.07821                        | 0.06035                         | 0.11764                         | 0.10670                      | 0.01271                      | 0.05118                      | 0.01931                          | 0.01915                         | 0.02688                     | 0.05198                        | 0.07789                           | 0.07902                        | 0.02704                  | 0.04297                  | 0.06550                |
| 18            | 0.01127                                | 0.01046                | 0.00000   | 0.07564                        | 0.05922                         | 0.11346                         | 0.10284                      | 0.01223                      | 0.04941                      | 0.01867                          | 0.01851                         | 0.02623                     | 0.05102                        | 0.07500                           | 0.07612                        | 0.02623                  | 0.04168                  | 0.06341                |
| 19            | 0.01078                                | 0.00998                | 0.00000   | 0.07339                        | 0.05826                         | 0.10944                         | 0.09930                      | 0.01191                      | 0.04796                      | 0.01819                          | 0.01802                         | 0.02559                     | 0.05005                        | 0.07242                           | 0.07355                        | 0.02543                  | 0.04039                  | 0.06148                |
| 20            | 0.01030                                | 0.00950                | 0.00000   | 0.07129                        | 0.05729                         | 0.10589                         | 0.09592                      | 0.01159                      | 0.04651                      | 0.01770                          | 0.01754                         | 0.02494                     | 0.04925                        | 0.07001                           | 0.07113                        | 0.02478                  | 0.03927                  | 0.05971                |
| 21            | 0.00982                                | 0.00917                | 0.00000   | 0.06920                        | 0.05633                         | 0.10268                         | 0.09302                      | 0.01127                      | 0.04522                      | 0.01722                          | 0.01706                         | 0.02446                     | 0.04844                        | 0.06791                           | 0.06888                        | 0.02414                  | 0.03830                  | 0.05810                |
| 22            | 0.00933                                | 0.00869                | 0.00000   | 0.06743                        | 0.05552                         | 0.09946                         | 0.09012                      | 0.01078                      | 0.04394                      | 0.01674                          | 0.01658                         | 0.02398                     | 0.04764                        | 0.06582                           | 0.06679                        | 0.02350                  | 0.03734                  | 0.05649                |
| 23            | 0.00901                                | 0.00837                | 0.00000   | 0.06566                        | 0.05472                         | 0.09672                         | 0.08755                      | 0.01046                      | 0.04281                      | 0.01625                          | 0.01609                         | 0.02350                     | 0.04683                        | 0.06389                           | 0.06486                        | 0.02301                  | 0.03637                  | 0.05504                |
| 24            | 0.00853                                | 0.00789                | 0.00000   | 0.06405                        | 0.05391                         | 0.09399                         | 0.08513                      | 0.01030                      | 0.04184                      | 0.01593                          | 0.01577                         | 0.02301                     | 0.04619                        | 0.06228                           | 0.06309                        | 0.02237                  | 0.03557                  | 0.05275                |
| 25            | 0.00821                                | 0.00756                | 0.00000   | 0.06260                        | 0.05311                         | 0.09157                         | 0.08288                      | 0.00998                      | 0.04088                      | 0.01545                          | 0.01529                         | 0.02253                     | 0.04554                        | 0.06051                           | 0.06148                        | 0.02189                  | 0.03476                  | 0.05246                |
| 26            | 0.00789                                | 0.00724                | 0.00000   | 0.06116                        | 0.05246                         | 0.08916                         | 0.08079                      | 0.00966                      | 0.03991                      | 0.01513                          | 0.01497                         | 0.02221                     | 0.04490                        | 0.05906                           | 0.05987                        | 0.02140                  | 0.03396                  | 0.05134                |
| 27            | 0.00756                                | 0.00692                | 0.00000   | 0.05987                        | 0.05182                         | 0.08707                         | 0.07886                      | 0.00933                      | 0.03911                      | 0.01465                          | 0.01465                         | 0.02173                     | 0.04426                        | 0.05761                           | 0.05842                        | 0.02108                  | 0.03331                  | 0.05021                |
| 28            | 0.00724                                | 0.00676                | 0.00000   | 0.05858                        | 0.05118                         | 0.08497                         | 0.07709                      | 0.00917                      | 0.03814                      | 0.01432                          | 0.01416                         | 0.02140                     | 0.04361                        | 0.05633                           | 0.05713                        | 0.02060                  | 0.03267                  | 0.04908                |
| 29            | 0.00692                                | 0.00644                | 0.00000   | 0.05745                        | 0.05053                         | 0.08320                         | 0.07532                      | 0.00885                      | 0.03750                      | 0.01400                          | 0.01384                         | 0.02108                     | 0.04313                        | 0.05504                           | 0.05584                        | 0.02028                  | 0.03203                  | 0.04812                |
| 30            | 0.00676                                | 0.00612                | 0.00000   | 0.05649                        | 0.04989                         | 0.08127                         | 0.07371                      | 0.00869                      | 0.03649                      | 0.01368                          | 0.01352                         | 0.02076                     | 0.04249                        | 0.05391                           | 0.05456                        | 0.01979                  | 0.03138                  | 0.04731                |
| 31            | 0.00644                                | 0.00595                | 0.00000   | 0.05536                        | 0.04925                         | 0.07966                         | 0.07226                      | 0.00837                      | 0.03605                      | 0.01336                          | 0.01320                         | 0.02044                     | 0.04200                        | 0.05279                           | 0.05343                        | 0.01947                  | 0.03090                  | 0.04635                |
| 32            | 0.00628                                | 0.00579                | 0.00000   | 0.05440                        | 0.04860                         | 0.07805                         | 0.07081                      | 0.00821                      | 0.03541                      | 0.01304                          | 0.01287                         | 0.02028                     | 0.04152                        | 0.05166                           | 0.05246                        | 0.01915                  | 0.03042                  | 0.04554                |
| 33            | 0.00595                                | 0.00547                | 0.00000   | 0.05343                        | 0.04812                         | 0.07660                         | 0.06936                      | 0.00805                      | 0.03476                      | 0.01271                          | 0.01255                         | 0.01996                     | 0.04104                        | 0.05069                           | 0.05134                        | 0.01883                  | 0.02977                  | 0.04490                |
| 34            | 0.00579                                | 0.00531                | 0.00000   | 0.05263                        | 0.04748                         | 0.07516                         | 0.06808                      | 0.00789                      | 0.03428                      | 0.01239                          | 0.01239                         | 0.01963                     | 0.04056                        | 0.04973                           | 0.05053                        | 0.01851                  | 0.02929                  | 0.04410                |
| 35            | 0.00563                                | 0.00515                | 0.00000   | 0.05182                        | 0.04699                         | 0.07371                         | 0.06695                      | 0.00756                      | 0.03364                      | 0.01207                          | 0.01207                         | 0.01947                     | 0.04007                        | 0.04876                           | 0.04957                        | 0.01819                  | 0.02897                  | 0.04345                |
| 36            | 0.00547                                | 0.00499                | 0.00000   | 0.05102                        | 0.04651                         | 0.07258                         | 0.06566                      | 0.00740                      | 0.03341                      | 0.01191                          | 0.01175                         | 0.01931                     | 0.03959                        | 0.04796                           | 0.04876                        | 0.01786                  | 0.02849                  | 0.04281                |
| 37            | 0.00515                                | 0.00483                | 0.00000   | 0.05037                        | 0.04603                         | 0.07129                         | 0.06470                      | 0.00724                      | 0.03267                      | 0.01159                          | 0.01159                         | 0.01899                     | 0.03911                        | 0.04715                           | 0.04796                        | 0.01770                  | 0.02800                  | 0.04216                |
| 38            | 0.00499                                | 0.00467                | 0.00000   | 0.04957                        | 0.04554                         | 0.07017                         | 0.06357                      | 0.00708                      | 0.03219                      | 0.01143                          | 0.01127                         | 0.01883                     | 0.03879                        | 0.04651                           | 0.04715                        | 0.01738                  | 0.02768                  | 0.04152                |
| 39            | 0.00483                                | 0.00451                | 0.00000   | 0.04892                        | 0.04506                         | 0.06904                         | 0.06260                      | 0.00692                      | 0.03187                      | 0.01110                          | 0.01110                         | 0.01867                     | 0.03830                        | 0.04571                           | 0.04635                        | 0.01722                  | 0.02720                  | 0.04104                |
| 40            | 0.00467                                | 0.00435                | 0.00000   | 0.04844                        | 0.04458                         | 0.06808                         | 0.06164                      | 0.00676                      | 0.03138                      | 0.01094                          | 0.01078                         | 0.01851                     | 0.03798                        | 0.04506                           | 0.04571                        | 0.01690                  | 0.02688                  | 0.04056                |
| 41            | 0.00467                                | 0.00418                | 0.00000   | 0.04780                        | 0.04410                         | 0.06711                         | 0.06083                      | 0.00660                      | 0.03106                      | 0.01062                          | 0.01062                         | 0.01835                     | 0.03750                        | 0.04442                           | 0.04506                        | 0.01674                  | 0.02655                  | 0.04007                |
| 42            | 0.00451                                | 0.00402                | 0.00000   | 0.04715                        | 0.04361                         | 0.06611                         | 0.05987                      | 0.00644                      | 0.03076                      | 0.01046                          | 0.01046                         | 0.01819                     | 0.03718                        | 0.04377                           | 0.04442                        | 0.01642                  | 0.02607                  | 0.03959                |
| 43            | 0.00435                                | 0.00402                | 0.00000   | 0.04667                        | 0.04329                         | 0.06518                         | 0.05906                      | 0.00644                      | 0.03026                      | 0.01030                          | 0.01014                         | 0.01802                     | 0.03685                        | 0.04313                           | 0.04377                        | 0.01625                  | 0.02575                  | 0.03911                |
| 44            | 0.00418                                | 0.00386                | 0.00000   | 0.04619                        | 0.04281                         | 0.06437                         | 0.05842                      | 0.00628                      | 0.02993                      | 0.01014                          | 0.00998                         | 0.01786                     | 0.03637                        | 0.04265                           | 0.04313                        | 0.01609                  | 0.02543                  | 0.03862                |
| 45            | 0.00418                                | 0.00370                | 0.00000   | 0.04571                        | 0.04233                         | 0.06357                         | 0.05761                      | 0.00612                      | 0.02961                      | 0.00982                          | 0.00982                         | 0.01786                     | 0.03605                        | 0.04200                           | 0.04265                        | 0.01593                  | 0.02511                  | 0.03830                |
| 46            | 0.00402                                | 0.00370                | 0.00000   | 0.04522                        | 0.04200                         | 0.06276                         | 0.05697                      | 0.00595                      | 0.02945                      | 0.00966                          | 0.00966                         | 0.01770                     | 0.03573                        | 0.04152                           | 0.04216                        | 0.01561                  | 0.02478                  | 0.03798                |
| 47            | 0.00386                                | 0.00354                | 0.00000   | 0.04490                        | 0.04152                         | 0.06212                         | 0.05617                      | 0.00595                      | 0.02913                      | 0.00950                          | 0.00950                         | 0.01754                     | 0.03541                        | 0.04104                           | 0.04168                        | 0.01545                  | 0.02462                  | 0.03750                |
| 48            | 0.00386                                | 0.00354                | 0.00000   | 0.04442                        | 0.04120                         | 0.06132                         | 0.05568                      | 0.00579                      | 0.02881                      | 0.00933                          | 0.00933                         | 0.01754                     | 0.03508                        | 0.04056                           | 0.04120                        | 0.01529                  | 0.02430                  | 0.03718                |
| 49            | 0.00370                                | 0.00338                | 0.00000   | 0.04410                        | 0.04088                         | 0.06067                         | 0.05504                      | 0.00563                      | 0.02865                      | 0.00917                          | 0.00917                         | 0.01738                     | 0.03476                        | 0.04007                           | 0.04072                        | 0.01513                  | 0.02398                  | 0.03685                |
| 50            | 0.00370                                | 0.00338                | 0.00000   | 0.04377                        | 0.04039                         | 0.06003                         | 0.05440                      | 0.00563                      | 0.02832                      | 0.00901                          | 0.00901                         | 0.01738                     | 0.03444                        | 0.03975                           | 0.04023                        | 0.01497                  | 0.02366                  | 0.03669                |
| 51            | 0.00354                                | 0.00322                | 0.00000   | 0.04329                        | 0.04007                         | 0.05938                         | 0.05391                      | 0.00547                      | 0.02816                      | 0.00885                          | 0.00885                         | 0.01722                     | 0.03412                        | 0.03927                           | 0.03991                        | 0.01481                  | 0.02350                  | 0.03637                |
| 52            | 0.00354                                | 0.00322                | 0.00000   | 0.04297                        | 0.03975                         | 0.05890                         | 0.05327                      | 0.00531                      | 0.02800                      | 0.00869                          | 0.00869                         | 0.01722                     | 0.03380                        | 0.03895                           | 0.03959                        | 0.01465                  | 0.02317                  | 0.03605                |

Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - FSP (Year 2036)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                  |                                 |                                 |                                |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|---------------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles<= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3 .5t | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.01513                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 2             | 0.01513                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 3             | 0.01513                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 4             | 0.01513                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 5             | 0.01513                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 6             | 0.01513                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 7             | 0.01497                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 8             | 0.01497                                | 0.01432                | 0.00000   | 0.10638                        | 0.06808                         | 0.16914                         | 0.15337                      | 0.01545                      | 0.06952                      | 0.02317                          | 0.02301                         | 0.03364                         | 0.06051                        | 0.11201                           | 0.11378                        | 0.03766                  | 0.05971                  | 0.08916                |
| 9             | 0.01497                                | 0.01432                | 0.00000   | 0.10091                        | 0.06630                         | 0.15916                         | 0.14420                      | 0.01513                      | 0.06598                      | 0.02253                          | 0.02237                         | 0.03235                         | 0.05842                        | 0.10541                           | 0.10686                        | 0.03541                  | 0.05617                  | 0.08449                |
| 10            | 0.01497                                | 0.01432                | 0.00000   | 0.09576                        | 0.06437                         | 0.14999                         | 0.13583                      | 0.01481                      | 0.06260                      | 0.02189                          | 0.02157                         | 0.03106                         | 0.05665                        | 0.09914                           | 0.10058                        | 0.03347                  | 0.05295                  | 0.08189                |
| 11            | 0.01465                                | 0.01416                | 0.00000   | 0.09125                        | 0.06276                         | 0.14178                         | 0.12859                      | 0.01432                      | 0.05971                      | 0.02124                          | 0.02092                         | 0.02993                         | 0.05504                        | 0.09282                           | 0.09511                        | 0.03170                  | 0.05037                  | 0.07644                |
| 12            | 0.01384                                | 0.01336                | 0.00000   | 0.08723                        | 0.06132                         | 0.13470                         | 0.12199                      | 0.01384                      | 0.05697                      | 0.02060                          | 0.02028                         | 0.02881                         | 0.05343                        | 0.08900                           | 0.09028                        | 0.03026                  | 0.04796                  | 0.07306                |
| 13            | 0.01320                                | 0.01271                | 0.00000   | 0.08352                        | 0.06003                         | 0.12826                         | 0.11619                      | 0.01336                      | 0.05456                      | 0.01996                          | 0.01979                         | 0.02784                         | 0.05214                        | 0.08481                           | 0.08594                        | 0.02897                  | 0.04587                  | 0.07001                |
| 14            | 0.01255                                | 0.01191                | 0.00000   | 0.08031                        | 0.05874                         | 0.12247                         | 0.11104                      | 0.01287                      | 0.05246                      | 0.01931                          | 0.01915                         | 0.02704                         | 0.05102                        | 0.08095                           | 0.08208                        | 0.02784                  | 0.04410                  | 0.06727                |
| 15            | 0.01191                                | 0.01143                | 0.00000   | 0.07725                        | 0.05761                         | 0.11732                         | 0.10622                      | 0.01255                      | 0.05053                      | 0.01883                          | 0.01867                         | 0.02623                         | 0.04989                        | 0.07757                           | 0.07870                        | 0.02672                  | 0.04233                  | 0.06470                |
| 16            | 0.01127                                | 0.01078                | 0.00000   | 0.07451                        | 0.05649                         | 0.11249                         | 0.10203                      | 0.01207                      | 0.04860                      | 0.01819                          | 0.01802                         | 0.02543                         | 0.04876                        | 0.07451                           | 0.07548                        | 0.02575                  | 0.04088                  | 0.06244                |
| 17            | 0.01078                                | 0.01030                | 0.00000   | 0.07194                        | 0.05552                         | 0.10831                         | 0.09817                      | 0.01175                      | 0.04699                      | 0.01770                          | 0.01754                         | 0.02478                         | 0.04780                        | 0.07162                           | 0.07258                        | 0.02494                  | 0.03959                  | 0.06035                |
| 18            | 0.01014                                | 0.00982                | 0.00000   | 0.06968                        | 0.05456                         | 0.10429                         | 0.09463                      | 0.01127                      | 0.04554                      | 0.01722                          | 0.01706                         | 0.02414                         | 0.04699                        | 0.06904                           | 0.07001                        | 0.02414                  | 0.03830                  | 0.05842                |
| 19            | 0.00966                                | 0.00933                | 0.00000   | 0.06759                        | 0.05359                         | 0.10074                         | 0.09104                      | 0.01074                      | 0.04410                      | 0.01674                          | 0.01658                         | 0.02350                         | 0.04603                        | 0.06663                           | 0.06759                        | 0.02350                  | 0.03718                  | 0.05665                |
| 20            | 0.00933                                | 0.00885                | 0.00000   | 0.06550                        | 0.05263                         | 0.09737                         | 0.08835                      | 0.01062                      | 0.04281                      | 0.01625                          | 0.01609                         | 0.02301                         | 0.04522                        | 0.06453                           | 0.06534                        | 0.02285                  | 0.03621                  | 0.05488                |
| 21            | 0.00885                                | 0.00853                | 0.00000   | 0.06373                        | 0.05182                         | 0.09447                         | 0.08562                      | 0.01030                      | 0.04152                      | 0.01577                          | 0.01577                         | 0.02253                         | 0.04458                        | 0.06244                           | 0.06341                        | 0.02221                  | 0.03524                  | 0.05343                |
| 22            | 0.00853                                | 0.00805                | 0.00000   | 0.06196                        | 0.05102                         | 0.09157                         | 0.08304                      | 0.00998                      | 0.04056                      | 0.01545                          | 0.01529                         | 0.02205                         | 0.04377                        | 0.06051                           | 0.06148                        | 0.02157                  | 0.03428                  | 0.05198                |
| 23            | 0.00805                                | 0.00772                | 0.00000   | 0.06051                        | 0.05037                         | 0.08900                         | 0.08063                      | 0.00966                      | 0.03943                      | 0.01497                          | 0.01481                         | 0.02157                         | 0.04313                        | 0.05890                           | 0.05971                        | 0.02108                  | 0.03347                  | 0.05069                |
| 24            | 0.00772                                | 0.00740                | 0.00000   | 0.05890                        | 0.04957                         | 0.08642                         | 0.07838                      | 0.00950                      | 0.03846                      | 0.01465                          | 0.01448                         | 0.02108                         | 0.04249                        | 0.05729                           | 0.05810                        | 0.02060                  | 0.03267                  | 0.04941                |
| 25            | 0.00740                                | 0.00708                | 0.00000   | 0.05761                        | 0.04892                         | 0.08417                         | 0.07628                      | 0.00917                      | 0.03750                      | 0.01416                          | 0.01416                         | 0.02076                         | 0.04184                        | 0.05568                           | 0.05649                        | 0.02012                  | 0.03203                  | 0.04828                |
| 26            | 0.00708                                | 0.00676                | 0.00000   | 0.05633                        | 0.04828                         | 0.08208                         | 0.07435                      | 0.00885                      | 0.03669                      | 0.01384                          | 0.01368                         | 0.02044                         | 0.04136                        | 0.05440                           | 0.05504                        | 0.01979                  | 0.03138                  | 0.04719                |
| 27            | 0.00676                                | 0.00644                | 0.00000   | 0.05504                        | 0.04764                         | 0.08015                         | 0.07258                      | 0.00869                      | 0.03589                      | 0.01352                          | 0.01336                         | 0.01996                         | 0.04072                        | 0.05295                           | 0.05375                        | 0.01931                  | 0.03074                  | 0.04519                |
| 28            | 0.00660                                | 0.00628                | 0.00000   | 0.05391                        | 0.04699                         | 0.07821                         | 0.07097                      | 0.00837                      | 0.03508                      | 0.01320                          | 0.01304                         | 0.01963                         | 0.04023                        | 0.05182                           | 0.05246                        | 0.01899                  | 0.03009                  | 0.04522                |
| 29            | 0.00628                                | 0.00595                | 0.00000   | 0.05295                        | 0.04635                         | 0.07644                         | 0.06936                      | 0.00821                      | 0.03444                      | 0.01287                          | 0.01271                         | 0.01947                         | 0.03959                        | 0.05069                           | 0.05134                        | 0.01851                  | 0.02945                  | 0.04426                |
| 30            | 0.00612                                | 0.00579                | 0.00000   | 0.05182                        | 0.04587                         | 0.07483                         | 0.06775                      | 0.00805                      | 0.03380                      | 0.01255                          | 0.01239                         | 0.01915                         | 0.03911                        | 0.04957                           | 0.05021                        | 0.01819                  | 0.02897                  | 0.04345                |
| 31            | 0.00579                                | 0.00547                | 0.00000   | 0.05102                        | 0.04522                         | 0.07323                         | 0.06647                      | 0.00772                      | 0.03315                      | 0.01223                          | 0.01223                         | 0.01883                         | 0.03862                        | 0.04844                           | 0.04925                        | 0.01786                  | 0.02849                  | 0.04265                |
| 32            | 0.00563                                | 0.00531                | 0.00000   | 0.05005                        | 0.04474                         | 0.07178                         | 0.06502                      | 0.00756                      | 0.03251                      | 0.01191                          | 0.01191                         | 0.01851                         | 0.03814                        | 0.04748                           | 0.04828                        | 0.01754                  | 0.02800                  | 0.04200                |
| 33            | 0.00547                                | 0.00515                | 0.00000   | 0.04925                        | 0.04426                         | 0.07049                         | 0.06389                      | 0.00740                      | 0.03203                      | 0.01175                          | 0.01159                         | 0.01835                         | 0.03766                        | 0.04667                           | 0.04731                        | 0.01738                  | 0.02752                  | 0.04120                |
| 34            | 0.00515                                | 0.00489                | 0.00000   | 0.04844                        | 0.04377                         | 0.06920                         | 0.06260                      | 0.00724                      | 0.03154                      | 0.01143                          | 0.01127                         | 0.01819                         | 0.03734                        | 0.04571                           | 0.04635                        | 0.01706                  | 0.02704                  | 0.04056                |
| 35            | 0.00489                                | 0.00463                | 0.00000   | 0.04764                        | 0.04329                         | 0.06791                         | 0.06148                      | 0.00708                      | 0.03106                      | 0.01110                          | 0.01110                         | 0.01786                         | 0.03685                        | 0.04490                           | 0.04554                        | 0.01674                  | 0.02655                  | 0.03991                |
| 36            | 0.00483                                | 0.00467                | 0.00000   | 0.04699                        | 0.04281                         | 0.06679                         | 0.06051                      | 0.00692                      | 0.03058                      | 0.01094                          | 0.01078                         | 0.01770                         | 0.03637                        | 0.04410                           | 0.04474                        | 0.01658                  | 0.02623                  | 0.03943                |
| 37            | 0.00467                                | 0.00451                | 0.00000   | 0.04635                        | 0.04233                         | 0.06566                         | 0.05938                      | 0.00676                      | 0.03009                      | 0.01062                          | 0.01062                         | 0.01754                         | 0.03605                        | 0.04345                           | 0.04410                        | 0.01625                  | 0.02575                  | 0.03879                |
| 38            | 0.00451                                | 0.00435                | 0.00000   | 0.04571                        | 0.04184                         | 0.06453                         | 0.05842                      | 0.00660                      | 0.02961                      | 0.01046                          | 0.01046                         | 0.01738                         | 0.03573                        | 0.04265                           | 0.04329                        | 0.01609                  | 0.02543                  | 0.03830                |
| 39            | 0.00435                                | 0.00418                | 0.00000   | 0.04506                        | 0.04136                         | 0.06357                         | 0.05761                      | 0.00644                      | 0.02929                      | 0.01030                          | 0.01014                         | 0.01722                         | 0.03524                        | 0.04200                           | 0.04265                        | 0.01577                  | 0.02511                  | 0.03782                |
| 40            | 0.00435                                | 0.00402                | 0.00000   | 0.04442                        | 0.04104                         | 0.06260                         | 0.05665                      | 0.00628                      | 0.02897                      | 0.00998                          | 0.00998                         | 0.01706                         | 0.03492                        | 0.04136                           | 0.04200                        | 0.01561                  | 0.02462                  | 0.03734                |
| 41            | 0.00418                                | 0.00386                | 0.00000   | 0.04394                        | 0.04056                         | 0.06164                         | 0.05584                      | 0.00612                      | 0.02849                      | 0.00982                          | 0.00982                         | 0.01690                         | 0.03460                        | 0.04088                           | 0.04136                        | 0.01529                  | 0.02430                  | 0.03685                |
| 42            | 0.00402                                | 0.00386                | 0.00000   | 0.04345                        | 0.04023                         | 0.06083                         | 0.05520                      | 0.00595                      | 0.02784                      | 0.00966                          | 0.00950                         | 0.01674                         | 0.03412                        | 0.04023                           | 0.04088                        | 0.01513                  | 0.02398                  | 0.03637                |
| 43            | 0.00386                                | 0.00370                | 0.00000   | 0.04297                        | 0.03975                         | 0.06003                         | 0.05440                      | 0.00595                      | 0.02784                      | 0.00950                          | 0.00933                         | 0.01658                         | 0.03380                        | 0.03975                           | 0.04023                        | 0.01497                  | 0.02366                  | 0.03605                |
| 44            | 0.00386                                | 0.00354                | 0.00000   | 0.04249                        | 0.03943                         | 0.05922                         | 0.05375                      | 0.00579                      | 0.02752                      | 0.00933                          | 0.00917                         | 0.01658                         | 0.03347                        | 0.03911                           | 0.03975                        | 0.01481                  | 0.02350                  | 0.03557                |
| 45            | 0.00370                                | 0.00354                | 0.00000   | 0.04200                        | 0.03895                         | 0.05842                         | 0.05295                      | 0.00563                      | 0.02736                      | 0.00901                          | 0.00901                         | 0.01642                         | 0.03315                        | 0.03862                           | 0.03927                        | 0.01465                  | 0.02317                  | 0.03524                |
| 46            | 0.00354                                | 0.00338                | 0.00000   | 0.04168                        | 0.03862                         | 0.05778                         | 0.05230                      | 0.00547                      | 0.02704                      | 0.00885                          | 0.00885                         | 0.01625                         | 0.03283                        | 0.03814                           | 0.03879                        | 0.01448                  | 0.02285                  | 0.03492                |
| 47            | 0.00354                                | 0.00338                | 0.00000   | 0.04120                        | 0.03830                         | 0.05713                         | 0.05182                      | 0.00547                      | 0.02672                      | 0.00869                          | 0.00869                         | 0.01625                         | 0.03251                        | 0.03782                           | 0.03830                        | 0.01432                  | 0.02253                  | 0.03460                |
| 48            | 0.00338                                | 0.00322                | 0.00000   | 0.04088                        | 0.03798                         | 0.05649                         | 0.05118                      | 0.00531                      | 0.02655                      | 0.00853                          | 0.00853                         | 0.01609                         | 0.03219                        | 0.03734                           | 0.03782                        | 0.01400                  | 0.02237                  | 0.03428                |
| 49            | 0.00338                                | 0.00322                | 0.00000   | 0.04056                        | 0.03750                         | 0.05584                         | 0.05053                      | 0.00531                      | 0.02639                      | 0.00837                          | 0.00837                         | 0.01609                         | 0.03203                        | 0.03685                           | 0.03750                        | 0.01384                  | 0.02205                  | 0.03396                |
| 50            | 0.00322                                | 0.00306                | 0.00000   | 0.04023                        | 0.03718                         | 0.05520                         | 0.05005                      | 0.00515                      | 0.02607                      | 0.00837                          | 0.00821                         | 0.01593                         | 0.03170                        | 0.03653                           | 0.03701                        | 0.01384                  | 0.02189                  | 0.03364                |
| 51            | 0.00322                                | 0.00306                | 0.00000   | 0.03991                        | 0.03685                         | 0.05472                         | 0.04957                      | 0.00499                      | 0.02591                      | 0.00821                          | 0.00805                         | 0.01593                         | 0.03138                        | 0.03621                           | 0.03669                        | 0.01368                  | 0.02157                  | 0.03347                |
| 52            | 0.00322                                | 0.00290                | 0.00000   | 0.03959                        | 0.03653                         | 0.05423                         | 0.04908                      | 0.00499                      | 0.02575                      | 0.00805                          | 0.00789                         | 0.01577                         | 0.03106                        | 0.03589                           | 0.03637                        | 0.01352                  | 0.02140                  | 0.03319                |
|               |  |                        |           |                                |                                 |                                 |                              |                              |                              |                                  |                                 |                                 |                                |                                   |                                |                          |                          |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - NO (Year 2042) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 0.44225       | 0.06309               | 2.67747                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32454                      | 1.31322                      | 2.91517                      | 2.94880                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.44225       | 0.06309               | 2.67747                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32454                      | 1.31322                      | 2.91517                      | 2.94880                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.44225       | 0.06309               | 2.67747                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32454                      | 1.31322                      | 2.91517                      | 2.94880                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.44225       | 0.06309               | 2.67747                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32454                      | 1.31322                      | 2.91517                      | 2.94880                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.43452       | 0.06293               | 2.33677                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32405                      | 1.31322                      | 2.91420                      | 2.94816                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.42664       | 0.06196               | 2.08458                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32405                      | 1.31322                      | 2.91420                      | 2.94816                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.41923       | 0.06083               | 1.89291                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32389                      | 1.31322                      | 2.91388                      | 2.94816                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.41199       | 0.05938               | 1.74083                | 1.58311   | 2.15475                        | 4.69526                         | 4.69574                         | 2.32373                      | 1.31322                      | 2.91356                      | 2.94784                          | 1.28973                         | 1.86362                         | 4.14116                         | 4.15162                           | 3.48455                        | 5.20558                  | 1.01694                  |                        |
| 0.40507       | 0.05810               | 1.61723                | 1.47175   | 2.03840                        | 4.69478                         | 4.69574                         | 2.19852                      | 1.22278                      | 2.75632                      | 2.78867                          | 1.22020                         | 1.76288                         | 4.13955                         | 4.14921                           | 3.48455                        | 5.20558                  | 0.94646                  |                        |
| 0.39831       | 0.05697               | 1.51391                | 1.37422   | 1.92896                        | 4.69430                         | 4.69574                         | 2.08088                      | 1.14328                      | 2.66042                      | 2.69300                          | 1.15454                         | 1.66825                         | 4.13827                         | 4.14712                           | 3.48455                        | 5.20558                  | 0.88433                  |                        |
| 0.39171       | 0.05568               | 1.42620                | 1.29150   | 1.82999                        | 4.48894                         | 4.49039                         | 1.97434                      | 1.07585                      | 2.47453                      | 2.50350                          | 1.09532                         | 1.58263                         | 3.95689                         | 3.96526                           | 3.33215                        | 5.20558                  | 0.83187                  |                        |
| 0.38528       | 0.05456               | 1.35040                | 1.22037   | 1.73938                        | 4.03253                         | 4.03350                         | 1.87714                      | 1.01791                      | 2.35238                      | 2.37974                          | 1.04125                         | 1.50458                         | 3.55488                         | 3.56277                           | 2.99222                        | 4.39496                  | 0.78665                  |                        |
| 0.37900       | 0.05327               | 1.28458                | 1.15857   | 1.65634                        | 3.64951                         | 3.65031                         | 1.78750                      | 0.96722                      | 2.24005                      | 2.26612                          | 0.99136                         | 1.43248                         | 3.21772                         | 3.22496                           | 2.70869                        | 3.68620                  | 0.74722                  |                        |
| 0.37305       | 0.05214               | 1.22616                | 1.10401   | 1.57941                        | 3.32394                         | 3.32442                         | 1.70462                      | 0.92264                      | 2.13592                      | 2.16087                          | 0.94549                         | 1.36617                         | 2.93110                         | 2.93802                           | 2.46712                        | 3.21161                  | 0.71246                  |                        |
| 0.36725       | 0.05134               | 1.17434                | 1.05541   | 1.50763                        | 3.04407                         | 3.04440                         | 1.62753                      | 0.88289                      | 2.03904                      | 2.06270                          | 0.90236                         | 1.30405                         | 2.68455                         | 2.69131                           | 2.25920                        | 2.86753                  | 0.68140                  |                        |
| 0.36162       | 0.05021               | 1.12783                | 1.01212   | 1.44052                        | 2.80122                         | 2.80139                         | 1.55543                      | 0.84732                      | 1.94859                      | 1.97112                          | 0.86229                         | 1.24612                         | 2.47066                         | 2.47710                           | 2.07895                        | 2.60424                  | 0.65272                  |                        |
| 0.35631       | 0.04925               | 1.08582                | 0.97285   | 1.37760                        | 2.58863                         | 2.58863                         | 1.48752                      | 0.81513                      | 1.86330                      | 1.88502                          | 0.82463                         | 1.19188                         | 2.28334                         | 2.28945                           | 1.92107                        | 2.39519                  | 0.62877                  |                        |
| 0.35084       | 0.04844               | 1.04768                | 0.93728   | 1.31821                        | 2.40098                         | 2.40098                         | 1.42363                      | 0.78600                      | 1.78315                      | 1.80375                          | 0.78906                         | 1.14054                         | 2.11822                         | 2.12401                           | 1.78170                        | 2.22444                  | 0.60608                  |                        |
| 0.34585       | 0.04748               | 1.01276                | 0.90477   | 1.26205                        | 2.23441                         | 2.23425                         | 1.36311                      | 0.75193                      | 1.70719                      | 1.72699                          | 0.75543                         | 1.09210                         | 1.97145                         | 1.97708                           | 1.65795                        | 2.08513                  | 0.58532                  |                        |
| 0.34086       | 0.04651               | 0.98073                | 0.87516   | 1.20878                        | 2.08555                         | 2.08523                         | 1.30582                      | 0.73467                      | 1.63525                      | 1.65408                          | 0.72356                         | 1.04607                         | 1.84045                         | 1.84576                           | 1.54755                        | 1.96018                  | 0.56633                  |                        |
| 0.33603       | 0.04587               | 0.95128                | 0.84780   | 1.15808                        | 1.95181                         | 1.95149                         | 1.25110                      | 0.71213                      | 1.56686                      | 1.58488                          | 0.69331                         | 1.00230                         | 1.72248                         | 1.72779                           | 1.44825                        | 1.85541                  | 0.54879                  |                        |
| 0.33152       | 0.04490               | 0.92392                | 0.82254   | 1.10980                        | 1.83111                         | 1.83079                         | 1.19912                      | 0.69121                      | 1.50152                      | 1.51874                          | 0.66434                         | 0.96062                         | 1.61626                         | 1.62141                           | 1.35861                        | 1.76384                  | 0.53253                  |                        |
| 0.32686       | 0.04410               | 0.89850                | 0.79904   | 1.06345                        | 1.72184                         | 1.72135                         | 1.14939                      | 0.67190                      | 1.43924                      | 1.45549                          | 0.63682                         | 0.92087                         | 1.51986                         | 1.52469                           | 1.27734                        | 1.68305                  | 0.51757                  |                        |
| 0.32251       | 0.04329               | 0.87484                | 0.77731   | 1.01920                        | 1.62206                         | 1.62174                         | 1.10176                      | 0.65372                      | 1.37953                      | 1.39514                          | 0.61026                         | 0.88256                         | 1.43216                         | 1.43682                           | 1.20347                        | 1.61111                  | 0.50340                  |                        |
| 0.31833       | 0.04265               | 0.85279                | 0.75687   | 0.97687                        | 1.53129                         | 1.53065                         | 1.05605                      | 0.63682                      | 1.32008                      | 1.33720                          | 0.58484                         | 0.84587                         | 1.35201                         | 1.35668                           | 1.13587                        | 1.54658                  | 0.49047                  |                        |
| 0.31414       | 0.04200               | 0.83219                | 0.73772   | 0.93616                        | 1.44793                         | 1.44744                         | 1.01228                      | 0.62088                      | 1.26720                      | 1.28152                          | 0.56053                         | 0.81095                         | 1.27846                         | 1.28313                           | 1.07392                        | 1.48816                  | 0.47830                  |                        |
| 0.31028       | 0.04120               | 0.81272                | 0.71986   | 0.89705                        | 1.37106                         | 1.37052                         | 0.96995                      | 0.60608                      | 1.21409                      | 1.22777                          | 0.53720                         | 0.77699                         | 1.21087                         | 1.21538                           | 1.01171                        | 1.43521                  | 0.46261                  |                        |
| 0.30642       | 0.04056               | 0.79437                | 0.70296   | 0.85907                        | 1.30051                         | 1.29987                         | 0.92940                      | 0.59208                      | 1.16307                      | 1.17627                          | 0.51467                         | 0.74448                         | 1.14875                         | 1.15293                           | 0.96464                        | 1.38677                  | 0.45593                  |                        |
| 0.30272       | 0.03975               | 0.77699                | 0.68719   | 0.82270                        | 1.23517                         | 1.23453                         | 0.88997                      | 0.57888                      | 1.11383                      | 1.12638                          | 0.49262                         | 0.71294                         | 1.09097                         | 1.09532                           | 0.91604                        | 1.34235                  | 0.44963                  |                        |
| 0.29902       | 0.03927               | 0.76074                | 0.67222   | 0.78761                        | 1.17450                         | 1.17386                         | 0.85199                      | 0.56633                      | 1.06619                      | 1.07826                          | 0.47170                         | 0.68252                         | 1.03771                         | 1.04189                           | 0.87114                        | 1.30132                  | 0.43697                  |                        |
| 0.29548       | 0.03862               | 0.74529                | 0.65790   | 0.76397                        | 1.11833                         | 1.11753                         | 0.74078                      | 0.55458                      | 0.92682                      | 0.93966                          | 0.40990                         | 0.59353                         | 0.98814                         | 0.99216                           | 0.82929                        | 1.26334                  | 0.42664                  |                        |
| 0.29210       | 0.03798               | 0.73080                | 0.64454   | 0.74568                        | 1.06587                         | 1.06522                         | 0.70908                      | 0.54331                      | 0.88707                      | 0.89673                          | 0.37610                         | 0.56826                         | 0.94211                         | 0.94581                           | 0.79051                        | 1.22825                  | 0.41811                  |                        |
| 0.28904       | 0.03734               | 0.71680                | 0.63167   | 0.72748                        | 1.01711                         | 1.01630                         | 0.67979                      | 0.53269                      | 0.85022                      | 0.85939                          | 0.36101                         | 0.54476                         | 0.89898                         | 0.90284                           | 0.75430                        | 1.19542                  | 0.40990                  |                        |
| 0.28582       | 0.03685               | 0.70344                | 0.61960   | 0.71006                        | 0.97140                         | 0.97060                         | 0.65243                      | 0.52255                      | 0.81594                      | 0.82479                          | 0.34610                         | 0.52288                         | 0.85875                         | 0.86245                           | 0.72034                        | 1.16484                  | 0.40201                  |                        |
| 0.28276       | 0.03621               | 0.69089                | 0.60801   | 0.69586                        | 0.92875                         | 0.92795                         | 0.62700                      | 0.51290                      | 0.78407                      | 0.79244                          | 0.34665                         | 0.50244                         | 0.82109                         | 0.82479                           | 0.68848                        | 1.13620                  | 0.39461                  |                        |
| 0.27970       | 0.03573               | 0.67882                | 0.59707   | 0.67855                        | 0.88868                         | 0.88788                         | 0.60318                      | 0.50356                      | 0.75430                      | 0.76235                          | 0.33406                         | 0.48329                         | 0.78568                         | 0.78938                           | 0.65887                        | 1.10916                  | 0.38763                  |                        |
| 0.27679       | 0.03508               | 0.66723                | 0.58644   | 0.66375                        | 0.85102                         | 0.85022                         | 0.58097                      | 0.49487                      | 0.72630                      | 0.73418                          | 0.32106                         | 0.46558                         | 0.75253                         | 0.75607                           | 0.63086                        | 1.08373                  | 0.38061                  |                        |
| 0.27423       | 0.03444               | 0.65613                | 0.57615   | 0.65144                        | 0.81545                         | 0.81481                         | 0.56005                      | 0.48650                      | 0.70006                      | 0.70747                          | 0.30948                         | 0.44885                         | 0.72115                         | 0.72485                           | 0.60463                        | 1.05795                  | 0.37401                  |                        |
| 0.27150       | 0.03396               | 0.64551                | 0.56665   | 0.64089                        | 0.78214                         | 0.78150                         | 0.54058                      | 0.47846                      | 0.67560                      | 0.68284                          | 0.29853                         | 0.43307                         | 0.69186                         | 0.69524                           | 0.57969                        | 1.03722                  | 0.36790                  |                        |
| 0.26892       | 0.03364               | 0.63537                | 0.55732   | 0.63119                        | 0.74819                         | 0.74756                         | 0.52207                      | 0.47073                      | 0.65259                      | 0.65935                          | 0.28839                         | 0.41827                         | 0.66418                         | 0.66756                           | 0.55651                        | 1.01566                  | 0.36194                  |                        |
| 0.26651       | 0.03329               | 0.62571                | 0.54846   | 0.61949                        | 0.72099                         | 0.72018                         | 0.50469                      | 0.46317                      | 0.63070                      | 0.63714                          | 0.27858                         | 0.40443                         | 0.63794                         | 0.64116                           | 0.53446                        | 0.99538                  | 0.35615                  |                        |
| 0.26425       | 0.03251               | 0.61638                | 0.53993   | 0.60981                        | 0.69282                         | 0.69202                         | 0.48827                      | 0.45609                      | 0.61010                      | 0.61638                          | 0.26957                         | 0.39123                         | 0.61316                         | 0.61638                           | 0.51354                        | 0.97607                  | 0.35068                  |                        |
| 0.26184       | 0.03203               | 0.60721                | 0.53173   | 0.60349                        | 0.66627                         | 0.66546                         | 0.47283                      | 0.44933                      | 0.59063                      | 0.59674                          | 0.26104                         | 0.37884                         | 0.58966                         | 0.59288                           | 0.49391                        | 0.95756                  | 0.34537                  |                        |
| 0.25959       | 0.03154               | 0.59868                | 0.52384   | 0.62165                        | 0.64100                         | 0.64036                         | 0.45802                      | 0.44257                      | 0.57228                      | 0.57824                          | 0.25283                         | 0.36709                         | 0.56745                         | 0.57067                           | 0.47508                        | 0.94018                  | 0.33926                  |                        |
| 0.25750       | 0.03106               | 0.59015                | 0.51628   | 0.60993                        | 0.61718                         | 0.61638                         | 0.44418                      | 0.43629                      | 0.55490                      | 0.56070                          | 0.24526                         | 0.35599                         | 0.54637                         | 0.54959                           | 0.45738                        | 0.92328                  | 0.33539                  |                        |
| 0.25540       | 0.03074               | 0.58210                | 0.50887   | 0.59670                        | 0.59449                         | 0.59383                         | 0.43098                      | 0.43018                      | 0.53833                      | 0.54396                          | 0.23786                         | 0.34537                         | 0.52642                         | 0.52947                           | 0.44048                        | 0.90735                  | 0.33056                  |                        |
| 0.25347       | 0.03026               | 0.57437                | 0.50179   | 0.58512                        | 0.57293                         | 0.57196                         | 0.41859                      | 0.42422                      | 0.52271                      | 0.52803                          | 0.23094                         | 0.33539                         | 0.50727                         | 0.51048                           | 0.42454                        | 0.89206                  | 0.32605                  |                        |
| 0.25154       | 0.02977               | 0.56681                | 0.49503   | 0.57401                        | 0.55249                         | 0.55152                         | 0.40668                      | 0.41859                      | 0.50791                      | 0.51290                          | 0.22434                         | 0.32573                         | 0.48940                         | 0.49230                           | 0.40926                        | 0.87741                  | 0.32187                  |                        |
| 0.24961       | 0.02929               | 0.55941                | 0.48844   | 0.56339                        | 0.53285                         | 0.53205                         | 0.39542                      | 0.41312                      | 0.49375                      | 0.49874                          | 0.21807                         | 0.31672                         | 0.47202                         | 0.47508                           | 0.39477                        | 0.86341                  | 0.31752                  |                        |
| 0.24800       | 0.02881               | 0.55265                | 0.48200   | 0.55357                        | 0.51419                         | 0.51338                         | 0.38447                      | 0.40781                      | 0.48023                      | 0.48506                          | 0.21211                         | 0.30803                         | 0.45561                         | 0.45850                           | 0.38093                        | 0.84899                  | 0.31334                  |                        |
| 0.24623       | 0.02849               | 0.54573                | 0.47588   | 0.54392                        | 0.49648                         | 0.49572                         | 0.37417                      | 0.40282                      | 0.46735                      | 0.47186                          | 0.20632                         | 0.29998                         | 0.43999                         | 0.44289                           | 0.36790                        | 0.83202                  | 0.30948                  |                        |
| 0.24478       | 0.02800               | 0.53913                | 0.46993   | 0.53490                        | 0.47942                         | 0.47862                         | 0.36436                      | 0.39767                      | 0.45496                      | 0.45947                          | 0.20101                         | 0.29210                         | 0.42503                         | 0.42776                           | 0.35518                        | 0.82447                  | 0.30561                  |                        |
| 0.24301       | 0.02768               | 0.53269                | 0.46413   | 0.52621                        | 0.46333                         | 0.46253                         | 0.35502                      | 0.39300                      | 0.44337                      | 0.44756                          | 0.19570                         | 0.28453                         | 0.41070                         | 0.41360                           | 0.34327                        | 0.81240                  | 0.30191                  |                        |
| 0.24172       | 0.02736               | 0.52642                | 0.45850   | 0.51785                        | 0.44788                         | 0                               |                              |                              |                              |                                  |                                 |                                 |                                 |                                   |                                |                          |                          |                        |



**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - NO2 (Year 2042) (for Sensitivity Test)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                 |                                 |                              |                              |                              |                                   |                                 |                             |                                |                                   |                                |                          |                          |                        |         |
|---------------|--|------------------------|-----------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|-----------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|---------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3 | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |         |
| 1             | 0.02334                                | 0.00338                | 0.07516   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17526                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 2             | 0.02334                                | 0.00338                | 0.07516   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17526                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 3             | 0.02334                                | 0.00338                | 0.07516   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17526                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 4             | 0.02334                                | 0.00338                | 0.07516   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17526                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 5             | 0.02285                                | 0.00338                | 0.06566   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17526                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 6             | 0.02253                                | 0.00338                | 0.05858   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17526                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 7             | 0.02205                                | 0.00322                | 0.05311   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17510                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 8             | 0.02173                                | 0.00322                | 0.04892   | 0.61557                         | 1.06136                         | 2.31005                      | 2.31279                      | 0.57920                      | 0.49729                           | 0.17960                         | 0.17510                     | 0.50163                        | 0.91684                           | 2.03308                        | 2.03437                  | 1.42330                  | 2.12610                | 0.38930 |
| 9             | 0.02124                                | 0.00322                | 0.04538   | 0.57228                         | 1.00407                         | 2.31005                      | 2.31279                      | 0.54798                      | 0.46236                           | 0.16995                         | 0.16576                     | 0.47443                        | 0.86744                           | 2.03292                        | 2.03405                  | 1.42330                  | 2.12610                | 0.36194 |
| 10            | 0.02092                                | 0.00306                | 0.04249   | 0.53446                         | 0.95000                         | 2.31005                      | 2.31279                      | 0.51853                      | 0.43179                           | 0.16077                         | 0.15675                     | 0.44901                        | 0.82077                           | 2.03276                        | 2.03373                  | 1.42330                  | 2.12610                | 0.33796 |
| 11            | 0.02060                                | 0.00306                | 0.04007   | 0.50228                         | 0.90123                         | 2.20899                      | 2.21172                      | 0.49182                      | 0.40588                           | 0.15257                         | 0.14870                     | 0.42599                        | 0.77860                           | 1.94377                        | 1.94473                  | 1.36102                  | 2.12610                | 0.31768 |
| 12            | 0.02028                                | 0.00290                | 0.03798   | 0.47460                         | 0.85681                         | 1.98416                      | 1.98657                      | 0.46751                      | 0.38351                           | 0.14500                         | 0.14146                     | 0.40491                        | 0.74014                           | 1.74614                        | 1.74694                  | 1.22246                  | 1.97906                | 0.30014 |
| 13            | 0.01996                                | 0.00290                | 0.03605   | 0.45046                         | 0.81578                         | 1.79571                      | 1.79780                      | 0.44531                      | 0.36403                           | 0.13808                         | 0.13470                     | 0.38560                        | 0.70489                           | 1.58021                        | 1.58118                  | 1.10642                  | 1.50554                | 0.28485 |
| 14            | 0.01963                                | 0.00290                | 0.03444   | 0.42921                         | 0.77780                         | 1.63558                      | 1.63751                      | 0.42454                      | 0.34681                           | 0.13164                         | 0.12843                     | 0.36757                        | 0.67206                           | 1.43924                        | 1.44020                  | 1.00761                  | 1.31178                | 0.27150 |
| 15            | 0.01931                                | 0.00274                | 0.03299   | 0.41038                         | 0.74255                         | 1.49782                      | 1.49959                      | 0.40523                      | 0.33169                           | 0.12569                         | 0.12263                     | 0.35100                        | 0.64165                           | 1.31821                        | 1.31902                  | 0.92280                  | 1.17112                | 0.25959 |
| 16            | 0.01899                                | 0.00274                | 0.03170   | 0.39348                         | 0.70956                         | 1.37824                      | 1.37985                      | 0.38721                      | 0.31801                           | 0.12006                         | 0.11716                     | 0.33539                        | 0.61316                           | 1.21296                        | 1.21377                  | 0.84909                  | 1.06362                | 0.24897 |
| 17            | 0.01867                                | 0.00274                | 0.03042   | 0.37836                         | 0.67850                         | 1.27347                      | 1.27508                      | 0.37031                      | 0.30561                           | 0.11491                         | 0.11201                     | 0.32074                        | 0.58628                           | 1.12091                        | 1.12171                  | 0.78456                  | 0.97832                | 0.23971 |
| 18            | 0.01835                                | 0.00257                | 0.02945   | 0.36452                         | 0.64921                         | 1.18126                      | 1.18255                      | 0.35438                      | 0.29451                           | 0.10992                         | 0.10718                     | 0.30690                        | 0.56118                           | 1.03964                        | 1.04044                  | 0.72775                  | 0.90847                | 0.23046 |
| 19            | 0.01819                                | 0.00257                | 0.02849   | 0.35196                         | 0.62153                         | 1.09918                      | 1.10047                      | 0.33925                      | 0.28437                           | 0.10525                         | 0.10268                     | 0.29387                        | 0.53720                           | 0.96754                        | 0.96818                  | 0.67721                  | 0.85022                | 0.22257 |
| 20            | 0.01786                                | 0.00257                | 0.02752   | 0.34038                         | 0.59530                         | 1.02596                      | 1.02708                      | 0.32493                      | 0.27504                           | 0.10074                         | 0.09833                     | 0.28147                        | 0.51467                           | 0.90300                        | 0.90381                  | 0.63199                  | 0.80065                | 0.21517 |
| 21            | 0.01770                                | 0.00241                | 0.02672   | 0.32975                         | 0.57035                         | 0.96013                      | 0.96126                      | 0.31141                      | 0.26635                           | 0.09656                         | 0.09415                     | 0.26957                        | 0.49310                           | 0.84523                        | 0.84587                  | 0.59143                  | 0.75784                | 0.20857 |
| 22            | 0.01738                                | 0.00241                | 0.02591   | 0.31994                         | 0.54653                         | 0.90075                      | 0.90172                      | 0.29837                      | 0.25846                           | 0.09254                         | 0.09028                     | 0.25846                        | 0.47250                           | 0.79292                        | 0.79357                  | 0.55490                  | 0.72050                | 0.20229 |
| 23            | 0.01722                                | 0.00241                | 0.02527   | 0.31076                         | 0.52384                         | 0.84684                      | 0.84780                      | 0.28598                      | 0.25106                           | 0.08867                         | 0.08658                     | 0.24768                        | 0.45287                           | 0.74561                        | 0.74625                  | 0.52175                  | 0.68751                | 0.19650 |
| 24            | 0.01690                                | 0.00241                | 0.02462   | 0.30223                         | 0.50212                         | 0.79791                      | 0.79872                      | 0.27407                      | 0.24430                           | 0.08497                         | 0.08288                     | 0.23738                        | 0.43420                           | 0.70248                        | 0.70312                  | 0.49149                  | 0.65806                | 0.19119 |
| 25            | 0.01674                                | 0.00225                | 0.02398   | 0.29435                         | 0.48119                         | 0.75301                      | 0.75398                      | 0.26264                      | 0.23786                           | 0.08159                         | 0.07950                     | 0.22756                        | 0.41618                           | 0.66305                        | 0.66369                  | 0.46397                  | 0.63167                | 0.18629 |
| 26            | 0.01658                                | 0.00225                | 0.02334   | 0.28695                         | 0.46108                         | 0.71197                      | 0.71278                      | 0.25170                      | 0.23191                           | 0.07805                         | 0.07612                     | 0.21807                        | 0.39880                           | 0.62700                        | 0.62748                  | 0.43871                  | 0.60785                | 0.18137 |
| 27            | 0.01625                                | 0.00225                | 0.02285   | 0.28003                         | 0.44176                         | 0.67432                      | 0.67512                      | 0.24124                      | 0.22627                           | 0.07483                         | 0.07306                     | 0.20889                        | 0.38222                           | 0.59385                        | 0.59433                  | 0.41537                  | 0.58628                | 0.17703 |
| 28            | 0.01609                                | 0.00225                | 0.02237   | 0.27343                         | 0.42326                         | 0.63955                      | 0.64020                      | 0.23094                      | 0.22096                           | 0.07178                         | 0.06985                     | 0.20004                        | 0.36613                           | 0.56311                        | 0.56375                  | 0.39397                  | 0.56649                | 0.17284 |
| 29            | 0.01593                                | 0.00225                | 0.02189   | 0.26715                         | 0.40523                         | 0.60737                      | 0.60801                      | 0.22128                      | 0.21597                           | 0.06872                         | 0.06695                     | 0.19167                        | 0.35068                           | 0.53495                        | 0.53543                  | 0.37417                  | 0.54830                | 0.16898 |
| 30            | 0.01577                                | 0.00209                | 0.02140   | 0.26136                         | 0.38785                         | 0.57759                      | 0.57824                      | 0.21179                      | 0.21131                           | 0.06582                         | 0.06405                     | 0.18347                        | 0.33571                           | 0.50871                        | 0.50920                  | 0.35583                  | 0.53157                | 0.16528 |
| 31            | 0.01561                                | 0.00209                | 0.02092   | 0.25589                         | 0.37300                         | 0.54991                      | 0.55056                      | 0.18395                      | 0.20680                           | 0.05713                         | 0.05568                     | 0.15933                        | 0.29177                           | 0.48425                        | 0.48490                  | 0.33877                  | 0.51612                | 0.16190 |
| 32            | 0.01545                                | 0.00209                | 0.02044   | 0.25057                         | 0.32511                         | 0.52416                      | 0.52465                      | 0.17606                      | 0.20262                           | 0.05472                         | 0.05327                     | 0.15257                        | 0.27938                           | 0.46156                        | 0.46220                  | 0.32283                  | 0.50163                | 0.15852 |
| 33            | 0.01513                                | 0.00209                | 0.02012   | 0.24575                         | 0.30899                         | 0.50002                      | 0.50067                      | 0.16866                      | 0.19859                           | 0.05246                         | 0.05118                     | 0.14613                        | 0.26779                           | 0.44048                        | 0.44096                  | 0.30803                  | 0.48827                | 0.15530 |
| 34            | 0.01497                                | 0.00193                | 0.01979   | 0.24092                         | 0.29660                         | 0.47765                      | 0.47814                      | 0.16190                      | 0.19473                           | 0.05037                         | 0.04908                     | 0.14033                        | 0.25701                           | 0.42068                        | 0.42117                  | 0.29419                  | 0.47572                | 0.15240 |
| 35            | 0.01481                                | 0.00193                | 0.01931   | 0.23641                         | 0.28485                         | 0.45657                      | 0.45705                      | 0.15562                      | 0.19103                           | 0.04844                         | 0.04715                     | 0.13486                        | 0.24703                           | 0.40218                        | 0.40266                  | 0.28131                  | 0.46397                | 0.14951 |
| 36            | 0.01481                                | 0.00193                | 0.01899   | 0.23207                         | 0.27407                         | 0.43678                      | 0.43726                      | 0.14967                      | 0.18065                           | 0.04651                         | 0.04538                     | 0.12971                        | 0.23770                           | 0.38479                        | 0.38528                  | 0.26908                  | 0.45303                | 0.14677 |
| 37            | 0.01465                                | 0.00193                | 0.01867   | 0.22804                         | 0.26393                         | 0.41827                      | 0.41875                      | 0.14404                      | 0.18427                           | 0.04490                         | 0.04361                     | 0.12489                        | 0.22885                           | 0.36854                        | 0.36902                  | 0.25766                  | 0.44273                | 0.14420 |
| 38            | 0.01448                                | 0.00193                | 0.01835   | 0.22418                         | 0.25428                         | 0.40089                      | 0.40121                      | 0.13889                      | 0.18105                           | 0.04329                         | 0.04216                     | 0.12038                        | 0.22064                           | 0.35325                        | 0.35357                  | 0.24687                  | 0.43291                | 0.14178 |
| 39            | 0.01432                                | 0.00193                | 0.01819   | 0.22032                         | 0.24542                         | 0.38447                      | 0.38479                      | 0.13390                      | 0.17799                           | 0.04168                         | 0.04056                     | 0.11619                        | 0.21292                           | 0.33877                        | 0.33925                  | 0.23690                  | 0.42358                | 0.13937 |
| 40            | 0.01416                                | 0.00177                | 0.01786   | 0.21678                         | 0.23690                         | 0.36902                      | 0.36934                      | 0.12939                      | 0.17510                           | 0.04023                         | 0.03927                     | 0.11217                        | 0.20567                           | 0.32509                        | 0.32557                  | 0.22724                  | 0.41489                | 0.13712 |
| 41            | 0.01400                                | 0.00177                | 0.01754   | 0.21324                         | 0.22901                         | 0.35438                      | 0.35470                      | 0.12505                      | 0.17236                           | 0.03895                         | 0.03798                     | 0.10847                        | 0.19875                           | 0.31221                        | 0.31270                  | 0.21823                  | 0.40652                | 0.13486 |
| 42            | 0.01384                                | 0.00177                | 0.01722   | 0.21002                         | 0.22145                         | 0.34054                      | 0.34086                      | 0.12086                      | 0.16962                           | 0.03766                         | 0.03669                     | 0.10493                        | 0.19232                           | 0.30014                        | 0.30046                  | 0.20970                  | 0.39863                | 0.13277 |
| 43            | 0.01368                                | 0.00177                | 0.01706   | 0.20680                         | 0.21436                         | 0.32750                      | 0.32782                      | 0.11700                      | 0.16705                           | 0.03653                         | 0.03557                     | 0.10155                        | 0.18620                           | 0.28856                        | 0.28904                  | 0.20165                  | 0.39123                | 0.13084 |
| 44            | 0.01368                                | 0.00177                | 0.01674   | 0.20374                         | 0.20777                         | 0.31511                      | 0.31527                      | 0.11346                      | 0.16464                           | 0.03441                         | 0.03444                     | 0.09833                        | 0.18041                           | 0.27761                        | 0.27809                  | 0.19409                  | 0.38399                | 0.12941 |
| 45            | 0.01352                                | 0.00177                | 0.01658   | 0.20069                         | 0.20133                         | 0.30320                      | 0.30352                      | 0.10992                      | 0.16222                           | 0.03428                         | 0.03331                     | 0.09527                        | 0.17494                           | 0.26731                        | 0.26783                  | 0.18684                  | 0.37723                | 0.12698 |
| 46            | 0.01352                                | 0.00161                | 0.01642   | 0.19795                         | 0.19537                         | 0.29210                      | 0.29242                      | 0.10670                      | 0.15997                           | 0.03331                         | 0.03235                     | 0.09254                        | 0.16979                           | 0.25750                        | 0.25782                  | 0.17992                  | 0.37063                | 0.12521 |
| 47            | 0.01336                                | 0.00161                | 0.01609   | 0.19521                         | 0.18958                         | 0.28147                      | 0.28180                      | 0.10348                      | 0.15772                           | 0.03235                         | 0.03138                     | 0.08980                        | 0.16480                           | 0.24816                        | 0.24868                  | 0.17333                  | 0.36436                | 0.12344 |
| 48            | 0.01320                                | 0.00161                | 0.01593   | 0.19248                         | 0.18427                         | 0.27134                      | 0.27166                      | 0.10058                      | 0.15562                           | 0.03138                         | 0.03058                     | 0.08723                        | 0.16103                           | 0.23915                        | 0.23963                  | 0.16721                  | 0.35840                | 0.12167 |
| 49            | 0.01320                                | 0.00161                | 0.01577   | 0.18990                         | 0.17912                         | 0.26184                      | 0.26200                      | 0.09769                      | 0.15353                           | 0.03042                         | 0.02961                     | 0.08481                        | 0.15562                           | 0.23078                        | 0.23110                  | 0.16126                  | 0.35261                | 0.12006 |
| 50            | 0.01304                                | 0.00161                | 0.01545   | 0.18749                         | 0.17413                         | 0.25267                      | 0.25283                      | 0.09511                      | 0.15144                           | 0.02961                         | 0.02881                     | 0.08240                        | 0.15144                           | 0.22273                        | 0.22306                  | 0.15562                  | 0.34714                | 0.11861 |
| 51            | 0.01304                                | 0.00161                | 0.01529   | 0.18507                         | 0.16946                         | 0.24382                      | 0.24414                      | 0.09254                      | 0.14951                           | 0.02881                         | 0.02816                     | 0.08031                        | 0.14725                           | 0.21501                        | 0.21533                  | 0.15015                  | 0.34182                | 0.11700 |
| 52            | 0.01287                                | 0.00161                | 0.01513   | 0.18266                         | 0.16496                         | 0.23561                      | 0.23577                      | 0.09012                      | 0.14774                           | 0.02816                         | 0.02736                     | 0.07805                        | 0.14339                           | 0.20761                        | 0.20809                  | 0.14516                  | 0.33667                |         |

Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - RSP (Year 2042) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3.5t | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|--------------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 1             | 0.01593               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 2             | 0.01593               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 3             | 0.01593               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 4             | 0.01593               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 5             | 0.01593               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 6             | 0.01593               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 7             | 0.01577               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 8             | 0.01577               | 0.01545                | 0.00000   | 0.11555                        | 0.07355                         | 0.16834                         | 0.17397                      | 0.01529                      | 0.07580                      | 0.02446                          | 0.02462                         | 0.04023                        | 0.06502                        | 0.12295                           | 0.12762                        | 0.04361                  | 0.06888                  | 0.09720                |
| 9             | 0.01577               | 0.01545                | 0.00000   | 0.10960                        | 0.07145                         | 0.15836                         | 0.16367                      | 0.01497                      | 0.07194                      | 0.02366                          | 0.02398                         | 0.03862                        | 0.06325                        | 0.11571                           | 0.11990                        | 0.04104                  | 0.06470                  | 0.09222                |
| 10            | 0.01577               | 0.01545                | 0.00000   | 0.10412                        | 0.06952                         | 0.14919                         | 0.15418                      | 0.01448                      | 0.06840                      | 0.02301                          | 0.02317                         | 0.03718                        | 0.06148                        | 0.10895                           | 0.11298                        | 0.03862                  | 0.06099                  | 0.08755                |
| 11            | 0.01561               | 0.01513                | 0.00000   | 0.09914                        | 0.06775                         | 0.14114                         | 0.14597                      | 0.01400                      | 0.06518                      | 0.02237                          | 0.02253                         | 0.03573                        | 0.05987                        | 0.10316                           | 0.10686                        | 0.03649                  | 0.05794                  | 0.08352                |
| 12            | 0.01481               | 0.01432                | 0.00000   | 0.09479                        | 0.06630                         | 0.13390                         | 0.13856                      | 0.01368                      | 0.06228                      | 0.02157                          | 0.02189                         | 0.03444                        | 0.05842                        | 0.09785                           | 0.10155                        | 0.03492                  | 0.05520                  | 0.07982                |
| 13            | 0.01400               | 0.01368                | 0.00000   | 0.09077                        | 0.06486                         | 0.12762                         | 0.13197                      | 0.01320                      | 0.05955                      | 0.02092                          | 0.02124                         | 0.03331                        | 0.05713                        | 0.09318                           | 0.09656                        | 0.03347                  | 0.05279                  | 0.07644                |
| 14            | 0.01320               | 0.01287                | 0.00000   | 0.08707                        | 0.06341                         | 0.12183                         | 0.12601                      | 0.01271                      | 0.05729                      | 0.02044                          | 0.02060                         | 0.03235                        | 0.05601                        | 0.08900                           | 0.09238                        | 0.03219                  | 0.05069                  | 0.07339                |
| 15            | 0.01255               | 0.01223                | 0.00000   | 0.08385                        | 0.06212                         | 0.11668                         | 0.12070                      | 0.01239                      | 0.05504                      | 0.01979                          | 0.01996                         | 0.03138                        | 0.05488                        | 0.08530                           | 0.08835                        | 0.03090                  | 0.04876                  | 0.07059                |
| 16            | 0.01191               | 0.01159                | 0.00000   | 0.08095                        | 0.06099                         | 0.11201                         | 0.11587                      | 0.01207                      | 0.05311                      | 0.01915                          | 0.01947                         | 0.03042                        | 0.05375                        | 0.08192                           | 0.08481                        | 0.02993                  | 0.04715                  | 0.06808                |
| 17            | 0.01143               | 0.01110                | 0.00000   | 0.07821                        | 0.05987                         | 0.10767                         | 0.11137                      | 0.01159                      | 0.05134                      | 0.01867                          | 0.01883                         | 0.02961                        | 0.05279                        | 0.07870                           | 0.08159                        | 0.02881                  | 0.04554                  | 0.06582                |
| 18            | 0.01078               | 0.01062                | 0.00000   | 0.07564                        | 0.05890                         | 0.10380                         | 0.10734                      | 0.01127                      | 0.04973                      | 0.01819                          | 0.01835                         | 0.02881                        | 0.05182                        | 0.07580                           | 0.07870                        | 0.02800                  | 0.04410                  | 0.06373                |
| 19            | 0.01030               | 0.09986                | 0.00000   | 0.07339                        | 0.05794                         | 0.10026                         | 0.10364                      | 0.01104                      | 0.04812                      | 0.01770                          | 0.01786                         | 0.02816                        | 0.05102                        | 0.07323                           | 0.07596                        | 0.02720                  | 0.04281                  | 0.06180                |
| 20            | 0.00982               | 0.00950                | 0.00000   | 0.07113                        | 0.05697                         | 0.09704                         | 0.10026                      | 0.01062                      | 0.04667                      | 0.01722                          | 0.01738                         | 0.02752                        | 0.05021                        | 0.07081                           | 0.07339                        | 0.02639                  | 0.04168                  | 0.05987                |
| 21            | 0.00933               | 0.00917                | 0.00000   | 0.06920                        | 0.05601                         | 0.09399                         | 0.09704                      | 0.01030                      | 0.04538                      | 0.01674                          | 0.01690                         | 0.02688                        | 0.04941                        | 0.06856                           | 0.07113                        | 0.02575                  | 0.04056                  | 0.05826                |
| 22            | 0.00901               | 0.00869                | 0.00000   | 0.06727                        | 0.05520                         | 0.09109                         | 0.09415                      | 0.01014                      | 0.04426                      | 0.01625                          | 0.01642                         | 0.02623                        | 0.04860                        | 0.06663                           | 0.06904                        | 0.02511                  | 0.03959                  | 0.05665                |
| 23            | 0.00853               | 0.00837                | 0.00000   | 0.06566                        | 0.05440                         | 0.08851                         | 0.09157                      | 0.00982                      | 0.04313                      | 0.01577                          | 0.01593                         | 0.02575                        | 0.04796                        | 0.06470                           | 0.06711                        | 0.02446                  | 0.03862                  | 0.05260                |
| 24            | 0.00821               | 0.00789                | 0.00000   | 0.06405                        | 0.05359                         | 0.08610                         | 0.08900                      | 0.00950                      | 0.04200                      | 0.01545                          | 0.01561                         | 0.02527                        | 0.04715                        | 0.06293                           | 0.06518                        | 0.02382                  | 0.03766                  | 0.05191                |
| 25            | 0.00789               | 0.00756                | 0.00000   | 0.06260                        | 0.05295                         | 0.08385                         | 0.08658                      | 0.00933                      | 0.04104                      | 0.01497                          | 0.01513                         | 0.02478                        | 0.04651                        | 0.06132                           | 0.06341                        | 0.02334                  | 0.03685                  | 0.05263                |
| 26            | 0.00756               | 0.00724                | 0.00000   | 0.06116                        | 0.05214                         | 0.08175                         | 0.08449                      | 0.00901                      | 0.04007                      | 0.01465                          | 0.01481                         | 0.02430                        | 0.04587                        | 0.05971                           | 0.06180                        | 0.02285                  | 0.03605                  | 0.05150                |
| 27            | 0.00724               | 0.00708                | 0.00000   | 0.05987                        | 0.05150                         | 0.07966                         | 0.08240                      | 0.00885                      | 0.03927                      | 0.01432                          | 0.01448                         | 0.02398                        | 0.04538                        | 0.05826                           | 0.06035                        | 0.02237                  | 0.03524                  | 0.05037                |
| 28            | 0.00692               | 0.00676                | 0.00000   | 0.05858                        | 0.05086                         | 0.07789                         | 0.08047                      | 0.00853                      | 0.03846                      | 0.01384                          | 0.01400                         | 0.02350                        | 0.04474                        | 0.05681                           | 0.05890                        | 0.02189                  | 0.03460                  | 0.04941                |
| 29            | 0.00660               | 0.00644                | 0.00000   | 0.05745                        | 0.05021                         | 0.07612                         | 0.07870                      | 0.00837                      | 0.03766                      | 0.01352                          | 0.01368                         | 0.02317                        | 0.04410                        | 0.05568                           | 0.05761                        | 0.02157                  | 0.03396                  | 0.04844                |
| 30            | 0.00644               | 0.00628                | 0.00000   | 0.05633                        | 0.04957                         | 0.07451                         | 0.07693                      | 0.00821                      | 0.03701                      | 0.01320                          | 0.01336                         | 0.02285                        | 0.04361                        | 0.05440                           | 0.05649                        | 0.02108                  | 0.03331                  | 0.04748                |
| 31            | 0.00612               | 0.00595                | 0.00000   | 0.05536                        | 0.04892                         | 0.07290                         | 0.07532                      | 0.00789                      | 0.03621                      | 0.01287                          | 0.01304                         | 0.02253                        | 0.04313                        | 0.05327                           | 0.05520                        | 0.02076                  | 0.03267                  | 0.04667                |
| 32            | 0.00595               | 0.00579                | 0.00000   | 0.05440                        | 0.04844                         | 0.07145                         | 0.07387                      | 0.00772                      | 0.03573                      | 0.01255                          | 0.01271                         | 0.02221                        | 0.04249                        | 0.05214                           | 0.05407                        | 0.02044                  | 0.03219                  | 0.04571                |
| 33            | 0.00563               | 0.00547                | 0.00000   | 0.05343                        | 0.04780                         | 0.07001                         | 0.07242                      | 0.00756                      | 0.03508                      | 0.01239                          | 0.01255                         | 0.02189                        | 0.04200                        | 0.05118                           | 0.05311                        | 0.02012                  | 0.03154                  | 0.04506                |
| 34            | 0.00547               | 0.00531                | 0.00000   | 0.05263                        | 0.04731                         | 0.06872                         | 0.07113                      | 0.00740                      | 0.03431                      | 0.01207                          | 0.01223                         | 0.02173                        | 0.04152                        | 0.05021                           | 0.05214                        | 0.01979                  | 0.03106                  | 0.04426                |
| 35            | 0.00531               | 0.00515                | 0.00000   | 0.05182                        | 0.04667                         | 0.06759                         | 0.06985                      | 0.00724                      | 0.03396                      | 0.01175                          | 0.01191                         | 0.02140                        | 0.04120                        | 0.04941                           | 0.05118                        | 0.01947                  | 0.03058                  | 0.04361                |
| 36            | 0.00515               | 0.00499                | 0.00000   | 0.05102                        | 0.04619                         | 0.06630                         | 0.06856                      | 0.00708                      | 0.03347                      | 0.01159                          | 0.01175                         | 0.02124                        | 0.04072                        | 0.04844                           | 0.05021                        | 0.01915                  | 0.03009                  | 0.04297                |
| 37            | 0.00499               | 0.00483                | 0.00000   | 0.05021                        | 0.04571                         | 0.06534                         | 0.06743                      | 0.00692                      | 0.03299                      | 0.01127                          | 0.01143                         | 0.02092                        | 0.04023                        | 0.04764                           | 0.04941                        | 0.01883                  | 0.02961                  | 0.04233                |
| 38            | 0.00483               | 0.00467                | 0.00000   | 0.04957                        | 0.04522                         | 0.06421                         | 0.06647                      | 0.00676                      | 0.03251                      | 0.01110                          | 0.01110                         | 0.02076                        | 0.03975                        | 0.04699                           | 0.04860                        | 0.01851                  | 0.02929                  | 0.04168                |
| 39            | 0.00467               | 0.00451                | 0.00000   | 0.04892                        | 0.04474                         | 0.06325                         | 0.06534                      | 0.00660                      | 0.03203                      | 0.01078                          | 0.01094                         | 0.02060                        | 0.03943                        | 0.04619                           | 0.04796                        | 0.01835                  | 0.02881                  | 0.04120                |
| 40            | 0.00451               | 0.00435                | 0.00000   | 0.04828                        | 0.04426                         | 0.06228                         | 0.06444                      | 0.00644                      | 0.03170                      | 0.01062                          | 0.01078                         | 0.02044                        | 0.03895                        | 0.04554                           | 0.04715                        | 0.01802                  | 0.02849                  | 0.04072                |
| 41            | 0.00435               | 0.00418                | 0.00000   | 0.04780                        | 0.04394                         | 0.06132                         | 0.06341                      | 0.00628                      | 0.03122                      | 0.01030                          | 0.01046                         | 0.02012                        | 0.03862                        | 0.04490                           | 0.04651                        | 0.01770                  | 0.02800                  | 0.04023                |
| 42            | 0.00418               | 0.00418                | 0.00000   | 0.04715                        | 0.04345                         | 0.06051                         | 0.06260                      | 0.00628                      | 0.03095                      | 0.01014                          | 0.01030                         | 0.01996                        | 0.03814                        | 0.04426                           | 0.04587                        | 0.01754                  | 0.02768                  | 0.03975                |
| 43            | 0.00402               | 0.00402                | 0.00000   | 0.04667                        | 0.04297                         | 0.05971                         | 0.06180                      | 0.00612                      | 0.03058                      | 0.00998                          | 0.01014                         | 0.01979                        | 0.03782                        | 0.04361                           | 0.04522                        | 0.01738                  | 0.02736                  | 0.03927                |
| 44            | 0.00402               | 0.00386                | 0.00000   | 0.04619                        | 0.04265                         | 0.05890                         | 0.06099                      | 0.00595                      | 0.03026                      | 0.00982                          | 0.00982                         | 0.01979                        | 0.03750                        | 0.04313                           | 0.04458                        | 0.01706                  | 0.02704                  | 0.03879                |
| 45            | 0.00386               | 0.00370                | 0.00000   | 0.04571                        | 0.04216                         | 0.05826                         | 0.06019                      | 0.00579                      | 0.02993                      | 0.00966                          | 0.00966                         | 0.01963                        | 0.03701                        | 0.04249                           | 0.04410                        | 0.01690                  | 0.02672                  | 0.03846                |
| 46            | 0.00370               | 0.00370                | 0.00000   | 0.04522                        | 0.04168                         | 0.05745                         | 0.05938                      | 0.00579                      | 0.02961                      | 0.00933                          | 0.00950                         | 0.01947                        | 0.03669                        | 0.04200                           | 0.04361                        | 0.01674                  | 0.02639                  | 0.03814                |
| 47            | 0.00370               | 0.00354                | 0.00000   | 0.04474                        | 0.04136                         | 0.05681                         | 0.05874                      | 0.00563                      | 0.02929                      | 0.00917                          | 0.00933                         | 0.01931                        | 0.03637                        | 0.04152                           | 0.04297                        | 0.01642                  | 0.02607                  | 0.03766                |
| 48            | 0.00354               | 0.00354                | 0.00000   | 0.04442                        | 0.04104                         | 0.05617                         | 0.05810                      | 0.00547                      | 0.02913                      | 0.00901                          | 0.00917                         | 0.01931                        | 0.03605                        | 0.04104                           | 0.04249                        | 0.01625                  | 0.02575                  | 0.03734                |
| 49            | 0.00354               | 0.00338                | 0.00000   | 0.04400                        | 0.04056                         | 0.05552                         | 0.05745                      | 0.00547                      | 0.02881                      | 0.00885                          | 0.00901                         | 0.01915                        | 0.03573                        | 0.04056                           | 0.04200                        | 0.01609                  | 0.02543                  | 0.03701                |
| 50            | 0.00338               | 0.00338                | 0.00000   | 0.04361                        | 0.04023                         | 0.05504                         | 0.05681                      | 0.00531                      | 0.02865                      | 0.00869                          | 0.00885                         | 0.01915                        | 0.03541                        | 0.04023                           | 0.04168                        | 0.01593                  | 0.02511                  | 0.03669                |
| 51            | 0.00338               | 0.00322                | 0.00000   | 0.04329                        | 0.03991                         | 0.05440                         | 0.05633                      | 0.00531                      | 0.02832                      | 0.00853                          | 0.00869                         | 0.01899                        | 0.03508                        | 0.03975                           | 0.04120                        | 0.01577                  | 0.02494                  | 0.03657                |
| 52            | 0.00322               | 0.00322                | 0.00000   | 0.04297                        | 0.03959                         | 0.05391                         | 0.05568                      | 0.00515                      | 0.02816                      | 0.00837                          | 0.00853                         | 0.01899                        | 0.03476                        | 0.03943                           |                                |                          |                          |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - FSP (Year 2042) (for Sensitivity Test)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                   |                                 |                                 |                                  |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <= 15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.01465                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 2             | 0.01465                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 3             | 0.01465                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 4             | 0.01465                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 5             | 0.01448                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 6             | 0.01448                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 7             | 0.01448                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 8             | 0.01448                                | 0.01432                | 0.00000   | 0.10622                        | 0.06759                         | 0.15482                         | 0.16013                      | 0.01416                      | 0.06985                      | 0.02253                           | 0.02269                         | 0.03701                         | 0.05987                          | 0.11314                           | 0.11732                        | 0.04007                  | 0.06325                  | 0.08948                |
| 9             | 0.01448                                | 0.01432                | 0.00000   | 0.10074                        | 0.06582                         | 0.14565                         | 0.15063                      | 0.01368                      | 0.06614                      | 0.02189                           | 0.02205                         | 0.03557                         | 0.05810                          | 0.10654                           | 0.11040                        | 0.03766                  | 0.05955                  | 0.08497                |
| 10            | 0.01448                                | 0.01432                | 0.00000   | 0.09576                        | 0.06405                         | 0.13728                         | 0.14194                      | 0.01336                      | 0.06293                      | 0.02108                           | 0.02140                         | 0.03412                         | 0.05649                          | 0.10026                           | 0.10396                        | 0.03557                  | 0.05617                  | 0.08063                |
| 11            | 0.01432                                | 0.01416                | 0.00000   | 0.09125                        | 0.06244                         | 0.12987                         | 0.13422                      | 0.01287                      | 0.05987                      | 0.02060                           | 0.02076                         | 0.03283                         | 0.05504                          | 0.09495                           | 0.09833                        | 0.03380                  | 0.05327                  | 0.07677                |
| 12            | 0.01352                                | 0.01336                | 0.00000   | 0.08707                        | 0.06099                         | 0.12328                         | 0.12746                      | 0.01255                      | 0.05729                      | 0.01996                           | 0.02012                         | 0.03170                         | 0.05375                          | 0.09012                           | 0.09334                        | 0.03219                  | 0.05086                  | 0.07339                |
| 13            | 0.01287                                | 0.01271                | 0.00000   | 0.08352                        | 0.05955                         | 0.11732                         | 0.12134                      | 0.01207                      | 0.05488                      | 0.01931                           | 0.01947                         | 0.03074                         | 0.05263                          | 0.08578                           | 0.08884                        | 0.03074                  | 0.04860                  | 0.07033                |
| 14            | 0.01223                                | 0.01207                | 0.00000   | 0.08015                        | 0.05842                         | 0.11217                         | 0.11587                      | 0.01175                      | 0.05263                      | 0.01867                           | 0.01899                         | 0.02977                         | 0.05150                          | 0.08192                           | 0.08497                        | 0.02961                  | 0.04667                  | 0.06759                |
| 15            | 0.01159                                | 0.01143                | 0.00000   | 0.07709                        | 0.05713                         | 0.10734                         | 0.11104                      | 0.01143                      | 0.05069                      | 0.01819                           | 0.01835                         | 0.02881                         | 0.05037                          | 0.07838                           | 0.08127                        | 0.02849                  | 0.04490                  | 0.06502                |
| 16            | 0.01094                                | 0.01078                | 0.00000   | 0.07435                        | 0.05617                         | 0.10300                         | 0.10654                      | 0.01110                      | 0.04892                      | 0.01770                           | 0.01786                         | 0.02800                         | 0.04941                          | 0.07532                           | 0.07805                        | 0.02752                  | 0.04329                  | 0.06260                |
| 17            | 0.01046                                | 0.01030                | 0.00000   | 0.07194                        | 0.05504                         | 0.09914                         | 0.10252                      | 0.01078                      | 0.04715                      | 0.01722                           | 0.01738                         | 0.02720                         | 0.04860                          | 0.07242                           | 0.07516                        | 0.02655                  | 0.04200                  | 0.06051                |
| 18            | 0.00998                                | 0.09982                | 0.00000   | 0.06952                        | 0.05407                         | 0.09560                         | 0.09881                      | 0.01046                      | 0.04571                      | 0.01674                           | 0.01690                         | 0.02655                         | 0.04764                          | 0.06985                           | 0.07242                        | 0.02575                  | 0.04056                  | 0.05858                |
| 19            | 0.00950                                | 0.09933                | 0.00000   | 0.06743                        | 0.05327                         | 0.09222                         | 0.09543                      | 0.01014                      | 0.04426                      | 0.01625                           | 0.01642                         | 0.02591                         | 0.04683                          | 0.06743                           | 0.06985                        | 0.02494                  | 0.03943                  | 0.05681                |
| 20            | 0.00901                                | 0.00885                | 0.00000   | 0.06550                        | 0.05230                         | 0.08916                         | 0.09222                      | 0.00982                      | 0.04297                      | 0.01577                           | 0.01593                         | 0.02527                         | 0.04619                          | 0.06518                           | 0.06759                        | 0.02430                  | 0.03830                  | 0.05520                |
| 21            | 0.00853                                | 0.00853                | 0.00000   | 0.06373                        | 0.05150                         | 0.08642                         | 0.08932                      | 0.00950                      | 0.04184                      | 0.01529                           | 0.01545                         | 0.02478                         | 0.04538                          | 0.06309                           | 0.06550                        | 0.02366                  | 0.03734                  | 0.05359                |
| 22            | 0.00821                                | 0.00805                | 0.00000   | 0.06196                        | 0.05086                         | 0.08385                         | 0.08658                      | 0.00933                      | 0.04072                      | 0.01497                           | 0.01513                         | 0.02414                         | 0.04474                          | 0.06132                           | 0.06357                        | 0.02301                  | 0.03637                  | 0.05214                |
| 23            | 0.00789                                | 0.00772                | 0.00000   | 0.06035                        | 0.05005                         | 0.08143                         | 0.08417                      | 0.00901                      | 0.03959                      | 0.01448                           | 0.01465                         | 0.02366                         | 0.04410                          | 0.05955                           | 0.06164                        | 0.02253                  | 0.03557                  | 0.05086                |
| 24            | 0.00756                                | 0.00740                | 0.00000   | 0.05890                        | 0.04925                         | 0.07918                         | 0.08192                      | 0.00869                      | 0.03862                      | 0.01416                           | 0.01432                         | 0.02317                         | 0.04345                          | 0.05794                           | 0.06003                        | 0.02205                  | 0.03460                  | 0.04957                |
| 25            | 0.00724                                | 0.00708                | 0.00000   | 0.05745                        | 0.04860                         | 0.07709                         | 0.07966                      | 0.00853                      | 0.03782                      | 0.01384                           | 0.01400                         | 0.02285                         | 0.04281                          | 0.05633                           | 0.05842                        | 0.02157                  | 0.03396                  | 0.04844                |
| 26            | 0.00692                                | 0.00676                | 0.00000   | 0.05617                        | 0.04796                         | 0.07516                         | 0.07773                      | 0.00837                      | 0.03685                      | 0.01352                           | 0.01368                         | 0.02237                         | 0.04216                          | 0.05488                           | 0.05697                        | 0.02108                  | 0.03315                  | 0.04731                |
| 27            | 0.00660                                | 0.00644                | 0.00000   | 0.05504                        | 0.04731                         | 0.07339                         | 0.07580                      | 0.00805                      | 0.03605                      | 0.01304                           | 0.01320                         | 0.02205                         | 0.04168                          | 0.05359                           | 0.05552                        | 0.02060                  | 0.03251                  | 0.04635                |
| 28            | 0.00628                                | 0.00612                | 0.00000   | 0.05391                        | 0.04667                         | 0.07162                         | 0.07403                      | 0.00789                      | 0.03541                      | 0.01271                           | 0.01287                         | 0.02173                         | 0.04120                          | 0.05230                           | 0.05423                        | 0.02012                  | 0.03187                  | 0.04538                |
| 29            | 0.00612                                | 0.00595                | 0.00000   | 0.05279                        | 0.04619                         | 0.07001                         | 0.07242                      | 0.00772                      | 0.03460                      | 0.01255                           | 0.01265                         | 0.02140                         | 0.04056                          | 0.05118                           | 0.05311                        | 0.01979                  | 0.03122                  | 0.04458                |
| 30            | 0.00579                                | 0.00579                | 0.00000   | 0.05182                        | 0.04554                         | 0.06856                         | 0.07081                      | 0.00756                      | 0.03396                      | 0.01223                           | 0.01239                         | 0.02108                         | 0.04007                          | 0.05005                           | 0.05182                        | 0.01947                  | 0.03074                  | 0.04361                |
| 31            | 0.00563                                | 0.00547                | 0.00000   | 0.05086                        | 0.04506                         | 0.06711                         | 0.06936                      | 0.00724                      | 0.03331                      | 0.01191                           | 0.01207                         | 0.02076                         | 0.03959                          | 0.04908                           | 0.05086                        | 0.01915                  | 0.03009                  | 0.04281                |
| 32            | 0.00547                                | 0.00531                | 0.00000   | 0.05005                        | 0.04458                         | 0.06566                         | 0.06791                      | 0.00708                      | 0.03283                      | 0.01159                           | 0.01175                         | 0.02044                         | 0.03911                          | 0.04812                           | 0.04973                        | 0.01883                  | 0.02961                  | 0.04216                |
| 33            | 0.00515                                | 0.00515                | 0.00000   | 0.04925                        | 0.04394                         | 0.06453                         | 0.06663                      | 0.00692                      | 0.03219                      | 0.01127                           | 0.01143                         | 0.02012                         | 0.03862                          | 0.04715                           | 0.04876                        | 0.01851                  | 0.02913                  | 0.04136                |
| 34            | 0.00499                                | 0.00499                | 0.00000   | 0.04844                        | 0.04345                         | 0.06325                         | 0.06550                      | 0.00676                      | 0.03170                      | 0.01110                           | 0.01127                         | 0.01996                         | 0.03830                          | 0.04619                           | 0.04796                        | 0.01819                  | 0.02865                  | 0.04076                |
| 35            | 0.00483                                | 0.00483                | 0.00000   | 0.04764                        | 0.04297                         | 0.06212                         | 0.06421                      | 0.00660                      | 0.03122                      | 0.01078                           | 0.01094                         | 0.01963                         | 0.03782                          | 0.04538                           | 0.04715                        | 0.01786                  | 0.02816                  | 0.04007                |
| 36            | 0.00467                                | 0.00467                | 0.00000   | 0.04699                        | 0.04249                         | 0.06099                         | 0.06309                      | 0.00644                      | 0.03074                      | 0.01062                           | 0.01078                         | 0.01947                         | 0.03734                          | 0.04458                           | 0.04619                        | 0.01754                  | 0.02768                  | 0.03959                |
| 37            | 0.00451                                | 0.00451                | 0.00000   | 0.04619                        | 0.04200                         | 0.06003                         | 0.06212                      | 0.00628                      | 0.03026                      | 0.01030                           | 0.01046                         | 0.01931                         | 0.03701                          | 0.04394                           | 0.04554                        | 0.01738                  | 0.02736                  | 0.03895                |
| 38            | 0.00435                                | 0.00435                | 0.00000   | 0.04554                        | 0.04168                         | 0.05906                         | 0.06116                      | 0.00628                      | 0.02996                      | 0.01014                           | 0.01030                         | 0.01915                         | 0.03669                          | 0.04313                           | 0.04474                        | 0.01706                  | 0.02688                  | 0.03846                |
| 39            | 0.00418                                | 0.00418                | 0.00000   | 0.04506                        | 0.04120                         | 0.05810                         | 0.06019                      | 0.00612                      | 0.02945                      | 0.00998                           | 0.00998                         | 0.01883                         | 0.03621                          | 0.04249                           | 0.04410                        | 0.01674                  | 0.02655                  | 0.03798                |
| 40            | 0.00418                                | 0.00402                | 0.00000   | 0.04442                        | 0.04072                         | 0.05729                         | 0.05922                      | 0.00595                      | 0.02913                      | 0.00966                           | 0.00982                         | 0.01867                         | 0.03589                          | 0.04184                           | 0.04345                        | 0.01658                  | 0.02623                  | 0.03750                |
| 41            | 0.00402                                | 0.00386                | 0.00000   | 0.04394                        | 0.04039                         | 0.05649                         | 0.05842                      | 0.00579                      | 0.02881                      | 0.00950                           | 0.00966                         | 0.01851                         | 0.03557                          | 0.04120                           | 0.04281                        | 0.01642                  | 0.02575                  | 0.03701                |
| 42            | 0.00386                                | 0.00386                | 0.00000   | 0.04345                        | 0.03991                         | 0.05568                         | 0.05761                      | 0.00563                      | 0.02849                      | 0.00933                           | 0.00950                         | 0.01835                         | 0.03508                          | 0.04072                           | 0.04216                        | 0.01609                  | 0.02543                  | 0.03653                |
| 43            | 0.00370                                | 0.00370                | 0.00000   | 0.04297                        | 0.03959                         | 0.05488                         | 0.05681                      | 0.00563                      | 0.02816                      | 0.00917                           | 0.00933                         | 0.01835                         | 0.03476                          | 0.04007                           | 0.04168                        | 0.01593                  | 0.02511                  | 0.03621                |
| 44            | 0.00370                                | 0.00354                | 0.00000   | 0.04249                        | 0.03911                         | 0.05423                         | 0.05601                      | 0.00547                      | 0.02784                      | 0.00901                           | 0.00901                         | 0.01819                         | 0.03444                          | 0.03959                           | 0.04104                        | 0.01577                  | 0.02478                  | 0.03573                |
| 45            | 0.00354                                | 0.00354                | 0.00000   | 0.04200                        | 0.03879                         | 0.05359                         | 0.05536                      | 0.00531                      | 0.02752                      | 0.00885                           | 0.00885                         | 0.01802                         | 0.03412                          | 0.03911                           | 0.04056                        | 0.01561                  | 0.02446                  | 0.03541                |
| 46            | 0.00354                                | 0.00338                | 0.00000   | 0.04168                        | 0.03846                         | 0.05295                         | 0.05472                      | 0.00531                      | 0.02720                      | 0.00869                           | 0.00869                         | 0.01786                         | 0.03380                          | 0.03862                           | 0.04007                        | 0.01529                  | 0.02430                  | 0.03508                |
| 47            | 0.00338                                | 0.00338                | 0.00000   | 0.04120                        | 0.03798                         | 0.05230                         | 0.05407                      | 0.00515                      | 0.02704                      | 0.00853                           | 0.00853                         | 0.01786                         | 0.03347                          | 0.03814                           | 0.03959                        | 0.01513                  | 0.02398                  | 0.03476                |
| 48            | 0.00322                                | 0.00322                | 0.00000   | 0.04088                        | 0.03766                         | 0.05166                         | 0.05343                      | 0.00515                      | 0.02672                      | 0.00837                           | 0.00837                         | 0.01770                         | 0.03315                          | 0.03782                           | 0.03911                        | 0.01497                  | 0.02366                  | 0.03444                |
| 49            | 0.00322                                | 0.00322                | 0.00000   | 0.04056                        | 0.03734                         | 0.05118                         | 0.05279                      | 0.00499                      | 0.02655                      | 0.00821                           | 0.00837                         | 0.01770                         | 0.03283                          | 0.03734                           | 0.03879                        | 0.01481                  | 0.02334                  | 0.03412                |
| 50            | 0.00322                                | 0.00306                | 0.00000   | 0.04023                        | 0.03701                         | 0.05053                         | 0.05230                      | 0.00483                      | 0.02639                      | 0.00805                           | 0.00821                         | 0.01754                         | 0.03251                          | 0.03701                           | 0.03830                        | 0.01465                  | 0.02317                  | 0.03380                |
| 51            | 0.00306                                | 0.00306                | 0.00000   | 0.03991                        | 0.03669                         | 0.05005                         | 0.05182                      | 0.00483                      | 0.02607                      | 0.00789                           | 0.00805                         | 0.01754                         | 0.03225                          | 0.03653                           | 0.03798                        | 0.01448                  | 0.02285                  | 0.03364                |
| 52            | 0.00306                                | 0.00290                | 0.00000   | 0.03959                        | 0.03637                         | 0.04957                         | 0.05134                      | 0.00467                      | 0.02591                      | 0.00772                           | 0.00789                         | 0.01738                         | 0.03203                          | 0.03621                           | 0.03750                        | 0.01432                  | 0.02269                  |                        |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works  
Running Exhaust Emission Factor (gram/mile/vehicle) - NO (Year 2048) (for Sensitivity Test)

| Speed (km/hr) | Temperature :6°C Relative Humidity:18% |                        |           |                                |                                 |                                 |                              |                              |                              |                                  |                                 |                                 |                                 |                                   |                                |                          |                          |                        |
|---------------|--|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
|               | 16 - Motorcycles (MC)                  | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
| 1             | 0.43340                                | 0.06293                | 2.59185   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91323                          | 2.93882                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 2             | 0.43340                                | 0.06293                | 2.59185   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91323                          | 2.93882                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 3             | 0.43340                                | 0.06293                | 2.59185   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91323                          | 2.93882                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 4             | 0.43340                                | 0.06293                | 2.59185   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91323                          | 2.93882                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 5             | 0.42583                                | 0.06276                | 2.26209   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91259                          | 2.93850                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 6             | 0.41811                                | 0.06180                | 2.01796   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91243                          | 2.93818                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 7             | 0.41070                                | 0.06067                | 1.83208   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91211                          | 2.93818                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 8             | 0.40362                                | 0.05938                | 1.68514   | 1.58440                        | 2.16022                         | 4.72729                         | 4.73549                      | 2.33741                      | 1.29665                      | 2.91179                          | 2.93786                         | 1.26832                         | 1.84576                         | 4.10994                           | 4.10093                        | 2.63852                  | 5.42590                  | 1.00729                |
| 9             | 0.39654                                | 0.05794                | 1.56541   | 1.47303                        | 2.04371                         | 4.72729                         | 4.73549                      | 2.21108                      | 1.20636                      | 2.74555                          | 2.77934                         | 1.19993                         | 1.74614                         | 4.10962                           | 4.10045                        | 2.63852                  | 5.42590                  | 0.93664                |
| 10            | 0.38994                                | 0.05681                | 1.46531   | 1.37535                        | 1.93395                         | 4.72729                         | 4.73549                      | 2.09247                      | 1.12702                      | 2.60665                          | 2.62999                         | 1.13539                         | 1.65231                         | 4.10962                           | 4.10013                        | 2.63852                  | 5.42590                  | 0.87468                |
| 11            | 0.38351                                | 0.05552                | 1.38050   | 1.29263                        | 1.83449                         | 4.52049                         | 4.52837                      | 1.98496                      | 1.05991                      | 2.47292                          | 2.49497                         | 1.07713                         | 1.56750                         | 3.92700                           | 3.92084                        | 2.52313                  | 5.42590                  | 0.82205                |
| 12            | 0.37723                                | 0.05440                | 1.30727   | 1.22149                        | 1.74389                         | 4.06054                         | 4.06762                      | 1.88712                      | 1.00198                      | 2.35077                          | 2.37185                         | 1.02386                         | 1.49009                         | 3.52010                           | 3.52205                        | 2.26644                  | 4.58100                  | 0.77683                |
| 13            | 0.37111                                | 0.05327                | 1.24338   | 1.15937                        | 1.66052                         | 3.67478                         | 3.68121                      | 1.79699                      | 0.95144                      | 2.23828                          | 2.25823                         | 0.97494                         | 1.41880                         | 3.19471                           | 3.18747                        | 2.05095                  | 3.84215                  | 0.73740                |
| 14            | 0.36516                                | 0.05214                | 1.18689   | 1.10481                        | 1.58311                         | 3.34679                         | 3.35259                      | 1.71331                      | 0.90703                      | 2.13451                          | 2.15346                         | 0.92972                         | 1.35265                         | 2.90969                           | 2.90310                        | 1.86797                  | 3.34760                  | 0.70280                |
| 15            | 0.35937                                | 0.05118                | 1.13684   | 1.05637                        | 1.51133                         | 3.06500                         | 3.07031                      | 1.63574                      | 0.86760                      | 2.03743                          | 2.05652                         | 0.88739                         | 1.29134                         | 2.66459                           | 2.65880                        | 1.71073                  | 2.98871                  | 0.67190                |
| 16            | 0.35373                                | 0.05021                | 1.09178   | 1.01292                        | 1.44406                         | 2.82038                         | 2.82520                      | 1.56299                      | 0.83219                      | 1.94682                          | 1.96420                         | 0.84796                         | 1.23388                         | 2.45200                           | 2.44669                        | 1.57410                  | 2.71448                  | 0.64438                |
| 17            | 0.34842                                | 0.04908                | 1.05106   | 0.97365                        | 1.38098                         | 2.60617                         | 2.61052                      | 1.49460                      | 0.80017                      | 1.86185                          | 1.87843                         | 0.81956                         | 1.17997                         | 2.26580                           | 2.26081                        | 1.45453                  | 2.49658                  | 0.61944                |
| 18            | 0.34327                                | 0.04828                | 1.01405   | 0.93809                        | 1.32143                         | 2.41707                         | 2.42142                      | 1.43022                      | 0.77120                      | 1.78154                          | 1.79748                         | 0.77586                         | 1.12912                         | 2.10148                           | 2.09698                        | 1.34911                  | 2.31858                  | 0.59691                |
| 19            | 0.33812                                | 0.04731                | 0.98041   | 0.90574                        | 1.26511                         | 2.24938                         | 2.25308                      | 1.36923                      | 0.74464                      | 1.70574                          | 1.72071                         | 0.74271                         | 1.08100                         | 1.95667                           | 1.95133                        | 1.25545                  | 2.16972                  | 0.57631                |
| 20            | 0.33330                                | 0.04651                | 0.94935   | 0.87581                        | 1.21168                         | 2.09939                         | 2.10293                      | 1.31145                      | 0.72050                      | 1.63365                          | 1.64813                         | 0.71149                         | 1.03529                         | 1.82532                           | 1.82146                        | 1.17176                  | 2.04306                  | 0.55732                |
| 21            | 0.32863                                | 0.04571                | 0.92071   | 0.84861                        | 1.16066                         | 1.96469                         | 1.96807                      | 1.25658                      | 0.69813                      | 1.56525                          | 1.57909                         | 0.68156                         | 0.99200                         | 1.70832                           | 1.70462                        | 1.09661                  | 1.93935                  | 0.53993                |
| 22            | 0.32396                                | 0.04490                | 0.89431   | 0.82318                        | 1.11238                         | 1.84318                         | 1.84624                      | 1.20411                      | 0.67753                      | 1.49991                          | 1.51311                         | 0.65307                         | 0.95064                         | 1.60258                           | 1.59921                        | 1.02869                  | 1.83851                  | 0.52384                |
| 23            | 0.31962                                | 0.04410                | 0.86969   | 0.79984                        | 1.06587                         | 1.73294                         | 1.73584                      | 1.15406                      | 0.65838                      | 1.43747                          | 1.45018                         | 0.62587                         | 0.91105                         | 1.50683                           | 1.50361                        | 0.96722                  | 1.75453                  | 0.50887                |
| 24            | 0.31527                                | 0.04329                | 0.84684   | 0.77780                        | 1.02161                         | 1.63268                         | 1.63558                      | 1.10610                      | 0.64036                      | 1.37776                          | 1.38999                         | 0.59980                         | 0.87291                         | 1.41976                           | 1.41671                        | 0.91121                  | 1.67935                  | 0.49503                |
| 25            | 0.31093                                | 0.04265                | 0.82559   | 0.75752                        | 0.97912                         | 1.54111                         | 1.54368                      | 1.06024                      | 0.62362                      | 1.32047                          | 1.33205                         | 0.57502                         | 0.83666                         | 1.33994                           | 1.33720                        | 0.86003                  | 1.61208                  | 0.48200                |
| 26            | 0.30706                                | 0.04184                | 0.80564   | 0.73837                        | 0.93825                         | 1.45710                         | 1.45951                      | 1.01582                      | 0.60817                      | 1.26543                          | 1.27637                         | 0.55104                         | 0.80178                         | 1.26720                           | 1.26446                        | 0.81320                  | 1.55125                  | 0.46993                |
| 27            | 0.30304                                | 0.04120                | 0.78665   | 0.72050                        | 0.89898                         | 1.38001                         | 1.38227                      | 0.97333                      | 0.59337                      | 1.21248                          | 1.22310                         | 0.52786                         | 0.76814                         | 1.19993                           | 1.19751                        | 0.77007                  | 1.49859                  | 0.45850                |
| 28            | 0.29918                                | 0.04039                | 0.76894   | 0.70361                        | 0.86116                         | 1.30872                         | 1.31097                      | 0.93245                      | 0.57969                      | 1.16146                          | 1.17160                         | 0.50549                         | 0.73579                         | 1.13797                           | 1.13571                        | 0.73032                  | 1.44551                  | 0.44778                |
| 29            | 0.29548                                | 0.03991                | 0.75221   | 0.68767                        | 0.82463                         | 1.24306                         | 1.24499                      | 0.89286                      | 0.56665                      | 1.11206                          | 1.12187                         | 0.48909                         | 0.70473                         | 1.08084                           | 1.07858                        | 0.69363                  | 1.39916                  | 0.43784                |
| 30            | 0.29210                                | 0.03927                | 0.73644   | 0.67271                        | 0.78922                         | 1.18206                         | 1.18383                      | 0.85472                      | 0.55426                      | 1.06458                          | 1.07375                         | 0.46333                         | 0.67448                         | 1.02789                           | 1.02580                        | 0.65967                  | 1.35636                  | 0.42809                |
| 31            | 0.28856                                | 0.03846                | 0.72147   | 0.65854                        | 0.68526                         | 1.12525                         | 1.12718                      | 0.74255                      | 0.54267                      | 0.92489                          | 0.93278                         | 0.40250                         | 0.58580                         | 0.97848                           | 0.97655                        | 0.62797                  | 1.31709                  | 0.41907                |
| 32            | 0.28534                                | 0.03782                | 0.70731   | 0.64503                        | 0.65597                         | 1.07247                         | 1.07424                      | 0.71053                      | 0.53157                      | 0.88530                          | 0.89270                         | 0.38512                         | 0.56070                         | 0.93261                           | 0.93084                        | 0.59852                  | 1.28203                  | 0.41054                |
| 33            | 0.28196                                | 0.03718                | 0.69379   | 0.63215                        | 0.62861                         | 1.02338                         | 1.02499                      | 0.68107                      | 0.52094                      | 0.84845                          | 0.85553                         | 0.36902                         | 0.53736                         | 0.88997                           | 0.88820                        | 0.57116                  | 1.24959                  | 0.40234                |
| 34            | 0.27890                                | 0.03685                | 0.68091   | 0.62008                        | 0.60318                         | 0.97735                         | 0.97896                      | 0.65355                      | 0.51113                      | 0.81401                          | 0.82109                         | 0.35422                         | 0.51563                         | 0.85006                           | 0.84829                        | 0.54541                  | 1.21425                  | 0.39477                |
| 35            | 0.27584                                | 0.03621                | 0.66868   | 0.60849                        | 0.57952                         | 0.93422                         | 0.93583                      | 0.62797                      | 0.50163                      | 0.78214                          | 0.78874                         | 0.34038                         | 0.49536                         | 0.81256                           | 0.81095                        | 0.52143                  | 1.18432                  | 0.38721                |
| 36            | 0.27294                                | 0.03557                | 0.65693   | 0.59739                        | 0.55732                         | 0.89399                         | 0.89544                      | 0.60399                      | 0.49246                      | 0.75237                          | 0.75881                         | 0.32718                         | 0.47653                         | 0.77731                           | 0.77586                        | 0.49980                  | 1.15615                  | 0.38013                |
| 37            | 0.27021                                | 0.03508                | 0.64567   | 0.58693                        | 0.53672                         | 0.85601                         | 0.85730                      | 0.58162                      | 0.48377                      | 0.72437                          | 0.73064                         | 0.31511                         | 0.45866                         | 0.74448                           | 0.74303                        | 0.47781                  | 1.12960                  | 0.37353                |
| 38            | 0.26747                                | 0.03444                | 0.63505   | 0.57679                        | 0.51724                         | 0.82028                         | 0.82157                      | 0.56053                      | 0.47566                      | 0.69829                          | 0.70425                         | 0.30368                         | 0.44225                         | 0.71342                           | 0.71213                        | 0.45786                  | 1.10465                  | 0.36709                |
| 39            | 0.26474                                | 0.03396                | 0.62491   | 0.56713                        | 0.49890                         | 0.78681                         | 0.78793                      | 0.54090                      | 0.46768                      | 0.67367                          | 0.67930                         | 0.29306                         | 0.42664                         | 0.68429                           | 0.68301                        | 0.43903                  | 1.08100                  | 0.36098                |
| 40            | 0.26216                                | 0.03347                | 0.61509   | 0.55780                        | 0.48184                         | 0.75510                         | 0.75639                      | 0.52223                      | 0.45995                      | 0.65066                          | 0.65597                         | 0.28292                         | 0.41199                         | 0.65677                           | 0.65565                        | 0.42149                  | 1.05879                  | 0.35502                |
| 41            | 0.25975                                | 0.03299                | 0.60560   | 0.54895                        | 0.46558                         | 0.72517                         | 0.72630                      | 0.50485                      | 0.45271                      | 0.62877                          | 0.63408                         | 0.27343                         | 0.39815                         | 0.63070                           | 0.62958                        | 0.40459                  | 1.03754                  | 0.34939                |
| 42            | 0.25750                                | 0.03251                | 0.59658   | 0.54042                        | 0.45046                         | 0.69685                         | 0.69797                      | 0.48827                      | 0.44563                      | 0.60833                          | 0.61332                         | 0.26442                         | 0.38512                         | 0.60624                           | 0.60495                        | 0.38882                  | 1.01743                  | 0.34392                |
| 43            | 0.25524                                | 0.03187                | 0.58773   | 0.53221                        | 0.43597                         | 0.67013                         | 0.67110                      | 0.47266                      | 0.43887                      | 0.58886                          | 0.59369                         | 0.25589                         | 0.37272                         | 0.58290                           | 0.58178                        | 0.37385                  | 0.99828                  | 0.33877                |
| 44            | 0.25283                                | 0.03138                | 0.57936   | 0.52416                        | 0.42229                         | 0.64470                         | 0.64567                      | 0.45802                      | 0.43243                      | 0.57051                          | 0.57502                         | 0.24800                         | 0.36114                         | 0.56070                           | 0.55973                        | 0.35969                  | 0.97993                  | 0.33378                |
| 45            | 0.25090                                | 0.03090                | 0.57116   | 0.51676                        | 0.40942                         | 0.62056                         | 0.62153                      | 0.44386                      | 0.42615                      | 0.55313                          | 0.55748                         | 0.24044                         | 0.35003                         | 0.53977                           | 0.53881                        | 0.34633                  | 0.96239                  | 0.32879                |
| 46            | 0.24880                                | 0.03058                | 0.56359   | 0.50920                        | 0.39719                         | 0.59771                         | 0.59868                      | 0.43066                      | 0.42020                      | 0.53656                          | 0.54106                         | 0.23319                         | 0.33957                         | 0.51998                           | 0.51901                        | 0.33346                  | 0.94597                  | 0.32428                |
| 47            | 0.24671                                | 0.03009                | 0.55587   | 0.50212                        | 0.38544                         | 0.57615                         | 0.57679                      | 0.41795                      | 0.41441                      | 0.52094                          | 0.52513                         | 0.22643                         | 0.32959                         | 0.50115                           | 0.50035                        | 0.32139                  | 0.92988                  | 0.31962                |
| 48            | 0.24494                                | 0.02977                | 0.54863   | 0.49536                        | 0.37449                         | 0.55538                         | 0.55619                      | 0.40620                      | 0.40877                      | 0.50598                          | 0.51016                         | 0.22000                         | 0.32026                         | 0.48313                           | 0.48216                        | 0.30980                  | 0.91459                  | 0.31543                |
| 49            | 0.24301                                | 0.02929                | 0.54171   | 0.48876                        | 0.36387                         | 0.53575                         | 0.53656                      | 0.39477                      | 0.40346                      | 0.49182                          | 0.49584                         | 0.21372                         | 0.31125                         | 0.46607                           | 0.46526                        | 0.29986                  | 0.89995                  | 0.31109                |
| 50            | 0.24140                                | 0.02881                | 0.53479   | 0.48232                        | 0.35389                         | 0.51692                         | 0.51773                      | 0.38399                      | 0.39815                      | 0.47830                          | 0.48216                         | 0.20793                         | 0.30272                         | 0.44965                           | 0.44885                        | 0.28856                  | 0.88594                  | 0.30706                |
| 51            | 0.23979                                | 0.02832                | 0.52819   | 0.47620                        | 0.34424                         | 0.49906                         | 0.49992                      | 0.37369                      | 0.39300                      | 0.46558                          | 0.46912                         | 0.20213                         | 0.29451                         | 0.43420                           | 0.43356                        | 0.27842                  | 0.87243                  | 0.30304                |
| 52            | 0.23818                                | 0.02800                | 0.52191   | 0.47025                        | 0.33523                         | 0.48200                         | 0.48280                      | 0.36371                      | 0.38817                      | 0.45319                          | 0.45673                         | 0.19682                         | 0.28679                         | 0.41940                           | 0.41875                        | 0.26892                  | 0.85939                  | 0.2                    |

**Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes**

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - NO<sub>2</sub> (Year 2048) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3.5t | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|--------------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 1             | 0.02285               | 0.00338                | 0.07274   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17655                          | 0.18218                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 2             | 0.02285               | 0.00338                | 0.07274   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17655                          | 0.18218                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 3             | 0.02285               | 0.00338                | 0.07274   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17655                          | 0.18218                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 4             | 0.02285               | 0.00338                | 0.07274   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17655                          | 0.18218                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 5             | 0.02237               | 0.00338                | 0.06341   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17655                          | 0.18218                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 6             | 0.02205               | 0.00338                | 0.05665   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17638                          | 0.18218                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 7             | 0.02157               | 0.00322                | 0.05150   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17638                          | 0.18202                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 8             | 0.02124               | 0.00322                | 0.04731   | 0.61606                        | 1.06410                         | 2.32808                         | 2.33242                      | 0.58387                      | 0.49874                      | 0.17638                          | 0.18202                         | 0.49326                        | 0.90896                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.39123                |
| 9             | 0.02092               | 0.00322                | 0.04394   | 0.57277                        | 1.00648                         | 2.32808                         | 2.33242                      | 0.55233                      | 0.46365                      | 0.16689                          | 0.17220                         | 0.46655                        | 0.85987                        | 2.02343                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.36371                |
| 10            | 0.02060               | 0.00306                | 0.04120   | 0.53479                        | 0.95241                         | 2.32808                         | 2.33242                      | 0.52255                      | 0.43291                      | 0.15788                          | 0.16903                         | 0.44160                        | 0.81368                        | 2.02327                           | 2.01828                        | 1.07762                  | 2.21623                  | 0.33957                |
| 11            | 0.02012               | 0.00306                | 0.03879   | 0.50260                        | 0.90365                         | 2.22621                         | 2.23039                      | 0.49584                      | 0.40684                      | 0.14983                          | 0.15466                         | 0.41891                        | 0.77184                        | 1.93491                           | 1.92993                        | 1.03062                  | 2.21623                  | 0.31913                |
| 12            | 0.01979               | 0.00290                | 0.03649   | 0.47492                        | 0.85891                         | 1.99977                         | 2.00347                      | 0.47122                      | 0.38447                      | 0.14243                          | 0.14693                         | 0.39815                        | 0.73370                        | 1.73793                           | 1.73359                        | 0.92569                  | 1.87110                  | 0.31913                |
| 13            | 0.01947               | 0.00290                | 0.03492   | 0.45094                        | 0.81787                         | 1.80971                         | 1.81309                      | 0.44869                      | 0.36500                      | 0.13567                          | 0.14001                         | 0.37916                        | 0.69862                        | 1.57281                           | 1.56895                        | 0.83782                  | 1.56943                  | 0.28630                |
| 14            | 0.01915               | 0.00290                | 0.03331   | 0.42969                        | 0.77999                         | 1.64829                         | 1.65135                      | 0.42792                      | 0.34778                      | 0.12939                          | 0.13341                         | 0.36146                        | 0.66627                        | 1.43248                           | 1.42894                        | 0.76299                  | 1.36730                  | 0.27278                |
| 15            | 0.01899               | 0.00274                | 0.03187   | 0.41070                        | 0.74448                         | 1.50940                         | 1.51230                      | 0.40845                      | 0.33249                      | 0.12344                          | 0.12746                         | 0.34504                        | 0.63601                        | 1.31194                           | 1.30856                        | 0.69878                  | 1.22085                  | 0.26087                |
| 16            | 0.01867               | 0.00274                | 0.03058   | 0.39381                        | 0.71133                         | 1.38886                         | 1.39160                      | 0.39027                      | 0.31881                      | 0.11796                          | 0.12167                         | 0.32975                        | 0.60769                        | 1.20171                           | 1.20411                        | 0.64293                  | 1.10868                  | 0.25009                |
| 17            | 0.01835               | 0.00274                | 0.02945   | 0.37868                        | 0.68011                         | 1.28345                         | 1.28587                      | 0.37321                      | 0.30658                      | 0.11282                          | 0.11636                         | 0.31527                        | 0.58113                        | 1.11544                           | 1.11270                        | 0.59417                  | 1.01968                  | 0.24044                |
| 18            | 0.01802               | 0.00257                | 0.02849   | 0.36484                        | 0.65082                         | 1.19043                         | 1.19252                      | 0.35711                      | 0.29531                      | 0.10799                          | 0.11137                         | 0.30175                        | 0.55603                        | 1.03465                           | 1.03207                        | 0.55104                  | 0.94694                  | 0.23158                |
| 19            | 0.01786               | 0.00257                | 0.02752   | 0.35212                        | 0.62314                         | 1.10771                         | 1.10980                      | 0.34199                      | 0.28518                      | 0.10332                          | 0.10670                         | 0.28888                        | 0.53237                        | 0.96271                           | 0.96046                        | 0.51274                  | 0.88627                  | 0.22354                |
| 20            | 0.01754               | 0.00257                | 0.02672   | 0.34070                        | 0.59674                         | 1.03384                         | 1.03577                      | 0.32750                      | 0.27568                      | 0.09897                          | 0.10219                         | 0.27665                        | 0.50984                        | 0.89866                           | 0.89640                        | 0.47862                  | 0.83461                  | 0.21630                |
| 21            | 0.01722               | 0.00241                | 0.02591   | 0.32992                        | 0.57180                         | 0.96754                         | 0.96931                      | 0.31366                      | 0.26715                      | 0.09479                          | 0.09785                         | 0.26506                        | 0.48844                        | 0.84088                           | 0.83895                        | 0.44788                  | 0.79897                  | 0.20954                |
| 22            | 0.01706               | 0.00241                | 0.02511   | 0.32010                        | 0.54782                         | 0.90767                         | 0.90944                      | 0.30063                      | 0.25910                      | 0.09093                          | 0.09382                         | 0.25395                        | 0.46800                        | 0.78890                           | 0.78697                        | 0.42020                  | 0.75092                  | 0.20326                |
| 23            | 0.01674               | 0.00241                | 0.02446   | 0.31093                        | 0.52513                         | 0.85344                         | 0.85504                      | 0.28807                      | 0.24807                      | 0.08980                          | 0.09280                         | 0.24349                        | 0.44852                        | 0.74175                           | 0.73998                        | 0.39509                  | 0.71648                  | 0.19747                |
| 24            | 0.01658               | 0.00241                | 0.02382   | 0.30256                        | 0.50324                         | 0.80403                         | 0.80548                      | 0.27616                      | 0.24494                      | 0.08352                          | 0.08610                         | 0.23335                        | 0.43002                        | 0.69878                           | 0.69717                        | 0.37224                  | 0.68590                  | 0.19199                |
| 25            | 0.01642               | 0.00225                | 0.02317   | 0.29451                        | 0.48232                         | 0.75897                         | 0.76025                      | 0.26458                      | 0.23850                      | 0.07998                          | 0.08256                         | 0.22354                        | 0.41199                        | 0.65967                           | 0.65806                        | 0.35132                  | 0.65838                  | 0.18701                |
| 26            | 0.01609               | 0.00225                | 0.02253   | 0.28711                        | 0.46220                         | 0.71761                         | 0.71889                      | 0.25363                      | 0.23239                      | 0.07660                          | 0.07918                         | 0.21420                        | 0.39493                        | 0.62362                           | 0.62217                        | 0.33217                  | 0.63360                  | 0.18234                |
| 27            | 0.01593               | 0.00225                | 0.02205   | 0.28019                        | 0.44273                         | 0.68075                         | 0.68203                      | 0.24276                      | 0.22676                      | 0.07339                          | 0.07580                         | 0.20519                        | 0.37836                        | 0.59063                           | 0.58918                        | 0.31463                  | 0.61107                  | 0.17783                |
| 28            | 0.01577               | 0.00225                | 0.02157   | 0.27359                        | 0.42406                         | 0.64454                         | 0.64567                      | 0.23271                      | 0.22145                      | 0.07033                          | 0.07258                         | 0.19666                        | 0.36242                        | 0.56021                           | 0.55876                        | 0.29837                  | 0.59047                  | 0.17365                |
| 29            | 0.01561               | 0.00209                | 0.02108   | 0.26747                        | 0.40604                         | 0.61203                         | 0.61316                      | 0.22289                      | 0.21466                      | 0.06743                          | 0.06952                         | 0.18829                        | 0.34697                        | 0.53205                           | 0.53076                        | 0.28341                  | 0.57148                  | 0.16979                |
| 30            | 0.01529               | 0.00209                | 0.02060   | 0.26168                        | 0.38866                         | 0.58194                         | 0.58307                      | 0.21324                      | 0.21179                      | 0.06453                          | 0.06663                         | 0.18025                        | 0.33217                        | 0.50582                           | 0.50469                        | 0.26940                  | 0.55410                  | 0.16608                |
| 31            | 0.01513               | 0.00209                | 0.02028   | 0.25605                        | 0.37374                         | 0.55410                         | 0.55506                      | 0.18524                      | 0.20728                      | 0.05601                          | 0.05778                         | 0.15643                        | 0.28856                        | 0.48168                           | 0.48055                        | 0.25653                  | 0.53784                  | 0.16254                |
| 32            | 0.01497               | 0.00209                | 0.01979   | 0.25090                        | 0.33000                         | 0.52819                         | 0.52915                      | 0.17735                      | 0.20310                      | 0.05359                          | 0.05536                         | 0.14983                        | 0.27616                        | 0.45915                           | 0.45802                        | 0.24446                  | 0.52288                  | 0.15933                |
| 33            | 0.01481               | 0.00209                | 0.01947   | 0.24591                        | 0.30964                         | 0.50389                         | 0.50485                      | 0.16995                      | 0.19908                      | 0.05134                          | 0.05311                         | 0.14355                        | 0.26458                        | 0.43806                           | 0.43694                        | 0.23319                  | 0.50904                  | 0.15611                |
| 34            | 0.01465               | 0.00193                | 0.01915   | 0.24108                        | 0.29708                         | 0.48119                         | 0.48216                      | 0.16303                      | 0.19521                      | 0.04941                          | 0.05086                         | 0.13776                        | 0.25395                        | 0.41827                           | 0.41730                        | 0.22273                  | 0.49584                  | 0.15031                |
| 35            | 0.01448               | 0.00193                | 0.01883   | 0.23657                        | 0.28534                         | 0.46011                         | 0.46092                      | 0.15659                      | 0.19151                      | 0.04748                          | 0.04892                         | 0.13229                        | 0.24398                        | 0.39992                           | 0.39896                        | 0.21292                  | 0.48361                  | 0.15031                |
| 36            | 0.01432               | 0.00193                | 0.01851   | 0.23239                        | 0.27455                         | 0.44016                         | 0.44096                      | 0.15063                      | 0.18432                      | 0.04554                          | 0.04699                         | 0.12730                        | 0.23464                        | 0.38270                           | 0.38174                        | 0.20374                  | 0.47218                  | 0.14758                |
| 37            | 0.01416               | 0.00193                | 0.01819   | 0.22820                        | 0.26425                         | 0.42149                         | 0.42229                      | 0.14500                      | 0.18475                      | 0.04394                          | 0.04522                         | 0.12247                        | 0.22595                        | 0.36645                           | 0.36548                        | 0.19505                  | 0.46140                  | 0.14484                |
| 38            | 0.01400               | 0.00193                | 0.01786   | 0.22434                        | 0.25476                         | 0.40395                         | 0.40475                      | 0.13985                      | 0.18153                      | 0.04233                          | 0.04361                         | 0.11813                        | 0.21774                        | 0.35116                           | 0.35033                        | 0.18701                  | 0.45126                  | 0.14243                |
| 39            | 0.01400               | 0.00193                | 0.01754   | 0.22048                        | 0.24575                         | 0.38737                         | 0.38817                      | 0.13486                      | 0.17848                      | 0.04088                          | 0.04216                         | 0.11394                        | 0.21002                        | 0.33667                           | 0.33587                        | 0.17928                  | 0.44160                  | 0.14001                |
| 40            | 0.01384               | 0.00177                | 0.01722   | 0.21694                        | 0.23722                         | 0.37176                         | 0.37240                      | 0.13020                      | 0.17588                      | 0.03943                          | 0.04072                         | 0.11008                        | 0.20278                        | 0.32316                           | 0.32235                        | 0.17204                  | 0.43243                  | 0.13776                |
| 41            | 0.01368               | 0.00177                | 0.01706   | 0.21340                        | 0.22933                         | 0.35711                         | 0.35776                      | 0.12585                      | 0.17284                      | 0.03814                          | 0.03927                         | 0.10638                        | 0.19602                        | 0.31044                           | 0.30964                        | 0.16528                  | 0.42374                  | 0.13551                |
| 42            | 0.01352               | 0.00177                | 0.01674   | 0.21018                        | 0.22177                         | 0.34311                         | 0.34376                      | 0.12167                      | 0.17011                      | 0.03685                          | 0.03798                         | 0.10284                        | 0.18958                        | 0.29821                           | 0.29757                        | 0.15884                  | 0.41553                  | 0.13341                |
| 43            | 0.01336               | 0.00177                | 0.01658   | 0.20696                        | 0.21469                         | 0.32992                         | 0.33056                      | 0.11780                      | 0.16753                      | 0.03573                          | 0.03685                         | 0.09962                        | 0.18363                        | 0.28679                           | 0.28614                        | 0.15273                  | 0.40765                  | 0.13132                |
| 44            | 0.01336               | 0.00177                | 0.01625   | 0.20390                        | 0.20793                         | 0.31736                         | 0.31801                      | 0.11410                      | 0.16512                      | 0.03460                          | 0.03573                         | 0.09640                        | 0.17783                        | 0.27600                           | 0.27536                        | 0.14693                  | 0.40024                  | 0.12939                |
| 45            | 0.01320               | 0.00177                | 0.01609   | 0.20085                        | 0.20165                         | 0.30561                         | 0.30610                      | 0.11072                      | 0.16270                      | 0.03347                          | 0.03460                         | 0.09350                        | 0.17236                        | 0.26570                           | 0.26506                        | 0.14146                  | 0.39316                  | 0.12762                |
| 46            | 0.01304               | 0.00161                | 0.01577   | 0.19811                        | 0.19554                         | 0.29435                         | 0.29483                      | 0.10734                      | 0.16029                      | 0.03251                          | 0.03347                         | 0.09077                        | 0.16721                        | 0.25589                           | 0.25524                        | 0.13631                  | 0.38264                  | 0.12569                |
| 47            | 0.01304               | 0.00161                | 0.01561   | 0.19537                        | 0.18990                         | 0.28357                         | 0.28421                      | 0.10429                      | 0.15804                      | 0.03154                          | 0.03251                         | 0.08803                        | 0.16238                        | 0.24655                           | 0.24591                        | 0.13132                  | 0.37981                  | 0.12408                |
| 48            | 0.01287               | 0.00161                | 0.01545   | 0.19264                        | 0.18443                         | 0.27343                         | 0.27391                      | 0.10123                      | 0.15595                      | 0.03074                          | 0.03154                         | 0.08546                        | 0.15728                        | 0.23770                           | 0.23722                        | 0.12666                  | 0.37353                  | 0.12231                |
| 49            | 0.01287               | 0.00161                | 0.01513   | 0.19006                        | 0.17928                         | 0.26377                         | 0.26425                      | 0.09833                      | 0.15385                      | 0.02977                          | 0.03074                         | 0.08304                        | 0.15321                        | 0.22933                           | 0.22869                        | 0.12215                  | 0.36757                  | 0.12070                |
| 50            | 0.01271               | 0.00161                | 0.01497   | 0.18765                        | 0.17429                         | 0.25460                         | 0.25492                      | 0.09560                      | 0.15192                      | 0.02897                          | 0.02993                         | 0.08079                        | 0.14903                        | 0.22128                           | 0.22080                        | 0.11780                  | 0.36178                  | 0.11909                |
| 51            | 0.01255               | 0.00161                | 0.01481   | 0.18524                        | 0.16962                         | 0.24575                         | 0.24623                      | 0.09302                      | 0.14999                      | 0.02816                          | 0.02913                         | 0.07870                        | 0.14500                        | 0.21356                           | 0.21308                        | 0.11378                  | 0.35631                  | 0.11764                |
| 52            | 0.01255               | 0.00161                | 0.01465   | 0.18282                        | 0.16512                         | 0.23738                         | 0.23770                      | 0.09061                      | 0.14806                      | 0.02752                          | 0.02832                         | 0.07660                        | 0.14114                        |                                   |                                |                          |                          |                        |



Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - RSP (Year 2048) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles <=2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles >3.5t | 06 - Heavy Goods Vehicles <=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 1             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 2             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 3             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 4             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 5             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 6             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 7             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 8             | 0.01561               | 0.01545                | 0.00000   | 0.11636                        | 0.07387                         | 0.17783                         | 0.17638                      | 0.01465                      | 0.07612                      | 0.02398                          | 0.02414                         | 0.03524                         | 0.06180                         | 0.11265                           | 0.10477                        | 0.03895                  | 0.07323                  | 0.10573                |
| 9             | 0.01561               | 0.01545                | 0.00000   | 0.11024                        | 0.07178                         | 0.16737                         | 0.16592                      | 0.01416                      | 0.07226                      | 0.02334                          | 0.02350                         | 0.03380                         | 0.06003                         | 0.10606                           | 0.09949                        | 0.03669                  | 0.06888                  | 0.10042                |
| 10            | 0.01561               | 0.01545                | 0.00000   | 0.10477                        | 0.06985                         | 0.15755                         | 0.15643                      | 0.01368                      | 0.06856                      | 0.02253                          | 0.02285                         | 0.03251                         | 0.05842                         | 0.09994                           | 0.09286                        | 0.03460                  | 0.06502                  | 0.09527                |
| 11            | 0.01529               | 0.01513                | 0.00000   | 0.09978                        | 0.06824                         | 0.14919                         | 0.14790                      | 0.01336                      | 0.06534                      | 0.02189                          | 0.02205                         | 0.03122                         | 0.05697                         | 0.09447                           | 0.08787                        | 0.03283                  | 0.06164                  | 0.09077                |
| 12            | 0.01448               | 0.01432                | 0.00000   | 0.09527                        | 0.06663                         | 0.14162                         | 0.14033                      | 0.01287                      | 0.06244                      | 0.02124                          | 0.02140                         | 0.03026                         | 0.05568                         | 0.08964                           | 0.08336                        | 0.03122                  | 0.05874                  | 0.08674                |
| 13            | 0.01384               | 0.01368                | 0.00000   | 0.09141                        | 0.06518                         | 0.13486                         | 0.13374                      | 0.01255                      | 0.05987                      | 0.02060                          | 0.02076                         | 0.02913                         | 0.05440                         | 0.08546                           | 0.07934                        | 0.02993                  | 0.05617                  | 0.08304                |
| 14            | 0.01304               | 0.01287                | 0.00000   | 0.08771                        | 0.06373                         | 0.12875                         | 0.12778                      | 0.01223                      | 0.05745                      | 0.01996                          | 0.02028                         | 0.02832                         | 0.05327                         | 0.08159                           | 0.07580                        | 0.02881                  | 0.05391                  | 0.07982                |
| 15            | 0.01239               | 0.01223                | 0.00000   | 0.08449                        | 0.06244                         | 0.12278                         | 0.12231                      | 0.01175                      | 0.05520                      | 0.01947                          | 0.01963                         | 0.02736                         | 0.05230                         | 0.07805                           | 0.07258                        | 0.02768                  | 0.05198                  | 0.07677                |
| 16            | 0.01175               | 0.01159                | 0.00000   | 0.08143                        | 0.06132                         | 0.11829                         | 0.11732                      | 0.01143                      | 0.05327                      | 0.01883                          | 0.01899                         | 0.02672                         | 0.05118                         | 0.07500                           | 0.06968                        | 0.02672                  | 0.05005                  | 0.07403                |
| 17            | 0.01127               | 0.01110                | 0.00000   | 0.07870                        | 0.06019                         | 0.11378                         | 0.11298                      | 0.01110                      | 0.05150                      | 0.01835                          | 0.01851                         | 0.02591                         | 0.05037                         | 0.07210                           | 0.06695                        | 0.02575                  | 0.04844                  | 0.07162                |
| 18            | 0.01062               | 0.01062                | 0.00000   | 0.07612                        | 0.05922                         | 0.10976                         | 0.10879                      | 0.01078                      | 0.04989                      | 0.01786                          | 0.01802                         | 0.02527                         | 0.04941                         | 0.06952                           | 0.06453                        | 0.02494                  | 0.04699                  | 0.06920                |
| 19            | 0.01014               | 0.00998                | 0.00000   | 0.07387                        | 0.05810                         | 0.10589                         | 0.10509                      | 0.01046                      | 0.04828                      | 0.01722                          | 0.01754                         | 0.02462                         | 0.04860                         | 0.06711                           | 0.06244                        | 0.02430                  | 0.04554                  | 0.06711                |
| 20            | 0.00966               | 0.00950                | 0.00000   | 0.07162                        | 0.05729                         | 0.10252                         | 0.10171                      | 0.01030                      | 0.04683                      | 0.01690                          | 0.01706                         | 0.02414                         | 0.04780                         | 0.06486                           | 0.06035                        | 0.02366                  | 0.04426                  | 0.06518                |
| 21            | 0.00917               | 0.00917                | 0.00000   | 0.06968                        | 0.05633                         | 0.09930                         | 0.09849                      | 0.00998                      | 0.04554                      | 0.01642                          | 0.01658                         | 0.02350                         | 0.04699                         | 0.06293                           | 0.05842                        | 0.02301                  | 0.04313                  | 0.06341                |
| 22            | 0.00885               | 0.00869                | 0.00000   | 0.06775                        | 0.05552                         | 0.09624                         | 0.09543                      | 0.00966                      | 0.0442                       | 0.01593                          | 0.01609                         | 0.02301                         | 0.04635                         | 0.06099                           | 0.05665                        | 0.02237                  | 0.04200                  | 0.06164                |
| 23            | 0.00837               | 0.00837                | 0.00000   | 0.06614                        | 0.05472                         | 0.09350                         | 0.09270                      | 0.00950                      | 0.04329                      | 0.01545                          | 0.01561                         | 0.02253                         | 0.04571                         | 0.05922                           | 0.05504                        | 0.02189                  | 0.04104                  | 0.06033                |
| 24            | 0.00805               | 0.00805                | 0.00000   | 0.06453                        | 0.05391                         | 0.09093                         | 0.09028                      | 0.00917                      | 0.04216                      | 0.01513                          | 0.01529                         | 0.02205                         | 0.04506                         | 0.05761                           | 0.05259                        | 0.02140                  | 0.04007                  | 0.05858                |
| 25            | 0.00772               | 0.00756                | 0.00000   | 0.06293                        | 0.05311                         | 0.08851                         | 0.08785                      | 0.00901                      | 0.04120                      | 0.01465                          | 0.01497                         | 0.02173                         | 0.04442                         | 0.05617                           | 0.05214                        | 0.02092                  | 0.03927                  | 0.05729                |
| 26            | 0.00740               | 0.00724                | 0.00000   | 0.06148                        | 0.05246                         | 0.08626                         | 0.08562                      | 0.00869                      | 0.04023                      | 0.01432                          | 0.01448                         | 0.02124                         | 0.04377                         | 0.05472                           | 0.05086                        | 0.02044                  | 0.03830                  | 0.05601                |
| 27            | 0.00708               | 0.00708                | 0.00000   | 0.06019                        | 0.05166                         | 0.08417                         | 0.08352                      | 0.00853                      | 0.03943                      | 0.01400                          | 0.01416                         | 0.02092                         | 0.04329                         | 0.05343                           | 0.04957                        | 0.01996                  | 0.03750                  | 0.05472                |
| 28            | 0.00676               | 0.00676                | 0.00000   | 0.05906                        | 0.05102                         | 0.08224                         | 0.08159                      | 0.00821                      | 0.03862                      | 0.01368                          | 0.01384                         | 0.02060                         | 0.04265                         | 0.05214                           | 0.04844                        | 0.01963                  | 0.03685                  | 0.05359                |
| 29            | 0.00644               | 0.00644                | 0.00000   | 0.05778                        | 0.05037                         | 0.08047                         | 0.07982                      | 0.00805                      | 0.03782                      | 0.01336                          | 0.01352                         | 0.02028                         | 0.04216                         | 0.05102                           | 0.04731                        | 0.01931                  | 0.03605                  | 0.05263                |
| 30            | 0.00628               | 0.00628                | 0.00000   | 0.05665                        | 0.04973                         | 0.07870                         | 0.07805                      | 0.00789                      | 0.03718                      | 0.01304                          | 0.01320                         | 0.01996                         | 0.04168                         | 0.04989                           | 0.04635                        | 0.01883                  | 0.03541                  | 0.05166                |
| 31            | 0.00595               | 0.00595                | 0.00000   | 0.05568                        | 0.04925                         | 0.07709                         | 0.07644                      | 0.00772                      | 0.03637                      | 0.01271                          | 0.01287                         | 0.01979                         | 0.04104                         | 0.04876                           | 0.04538                        | 0.01851                  | 0.03476                  | 0.05069                |
| 32            | 0.00579               | 0.00579                | 0.00000   | 0.05472                        | 0.04860                         | 0.07548                         | 0.07483                      | 0.00756                      | 0.03573                      | 0.01239                          | 0.01255                         | 0.01947                         | 0.04056                         | 0.04780                           | 0.04442                        | 0.01819                  | 0.03428                  | 0.04973                |
| 33            | 0.00563               | 0.00563                | 0.00000   | 0.05375                        | 0.04812                         | 0.07403                         | 0.07339                      | 0.00740                      | 0.03524                      | 0.01207                          | 0.01223                         | 0.01915                         | 0.04007                         | 0.04699                           | 0.04361                        | 0.01786                  | 0.03364                  | 0.04892                |
| 34            | 0.00531               | 0.00531                | 0.00000   | 0.05295                        | 0.04748                         | 0.07274                         | 0.07210                      | 0.00724                      | 0.03474                      | 0.01175                          | 0.01191                         | 0.01899                         | 0.03975                         | 0.04603                           | 0.04281                        | 0.01754                  | 0.03315                  | 0.04812                |
| 35            | 0.00515               | 0.00515                | 0.00000   | 0.05214                        | 0.04699                         | 0.07129                         | 0.07081                      | 0.00708                      | 0.03412                      | 0.01159                          | 0.01175                         | 0.01867                         | 0.03927                         | 0.04522                           | 0.04200                        | 0.01738                  | 0.03251                  | 0.04748                |
| 36            | 0.00499               | 0.00499                | 0.00000   | 0.05134                        | 0.04651                         | 0.07017                         | 0.06962                      | 0.00692                      | 0.03364                      | 0.01127                          | 0.01143                         | 0.01851                         | 0.03879                         | 0.04442                           | 0.04136                        | 0.01706                  | 0.03203                  | 0.04667                |
| 37            | 0.00483               | 0.00483                | 0.00000   | 0.05053                        | 0.04603                         | 0.06904                         | 0.06840                      | 0.00676                      | 0.03315                      | 0.01110                          | 0.01127                         | 0.01835                         | 0.03846                         | 0.04377                           | 0.04056                        | 0.01674                  | 0.03154                  | 0.04603                |
| 38            | 0.00467               | 0.00467                | 0.00000   | 0.04989                        | 0.04554                         | 0.06791                         | 0.06727                      | 0.00660                      | 0.03267                      | 0.01078                          | 0.01094                         | 0.01819                         | 0.03798                         | 0.04297                           | 0.03991                        | 0.01658                  | 0.03106                  | 0.04538                |
| 39            | 0.00451               | 0.00451                | 0.00000   | 0.04925                        | 0.04506                         | 0.06679                         | 0.06620                      | 0.00644                      | 0.03219                      | 0.01062                          | 0.01078                         | 0.01802                         | 0.03766                         | 0.04233                           | 0.03927                        | 0.01642                  | 0.03074                  | 0.04474                |
| 40            | 0.00435               | 0.00435                | 0.00000   | 0.04860                        | 0.04458                         | 0.06582                         | 0.06534                      | 0.00628                      | 0.03187                      | 0.01030                          | 0.01046                         | 0.01786                         | 0.03718                         | 0.04168                           | 0.03879                        | 0.01609                  | 0.03026                  | 0.04426                |
| 41            | 0.00418               | 0.00418                | 0.00000   | 0.04812                        | 0.04410                         | 0.06486                         | 0.06437                      | 0.00612                      | 0.03138                      | 0.01014                          | 0.01030                         | 0.01770                         | 0.03685                         | 0.04104                           | 0.03814                        | 0.01593                  | 0.02977                  | 0.04377                |
| 42            | 0.00418               | 0.00418                | 0.00000   | 0.04748                        | 0.04361                         | 0.06389                         | 0.06341                      | 0.00595                      | 0.03106                      | 0.00998                          | 0.01014                         | 0.01754                         | 0.03653                         | 0.04056                           | 0.03766                        | 0.01561                  | 0.02945                  | 0.04313                |
| 43            | 0.00402               | 0.00402                | 0.00000   | 0.04699                        | 0.04313                         | 0.06309                         | 0.06260                      | 0.00595                      | 0.03074                      | 0.00982                          | 0.00982                         | 0.01738                         | 0.03605                         | 0.03991                           | 0.03718                        | 0.01545                  | 0.02913                  | 0.04265                |
| 44            | 0.00386               | 0.00386                | 0.00000   | 0.04651                        | 0.04281                         | 0.06228                         | 0.06180                      | 0.00579                      | 0.03042                      | 0.00966                          | 0.00966                         | 0.01722                         | 0.03573                         | 0.03943                           | 0.03669                        | 0.01529                  | 0.02865                  | 0.04233                |
| 45            | 0.00386               | 0.00386                | 0.00000   | 0.04603                        | 0.04233                         | 0.06148                         | 0.06099                      | 0.00563                      | 0.03009                      | 0.00933                          | 0.00950                         | 0.01722                         | 0.03541                         | 0.03895                           | 0.03621                        | 0.01513                  | 0.02832                  | 0.04184                |
| 46            | 0.00370               | 0.00370                | 0.00000   | 0.04554                        | 0.04200                         | 0.06067                         | 0.06019                      | 0.00553                      | 0.02977                      | 0.00917                          | 0.00933                         | 0.01706                         | 0.03508                         | 0.03846                           | 0.03573                        | 0.01497                  | 0.02800                  | 0.04136                |
| 47            | 0.00354               | 0.00354                | 0.00000   | 0.04506                        | 0.04152                         | 0.06003                         | 0.05955                      | 0.00547                      | 0.02945                      | 0.00901                          | 0.00917                         | 0.01690                         | 0.03476                         | 0.03798                           | 0.03541                        | 0.01481                  | 0.02768                  | 0.04104                |
| 48            | 0.00354               | 0.00354                | 0.00000   | 0.04474                        | 0.04120                         | 0.05938                         | 0.05890                      | 0.00531                      | 0.02929                      | 0.00885                          | 0.00901                         | 0.01690                         | 0.03446                         | 0.03766                           | 0.03492                        | 0.01465                  | 0.02736                  | 0.04072                |
| 49            | 0.00338               | 0.00338                | 0.00000   | 0.04426                        | 0.04088                         | 0.05874                         | 0.05826                      | 0.00531                      | 0.02897                      | 0.00869                          | 0.00885                         | 0.01674                         | 0.03412                         | 0.03718                           | 0.03460                        | 0.01448                  | 0.02704                  | 0.04023                |
| 50            | 0.00338               | 0.00338                | 0.00000   | 0.04394                        | 0.04039                         | 0.05810                         | 0.05761                      | 0.00515                      | 0.02881                      | 0.00853                          | 0.00869                         | 0.01674                         | 0.03380                         | 0.03685                           | 0.03428                        | 0.01432                  | 0.02672                  | 0.03991                |
| 51            | 0.00322               | 0.00322                | 0.00000   | 0.04361                        | 0.04007                         | 0.05745                         | 0.05697                      | 0.00515                      | 0.02849                      | 0.00837                          | 0.00853                         | 0.01658                         | 0.03347                         | 0.03637                           | 0.03380                        | 0.01416                  | 0.02639                  | 0.03959                |
| 52            | 0.00322               | 0.00322                | 0.00000   | 0.04329                        | 0.03975                         | 0.05697                         | 0.05649                      | 0.00499                      | 0.02832                      | 0.00837                          | 0.00837                         | 0.01658                         | 0.03315                         | 0.03605</                         |                                |                          |                          |                        |

Appendix 3.3 Summary of Vehicular Emission Factors of 18 Vehicle Classes

Widening of Tsuen Wan Road and the Associated Junction Improvement Works

Running Exhaust Emission Factor (gram/mile/vehicle) - FSP (Year 2048) (for Sensitivity Test)

Temperature :6°C Relative Humidity:18%

| Speed (km/hr) | 16 - Motorcycles (MC) | 01 - Private Cars (PC) | 02 - Taxi | 11 - Non-franchised Bus <=6.4t | 12 - Non-franchised Bus 6.4-15t | 13 - Non-franchised Bus 15t-24t | 18 - Non-franchised Bus >24t | 9 - Private Light Bus <=3.5t | 10 - Private Light Bus >3.5t | 03 - Light Goods Vehicles<= 2.5t | 04 - Lt Goods Vehicles 2.5-3.5t | 05 - Light Goods Vehicles-3.5t | 06 - Heavy Goods Vehicles<=15t | 07 - Heavy Goods Vehicles 15t-24t | 17 - Heavy Goods Vehicles >24t | 14 - Franchised Bus (SD) | 15 - Franchised Bus (DD) | 8 - Public Light Buses |
|---------------|-----------------------|------------------------|-----------|--------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|---------------------------------|--------------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------|--------------------------|------------------------|
| 1             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 2             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 3             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 4             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 5             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 6             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 7             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 8             | 0.01432               | 0.01432                | 0.00000   | 0.10702                        | 0.06791                         | 0.16367                         | 0.16238                      | 0.01336                      | 0.07001                      | 0.02205                          | 0.02221                         | 0.03235                        | 0.05681                        | 0.10364                           | 0.09640                        | 0.03589                  | 0.06743                  | 0.09737                |
| 9             | 0.01432               | 0.01432                | 0.00000   | 0.10155                        | 0.06614                         | 0.15385                         | 0.15273                      | 0.01304                      | 0.06647                      | 0.02140                          | 0.02157                         | 0.03106                        | 0.05520                        | 0.09753                           | 0.09061                        | 0.03380                  | 0.06325                  | 0.09238                |
| 10            | 0.01432               | 0.01432                | 0.00000   | 0.09640                        | 0.06437                         | 0.14500                         | 0.14388                      | 0.01271                      | 0.06309                      | 0.02076                          | 0.02092                         | 0.02993                        | 0.05375                        | 0.09189                           | 0.08546                        | 0.03187                  | 0.05971                  | 0.08771                |
| 11            | 0.01416               | 0.01416                | 0.00000   | 0.09173                        | 0.06276                         | 0.13712                         | 0.13615                      | 0.01223                      | 0.06003                      | 0.02012                          | 0.02028                         | 0.02881                        | 0.05246                        | 0.08690                           | 0.08079                        | 0.03026                  | 0.05665                  | 0.08352                |
| 12            | 0.01336               | 0.01336                | 0.00000   | 0.08771                        | 0.06132                         | 0.13020                         | 0.12923                      | 0.01191                      | 0.05745                      | 0.01947                          | 0.01979                         | 0.02784                        | 0.05118                        | 0.08256                           | 0.07660                        | 0.02881                  | 0.05407                  | 0.07982                |
| 13            | 0.01271               | 0.01271                | 0.00000   | 0.08401                        | 0.05987                         | 0.12408                         | 0.12295                      | 0.01159                      | 0.05504                      | 0.01899                          | 0.01915                         | 0.02688                        | 0.05005                        | 0.07854                           | 0.07306                        | 0.02752                  | 0.05166                  | 0.07644                |
| 14            | 0.01207               | 0.01207                | 0.00000   | 0.08063                        | 0.05858                         | 0.11845                         | 0.11748                      | 0.01127                      | 0.05279                      | 0.01835                          | 0.01851                         | 0.02607                        | 0.04908                        | 0.07500                           | 0.06968                        | 0.02639                  | 0.04957                  | 0.07359                |
| 15            | 0.01143               | 0.01143                | 0.00000   | 0.07773                        | 0.05745                         | 0.11346                         | 0.11249                      | 0.01094                      | 0.05086                      | 0.01786                          | 0.01802                         | 0.02527                        | 0.04812                        | 0.07194                           | 0.06679                        | 0.02543                  | 0.04780                  | 0.07039                |
| 16            | 0.01078               | 0.01078                | 0.00000   | 0.07483                        | 0.05633                         | 0.10895                         | 0.10799                      | 0.01062                      | 0.04908                      | 0.01738                          | 0.01754                         | 0.02446                        | 0.04715                        | 0.06904                           | 0.06405                        | 0.02462                  | 0.04619                  | 0.06808                |
| 17            | 0.01030               | 0.01030                | 0.00000   | 0.07242                        | 0.05536                         | 0.10477                         | 0.10396                      | 0.01030                      | 0.04731                      | 0.01690                          | 0.01706                         | 0.02382                        | 0.04635                        | 0.06630                           | 0.06164                        | 0.02382                  | 0.04458                  | 0.06582                |
| 18            | 0.00982               | 0.00982                | 0.00000   | 0.07001                        | 0.05440                         | 0.10091                         | 0.10010                      | 0.00998                      | 0.04587                      | 0.01642                          | 0.01658                         | 0.02317                        | 0.04554                        | 0.06389                           | 0.05938                        | 0.02301                  | 0.04329                  | 0.06373                |
| 19            | 0.00933               | 0.00933                | 0.00000   | 0.06791                        | 0.05343                         | 0.09753                         | 0.09672                      | 0.00966                      | 0.04442                      | 0.01593                          | 0.01609                         | 0.02269                        | 0.04474                        | 0.06180                           | 0.05745                        | 0.02237                  | 0.04200                  | 0.06180                |
| 20            | 0.00885               | 0.00885                | 0.00000   | 0.06598                        | 0.05263                         | 0.09431                         | 0.09350                      | 0.00933                      | 0.04313                      | 0.01545                          | 0.01561                         | 0.02221                        | 0.04394                        | 0.05971                           | 0.05552                        | 0.02173                  | 0.04072                  | 0.06003                |
| 21            | 0.00853               | 0.00853                | 0.00000   | 0.06405                        | 0.05182                         | 0.09125                         | 0.09061                      | 0.00917                      | 0.04200                      | 0.01513                          | 0.01529                         | 0.02157                        | 0.04329                        | 0.05778                           | 0.05375                        | 0.02108                  | 0.03975                  | 0.05826                |
| 22            | 0.00805               | 0.00805                | 0.00000   | 0.06244                        | 0.05102                         | 0.08851                         | 0.08787                      | 0.00885                      | 0.04088                      | 0.01465                          | 0.01481                         | 0.02124                        | 0.04265                        | 0.05617                           | 0.05214                        | 0.02060                  | 0.03862                  | 0.05681                |
| 23            | 0.00772               | 0.00772                | 0.00000   | 0.06083                        | 0.05021                         | 0.08610                         | 0.08530                      | 0.00869                      | 0.03975                      | 0.01432                          | 0.01448                         | 0.02076                        | 0.04200                        | 0.05456                           | 0.05069                        | 0.02012                  | 0.03782                  | 0.05536                |
| 24            | 0.00740               | 0.00740                | 0.00000   | 0.05922                        | 0.04957                         | 0.08369                         | 0.08304                      | 0.00837                      | 0.03879                      | 0.01384                          | 0.01400                         | 0.02028                        | 0.04136                        | 0.05295                           | 0.04925                        | 0.01963                  | 0.03685                  | 0.05391                |
| 25            | 0.00708               | 0.00708                | 0.00000   | 0.05794                        | 0.04892                         | 0.08143                         | 0.08079                      | 0.00821                      | 0.03798                      | 0.01352                          | 0.01368                         | 0.01996                        | 0.04088                        | 0.05166                           | 0.04796                        | 0.01915                  | 0.03605                  | 0.05263                |
| 26            | 0.00676               | 0.00676                | 0.00000   | 0.05665                        | 0.04828                         | 0.07934                         | 0.07870                      | 0.00805                      | 0.03701                      | 0.01320                          | 0.01336                         | 0.01963                        | 0.04023                        | 0.05037                           | 0.04683                        | 0.01883                  | 0.03524                  | 0.05150                |
| 27            | 0.00644               | 0.00644                | 0.00000   | 0.05536                        | 0.04764                         | 0.07741                         | 0.07673                      | 0.00789                      | 0.03621                      | 0.01287                          | 0.01304                         | 0.01931                        | 0.03975                        | 0.04908                           | 0.04554                        | 0.01835                  | 0.03460                  | 0.05037                |
| 28            | 0.00628               | 0.00628                | 0.00000   | 0.05423                        | 0.04699                         | 0.07564                         | 0.07500                      | 0.00756                      | 0.03557                      | 0.01255                          | 0.01271                         | 0.01899                        | 0.03927                        | 0.04796                           | 0.04458                        | 0.01802                  | 0.03396                  | 0.04941                |
| 29            | 0.00595               | 0.00595                | 0.00000   | 0.05327                        | 0.04635                         | 0.07403                         | 0.07339                      | 0.00740                      | 0.03476                      | 0.01223                          | 0.01239                         | 0.01867                        | 0.03879                        | 0.04683                           | 0.04361                        | 0.01770                  | 0.03315                  | 0.04844                |
| 30            | 0.00579               | 0.00579                | 0.00000   | 0.05214                        | 0.04587                         | 0.07242                         | 0.07178                      | 0.00724                      | 0.03412                      | 0.01191                          | 0.01207                         | 0.01825                        | 0.03830                        | 0.04587                           | 0.04265                        | 0.01738                  | 0.03267                  | 0.04748                |
| 31            | 0.00547               | 0.00547                | 0.00000   | 0.05118                        | 0.04522                         | 0.07081                         | 0.07033                      | 0.00708                      | 0.03347                      | 0.01159                          | 0.01175                         | 0.01819                        | 0.03782                        | 0.04490                           | 0.04168                        | 0.01706                  | 0.03203                  | 0.04667                |
| 32            | 0.00531               | 0.00531                | 0.00000   | 0.05037                        | 0.04474                         | 0.06952                         | 0.06888                      | 0.00692                      | 0.03299                      | 0.01143                          | 0.01159                         | 0.01786                        | 0.03734                        | 0.04394                           | 0.04088                        | 0.01674                  | 0.03154                  | 0.04587                |
| 33            | 0.00515               | 0.00515                | 0.00000   | 0.04957                        | 0.04426                         | 0.06808                         | 0.06759                      | 0.00676                      | 0.03235                      | 0.01110                          | 0.01127                         | 0.01770                        | 0.03701                        | 0.04313                           | 0.04007                        | 0.01642                  | 0.03090                  | 0.04506                |
| 34            | 0.00499               | 0.00499                | 0.00000   | 0.04876                        | 0.04377                         | 0.06679                         | 0.06630                      | 0.00660                      | 0.03187                      | 0.01094                          | 0.01094                         | 0.01738                        | 0.03653                        | 0.04233                           | 0.03943                        | 0.01625                  | 0.03042                  | 0.04426                |
| 35            | 0.00483               | 0.00483                | 0.00000   | 0.04796                        | 0.04329                         | 0.06566                         | 0.06518                      | 0.00644                      | 0.03138                      | 0.01062                          | 0.01078                         | 0.01722                        | 0.03605                        | 0.04168                           | 0.03862                        | 0.01593                  | 0.02993                  | 0.04361                |
| 36            | 0.00467               | 0.00467                | 0.00000   | 0.04731                        | 0.04281                         | 0.06453                         | 0.06405                      | 0.00628                      | 0.03098                      | 0.01046                          | 0.01062                         | 0.01706                        | 0.03573                        | 0.04088                           | 0.03798                        | 0.01577                  | 0.02945                  | 0.04291                |
| 37            | 0.00451               | 0.00451                | 0.00000   | 0.04651                        | 0.04233                         | 0.06341                         | 0.06293                      | 0.00612                      | 0.03042                      | 0.01014                          | 0.01030                         | 0.01690                        | 0.03541                        | 0.04023                           | 0.03734                        | 0.01545                  | 0.02913                  | 0.04233                |
| 38            | 0.00435               | 0.00435                | 0.00000   | 0.04587                        | 0.04184                         | 0.06244                         | 0.06196                      | 0.00595                      | 0.03009                      | 0.00998                          | 0.01014                         | 0.01674                        | 0.03492                        | 0.03959                           | 0.03669                        | 0.01529                  | 0.02865                  | 0.04184                |
| 39            | 0.00418               | 0.00418                | 0.00000   | 0.04538                        | 0.04136                         | 0.06148                         | 0.06099                      | 0.00595                      | 0.02961                      | 0.00982                          | 0.00982                         | 0.01658                        | 0.03460                        | 0.03895                           | 0.03621                        | 0.01497                  | 0.02816                  | 0.04120                |
| 40            | 0.00402               | 0.00402                | 0.00000   | 0.04474                        | 0.04104                         | 0.06051                         | 0.06003                      | 0.00579                      | 0.02929                      | 0.00950                          | 0.00966                         | 0.01642                        | 0.03428                        | 0.03830                           | 0.03573                        | 0.01481                  | 0.02784                  | 0.04072                |
| 41            | 0.00386               | 0.00386                | 0.00000   | 0.04426                        | 0.04056                         | 0.05971                         | 0.05922                      | 0.00563                      | 0.02897                      | 0.00933                          | 0.00950                         | 0.01625                        | 0.03396                        | 0.03782                           | 0.03508                        | 0.01465                  | 0.02752                  | 0.04023                |
| 42            | 0.00386               | 0.00386                | 0.00000   | 0.04361                        | 0.04007                         | 0.05890                         | 0.05842                      | 0.00547                      | 0.02865                      | 0.00917                          | 0.00933                         | 0.01609                        | 0.03347                        | 0.03734                           | 0.03460                        | 0.01448                  | 0.02704                  | 0.03975                |
| 43            | 0.00370               | 0.00370                | 0.00000   | 0.04313                        | 0.03975                         | 0.05810                         | 0.05761                      | 0.00547                      | 0.02832                      | 0.00901                          | 0.00917                         | 0.01593                        | 0.03315                        | 0.03685                           | 0.03412                        | 0.01416                  | 0.02672                  | 0.03927                |
| 44            | 0.00354               | 0.00354                | 0.00000   | 0.04281                        | 0.03943                         | 0.05729                         | 0.05681                      | 0.00531                      | 0.02800                      | 0.00885                          | 0.00885                         | 0.01593                        | 0.03283                        | 0.03637                           | 0.03380                        | 0.01400                  | 0.02639                  | 0.03895                |
| 45            | 0.00354               | 0.00354                | 0.00000   | 0.04233                        | 0.03895                         | 0.05665                         | 0.05617                      | 0.00531                      | 0.02768                      | 0.00869                          | 0.00869                         | 0.01577                        | 0.03251                        | 0.03589                           | 0.03331                        | 0.01384                  | 0.02607                  | 0.03846                |
| 46            | 0.00338               | 0.00338                | 0.00000   | 0.04184                        | 0.03862                         | 0.05584                         | 0.05536                      | 0.00515                      | 0.02736                      | 0.00853                          | 0.00853                         | 0.01561                        | 0.03219                        | 0.03541                           | 0.03283                        | 0.01368                  | 0.02575                  | 0.03814                |
| 47            | 0.00338               | 0.00338                | 0.00000   | 0.04152                        | 0.03830                         | 0.05520                         | 0.05472                      | 0.00499                      | 0.02720                      | 0.00837                          | 0.00837                         | 0.01561                        | 0.03203                        | 0.03492                           | 0.03251                        | 0.01352                  | 0.02543                  | 0.03782                |
| 48            | 0.00322               | 0.00322                | 0.00000   | 0.04104                        | 0.03782                         | 0.05456                         | 0.05423                      | 0.00499                      | 0.02688                      | 0.00821                          | 0.00821                         | 0.01545                        | 0.03170                        | 0.03460                           | 0.03219                        | 0.01336                  | 0.02511                  | 0.03734                |
| 49            | 0.00322               | 0.00322                | 0.00000   | 0.04072                        | 0.03750                         | 0.05407                         | 0.05359                      | 0.00483                      | 0.02672                      | 0.00805                          | 0.00821                         | 0.01545                        | 0.03138                        | 0.03428                           | 0.03187                        | 0.01320                  | 0.02494                  | 0.03701                |
| 50            | 0.00306               | 0.00306                | 0.00000   | 0.04039                        | 0.03718                         | 0.05343                         | 0.05295                      | 0.00483                      | 0.02639                      | 0.00789                          | 0.00805                         | 0.01529                        | 0.03106                        | 0.03380                           | 0.03154                        | 0.01304                  | 0.02462                  | 0.03685                |
| 51            | 0.00306               | 0.00306                | 0.00000   | 0.04007                        | 0.03685                         | 0.05295                         | 0.05246                      | 0.00467                      | 0.02623                      | 0.00772                          | 0.00789                         | 0.01529                        | 0.03074                        | 0.03347                           | 0.03122                        | 0.01304                  | 0.02430                  | 0.03653                |
| 52            | 0.00290               | 0.00290                | 0.00000   | 0.03975                        | 0.03653                         | 0.05246                         | 0.05198                      | 0.00467                      | 0.02607                      | 0.00756                          | 0.00772                         | 0.01529                        | 0.03058                        | 0.03315                           |                                |                          |                          |                        |