Topic 2: How to Add Data to the Facility and Emission Inventory Database

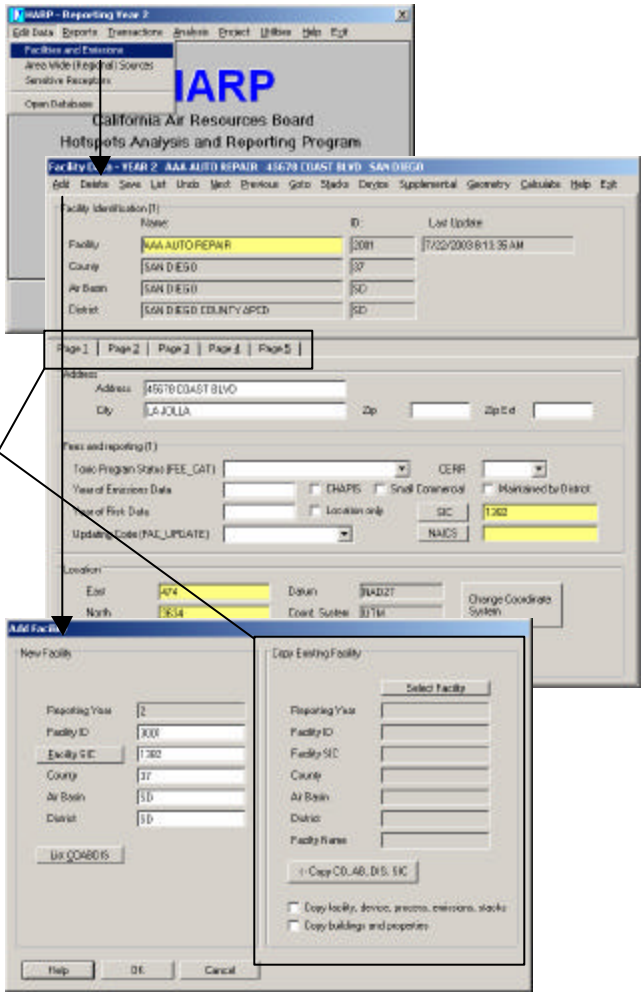
HARP's facility and emission inventory database, also known as CEIDARS-Lite (California Emission Inventory Development and Reporting System-Lite), can be used by facility operators and local air district staff to organize and manage their criteria and toxics emissions data. The database can also be exported to submit emissions data directly to either the local air district or to the ARB. For more information on setting up an emission inventory database, see Chapters 4 and 5 in the HARP User Guide.

Prerequisite

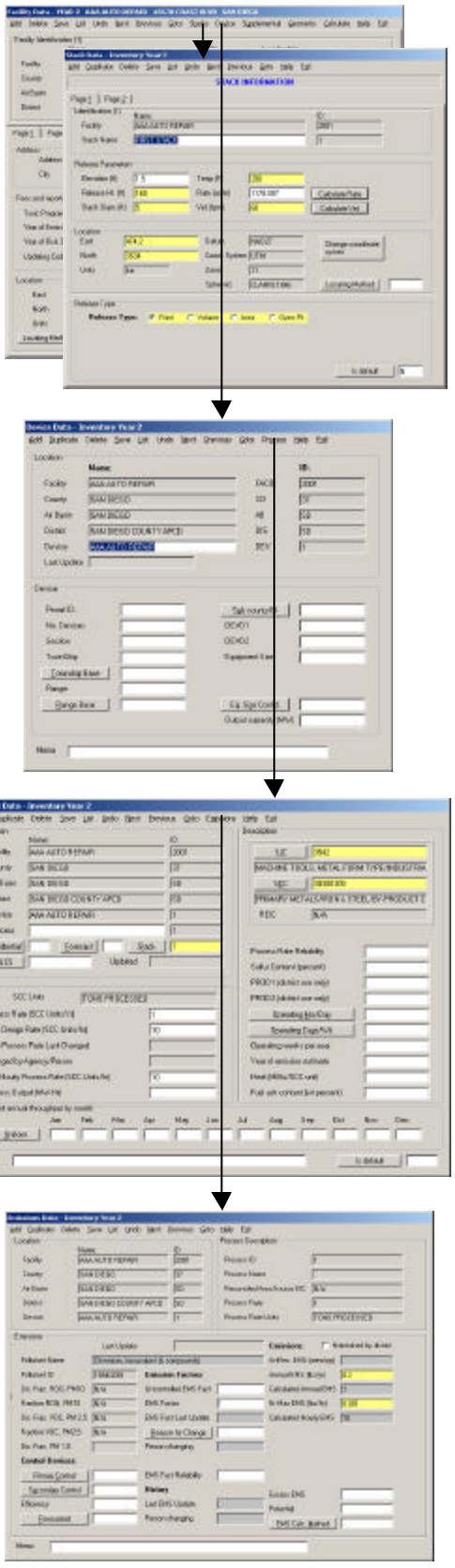
Before you can add your data to the emissions inventory database, you must first open a project in HARP (See Topic 1 in the How-To Guide for instructions).

Step 1. Adding Facility and Emission Data

1. To begin adding your facility data, select ***Edit Data/Facilities and Emissions*** from the HARP main menu to enter the ***Facility Data*** window.
2. To add a new facility, click on ***Add*** from the top menu. Fill in all blank fields in the ***Add Facility*** window. Use the buttons in this section to help fill in the information. If the new facility is similar to an existing facility, you can copy all or part of an existing facility into the new record using the ***Copy Existing Facility*** section. Click ***OK***.
3. Fill in all blank fields in the ***Facility Data*** window for pages 1-5. The yellow fields are required if you plan to conduct a health risk analysis. For instructions on how to enter the receptor proximity on Page 3 of the ***Facility Data*** window, see Topic 2 for setting property boundary information, Topic 3 for identifying sensitive receptors, and Topic 4 for entering receptor proximity information without using sensitive receptors or property boundary information. Click ***Save*** from the top menu.



4. To add stack information click on ***Stacks*** from the ***Facility Data*** window. Click on ***Add*** from the new window. Fill in all blank fields for the stack. The yellow cells are required if you plan to conduct a health risk analysis. If you want to copy an existing stack, click ***List*** and double click on a stack of interest from the popup window. HARP will display the data for this stack. Then click on ***Duplicate*** and enter a new unique stack identification number. Click ***Save*** and ***Exit*** when finished.
5. To add the device information, click on ***Device*** from the ***Facility Data*** window. Click on ***Add*** from the new window. Fill in all blank fields for the device. If you want to copy an existing device, click ***List*** and pick a device of interest from the popup list window. Then click on ***Duplicate*** and enter a new unique device identification number. Click ***Save*** when finished.
6. To add the process information, click on ***Process*** from the ***Device Data*** window. Click on ***Add*** from the new window. Fill in all blank fields for the process information. If you want to copy existing process information, click ***List*** and double click on a process of interest from the popup window. Then click on ***Duplicate*** and enter a new unique process identification number. Click ***Save*** when finished.
7. To add the emissions information, click ***Emissions*** from the ***Process Data*** window. To add a new pollutant, click on ***Add.*** If you want to copy existing pollutant information, click ***List*** and double click on a pollutant of interest from the popup window. Then click on ***Duplicate*** and enter a new pollutant identification number. Click ***Save*** when finished.
8. Exit out of the ***Emission***, ***Process***, and ***Device*** windows to return to main ***Facility Data*** window



Step 2. Defining Building Geometry

Next, you will need to enter the data for the building and property geometry. This information will be used to calculate building downwash in the dispersion analysis to generate property boundary receptors (See the HARP User Guide for more information).

1. From the main ***Facility Data*** window, click ***Geometry/Buildings.***
2. To add a new building, click on ***Add***. Enter ID number, number of corners, and Tier number. Click ***OK***.
3. Enter the building description, height, and elevation. Click on ***Save***.
4. Select ***Edit Points***, to enter/edit the vertex points for the building. Enter the relative distance for each point (See the illustration below for help on inputting). Click on ***Exit*** to return to the main Building Geometry window.
5. Repeat the above steps to add more buildings or tiers. (Window Legend: The currently selected building tier is shown in red. Stacks are shown as small red circles (solid line). The diameter of the circle is the diameter of the stack. The large dotted circle around each stack is merely a visual aid to make it easier to locate the stacks on the map when the map scale is small. The diameter of the dotted circles has no significance.)

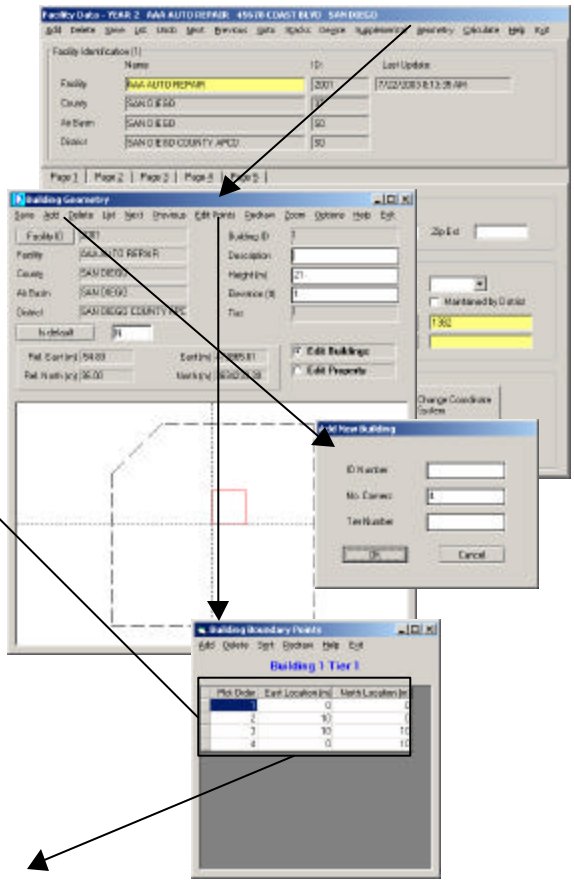
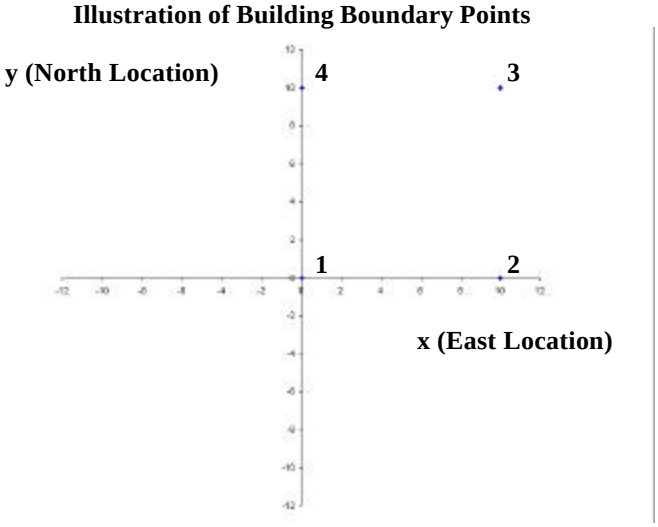


Illustration of Building Boundary Points



Step 3. Defining Property Geometry

Next, you will need to enter the property boundary data. Property boundary data is used to locate boundary receptors along the property boundary for risk analysis. Once the property boundaries have been identified, HARP can generate receptors at regular intervals along the boundary automatically so that you do not have to figure out the UTM coordinates of each boundary receptor. Each facility may have one or more property boundaries. The boundary curves do not have to be connected. (See the HARP User Guide for more information.)

1. To add information on the property boundary, click ***Geometry/Property boundaries*** from the main ***Facility Data window*** or click on the ***Edit Property*** radio button on the ***Property Boundary Geometry*** window
2. To add a new property boundary, click on ***Add*** from the top menu. Enter ID number and number of corners. Click ***OK***
3. Enter building description. Click on ***Save***.
4. Select ***Edit Points***, to enter/edit the vertex points for the property boundary. Enter the relative distance for each point. Click on ***Exit*** to return to the ***Property Boundary Geometry*** window.
5. Repeat the above steps to add more property boundaries to the database. When all of your facilities are entered, return to the HARP main menu. From the HARP Main window you can create reports from the database, export the database to a third party, or set-up and air dispersion run on data within the database.