

## INSTRUCTIONS FOR “MODELING INFORMATION” REQUIREMENT IN TITLE V PERMITS.

These instructions are for all permittees required to submit “Modeling Information” in Table B of their Title V permit. The purpose of this requirement is to collect data with which modeling can be performed, although no actual modeling of the facility’s ambient impacts are requested of the permittee.

“Modeling Information” generally entails providing locational data for stacks, fugitive sources, buildings, and property boundaries (or fenceline). The permittee must also submit characterizations of the facility’s fugitive sources and buildings. Below are detailed instructions on the steps to take and the data to submit

1. Send an e-mail to **askpca@pca.state.mn.us**. In the subject line, request “Model Information Request Forms”. Within the body of the message, provide the first eight numbers (before the dash) of the facility Air Emission Permit number, including preceeding zeros. This number can be found on the cover page of the Title V permit. Then follow with a space and the facility name exactly as it’s shown on the cover page of the permit (under “Issued To”). An example of the subject line and body of the e-mail message will be:

Subject Line: Model Information Request Forms

Body Text: “I am requesting modeling information to fulfill a requirement in my air permit. Please send Model Information Request forms for <insert facility i.d. # and facility name, for example: 00055555 ABCompany, Inc.> If you have any questions that are best addressed by telephone, please contact <insert contact name> at <insert contact phone number>.”

2. In reply, the MPCA will send you a Microsoft Excel Workbook that contains several sheets with the emissions, stack, fugitive source, building, and property boundary information that we have in our database. To utilize the workbook, you must have Microsoft Excel version 97, or higher. Examples of the spreadsheets are provided in Appendix A of these instructions.
3. You will add new data that the MPCA requests, and correct any mistakes we might have in our database. A list of these data items and the definitions of acceptable entries are provided in Appendix B of these instructions.
4. Return the completed workbook to different e-mail address {**AirModel@pca.state.mn.us**} The subject line of this e-mail should contain the date, the words “MIform” the Air Emission Permit number and the Facility Name, in the following format:

02/02/02 MIform 00055555 ABCompany

The body of the message should contain the name and telephone number of the contact person that filled out the spreadsheets, and the attached spreadsheets, in the following format:

Chris Johnson  
651-555-5555  
<Excel Spreadsheet Attachments>

5. You will receive a reply message indicating the MPCA received the data:

Thank you for complying with the  
“Model Information” permit requirement  
The MPCA will contact you if there are any  
Questions or concerns regarding your submittal.

6. The MPCA may contact you by telephone or by return e-mail if there are any questions or concerns regarding the submittal. If the MPCA requests that the permittee make changes to the spreadsheets, the completed spreadsheets will be returned to you. Repeat steps 3 and 4 in these instructions.

If you don't have e-mail, Microsoft Excel 97 or later version, or if you have any questions or problems, please telephone the MPCA's Customer Assistance Center at 1-800-646-6247 in Minnesota, or 651-297-2274 within the Twin Cities Metropolitan Area and outside of Minnesota.

## Attachment A: Example Forms (as Microsoft Excel Spreadsheets)

MINNESOTA POLLUTION CONTROL AGENCY

## AIR QUALITY

520 LAFAYETTE ROAD

ST. PAUL MN 55155-4194

## MODELING INFORMATION

## STACK/VENT FORM

<date>

This is not a permit application form

AQ Facility ID No:

Facility Name:

Facility Address:

[illegible]

This is not a permit application form

Facility Address:

# EXAMPLE



ST. PAUL MN 55155-4194

This is not a permit application form

Facility Address:

[illegible]

**This is not a permit application form**

# EXAMPLE

AIR QUALITY

ST. PAUL MN 55155-4194

This is not a permit application form

Facility Name:

Facility Address:

[illegible]





## Attachment B: Data Specifications

The spreadsheets you receive will look like the examples in Attachment A. They will also contain data specific to your facility that the MPCA has in their database. This data is based on the information submitted in your permit application and the permit(s) you were issued. In order to fulfill your “Modeling Information” permit requirement, you will add new data and correct any mistakes we have in our database. A list of these data items and the definitions of acceptable entries are provided in the following pages.

Each spreadsheet in the workbook you are sent has a corresponding section below. Each of these sections has a name that matches a spreadsheet name (depicted on the upper right of each sheet and on the tab at the bottom of each sheet on the computer screen). Each column in a spreadsheet has a sub-section dedicated to it. Specifics on what to enter in each column in the spreadsheet are listed under the corresponding column identification number and name below.

If you have any questions about specific entries, please call the MPCA Customer Assistance Center (CAC) at 1-800-646-6247 in Minnesota, or 651-297-2274 within the Twin Cities Metropolitan Area and outside of Minnesota). Or e-mail at [askpca@pca.state.mn.us](mailto:askpca@pca.state.mn.us) Depending on the question, the CAC will either provide an answer, or re-direct your call to someone who can. If you would need to hire a consultant to prepare inputs for an air dispersion model, you may need to hire a consultant to fill out these forms.

Some documents that might be useful when completing this submittal are your permit and your permit application. The Environmental Protection Agency’s “User’s Guide to the Building Profile Input Program” will be useful when filling out the “Detailed Building and Structure Form”. This document is available on the EPA website at <http://www.epa.gov/scram001/tt22.htm#relatedprograms>. The following URLs contain factsheets prepared by the USGS on location data in Universal Transverse Mercator (UTM): <http://mac.usgs.gov/mac/isb/pubs/factsheets/fs07701.html> and <http://www.nps.gov/prwi/readutm.htm>

**Note:** Your requirement to complete the Air Dispersion Modeling “info request” may be for one, two and/or three pollutants (PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>). In the case where only one pollutant is specified, you only need to add or correct data associated with that pollutant. Assuming your requirement is for PM<sub>10</sub> only, you do not need to add any additional emission units and stacks—meaning, in addition to those that you receive in the workbook forms—if they do not emit PM<sub>10</sub>. In this case, you are only required to submit updates and location data for the stacks that emit PM<sub>10</sub>. However, you may choose to include location data for the other stacks that appear in your forms as long as you are obtaining location data for the PM<sub>10</sub> sources, as in this example. It is possible that the MPCA might ask for location data for the other stacks in the future, and this may head-off the request (for example, if there were interest in another pollutant emitted from the facility). You may want to consider the cost effectiveness of doing it now, or possibly sometime in the future.

**Sheet Name: STACK/VENT FORM**

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**SV(1)**

**Name:** **ID No.**  
(Stack Vent Identification Number)

**Definition:** The sequential numbering of the individual stacks and vents at the facility.

**Datatype:** 6 characters

**Notes:** The stacks that are used in the facility Title V permit, and any subsequent modifications, should appear automatically from the MPCA's database. If the list of stacks is an incomplete representation of your facility, add the missing stacks to the bottom of the list using the naming convention in your permit.

The stack number is followed by the letter "M" for main stack, "B" for bypass stack, "P" for parallel stack, or "O" for other. ...

**Sample Values:** "SV 001M" , "SV 002B"

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**SV(2)**

**Name:** **Stack Description**

**Definition:** Brief description of the function of the stack or vent.

**Datatype:** Maximum 50 characters

**Notes:** If the stack itself does not have a description, use the emission unit description.

**Sample Values:** Free text, examples include:  
"Boiler 1 stack (EU001) "  
"Transfer tower (EU005) and silo vent (EU010)"

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**SV(3)**

**Name:** **Height of Opening from Ground (ft)**

**Definition:** The height is from the nearest ground level to the top of the stack expressed in feet.

**Datatype:** Maximum of 4 characters

**Notes:**

**Sample Values:** 0 – 1000 feet

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**SV(4)****Name:** Inside Diameter or Length (ft)**Definition:** The inside dimension of the stack at the exit. Provide the inside diameter in feet for a round stack opening, or the length of one side in feet for a rectangular opening.**Datatype:** Real number of maximum 4 places with 1 after the decimal**Notes:** If entering the side of a square or rectangular opening, the second side should be entered in the next column SV(5)**Sample Values:** “22.5”  
“3.0”**SV(5)****Name:** Width (ft)**Definition:** The inside dimension of the stack at the exit. The width (second side) in feet for a rectangular opening.**Datatype:** Real number of maximum 4 places with 1 after the decimal**Notes:** This column should be left blank if this stack has a circular exit diameter.**Sample Values:** “3.0”  
“1.5”**SV(6)****Name:** Design Flow Rate at Exit (acfm)**Definition:** The flow rate, in actual cubic feet per minute, at the stack exit based on the emission unit(s) maximum design capacity.**Datatype:****Notes:** The source of the flowrate must be the same as for the Exit Gas Temperature SV(7). For example, if the manufacturer supplies the flowrate, they should also provide the exit temperature. Use the same source of information on which the most recent permit was based.**Sample Values:** “68,000”  
“600”

**SV(7)****Name:** Exit Gas Temperature (degrees F.)**Definition:** The temperature in degrees Fahrenheit corresponding to the flowrate of the stack.**Datatype:****Notes:** The source of the exit temperature must be the same as for the Design Flow Rate at Exit SV(6). Use the same source of information on which the most recent permit was based.**Sample Values:** "450"  
"70"

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**SV(8)****Name:** Discharge Direction**Definition:** The direction the flow of gases exit the stack or vent.**Datatype:****Notes:** .**Sample Values:** "U" – gas exits upward (with no cap on stack/vent);  
"C" – gas exits upwards (with a cap on stack/vent);  
"D" – gas exits downward; and  
"H" – gas exits horizontally

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**SV(9)****Name:** Base of Elevation of Ground (ft)**Definition:** The measured value of elevation (i.e. altitude), in feet, above sea level.**Datatype:****Notes:** .**Sample Values:** "705.5"

**SV(10)****Name:**        **Location Easting (UTM) {X Coordinate}****Definition:**    The value for the X coordinate (easting) in UTM extended Zone 15, NAD83, meters.**Datatype:**     NUMBER (10, 4)

**Notes:**        The number of significant digits provided in the coordinate value is **NOT** an indication of the positional accuracy of the coordinate. Convert UTM coordinates outside zone 15 to extended zone 15 with a program developed by the Minnesota Department of Transportation (MNCON) at the following URL:  
[http://rocky.dot.state.mn.us/Inside\\_LM/LIS/MnCON/mncon.html](http://rocky.dot.state.mn.us/Inside_LM/LIS/MnCON/mncon.html) This program is free and easy to install. An Example: Convert UTM Zone 14 NAD83 to Universal Transverse Mercator 15E NAD83

**Sample Values:** For Minnesota, the X coordinate will range from roughly 180,000 to 770,000**SV(11)****Name:**        **Location Northing (UTM) {Y Coordinate}****Definition:**    The value for the Y coordinate (northing) in UTM extended Zone 15, NAD83, meters.**Datatype:**     NUMBER (11 ,4)

**Notes:**        The number of significant digits provided in the coordinate value is **NOT** an indication of the positional accuracy of the coordinate.

**Sample Values** For Minnesota, the Y coordinate will range from roughly 4,800,000 to 5,500,000

**Sheet Name: FUGITIVES FORM**

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**FS(1)****Name:** Fugitive Source ID No.**Definition:** The sequential numbering of the individual fugitive sources at the facility.**Datatype:** CHAR(6)**Notes:** The fugitive sources that are used in the facility Title V permit, and any subsequent modifications, should appear automatically from the MPCA's database. If the list of fugitive sources is an incomplete representation of your facility, add the missing sources to the bottom of the list using the naming convention in your permit.**Sample Values:** "FS001", "FS002"

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**FS(2)****Name:** Pollutant Emitted**Definition:** The name of the fugitive pollutant emitted.**Datatype:** CHAR (4)**Notes:** "PM10" is particulate matter less than 10 microns, "PM" is total suspended particulates (otherwise known as TSP), "SO2" is sulfur dioxide, and "NOX" is nitrogen oxides.**Sample Values** "PM10", "PM" (if PM is assumed to be PM10), "SO2" and/or "NOX"

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**FS(3)****Name:** Control Equipment ID**Definition:** The ID number of the control equipment associated with the particular fugitive source, as used for the facility permit.**Datatype:** CHAR(4)**Notes:** An example would be a water spray bar at the end of conveyor used to transfer material onto an outdoor storage pile. In general, emissions vented through control equipment are not fugitive emissions, however, they can be characterized as such for modeling if they fit the criteria described in section FS(4) Description of Fugitive Source, below. If there is no control device for the fugitive source, leave the cell blank.**Sample Values:** Examples include: "CE028"

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**FS(4)****Name:**        **Description of Fugitive Source****Definition:**    Description of the fugitive source in sufficient detail to identify this source at the facility.**Datatype:**     CHAR(50)

**Notes:**        Fugitive sources labeled as “insignificant” for purposes of permitting applicability are not necessarily insignificant for modeling. Please add or include sources that are “insignificant” because they fall under the definition at MN Rule 7007.1300, subparts 3 and 4. Some “insignificant” point sources (with stacks) that did not need to be listed in the facility’s Title V permit may be characterized as a modeled fugitive source if the emissions are between 0.1 and 2.28 lbs/hour. See the Title V modeling guidance at [www.pca.state.mn.us/air/modeling.html](http://www.pca.state.mn.us/air/modeling.html) for more information.

**Sample Values:**        Free text, examples include:  
                               “coal stockpile ”  
                               “Road from mine to north crusher”

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**FS(5)****Name:**        **Source Length (ft)****Definition:**    The length of X side of the area in feet.**Datatype:**     NUMBER(6,2)

**Notes:**        For purposes of the “Model Information Request”, fugitive source characterizations are limited to a rectangular area source. The size of the area source should be the smallest area that will encompass the fugitive source. In some cases this will be the size of the property boundary. In no cases should the area source extend outside the facility boundary.

**Sample Values** Examples: “10.00”, “328.00”

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**FS(6)****Name:**        **Source Width (ft)****Definition:**    The length of Y side of the area in feet.**Datatype:**     NUMBER(6,2)

**Notes:**        For purposes of the “Model Information Request”, fugitive source characterizations are limited to a rectangular area source. The size of the area source should be the smallest area that will encompass the fugitive source. In some cases this will be the size of the



property boundary. In no cases should the area source extend outside the facility boundary.

**Sample Values** Examples: “27.50”, “328.00”

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### FS(7)

**Name:**        **Release Height from Ground (ft)**

**Definition:**    Height above the ground in feet that emissions are released.

**Datatype:**     NUMBER(4,1)

**Notes:**

**Sample Values** Examples: “3.0”, “16.4”

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### FS(8)

**Name:**        **Base Elevation of Ground (ft)**

**Definition:**    The measured value of elevation (i.e. altitude), in feet, above sea level.

**Datatype:**

**Notes:**        .

**Sample Values:**        “705.5”

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### FS(9)

**Name:**        **Location Easting (UTM) {X Coordinate}**

**Definition:**    The value for the X coordinate (easting) in UTM extended Zone 15, NAD83, meters located at the southwest corner of the area source.

**Datatype:**     NUMBER (10, 4)

**Notes:**        The number of significant digits provided in the coordinate value is **NOT** an indication of the positional accuracy of the coordinate.

**Sample Values:**        For Minnesota, the X coordinate will range from roughly 180,000 to 770,000

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### FS(10)

**Name:**        **Location Northing (UTM) {Y Coordinate}**

**Definition:**    The value for the Y coordinate (northing) in UTM extended Zone 15, NAD83, meters located at the southwest corner of the area source.

**Datatype:** NUMBER (11 ,4)

**Notes:** The number of significant digits provided in the coordinate value is **NOT** an indication of the positional accuracy of the coordinate.

**Sample Values** For Minnesota, the Y coordinate will range from roughly 4,800,000 to 5,500,000

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## Sheet Name: **DETAILED BUILDING AND STRUCTURE**

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### **B(1)**

**Name:** **Bldg ID No.**

**Definition:** The sequential numbering of the individual buildings at the facility.

**Datatype:** CHAR(5)

**Notes:**

**Sample Values:** Examples include “BD001” , “BD002”

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### **B(2)**

**Name:** **Building Name**

**Definition:** The name of the building

**Datatype:** CHAR(50)

**Notes:** Not all buildings at a facility need to be included. You may exclude buildings with a height less than 40 percent of the stack exit height. Also, only those buildings with stacks within 5L of the building need be included (but not buildings whose nearest edge is greater than 800 meters from the stack). “L” is the lesser of the building height, or projected building width (as described in the “User’s Guide to the Building Profile Input Program” available from EPA’s web page for air dispersion modeler’s at [www.epa.gov/ttn/scram/](http://www.epa.gov/ttn/scram/) )

**Sample Values:** Examples include “Building No.7” , “Boiler House”

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### **B(3)**

**Name:** **Base Elevation of Ground (ft)**

**Definition:** The measured value of elevation (i.e. altitude), in feet, above sea level.

**Datatype:**

**Notes:** .

**Sample Values:** “705.5”

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**B(4)****Name:** Building Tier No.**Definition:** The sequential numbering of the individual building tiers for a multiple-tier building.**Datatype:** CHAR(2)**Notes:** Repeat the tier number for each corner of the tier. For example, if “tier 1” has four corners, column B(4) should have the number “1” repeated in four rows sequentially downward. The minimum number of tiers is one.

For example:

<b>B (1)</b> Bldg ID No.	<b>B (2)</b> Building Name	<b>B (3)</b> Base Elevation of Ground (ft)	<b>B (4)</b> Building Tier No.	<b>B (5)</b> Building Tier Height (ft)	<b>B (6)</b> Corner No. of Tier
1	Main	240.0	1	12.50	1
1	Main	240.0	1	12.50	2
1	Main	240.0	1	12.50	3
1	Main	240.0	1	12.50	4

An individual UTM coordinate should be provided for each of the four corners. See B(7) and B(8) below.

**Sample Values:** Examples include “1” , “2”**B(5)****Name:** Building Tier Height (ft)**Definition:** The height of the tier in feet above ground level.**Datatype:** NUMBER(5,2)**Notes:****Sample Values:** Examples include “12.50” , “162.07”**B(6)****Name:** Corner No. of Tier**Definition:** The sequential numbering of the individual corners of each tier.**Datatype:** CHAR(2)

**Notes:** The minimum number of tier corners is three, for a triangular shaped tier.

**Sample Values:** Examples include “1” , “2”, “3”

## **B(7)**

**Name:** **Location Easting (UTM) {X Coordinate}**

**Definition:** The value for the X coordinate (easting) in UTM extended Zone 15, NAD83, in meters.

**Datatype:** NUMBER (10, 4)

**Notes:** There is one value for each corner of every tier.

**Sample Values:** For Minnesota, the X coordinate will range from roughly 180,000 to 770,000

## **B(8)**

**Name:** **Location Northing (UTM) {Y Coordinate}**

**Definition:** The value for the Y coordinate (northing) in UTM extended Zone 15, NAD83, in meters.

**Datatype:** NUMBER (11 ,4)

**Notes:** There is one value for each corner of every tier.

**Sample Values** For Minnesota, the Y coordinate will range from roughly 4,800,000 to 5,500,000

## **B(9)**

**Name:** **Description/Comments**

**Definition:** Description or comments about the building.

**Datatype:** CHAR(50)

**Notes:**

**Sample Values:** Examples: “One story building with four sides”, “Two story building with 14 sides and 2 tiers”

## Sheet Name: **FACILITY EMISSIONS SUMMARY**

### **ES(1)**

**Name:** **SV or FS ID No.**

**Definition:** The sequential numbering of the individual stack/vents, fugitive sources and groups at the facility that emit PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>x</sub>.

**Datatype:** CHAR(5)

**Notes:** The stacks, fugitive sources and groups that were used in developing the facility Title V permit, and any subsequent modifications, should appear automatically from the MPCA's database. If the list of stacks is an incomplete representation of your facility, add the missing sources to the bottom of the list using the naming convention in your permit.

The stack number is followed by the letter "M" for main stack, "B" for bypass stack, "P" for parallel stack, or "O" for other. ...

**Sample Values:** Examples: "SV001M", "SV002B", FS001, GP001

### **ES(2)**

**Name:** **EU ID No.**

**Definition:** The sequential numbering of the individual emission units associated with the stacks. This field is left blank for fugitives and groups.

**Datatype:** CHAR(5)

**Notes:** The emission units associated with the stacks that were used in the facility Title V permit, and any subsequent modifications, should appear automatically in your forms from the MPCA's database. If the list of emission units is an incomplete representation of your facility, add the missing sources to the bottom of the list using the naming convention in your permit.

**Sample Values:** Examples: "EU001", "EU002"

### **ES(3)**

**Name:** **Pollutant Name**

**Definition:** The name of the pollutant emitted from the stack, or fugitive source or group.

**Datatype:** CHAR(4)

**Notes:** The "Model Information Request Forms" which are used to comply with Title V permit requirements are limited to three of the criteria pollutants. "PM10" is particulate matter

less than 10 microns, “PM” is total suspended particulates (otherwise known as TSP), “SO<sub>2</sub>” is sulfur dioxide, and “NO<sub>X</sub>” is nitrogen oxides. Do not enter data for any other pollutants.

**Sample Values** “PM<sub>10</sub>”, “PM” (if PM is assumed to be PM<sub>10</sub>), “SO<sub>2</sub>” and/or “NO<sub>X</sub>”

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### ES(4)

**Name:**            **Unrestricted Potential Emissions (lb/hr)**

**Definition:**    The emission sources maximum **uncontrolled** emissions of PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>X</sub> in pounds per hour.

**Datatype:**      NUMBER(7,3)

**Notes:**            This value should not take into account control devices, state or federal rule limitations or self-imposed limits. This value was not requested in your Title V permit application. The pound per hour value requested in your permit application (allowed hourly emissions, considering control equipment and permit restrictions) is in ES(5) below.

**Sample Values:**

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### ES(5)

**Name:**            **Permit Allowable Emissions (lb/hr)**

**Definition:**    The emission source’s maximum **controlled** emissions of PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>X</sub> in pounds per hour.

**Datatype:**      NUMBER(7,3)

**Notes:**            The controlled emissions take into account pollution control equipment, state or federal rule limitations and any self-imposed limits. This value was requested in your Title V permit application, and should appear automatically in your Modeling Information Request forms as it appears in MPCA’s database.

**Sample Values:**

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### ES(6)

**Name:**            **Unrestricted Potential Emissions (lb/3-hr)**

**Definition:**    The emission sources maximum **uncontrolled** emissions of SO<sub>2</sub> in pounds per 3-hour.

**Datatype:**      NUMBER(7,3)

**Notes:**            This value only applies to SO<sub>2</sub>. This value should not take into account control devices, state or federal rule limitations or self-imposed limits. This value was not requested in your Title V permit application.

**Sample Values:**

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**ES(7)****Name:** Permit Allowable Emissions (lb/3-hour)**Definition:** The emission sources maximum **controlled** emissions of SO<sub>2</sub> or in pounds per 3-hour.**Datatype:** NUMBER(7,3)**Notes:** This value only applies to SO<sub>2</sub>. The controlled emissions take into account pollution control equipment, state or federal rule limitations and any self-imposed limits. This value was not requested in your Title V permit application.**Sample Values:**

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**ES(8)****Name:** Unrestricted Potential Emissions (lb/day)**Definition:** The emission sources maximum **uncontrolled** emissions of PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>x</sub> in pounds per day, or pounds per 24-hour period.**Datatype:** NUMBER(7,3)**Notes:** This value was not requested in your Title V permit application. It should not take into account control devices, state or federal rule limitations or self-imposed limits.**Sample Values:**

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**ES(9)****Name:** Permit Allowable Emissions (lb/day)**Definition:** The emission sources maximum **controlled** emissions of PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>x</sub> in pounds per day, or pounds per 24-hour period.**Datatype:** NUMBER(7,3)**Notes:** The controlled emissions take into account pollution control equipment, state or federal rule limitations and any self-imposed limits. This value was not requested in your Title V permit application**Sample Values:**

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**ES(10)****Name:**        **Unrestricted Potential Emissions (tons/year)****Definition:**    The emission source's maximum **uncontrolled** emissions of PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>x</sub> tons per year.**Datatype:**    NUMBER(7,3)**Notes:**        This value was requested in your Title V permit application, and should appear automatically in your Modeling Information Request forms as it appears in MPCA's database. It should not take into account control devices, state or federal rule limitations or self-imposed limits.**Sample Values:****ES(11)****Name:**        **Permit Allowable Emissions (tons/year)****Definition:**    The emission source's maximum **controlled** emissions of PM<sub>10</sub>, SO<sub>2</sub> or NO<sub>x</sub> in tons per year.**Datatype:**    NUMBER(7,3)**Notes:**        This value was requested in your Title V permit application, and should appear automatically in your Modeling Information Request forms as it appears in MPCA's database. It should account for control devices, state or federal rule limitations and self-imposed limits.**Sample Values:****ES(12)****Name:**        **Comments****Definition:**    Detailed information on the control levels and permit limits the controlled emissions values are based.**Datatype:**    CHAR(50)**Notes:****Sample Values:**        Examples: "< or = 0.3 lb/MMBtu limit", "12-hour/day operation limit"

## Sheet Name: **PROPERTY BOUNDARY LOCATION FORM**

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### **PB(1)**

**Name:**           **Property Boundary Locator No.**

**Definition:**    The sequential numbering of individual points along the facility property boundary at regular intervals.

**Datatype:**     CHAR(5)

**Notes:**        Property boundary location points should be placed every 25 meters (82 feet) around the property boundary. If the facility has a continuous fenceline within the property boundary that excludes the public from access to the property, location points for the fenceline may be used in lieu of the property boundary.

**Sample Values:**       Examples “PB001” , “PB002”

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### **PB(2)**

**Name:**           **Location Easting (UTM) {X Coordinate}**

**Definition:**    The value for the X coordinate (easting) in UTM extended Zone 15, NAD83, in meters.

**Datatype:**     NUMBER (10, 4)

**Notes:**        Spacing of the points is discussed in PB(1).

**Sample Values:**       For Minnesota, the X coordinate will range from roughly 180,000 to 770,000

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### **PB(3)**

**Name:**           **Location Northing (UTM) {Y Coordinate}**

**Definition:**    The value for the Y coordinate (northing) in UTM extended Zone 15, NAD83, in meters.

**Datatype:**     NUMBER (11 ,4)

**Notes:**        Spacing of the points is discussed in PB(1).

**Sample Values** For Minnesota, the Y coordinate will range from roughly 4,800,000 to 5,500,000

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### **PB(4)**

**Name:**           **Description/Comments**

**Definition:**    Description or comments about the boundary.

**Datatype:** CHAR(50)

**Notes:**

**Sample Values:** Examples: "Continuous Fenceline w/in property boundary", "points along drainage ditch"

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Sheet Name: **HORIZONTAL LOCATION DATA SPECIFICATIONS  
FORM**

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**HL(1)**

**Name:** ID No.

**Definition:** The ID numbers of each stack/vent, fugitive, source, building corner, and property boundary location point listed in the previous Excel spreadsheets.

**Datatype:** CHAR(5)

**Notes:** This value need not be entered. It will carry-over automatically from the previous spreadsheets.

**Sample Values:**

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**HL(2)**

**Name:** Building Tier No.

**Definition:**

**Datatype:**

**Notes:** This value need not be entered. It will carry-over automatically from the Detailed Building and Structure spreadsheet. This value will only appear if the ID no. in HL(1) is associated with a building.

**Sample Values:**

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**HL(3)**

**Name:** Corner No. of Tier

**Definition:**

**Datatype:**

**Notes:** This value need not be entered. It will carry-over automatically from the Detailed Building and Structure spreadsheet. This value will only appear if the ID no. in HL(1) is associated with a building.

**Sample Values:**

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**HL(4)****Name:**        **Location Easting (UTM) {X Coordinate}****Definition:**        .**Datatype:****Notes:**        This value need not be entered. It will carry-over automatically from the associated spreadsheet.**Sample Values:****HL(5)****Name:**        **Location Northing (UTM) {Y Coordinate}****Definition:****Datatype:****Notes:**        This value need not be entered. It will carry-over automatically from the associated spreadsheet.**Sample Values:****HL(6)****Name:**        **Horizontal Datum****Definition:**        The reference system used for defining the coordinates.**Datatype:**        CHAR (12)**Notes:**        Enter the value of NAD83 in North America**Sample Values:**        “NAD83”  
Note: new datums will become available in the future (e.g. terrestrial datum, etc.)**HL(7)****Name:**        **Method of Coordinate Collection****Definition:**        The code specifying the **original** method used to collect the location coordinates. This represents the primary source of the data.**Datatype:**        CHAR (4)

**Notes:** This assists the MPCA in determining horizontal positional accuracy. The codes to use are in the left column in the Table below.

**Sample Values:**

<b>Table: Codes for filling in HL(7)</b>	
<b><i>MPCA Standard Code</i></b>	<b><i>Method of Coordinate Collection</i></b>
0300	Interpolation – Digital Map Source (TIGER)
0301	Interpolation – Digital Map Source - USGS 1:24,000 DRG (Digital Raster Graphic)
0200	Interpolation – Satellite Imagery
0320	Interpolation – MSS
0310	Interpolation – SPOT
0330	Interpolation – TM
0190	Interpolation – Photo
0191	Interpolation – Photo - 1991 USGS DOQ (Digital Orthophoto Quad)
0192	Interpolation – Photo - 1997 Met. Council DOQQ
0180	Interpolation – Map
0181	Interpolation – Map USGS 1:24,000 DRG (Digital Raster Graphic)
0182	Interpolation – Map USGS 1:100,000 DRG (Digital Raster Graphic)
0210	Interpolation – Other
0250	Classical Surveying Techniques
0130	GPS Carrier Phase Kinematic Relative Position
0120	GPS Carrier Phase Static Relative Position
0140	GPS Code (Pseudo Range) Differential
0150	GPS Code (Pseudo Range) Precise Position
0160	GPS Code (Pseudo Range) Standard Position (SA Off)
0170	GPS Code (Pseudo Range) Standard Position (SA On)
0290	GPS, with Canadian Active Control System
0280	GPS – Unspecified
0270	Unknown

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## **HL(8)**

**Name:**            **Source Scale Denominator**

**Definition:** The denominator of the representative fraction of the source map scale. (For example, on a 1:24,000-scale map, the Source Scale Denominator is 24000.)

**Datatype:** INTEGER (7)

**Notes:** **Mandatory** if source is hard-copy. **Should not be used if source was a digital product, unless** the on-screen scale is collected for each point in heads up digitizing –and – the on-screen scale does not exceed the nominal scale and resolution capabilities of the source data set.

**Sample Values:** Examples:  
 “24000” – for a 1:24,000 paper quad map  
 “1200” – for “100 scale” map (1 inch = 100 feet, or 1:1200)

## HL(9)

**Name:** **Date of Coordinate Collection**

**Definition:** The date on which, to the best of the person’s knowledge, the coordinates were obtained.

**Datatype:** MMDDYYYY

**Notes:** At a minimum, a year should be provided and the month and day may be entered as “01”.

**Sample Values:** Year (Y) >=1900  
 Month (M) 01-12  
 Day (D) 01-31

## HL(10)

**Name:** **Date of Coordinate Collection Qualifier**

**Definition:** A code indicating the level of precision ascribed to the Date of Coordinate Collection.

**Datatype:** CHAR (2)

**Notes:**

**Sample Values:**

<b>Table: Codes for filling in HL(10)</b>	
<b>MPCA Code</b>	<b>Value</b>
03	Actual Date
01	Before this Date
02	After this Date
04	Unknown

## HL(11)

**Name:**        **Coordinate Source Type**

**Definition:**    A code indicating the type of organization that collected or otherwise provided the location coordinates.

**Datatype:**     CHAR (4)

**Sample Values:**        For purposes of the Modeling Information Request, organization type will most likely always be “Regulated Entity”. Use “Regulated Entity” even if a consultant was hired by the facility to acquire the location points. See Table below

<b>Table: Codes for filling in HL(11)</b>	
<b><i>MPCA Standard Code</i></b>	<b><i>Value</i></b>
0270	Minnesota (State of) <b>Note:</b> Use if Source Organization Name is “MPCA.”
0190	Iowa
0380	North Dakota
0460	South Dakota
0550	Wisconsin
0930	EPA Region
0820	EPA Headquarters
0840	Other Federal Agency (than EPA)
0980	Regulated Entity
0800	Contractor
0860	Tribe
0810	Dun & Bradstreet
0850	Private
0830	Other
0831	County/Local Government
0870	Unknown

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## HL(12)

**Name:**        **Coordinate Source Organization**

**Definition:**    The name of the organization providing the coordinates.

**Datatype:**     CHAR (30)

**Notes:**

**Sample Values:** Hennepin County  
MPCA  
EPA Region 5  
Barr Engineering  
North Star Steel



Sheet Name: **VERTICAL LOCATION DATA SPECIFICATIONS  
FORM**

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**VL(1)**

**Name:** ID No.

**Definition:** The ID numbers of each stack/vent, fugitive, source, building corner, and property boundary location point listed in the previous Excel spreadsheets.

**Datatype:** CHAR(5)

**Notes:** This value need not be entered. It will carry-over automatically from the previous spreadsheets.

**Sample Values:**

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**VL(2)**

**Name:** Building Tier No.

**Definition:**

**Datatype:**

**Notes:** This value need not be entered. It will carry-over automatically from the Detailed Building and Structure spreadsheet. This value will only appear if the ID no. in VL(1) is associated with a building.

**Sample Values:**

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**VL(3)**

**Name:** Corner No. of Tier

**Definition:**

**Datatype:**

**Notes:** This value need not be entered. It will carry-over automatically from the Detailed Building and Structure spreadsheet. This value will only appear if the ID no. in VL(1) is associated with a building.

**Sample Values:**

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**VL(4)****Name:**        **Base of Elevation of Ground (ft)****Definition:****Datatype:****Notes:**        This value need not be entered. It will carry-over automatically from the previous associated spreadsheets**Sample Values:****VL(5)****Name:**        **Vertical Datum****Definition:**    The level surface of reference from which elevation for each point in VL(1) is measured.**Datatype:**    CHAR (6)**Notes:**        Required for all vertical measurements. Same vertical datum will likely be repeated for each cell in VL(5)**Sample Values:**

“NGVD29” = National Geodetic Vertical Datum of 1929

“NAVD88” = North American Vertical Datum of 1988

**VL(6)****Name:**        **Vertical Measure Method****Definition:**    A code indicating a vertical measurement method of collection.**Datatype:**    CHAR (4)**Notes:**        Required for all vertical measurements.**Sample Values:**        See Table below

<b>Table: Codes for filling in VL(6)</b>	
<b><i>MPCA Standard Code</i></b>	<b><i>Value</i></b>
0090	Altimetry
0010	GPS Carrier Phase Static Relative Position
0020	GPS Carrier Phase Kinematic Relative Position
0030	GPS Code (Pseudo Range) Differential (DGPS)
0040	GPS Code (Pseudo Range) Precise Position

0050	GPS Code (Pseudo Range) Standard Position (SA Off)
0060	GPS Code (Pseudo Range) Standard Position (SA On)
0100	Precise Leveling - Benchmark
0110	Leveling-Non-Benchmark Control Points
0120	Trigonometrical Leveling
0130	Photogrammetric
0070	Classical Surveying Techniques
0140	Topographic Map Interpolation
0080	Other

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