|  |  |
| --- | --- |
| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | AQDM-11  Air Quality Dispersion Modeling (AQDM)  Source Impact Analysis (SIA) results form  Air Quality Program  *Doc Type: Air Dispersion Modeling* |

**Instructions:** The purpose of this form is to document the results of a Source Impact Analysis (SIA), where H1H modeled concentrations are compared to applicable Significant Impact Levels (SIL) to determine if a Cumulative Impact Analysis (CIA) is needed for each pollutant modeled. If an SIA has been conducted for this project, please provide results in Table 1 below. Attach this form as the “SIL Analysis and Results” required attachment in e-Services. In addition, please attach the corresponding model output files as “Additional attachments” within your e-Services submittal.

**Note:** Refer to the Minnesota Pollution Control Agency’s (MPCA) Modeling Practice Manual for more information.

**Table 1: Source Impact Analysis (SIA) results for Class II modeling demonstrations**

| **Pollutant** | **Averaging time** | **Modeled concentration**  **(H1H)**  **(μg/m3)** | **SIL (μg/m3)** | **% of SIL** | **Number of receptors with impact greater than or equal to SIL** | **Maximum distance from facility centroid to impact greater than or equal to SIL (if applicable)** |
| --- | --- | --- | --- | --- | --- | --- |
| **SO2** | 1-hr |  | 7.86 | 0.0% |  | km |
| 3-hr |  | 25 | 0.0% |
| 24-hr |  | 5 | 0.0% |
| Annual |  | 1 | 0.0% |
| **PM10** | 24-hr |  | 5 | 0.0% |  | km |
| Annual |  | 1 | 0.0% |
| **PM2.5** | 24-hr |  | 1.2 | 0.0% |  | km |
| Annual |  | 0.2 | 0.0% |
| **NO2** | 1-hr |  | 7.52 | 0.0% |  | km |
| Annual |  | 1 | 0.0% |
| **CO** | 1-hr |  | 2000 | 0.0% |  | km |
| 8-hr |  | 500 | 0.0% |

|  |
| --- |
| Additional information: |
|  |