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8. Prioritization

8.1 Prioritization Background

HARP performs the prioritization calculations in accordance with the guidelines set forth by the California Air Pollution Control Officers Association in the document entitled *CAPCOA Air Toxics "Hot Spots" Program Facility Prioritization Guidelines (July 1990)*. In addition, the HARP software automatically applies the appropriate molecular weight adjustment factor (MWAF) for each Hot Spots substance; therefore, facility emissions should not be manually adjusted before entering them into HARP (see Appendix I for a list of MWAFs, Chapter 4 of the OEHHA Guidance Manual for an example calculation, or the Emission Inventory Criteria Guidelines for reporting guidance).

Prioritization scores are used to determine which facilities shall complete a health risk assessment for the "Hot Spots" Program. Prioritization scores should not to be interpreted as estimates of potential health impacts. Only a health risk assessment can provide those types of estimates. This functionality is intended for District use.

Below is an overview of the prioritization process in HARP. See Appendix A for a set of simple "how to" guides that are intended to assist users with some basic HARP applications and chapter 4 for an example tutorial.

8.2 Prioritization Setup

Open the ***Facility Data*** window. If you have entered data for more than one facility, select ***List*** to bring up the data and select the facility of interest. If you want to start with a new facility, then you will need to add the facility according to instructions in section 5.9.

Once you have the facility of interest on screen, set the receptor proximity by selecting the tab in the center of the screen titled ***PAGE 3***. Next to the button labeled ***Receptor Proximity*** enter a value in meters and select ***Save.*** Note that if no value is entered for the receptor proximity, then HARP assumes that the distance is zero meters and no adjustment is made for the receptor proximity.

Next enter a ***Priority Multiplier*** (if applicable) and select ***Save***. This is a factor that is used to adjust a facility score. This could be used, for example, if a facility emits multipathway pollutants or has receptors within 50 meters.

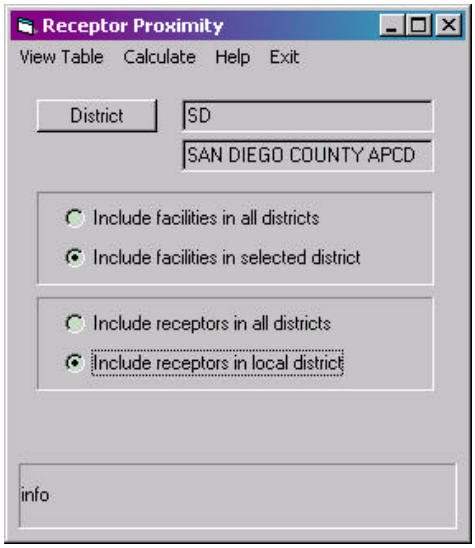
As an alternative, if you do not know the receptor proximity, but have entered set the facility boundary and identified the sensitive receptors, press the ***Receptor Proximity*** button and it will be automatically calculated. The receptor proximity is calculated based on the distance from the nearest sensitive receptor to the facility property boundary. To enter the facility boundary information, from the ***Facility Data*** window, select ***Geometry/Property Boundaries*** and populate the boundary information (e.g., UTMs) for the facility (see sections 4.4.6, 4.4.7, 5.16, 5.17 for more information). To input sensitive receptor information, go to the main HARP

window, enter the sensitive receptor database by clicking ***Edit Data/Sensitive Receptors***. Enter the data for the sensitive receptors (see sections 4.4.8 and 5.20 for more information).

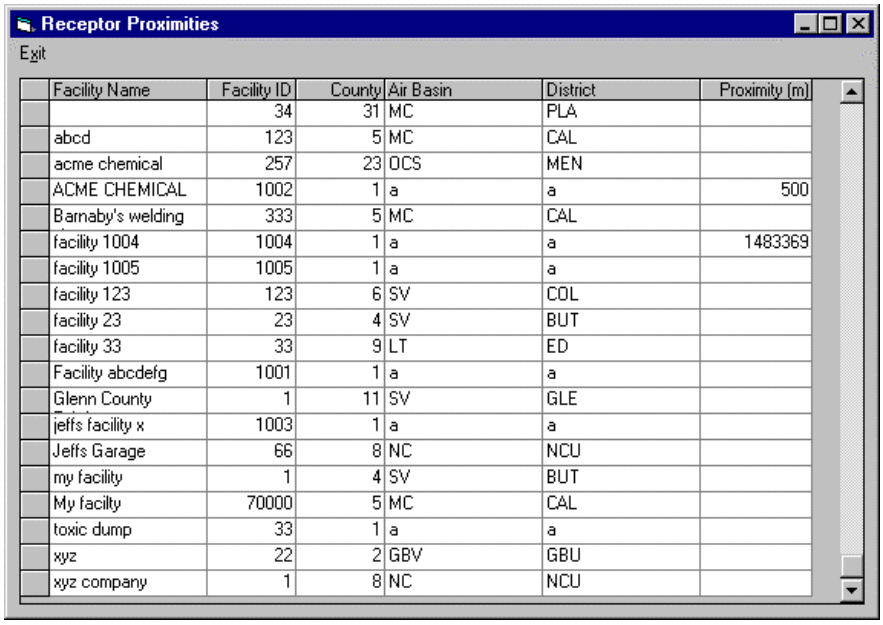
8.3 Calculating Receptor Proximities for Multiple Facilities

If you need to calculate receptor proximities for several facilities in a district, from the HARP main menu, select ***Utilities/Receptor Proximities***. The ***Receptor Proximity*** window will appear as shown below. Click the button labeled ***District*** and select the one of interest. Click the buttons ***Include facilities in selected districts*** and ***Include receptors in local district***. Select ***Calculate***. The receptor proximity data will be calculated and stored in the database. Click ***Exit*** to return to the HARP main window.

If you wish to update all facilities in you database regardless of district, click the buttons labeled ***Include facilities in all districts*** and ***Include receptors in all districts***. Select ***Calculate***. The receptor proximity data will be calculated and stored in the database. Click ***Exit*** to return to the HARP main window.



When you select the *View Table* option, a scrolling list of all facilities is displayed as shown below.



Facility Name	Facility ID	County	Air Basin	District	Proximity (m)
	34	31	MC	PLA	
abcd	123	5	MC	CAL	
acme chemical	257	23	OCS	MEN	
ACME CHEMICAL	1002	1	a	a	500
Barnaby's welding	333	5	MC	CAL	
facility 1004	1004	1	a	a	1483369
facility 1005	1005	1	a	a	
facility 123	123	6	SV	COL	
facility 23	23	4	SV	BUT	
facility 33	33	9	LT	ED	
Facility abcdefg	1001	1	a	a	
Glenn County	1	11	SV	GLE	
jeffs facility x	1003	1	a	a	
Jeffs Garage	66	8	NC	NCU	
my facility	1	4	SV	BUT	
My facilty	70000	5	MC	CAL	
toxic dump	33	1	a	a	
xyz	22	2	GBV	GBU	
xyz company	1	8	NC	NCU	

The program will calculate receptor proximities automatically when you select the ***Calculate*** menu option. You use the circular radio buttons to specify whether you want the calculation to be performed for all facilities and receptors in the database, or only for facilities and receptors in a single district. In the latter case, you must specify the district by clicking on the button labeled ***District***. As receptor proximities are calculated, the facility table is updated with the new values. Therefore you should be careful not to unintentionally perform this calculation and overwrite receptor proximities that have been manually entered.

Note that in order to calculate the receptor proximity for a facility, you must enter property boundary data for the facility by selecting ***Edit Data/Property Boundaries*** from the main menu. To understand why property boundary data is required, refer to footnote B, Appendix C or footnote B, Appendix F in the CAPCOA prioritization guidelines.

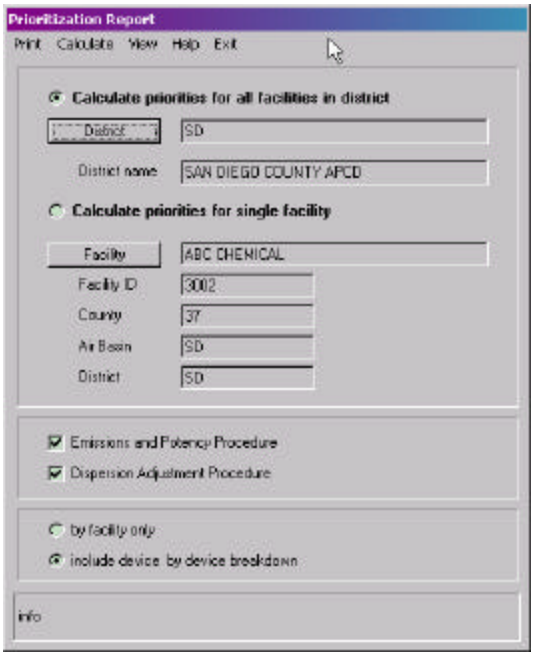
8.4 Prioritization Calculation

There are two ways to get to the prioritization analysis window.

1) From the main HARP screen enter the facility window by clicking on ***Edit Data/Facilities and Emissions.*** Next click on ***Calculate/Priority***. This will open the Prioritization Report window.

2) From the main HARP screen enter the facility window by clicking on ***Reports***. Next click on ***Prioritization***. This will open the Prioritization Report window.

Selecting ***Reports/Prioritization*** from the main menu accesses the prioritization report window. This will cause the following dialog window to be displayed. Follow the procedures described below to generate a facility prioritization report.



If at anytime you wish to view the receptor proximity or facility multiplier information for each facility, select ***View/Receptor Proximities*** for the Prioritization Report window. Also available in the ***View*** button are a list of the chemical potencies/health information and a summary report of the facility prioritization scores.

To calculate scores, first select one of the two circular radio buttons in the top part of the window to specify whether to generate a prioritization report for all facilities in a particular district, or for only a single facility. If you choose ***Calculate priorities for all facilities in district***, then you must select the district by pressing the button labeled ***District***. If you choose ***Calculate priorities for single facility***, then you must select the facility by pressing the button labeled ***Facility***.

Next select one of the two calculation methods to use, either the Emissions and Potency Procedure or the Dispersion Adjustment Procedure, or both. If both methods are used, the total facility score will be the larger of the scores calculated by the two methods.

Next select whether you want the prioritization report to include a device-by-device breakdown of the scores. Although the CAPCOA guidelines do not provide any guidance on how to do this, the method employed by the program to calculate each device score closely resembles the algorithm used for calculating an entire facility score.

The prioritization database can be updated in two ways. First, you may select ***Calculate Priority*** from the facility-editing window. This will update the priority for a single facility. Second, you may select ***Calculate/Update Priority Database*** from the prioritization window. This will either update a single facility priority or all facility priorities, depending on which of the two options is selected in the top portion of the window.

8.5 Printing/Display of Prioritization Reports

Once the priority database has been updated, you may print a report using one of three options under the Print menu:

Print/Preview Report	This will display the prioritization report in a preview window on the screen. To Print this report, select Print from the top of the page while viewing the report.
Print/Print Report to File	This will create a prioritization report and send it to a file.