| Sampling Point | HI | | | | CR | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Adult Winter | Child Winter | Adult Summer | Child Summer | Adult Winter | Child Winter | Adult Summer | Child Summer |
| Gabtoli Dhalwes | 33.24 | 24.17 | 19.94 | 14.55 | 0.012 | 0.009 | 0.007 | 0.005 |
| Gabtoli Turag | 35.52 | 25.83 | 27.95 | 20.36 | 0.011 | 0.008 | 0.008 | 0.006 |
| Shah Cement | 39.89 | 29.02 | 41.03 | 29.85 | 0.007 | 0.006 | 0.005 | 0.004 |
| Hazaribag | 251.08 | 194.7 | 252.73 | 195.16 | 0.069 | 0.059 | 0.062 | 0.052 |
| Rayerbazar | 15.75 | 11.54 | 31.52 | 22.91 | 0.005 | 0.004 | 0.004 | 0.003 |
| Kholamora | 15.63 | 11.44 | 19.28 | 14.07 | 0.004 | 0.003 | 0.005 | 0.004 |
| Zinzira | 56.9 | 42.06 | 67.09 | 49.43 | 0.014 | 0.012 | 0.013 | 0.010 |
| Sadarghat Terminal | 95.63 | 70.29 | 132.03 | 96.61 | 0.035 | 0.032 | 0.039 | 0.035 |
| Postogola Bri | 56.08 | 41.06 | 74.68 | 54.38 | 0.017 | 0.015 | 0.013 | 0.012 |

| **Health Risk parameters** | **Winter** | | | | | | **Summer** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Ingestion** | | | **Dermal** | | | **Ingestion** | | | **Dermal** | | |
| **Mean** | **SD** | **Range** | **Mean** | **SD** | **Range** | **Mean** | **SD** | **Range** | **Mean** | **SD** | **Range** |
| **Non- Carcinogenic Risk** | | | | | | | | | | | | |
| Mn HQ Adult | 2.78 | 1.68 |  | 0.29 | 0.17 |  | 2.52 | 1.52 |  | 0.26 | 0.16 |  |
| Mn HQ children | 2 | 1.2 |  | 0.51 | 0.31 |  | 1.81 | 1.09 |  | 0.47 | 0.28 |  |
| Cr HQ Adult | 4.79 | 6.17 |  | 0.01 | 0.01 |  | 4.13 | 5.47 |  | 0.1 | 0.01 |  |
| Cr HQ children | 3.43 | 4.43 |  | 0.01 | 0.01 |  | 2.96 | 3.92 |  | 0.1 | 0.01 |  |
| Ni HQ Adult | 0.5 | 0.57 |  | 0.002 | 0.002 |  | 0.47 | 0.44 |  | 0.002 | 0.002 |  |
| Ni HQ children | 0.36 | 0.41 |  | 0.003 | 0.004 |  | 0.34 | 0.31 |  | 0.003 | 0.003 |  |
| Cu HQ Adult | 0.73 | 0.5 |  | 0.003 | 0.002 |  | 0.86 | 0.63 |  | 0.004 | 0.003 |  |
| Cu HQ children | 0.52 | 0.36 |  | 0.01 | 0.003 |  | 0.62 | 0.45 |  | 0.01 | 0.004 |  |
| Zn HQ Adult | 0.06 | 0.02 |  | 0.0007 | 0.0003 |  | 0.06 | 0.03 |  | 0.001 | 0.0003 |  |
| Zn HQ children | 0.04 | 0.02 |  | 0.001 | 0.0005 |  | 0.04 | 0.02 |  | 0.001 | 0.0006 |  |
| As HQ Adult | 12.58 | 5.09 |  | 0.05 | 0.02 |  | 11.06 | 4 |  | 0.05 | 0.02 |  |
| As HQ children | 9.02 | 3.65 |  | 0.09 | 0.04 |  | 7.93 | 2.87 |  | 0.08 | 0.03 |  |
| Cd HQ Adult | 20.53 | 51.65 |  | 1.71 | 4.31 |  | 19.9 | 49 |  | 1.66 | 4.09 |  |
| Cd HQ children | 14.72 | 37.02 |  | 3.04 | 7.64 |  | 14.27 | 35.12 |  | 2.94 | 7.24 |  |
| Hg HQ Adult | 14.93 | 11.69 |  | 0.06 | 0.05 |  | 24.11 | 19.26 |  | 0.1 | 0.08 |  |
| Hg HQ children | 10.7 | 8.38 |  | 0.11 | 0.09 |  | 17.28 | 13.81 |  | 0.18 | 0.14 |  |
| Pb HQ Adult | 7.61 | 5.98 |  | 0.0002 | 0.0002 |  | 8.83 | 5.73 |  | 0.0003 | 0.0003 |  |
| Pb HQ children | 5.45 | 4.29 |  | 0.0004 | 0.0004 |  | 6.33 | 0.0003 |  | 0.0005 | 0.0005 |  |
| **HI Adult** |  |  |  |  |  |  |  |  |  |  |  |  |
| **HI children** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Carcinogenic Risk** | | | | | | | | | | | | |
| Cd ILCR Adult |  |  |  |  |  |  |  |  |  |  |  |  |
| Cd ILCR Children |  |  |  |  |  |  |  |  |  |  |  |  |
| Cr ILCR Adult |  |  |  |  |  |  |  |  |  |  |  |  |
| Cr ILCR Children |  |  |  |  |  |  |  |  |  |  |  |  |