Modular Emergency Assessment & Notification System (MEANS)

CONTROLLED

COPY # 25

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Modular Emergency Assessment & Notification System (MEANS)

1.0 PURPOSE

1.1 To describe the use of the Modular Emergency Assessment and Notification System (MEANS).

1.2 To describe administrative procedures used to update Emergency Action Level Computerized Information System (EALCIS) module data.

2.0 REFERENCES

2.1 MEANS Version 4.0 User Manual Indian Point Station, Operations Support Services, Inc.

2.2 IP-EP-320, Dose Assessment

2.3 IP-EP-410, Protective Action Recommendations

2.4 IP-EP-120, Emergency Classification

3.0 DEFINITIONS

3.1 System Description and Terms

The MEANS computer program for the Indian Point 2 Station is a graphical software application designed to operate within the Microsoft Windows® environment. Application operation and system requirements are dictated by Microsoft Windows® protocols.

The MEANS program, when launched, presents the user with a command switchboard, which allows operation and interaction among the three emergency planning notification, assessment and information applications:

- New York State Radiological Emergency Data Forms (INForms)
- Dose Assessment and Protective Action Recommendations (DAPAR)
- Emergency Action Level Computerized Information System (EALCIS)

In addition to furnishing a rapid mechanism for switching between the applications, MEANS provides the interface to save and import meteorological, dose projection

and protective action recommendation information[1] and the EAL brief non-technical descriptions onto the notification forms eliminating the need for redundant or additional data input. The interface flow diagram (figure 2-1) illustrates the basic application interactions.

This procedure contains detailed information for operating and understanding the MEANS Interface, the applications and the EALCIS administration application. It is not required nor intended to be used as a step-by-step instruction when using the MEANS interface however, the user must be familiar with basic computer operations within the Microsoft Windows® environment, dose assessment and protective action recommendations in order to operate the program effectively.

A brief description of the purpose and an illustration of each of the application's windows are provided by this procedure. Since users are not constrained to operating the application in any step order, a table is used to describe information and functions for the objects (such as buttons, fields and graphs) contained in MEANS. Information and functions include descriptions, options, units and limits as applicable.

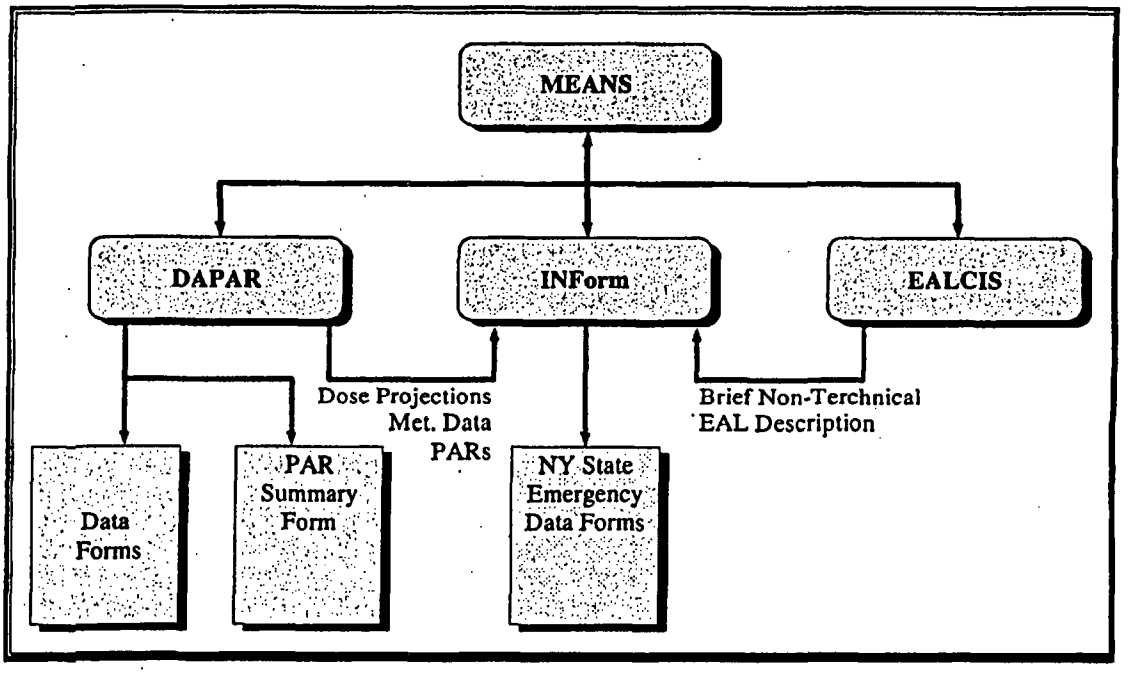


Figure 2-1: MEANS Interface Flow Diagram

[1] Dose projection and protective action recommendation data imported onto the emergency data forms is calculated by the DAPAR application in accordance with the methodologies of IP-EP-310and IP-EP-410 respectively.

A menu bar is provided to allow the user to quit the program from any point. Additionally, the application version and serial number can be obtained from the menu bar. A description of the function for each control is provided at the bottom of the application window (within the status bar) whenever the control has the focus.

The table in Attachment 6, MEANS Window Summary, provides details for most windows presented in the program.

4.0 RESPONSIBILIITES

4.1 Individuals assigned to perform dose assessment or make offsite notifications during emergency will operate the MEANs program.

4.2 Personnel assigned to the Emergency Planning Department are responsible for performing administrative task to maintain the accuracy of the EAL portions of the MEANS program.

5.0 DETAILS

5.1 General MEANS Operations

5.1.1 Upon startup, the program opens to the MEANS interface (Main switchboard). The window directs program flow and provides for the sharing and transfer of information between the modules applications. Once an application's button is selected, the switchboard is hidden and the program module is opened for input. The user can return to the main switchboard by exiting the application. All of the user-entered information is retained when switching between the applications.

5.1.2 Selecting the 'Emergency Data Forms' button opens the initial notification forms application to allows rapid completion of the New York State Radiological Emergency Data Forms, Parts 1 and 2.

5.1.3 Selecting the 'Dose Assessment and PARs' button opens the DAPAR application. Dose projection and assessment is performed from effluent information related to a monitored release and is based on the hand calculation methodologies of IP-EP-310, "Dose Assessment", and IP-EP-410, "Protective Action Recommendations". Up to seven multiple release points can be entered simultaneously during a single session.

5.1.4 The 'Emergency Action Levels' button opens an interactive database, which provides the criteria, conditions, definitions, tables, references, and technical bases of the EALs.

5.1.4 The 'Emergency Action Levels' button opens an interactive database, which provides the criteria, conditions, definitions, tables, references, and technical bases of the EALs.

5.2 Part I of the NYS Radiological Emergency Data Form

To complete Part I of the NYS Radiological Emergency Data Form go to Attachment 9.1, MEANS User Guide #1, NYS Radiological Emergency Data Form (Part I)

5.3 Part II of the NYS Radiological Emergency Data Form

To complete Part II of the NYS Radiological Emergency Data Form go to Attachment 9.2, MEANS User Guide #2, NYS Radiological Emergency Data Form (Part II)

5.4 Dose Assessment

To perform Dose Assessment and Protective Action Recommendations (DAPAR) go to Attachment 9. 3, User Guide #3, DAPAR

5.5 Review of Emergency Action Level Information

To use the Emergency Action Level Computerized Information System go to Attachment 9.4, Use of MEANS for EAL Information Functions.

5.6 System Administration

To perform administrative functions on the Emergency Action Level Computerized Information System go to Attachment 9.5, System Administration **NOTE:** Only authorized personnel shall make changes to EAL Data.

6.0 INTERFACES

6.1 IP-EP-310, Dose Assessment

6.2 IP-EP-410, Protective Action Recommendations

6.3 IP-EP-120, Emergency Classification

7.0 RECORDS

During actual emergencies calculations performed and reported to offsite authorities will be captured and maintained by the Emergency Planning Department.

8.0 REQUIREMENTS AND COMMITMENT CROSS-REFERNERCE

None

9.0 ATTACHMENTS

9.1 MEANS User Guide #1 NYS Radiological Emergency Data Form (Part I)

9.2 MEANS User Guide #2 NYS Radiological Emergency Data Form (Part II)

9.3 MEANS User Guide #3 DAPAR

9.4 Use of MEANS for EAL Information Functions

9.5 System Administration

9.6 MEANS Window Summary

Attachment 9.1
MEANS User Guide #1
NYS Radiological Emergency Data Form (Part I)
Sheet 1 of 6

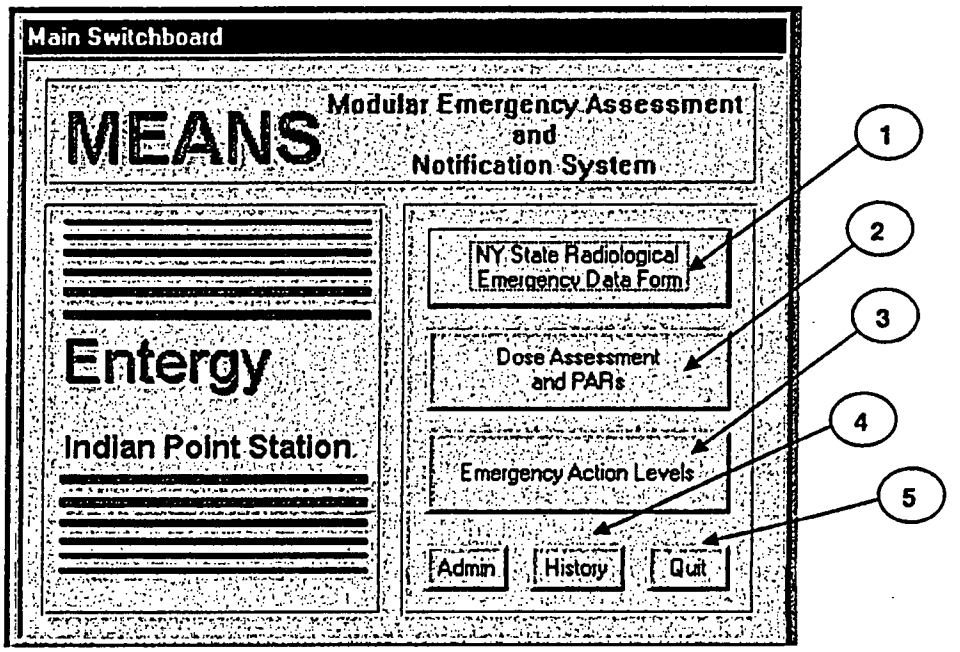
1.0 **IF** the MEANS program is NOT running **THEN** start the MEANS program by one of the following:

1.1 Double clicking icon on desktop

1.2 Selecting MEANS from the start memo

1.3 Locating MEANS program on the Drive "C".

2.0 The following window will open:



3.0 Description of Choices (buttons) on Main Switchboard:

3.1 Button 1 – Opens up the NYS Radiological Emergency Data Form Input Screen. (INForm)

3.2 Button 2 – Opens up DAPAR input screens to perform Dose Assessments.

3.3 Button 3 – Opens up Database of Emergency Action Levels (EAL), which allows review of EAL Descriptions and Technical Basis.

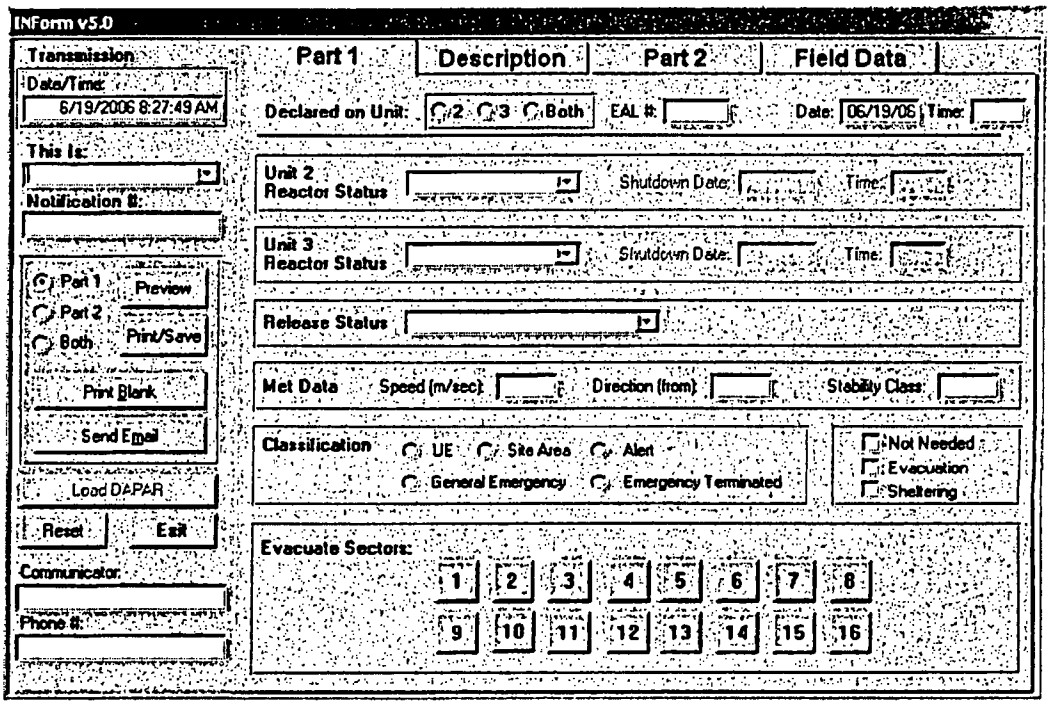
3.4 Button 4 – Opens up access to historical notification and dose assessment forms. Forms are stored when the *"print/save"* button is pressed from within the modules to print forms. (Note: Forms are only stored when "Print/Save is selected for options 1 &2) Copies of historical forms can be printed from this window.

Attachment 9.1
MEANS User Guide #1
NYS Radiological Emergency Data Form (Part I)
Sheet 2 of 6

3.5 Button 5 -- Closes program.
3.6 The Admin button is used by Emergency Planning Staff to edit EAL information.

NOTE:
IF there is a radiological release in progress **THEN** go to DAPAR module first, perform dose assessments, export data and load data into NYS Radiological Emergency Data Forms.

4.0 Press **Button 1** and the following window will open:



5.0 To complete Part 1 of the NYS Notification Form perform the following steps:

NOTES:
Fields on the form can be selected with the mouse cursor or by tabbing between fields.

Pressing "*Exit*" will take you back to Main Switchboard keeping all information entered.

Pressing "*Reset*" will clear all fields to allow user to start over.

Attachment 9.1
MEANS User Guide #1
NYS Radiological Emergency Data Form (Part I)
Sheet 3 of 6

5.1 Transmission time is a locked field and is automatically updated every ten seconds.

5.2 Click on the drop down button in the "*This Is:*" field and select *"Actual Emergency"* or "*Exercise*"

NOTES:

If you choose an EAL # corresponding to a General Emergency, the program will automatically request entry of met data so that it can supply the default Protective Action Recommendations. It will also automatically select *"Evacuation."* The program **will not** allow you to choose PARs unless a General Emergency has been declared.

The program will automatically enter a "*Brief Event Description.*" This description may be reviewed and/or edited by selecting the "*Description*" tab at the top of the window.

5.3 Enter the EAL # (x.x.x) and press enter or tab. The program will choose the proper classification based on the EAL number entered. Verify that the proper classification and description was selected.

5.4 Enter the date and time the emergency was classified.

5.5 Click on the drop down button user must enter "*Reactor Status*" for both units and if the reactor is shutdown, date and time it was shutdown.

5.6 Click on the drop down button to select the proper release data from the "*Release Status:*" drop down button.

NOTES:

Met Data and Radiological Data may be imported from the DAPAR section of MEANS **ONLY** if a release to atmosphere is selected in the "Release Status" field and it has been previously been exported. See instructions for performing Dose Assessment on how data is exported.

The program will not allow issuing of a Protective Action Recommendation unless there is a General Emergency

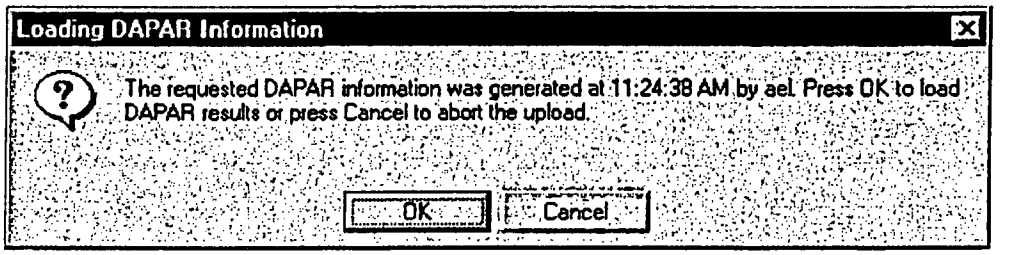
Attachment 9.1
MEANS User Guide #1
NYS Radiological Emergency Data Form (Part I)
Sheet 4 of 6

5.7 To import directly from the DAPAR module perform the following:

5.7.1 Data must be exported from DAPAR prior to importing it into Part II, see Attachment 9.3 for guidance on exporting data.

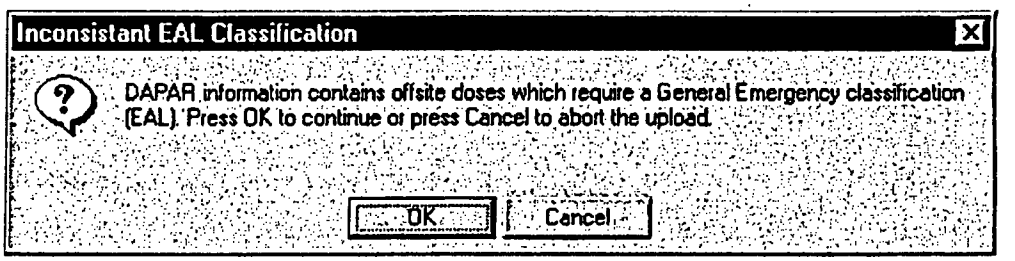
5.7.2 Radiological Data cannot be imported UNLESS, "A release is selected on Part I of the form.

5.7.3 IF the data has been exported AND a release has been selected THEN the "Load DAPAR" button will become active and pressing it will provide the following prompt:



5.7.4 Verify that the time matches data you wish to import and press "OK" to import data.

5.7.5 IF the DAPAR dose projections require a PAR THEN you will receive the following prompt"



5.10 IF there is no radiological release THEN Enter the wind speed, wind direction from, and the stability class into Met Data.

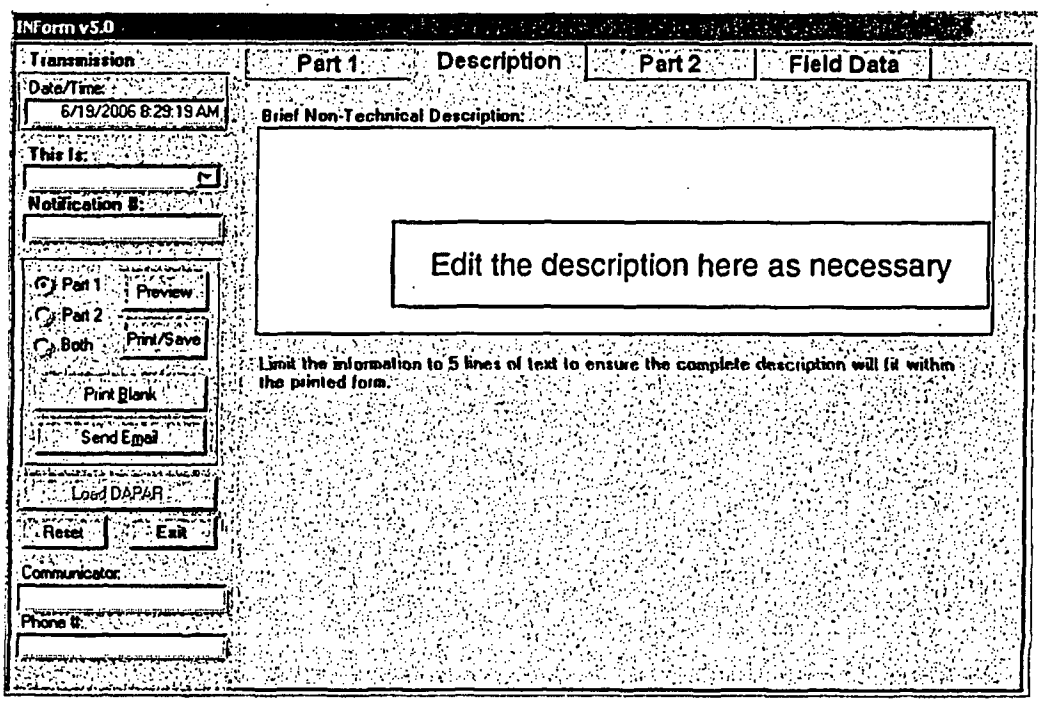
Attachment 9.1

MEANS User Guide #1

NYS Radiological Emergency Data Form (Part I)

Sheet 5 of 6

6.0 **IF** there is a need to change the description **THEN** select the "Description Tab" to open the following window:



7.0 Select the Sectors in the Evacuate Sectors section of the Part I window.

7.1 The program selects default Sectors based on wind direction

7.2 If you import data from DAPAR program updates Sectors in accordance with Dose Projections

7.3 Once a recommendation has been made to evacuate a Sector that Sector should always be included in updated recommendations.

Attachment 9.1

MEANS User Guide #1

NYS Radiological Emergency Data Form (Part I)

Sheet 6 of 6

8.0 Select the "*Preview*" button to see the completed form on-screen and verify data.

8.1 Make any required changes to the information

9.0 Select the "*Print/Save*" button to print the form and save it to the historical records.

9.1 Obtain ED approval

10.0 To complete a transmittal of the notification form:

10.1 Select the "Send Email" button

10.2 Make any required changes to the information.

10.3 Preview and Print/Save.

Attachment 9.2
MEANS User Guide #2
NYS Radiological Emergency Data Form (Part II)
Sheet 1 of 6

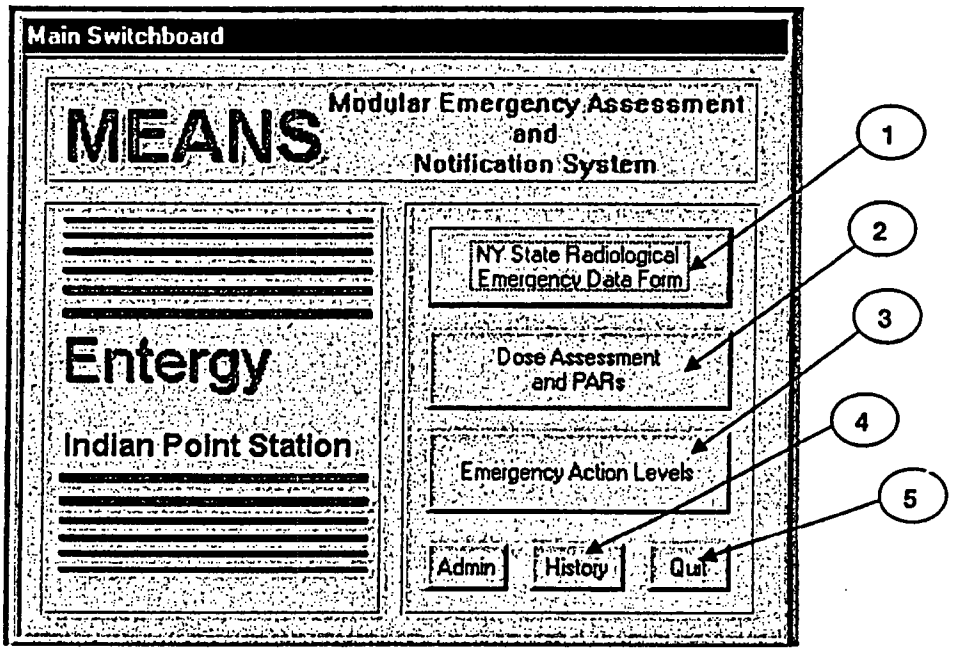
1.0 **IF** the MEANS program is NOT running **THEN** start the MEANS program by one of the following:

1.1 Double clicking icon on desktop

1.2 Selecting Means from the start memo

1.3 Locating Means program on the "C" Drive

2.0 The following window will open:



3.0 Description of Choices (buttons) on Main Switchboard:

3.1 Button 1 – Opens up the NYS Radiological Emergency Data Form Input Screen. (INForm)

3.2 Button 2 – Opens up DAPAR input screens to perform Dose Assessments.

3.3 Button 3 – Opens up Database of Emergency Action Levels (EAL), which allows review of EAL Descriptions and Technical Basis.

3.4 Opens up access to historical notification and dose assessment forms. Forms are stored when the "*print/save*" button is pressed from within the modules to print forms. Copies of historical forms can be printed from this window.

Attachment 9.2

MEANS User Guide #2

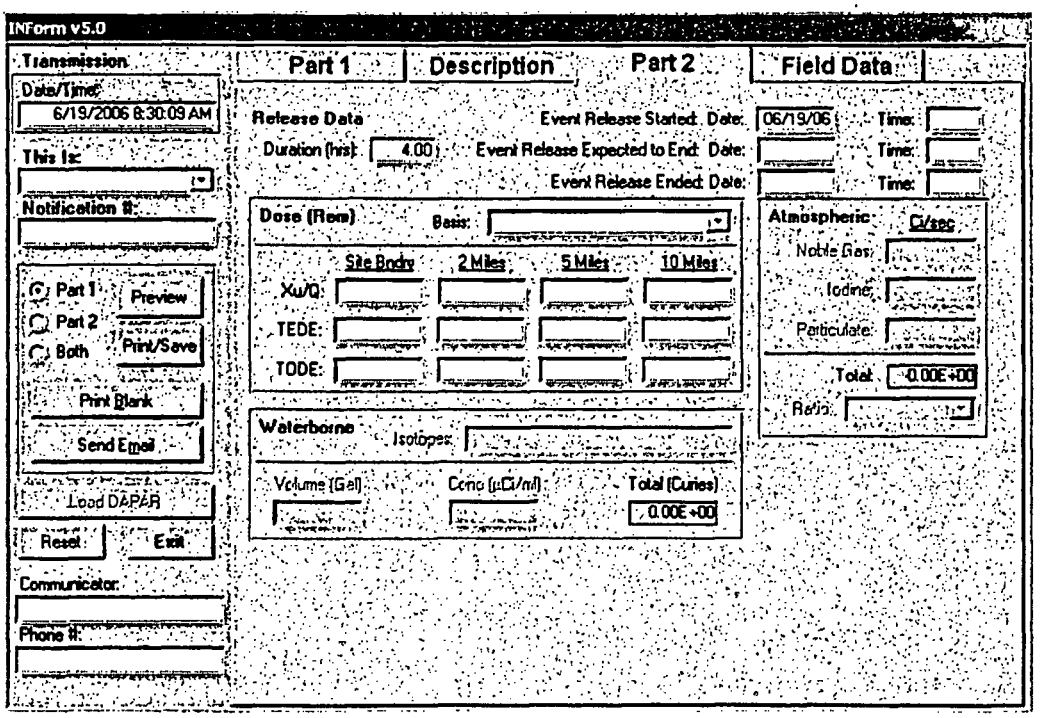
NYS Radiological Emergency Data Form (Part II)

Sheet 2 of 6

3.5 Button 5 -- Closes program.

3.6 The Admin button is used by Emergency Planning Staff to edit EAL information.

4.0 Press **Button 1** and the following window will open:



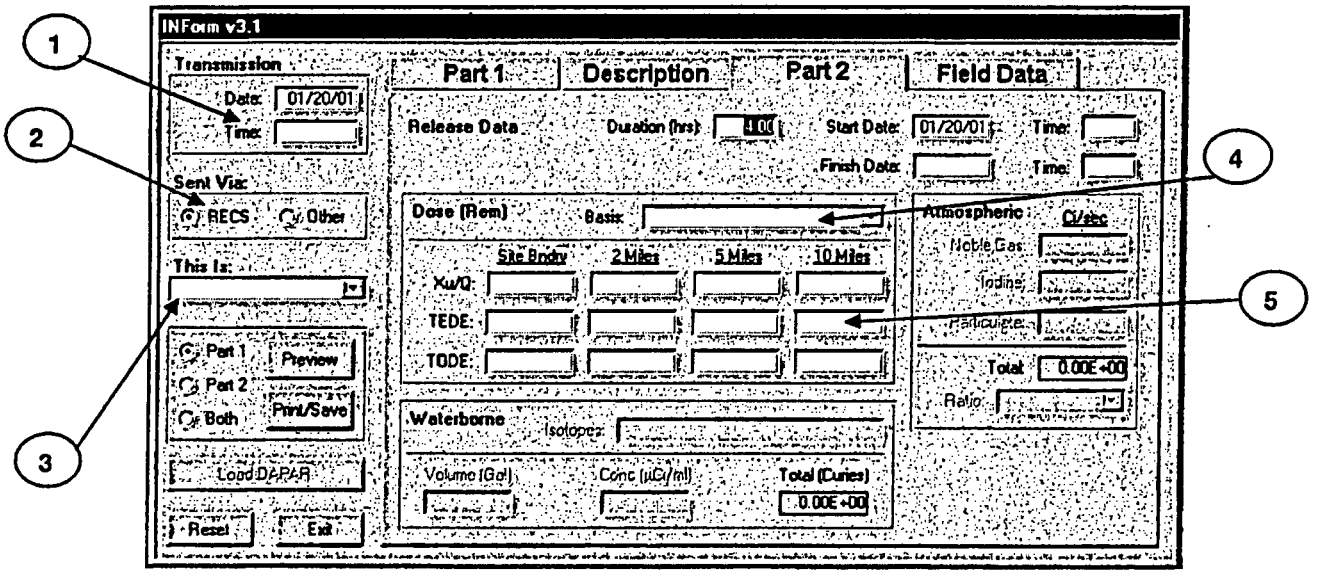
Attachment 9.2

MEANS User Guide #2

NYS Radiological Emergency Data Form (Part II)

Sheet 3 of 6

5.0 Choose the "Part 2" tab at the top of the window and the following window will open:



Attachment 9.2
MEANS User Guide #2
NYS Radiological Emergency Data Form (Part II)
Sheet 4 of 6

6.0 To complete Part II of the NYS Notification Form perform the following steps:

NOTES:
Fields on the form can be selected with the mouse cursor or by tabbing between fields.

Pressing **Exit** will take you back to Main Switchboard keeping all information entered.

Pressing **Reset** will clear all fields

6.1 **DO NOT** enter a transmission time at this time. (This time should be entered by communicator when message is transmitted to offsite agencies.)

6.2 Select "*RECS*" or "*Other*" for method to be used to transmit data. Normally this will be via RECS.

6.3 Click on the drop down button in the "*This Is:*" field and select "*Actual Emergency*" or "*Exercise*"

6.4 Enter Release Data:

6.4.1 **IF** the Release Duration is known **THEN** enter known value
ELSE
Use default value of **4 hours.**

6.4.2 **IF** the release start and stop dates and times are known **THEN** enter these values

6.5 Choose the basis for the projected doses

6.5.1 Inplant Measurements

6.5.2 Field Measurements

6.5.3 Assumed Source Term

NOTES:
Projected offsite doses may be entered manually or imported from the DAPAR module in MEANS

Before information can be imported from DAPAR the individual performing dose assessments must export the data from DAPAR.

Attachment 9.2
MEANS User Guide #2
NYS Radiological Emergency Data Form (Part II)
Sheet 5 of 6

6.6 Enter "*Dose (Rem)*"

6.6.1 Doses may be entered manually.

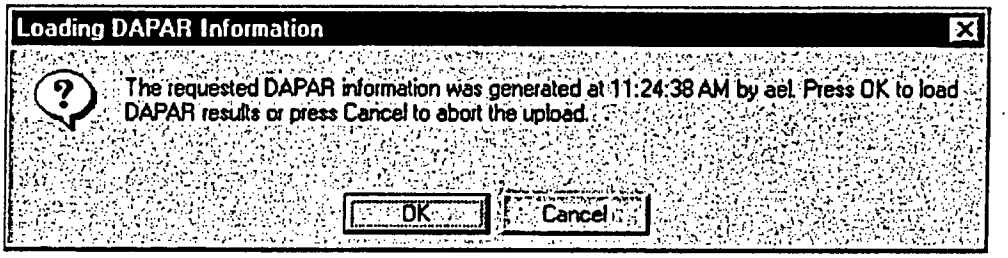
OR

6.6.2 Imported directly from DAPAR module as follows:

A. Data must be exported from DAPAR prior to importing it into Part II. See Attachment 3 for guidance on exporting data.

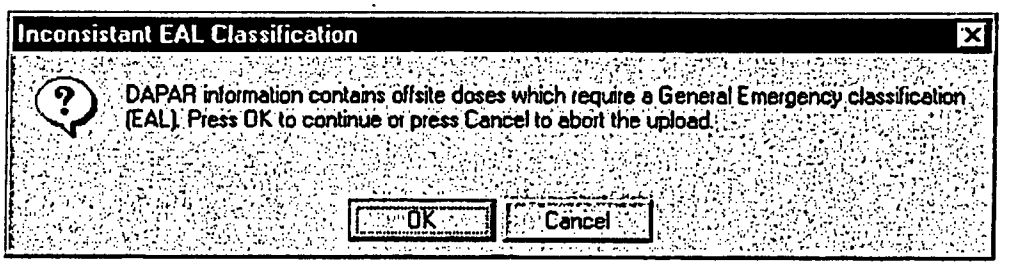
B. Radiological data **CANNOT** be imported unless, a release is selected on Part I of the form.

C. **IF** the data has been exported AND a release has been selected **THEN** the "*Load DAPAR*" button will become active. Pressing it will provide the following prompt:



D. Verify that the time matches the data you wish to import and press "*OK*" to import data.

E. **IF** the results of the DAPAR dose projections require a PAR (projected doses exceed PAGs) and a General Emergency has not been selected on Part I **THEN** you will receive the following prompt:



The program will not allow issuing of a Protective Action Recommendation unless there is a General Emergency

Attachment 9.2

MEANS User Guide #2

NYS Radiological Emergency Data Form (Part II)

Sheet 6 of 6

6.7 Atmospheric data can only be entered if a "*Above or Below TS to Atmosphere*" is chosen on Part I

6.8 Waterborne data can only be entered if a "*Above or Below TS to Water*" is chosen on Part I

6.9 **IF** unmonitored release option is selected **THEN** DAPAR Data cannot be loaded.

Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 1 of 9

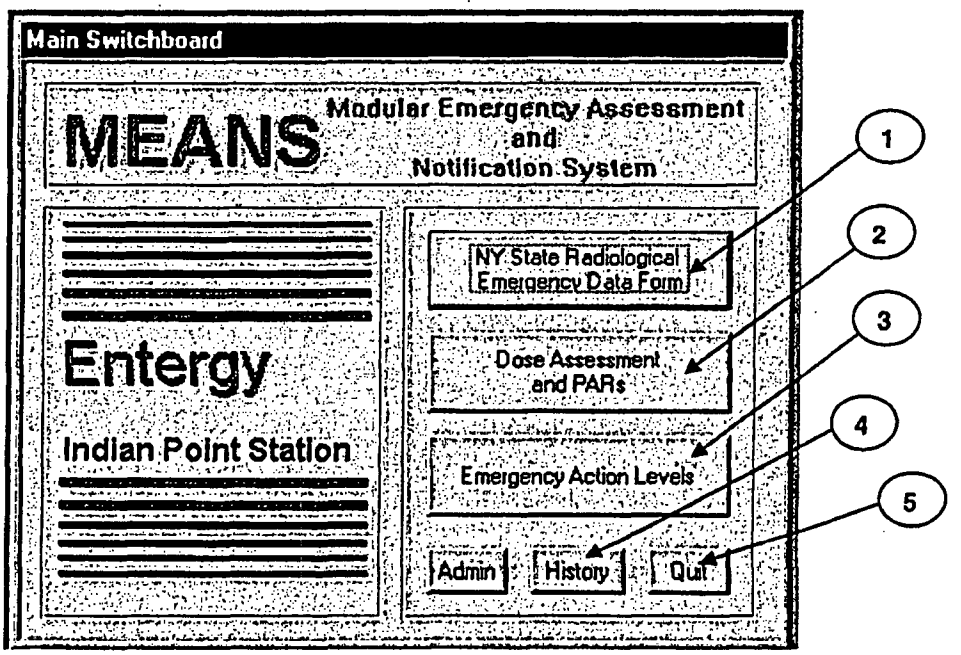
1.0 **IF** the MEANS program is NOT running **THEN** start the MEANS program by one of the following:

1.1 Double clicking icon on desktop

1.2 Selecting Means from the start memo

1.3 Locating Means program on the "Public Drive (R) Drive" EPlan Folder.

2.0 The following window will open:



3.0 Description of Choices (buttons) on Main Switchboard:

3.1 Button 1 – Opens up the NYS Radiological Emergency Data Form Input Screen (INForm).

3.2 Button 2 – Opens up DAPAR input screens to perform Dose Assessments.

3.3 Button 3 – Opens up Database of Emergency Action Levels (EAL), which allows review of EAL Descriptions and Technical Basis.

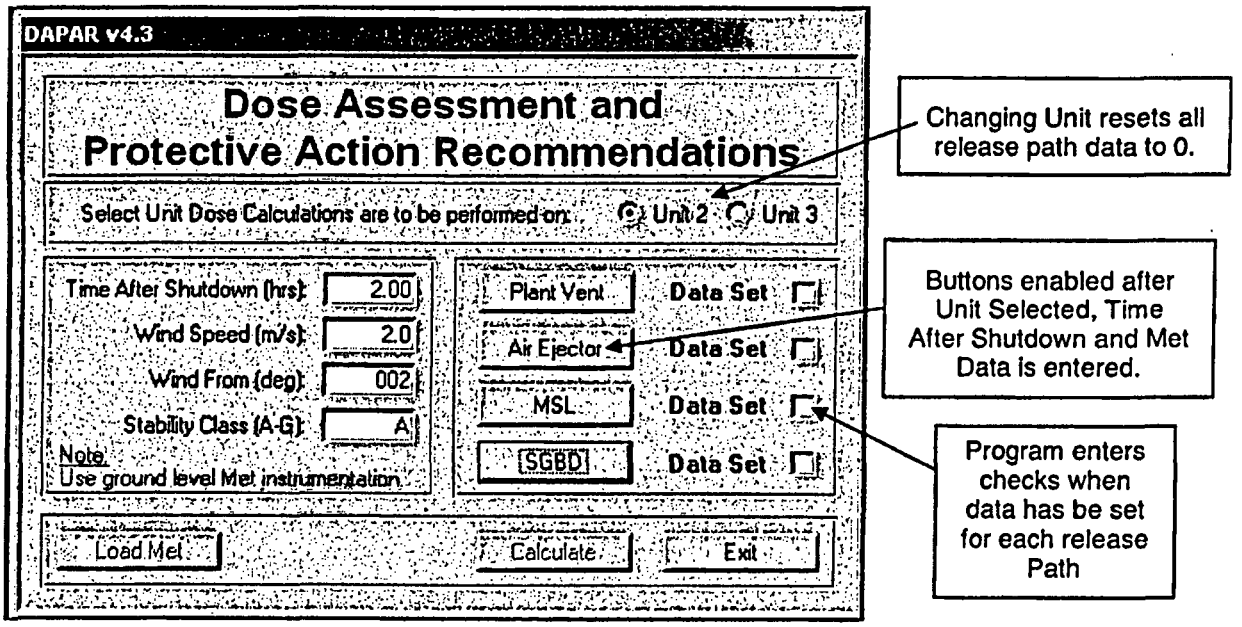
3.4 Button 4 – Opens up access to historical notification and dose assessment forms. Forms are stored when the *"print/save"* button is pressed from within the modules to print forms. Copies of historical forms can be printed from this window.

Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 2 of 9

3.5 Button 5 -- Closes program.

The Admin button is used by Emergency Planning Staff to edit EAL information.

4.0 Choose **Button 2** to open the Dose Assessment and Protective Action Recommendation" (DAPAR) module:



Notes:

The buttons to perform dose calculations will not become active until Unit, Met Data and Time after shutdown data is entered.

IF you "Load Met" data from Form I, after entering Time After Shutdown **THEN** tab to the Time After Shutdown field and re-enter time to activate buttons.

IF you have "Data Set" for more than one release path **THEN** the program will sum dose projections from each set of data. To clear "Set Data" press the cancel button in appropriate window.

5.0 Select affected Unit

6.0 Enter the reactor "*Time After Shutdown (hrs):*"

Attachment 9.3

MEANS User Guide #3

Dose Assessment and Protective Action Recommendations

Sheet 3 of 9

7.0 Enter, "*Wind Speed (m/s)*", Wind Direction, "*Wind From (deg)*:" and "*Stability Class (A-G)*:"

OR

Press "*Load Met*" button to load meteorological data previously entered in NYS Radiological Emergency Data Form.

8.0 Select the button that matches the location of the release.

8.1 "*Plant Vent*" for R-44 Unit 2 (R-14 unit 3), R-27 or survey of release from plant vent.

8.2 "*Air Ejector*" for a release from the Air Ejector. (R-45 Unit 2; R-15 Unit 3)

8.3 "*MSL*" for a release from a SG or ruptured main steam line. (R-28, 29, 30, 31 or R-62A-D)

8.4 "*SGBD*" for a release from a Steam Generator Blowdown line. (R-49 Unit 2; R-19 Unit 3)

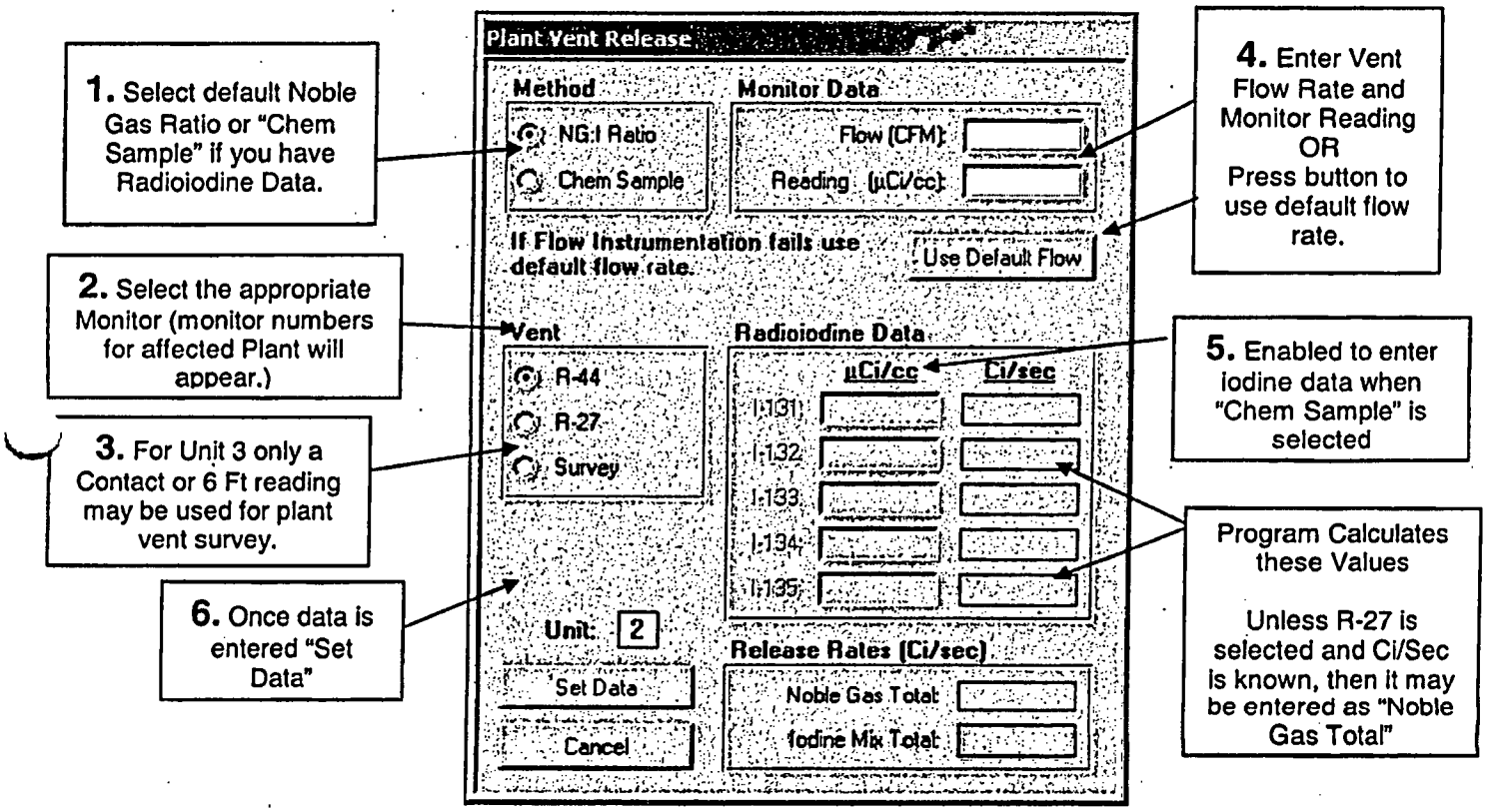
9.0 **IF** you choose "*Plant Vent*" **THEN** enter appropriate information in the following window:

Attachment 9.3

MEANS User Guide #3

Dose Assessment and Protective Action Recommendations

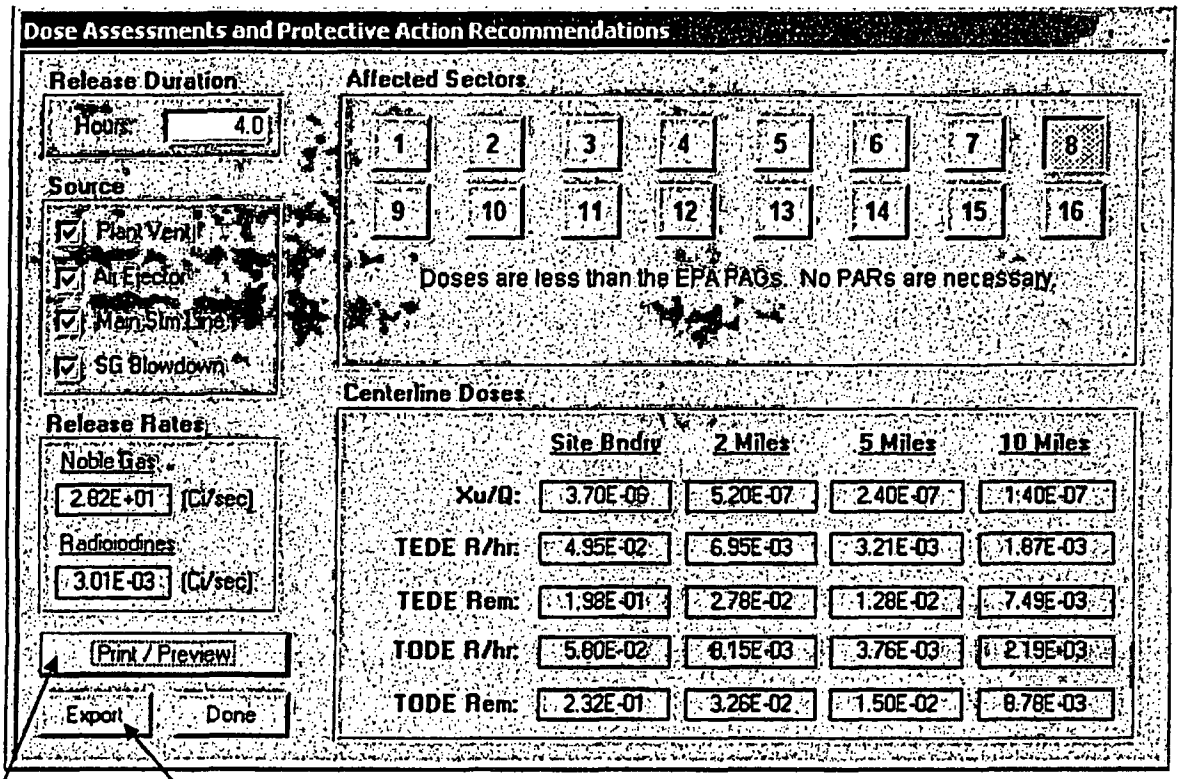
Sheet 4 of 9



Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 5 of 9

9.1 Once Data is set for the plant vent the "*Dose Assessment and Protective Action Recommendations*" (see section 4.0) window will open again.

9.2 Press the "*Calculate*" button to perform dose projection calculations. The following window will open:

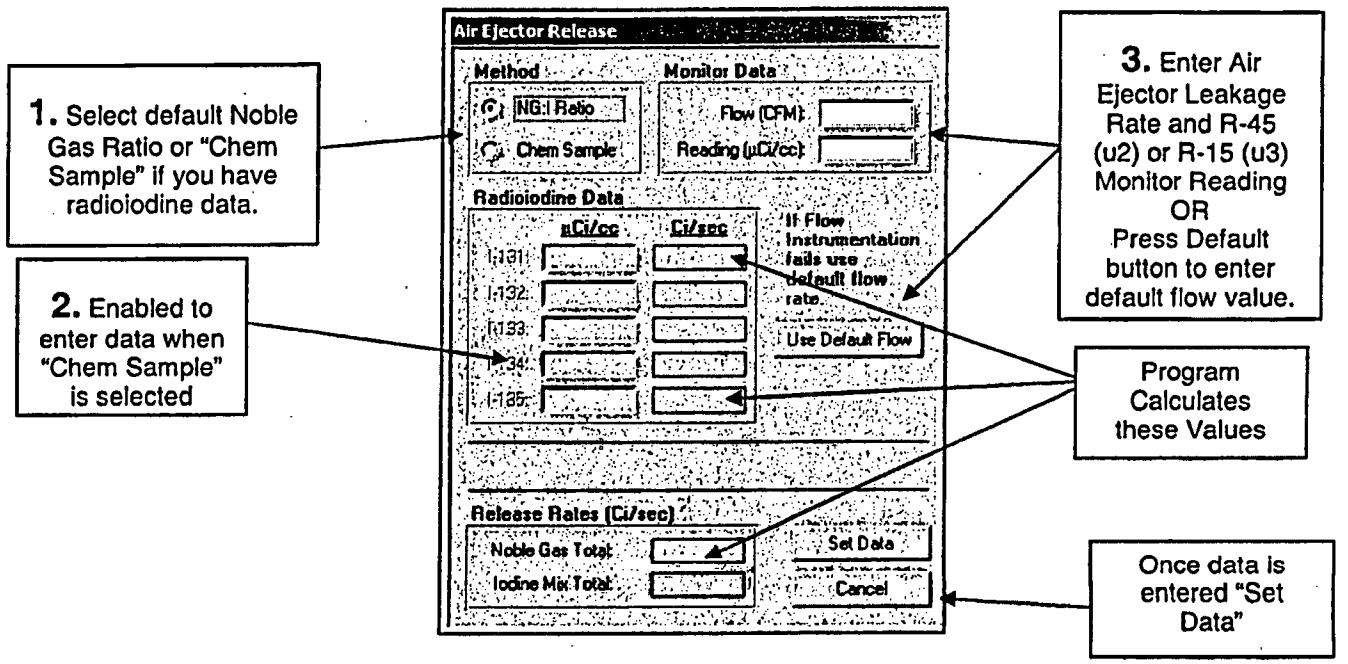


Press this button to Summary Form

Press this button to export data to NYS Forms

Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 6 of 9

10.0 **IF** you choose "Air Ejector" **THEN** enter appropriate information in the following window:



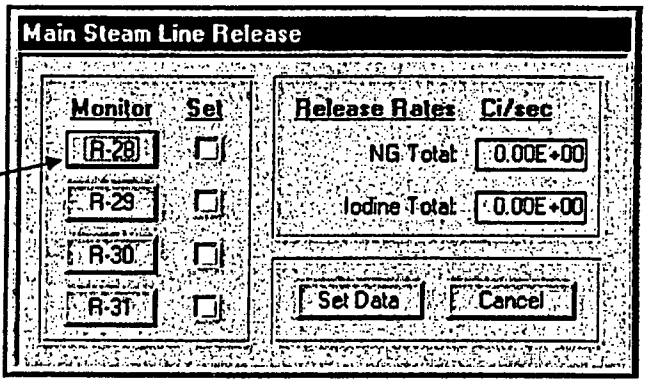
Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 7 of 9

10.1 Once data is set for the air ejector release path the "Dose Assessment and Protective Action Recommendations" (see section 4.0) window will open again.

10.2 Press the "Calculate" button to perform dose projection calculations. The Dose Assessment and Protective Action Recommendations window shown in section 8.2 will open, press "Print / Preview" button to print data.

11.0 **IF** you choose "MSL" **THEN** enter appropriate information in the following window:

Select the monitor and enter data for each release path, multiple monitors may be chosen. (R62a-d for Unit 3)



11.1 When you press one of the monitor buttons the following window will open to enter release data for each Main Steam Line

1. Select default Noble Gas Ratio or "Chem Sample" if you have Radioiodine Data.

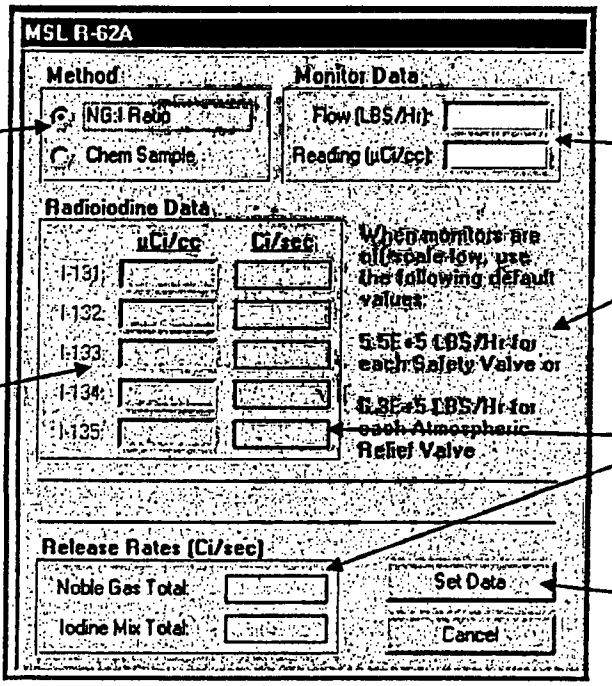
2. Enabled to enter data when "Chem Sample" is selected

3. Enter release Flow Rate and Monitor Reading

Default values listed.

Program Calculates these Values

Once data is entered "Set Data"

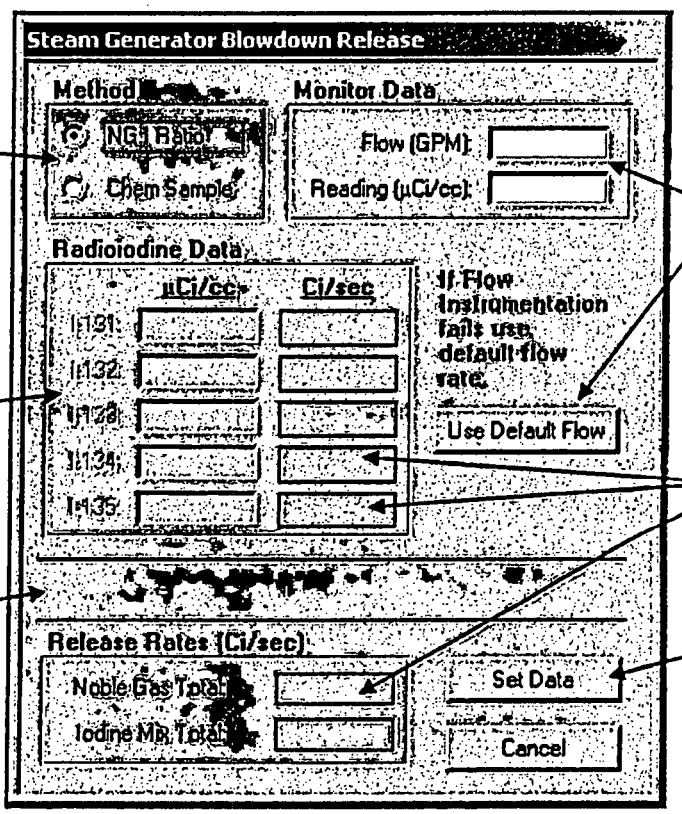


Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 8 of 9

11.2 Once Data is set for the MSL the "*Dose Assessment and Protective Action Recommendations*" (see section 4.0) window will open again.

11.3 Press the "*Calculate*" button to perform dose projection calculations. The Dose Assessment and Protective Action Recommendations window shown under step 8.2 will open. Press "*Print / Preview*" button to print data.

12.0 **IF** you choose "*SGBD*" (Unit 2 Only) **THEN** enter appropriate information in the following window:



12.1 Once data is set for the SGBD the "*Dose Assessment and Protective Action Recommendations*" (see section 4.0) window will open again.

12.2 Press the "*Calculate*" button to perform dose projection calculations. The Dose Assessment and Protective Action Recommendations window shown under step 8.2 will open. Press "*Print / Preview*" button to print data.

Attachment 9.3
MEANS User Guide #3
Dose Assessment and Protective Action Recommendations
Sheet 9 of 9

13.0 Exporting Data

Note:
Transferring data between DAPAR and INForm is a two-part process. First data is exported to memory to make it available for use, then it is imported into the notification forms as needed.

13.1 **AFTER** you have entered release path data and pressed calculate **THEN** press the "*Export*" button to save data for importing (*Load DAPAR*) into Part I and Part II or NYS Radiological Emergency Data Form.

13.2 Enter you initials into the Save Assessment Results box and click "*OK*". The export button will remain sunken to indicate that the exported data is set.

Attachment 9.4

Use of MEANS for EAL Information Functions

Sheet 1 of 2

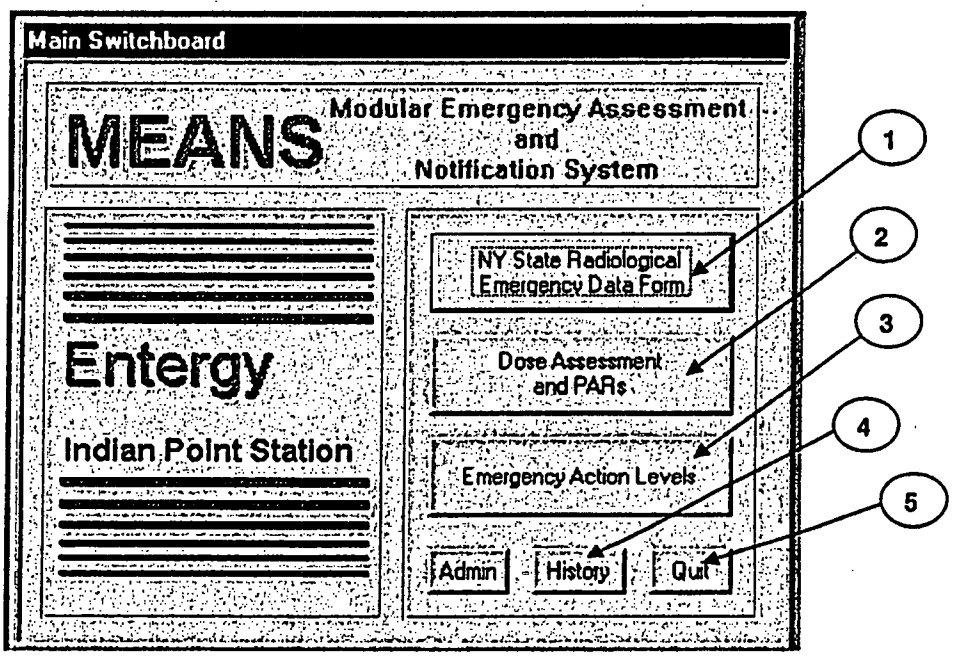
1.0 **IF** the MEANS program is NOT running **THEN** start the MEANS program by one of the following:

1.1 Double clicking icon on desktop

1.2 Selecting Means from the start memo

1.3 Locating Means program on the "Public Drive (R) Drive" EPlan Folder.

2.0 The following window will open:



3.0 Description of Choices (buttons) on Main Switchboard:

3.1 Button 1 – Opens up the NYS Radiological Emergency Data Form Input Screen (INForm).

3.2 Button 2 – Opens up DAPAR input screens to perform Dose Assessments.

3.3 Button 3 – Opens up Database of Emergency Action Levels (EAL), which allows review of EAL Descriptions and Technical Basis.

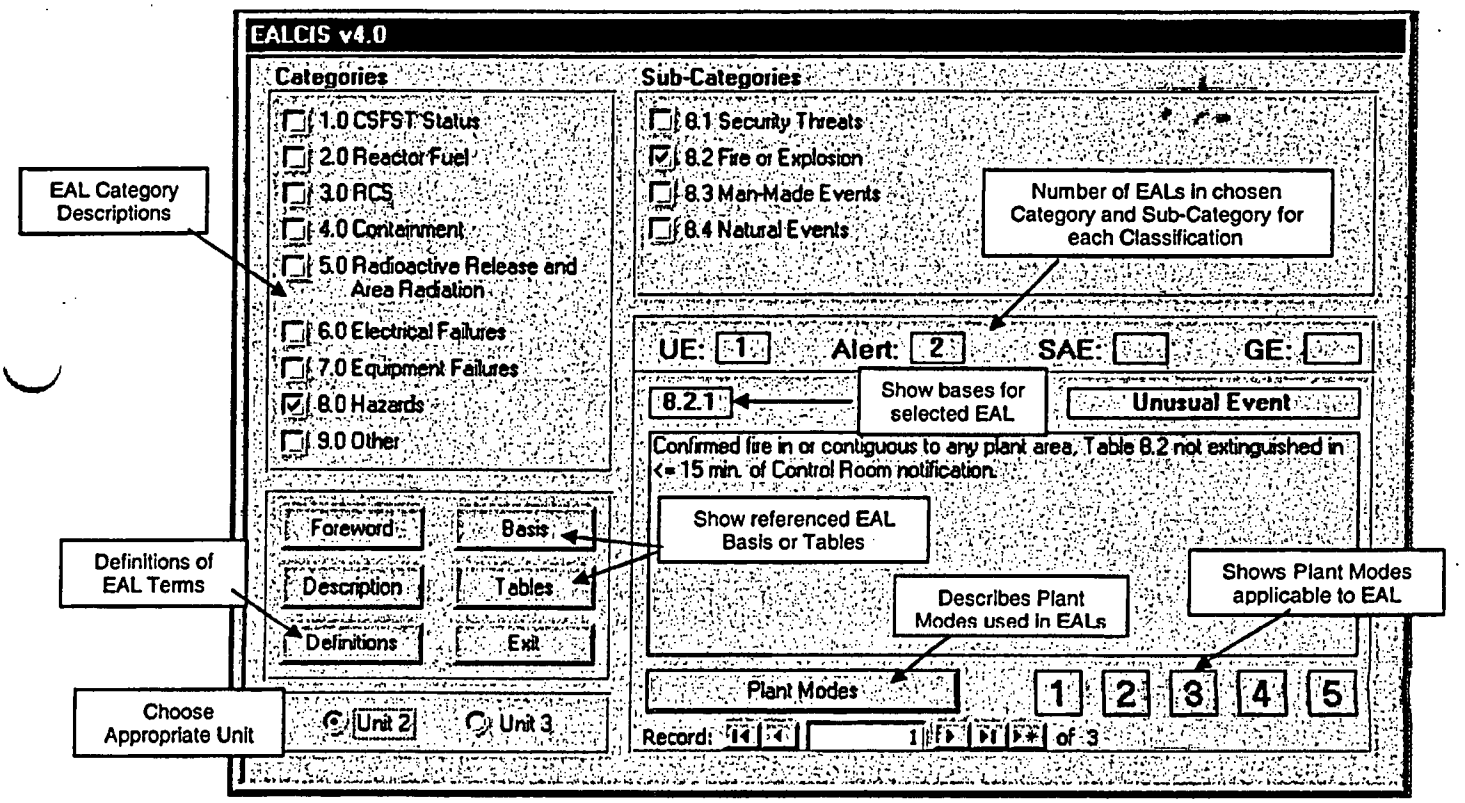
3.4 Button 4 – Opens up access to historical notification and dose assessment forms. Forms are stored when the *"print/save"* button is pressed from within the modules to print forms. Copies of historical forms can be printed from this window.

Attachment 9.4
Use of MEANS for EAL Information Functions
Sheet 2 of 2

3.5 Button 5 -- Closes program.

The Admin button is used by Emergency Planning Staff to edit EAL information.

4.0 Choose **Button 3** to access the Emergency Action Level Information module:



5.0 Choose the EAL "Category" and "Sub Category" to select only those record of interest.

6.0 To locate the record desired, use the "Record" selection buttons to page through all EALs in a sub-category

7.0 Press appropriate button as described above to obtain desired information about chosen EAL.

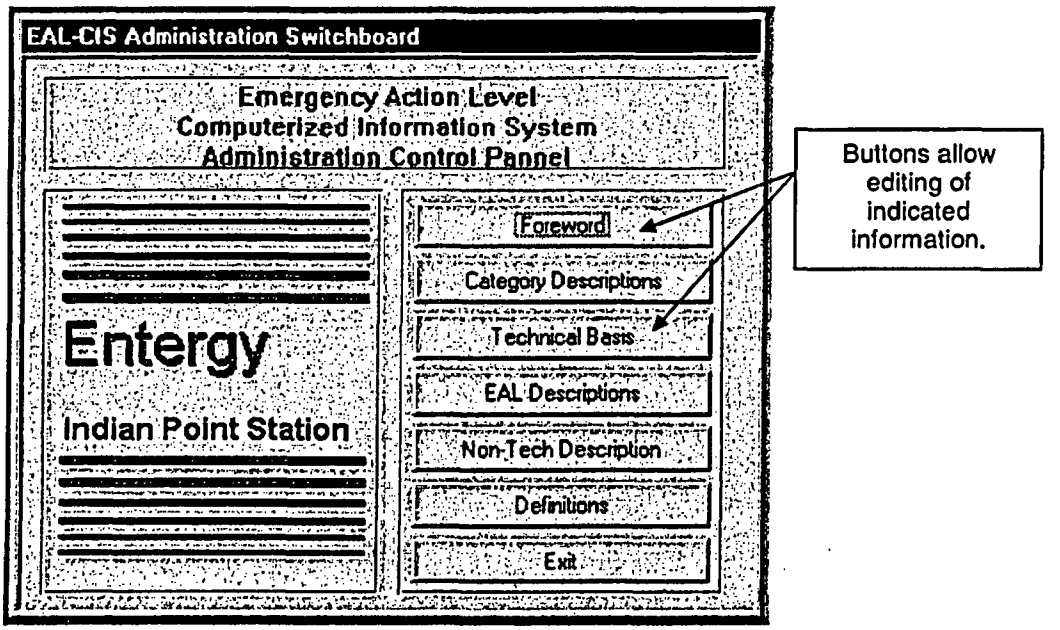
8.0 Press the "Exit" button to return to main switchboard.

Attachment 9.5
System Administration
Sheet 1 of 1

1.0 **IF** the MEANS program is NOT running **THEN** start the MEANS program.

2.0 On the Main Switchboard select **"Admin"** to access administrative functions of program.

3.0 You will be ask to enter a password, enter the appropriate password and the following window will open:



4.0 Edit EAL information as necessary and exit administration controls.

Attachment 9.6
MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description

Main Switchboard

INForm	Command Button	Opens the New York State Radiological Emergency Data Forms application.
DAPAR	Command Button	Opens the Dose Assessment and Protective Action Recommendation application.
EALCIS	Command Button	Opens the Emergency Action Level Computerized Information System application.
Admin	Command Button	Opens the administration windows to allow changes to the EALCIS data tables. *(This area is password protected)*
History	Command Button	Opens the administration windows for historical application form printing and maintenance.
Quit	Command Button	Closes all applications, resets all data inputs, quits out of the MEANS interface and returns to the Windows desktop.

Non-Tab (appears on each tab) Emergency Data Forms

Transmission Date	Text Box	Date the form is transmitted to offsite authorities entered as **MM/DD/YY.** The system date is entered as a default value.
Transmission Time	Text Box	Time the form is transmitted to offsite authorities entered as **HHMM.**
Transmission Via	Option Button	Available selections are: • RECES • Other
This Is	List Box	Available selections are: • NOT an Exercise • An Exercise
Report Selector	Option Buttons	Available selections to set the preview or print commands are: • Part 1 • Part 2 • Both
Preview	Command Button	Opens a print preview window for the selected Part 1 and/or Part 2 report.
Print/Save	Command Button	Prints the selected Part 1 and/or Part 2 report and save the data to the historical file.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Load DAPAR	Command Button	Loads meteorological, dose assessment and protective action recommendation data. **NOTE:** The data must have been saved while running the DAPAR application **AND** a release to the atmosphere must be selected to enable this feature.
Reset	Command Button	Clears all the data and restores BOTH Emergency Data Forms to their initial startup default states.
Exit	Command Button	Closes the emergency data forms window and returns to the main switchboard.

Emergency Data Form -- Part 1 Tab

EAL #	Text Box	EAL number entered as **X.X.X.** Improper EAL numbers are not accepted. The classification will be automatically selected when an EAL is entered. Entry of an EAL number inconsistent with a previously selected classification will prompt for user direction. Entry of a General Emergency EAL will select the default PARs provided met data has been entered.
Declaration Date	Text Box	Date the event was declared entered as **MM/DD/YY.** The system date is entered as the default value.
Declaration Time	Text Box	Time the event was declared entered as **HHMM.**
Reactor Status	List Box	Available selections are: • Critical • Hot Shutdown • Cold Shutdown
Shutdown Date	Text Box	Date the reactor was shutdown entered as **MM/DD/YY.** This control is disabled until either the hot or cold shutdown status is selected.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Shutdown Time	Text Box	Time the event was declared entered as **HHMM.** This control is disabled until either the hot or cold shutdown status is selected.
Conditions	List Box	Available selections are: • Stable • Improving • Degrading
Release Status	List Box	Available selections are: • No Release • Above TS to Atmosphere • Below TS to Atmosphere • Above TS to Water • Below TS to Atmosphere • Unmonitored **NOTE:** A release to the atmosphere must be selected to enable the Load DAPAR command button.
Speed	Text Box	Wind speed value between **0 - 45** m/sec. Wind speed is automatically entered when DAPAR data is loaded. Entering wind speed will select the default PARs provided the other met data has been entered and a General Emergency classification is selected.
Direction	Text Box	Wind direction entered as degrees from in the range of **000º to 360º.** Wind direction is automatically entered when DAPAR data is loaded. Entering wind direction will select the default PARs provided the other met data has been entered and a General Emergency classification is selected.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Stability Class	Text Box	Pasquil category entered as **A-G** describing the applicable stability class. Stability class is automatically entered when DAPAR data is loaded. Entering stability class will select the default PARs provided the other met data has been entered and a General Emergency classification is selected.
Classification	Option Buttons	Available selections are: • Unusual Event Disables PARs • Alert Disables PARs • Site Area Emergency Disables PARs • General Emergency Enables PARs • Recovery Enables PARs • Emergency Terminated Disables PARs • Transport Enables PARs The classification will be automatically selected when an EAL is entered. Selection of a General Emergency will set the default PARs provided met data has been entered. Selection of a classification inconsistent with an entered EAL number will prompt for user direction.
PARs	Option Buttons	Available selections are: • Issued • Not Issued Disabled and set at 'Not Issued' for UE, Alert, SAE and Termination. Disabled and set at 'Issued' for GE. Enabled for Recovery and a Transportation Incident.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
ERPAs	Toggle Buttons	On or Off buttons for each ERPA. A depressed button is 'on' (indicating evacuate). Buttons are disabled unless a classification of GE, Recovery or Transportation Incident is selected. Default ERPAs are automatically selected whenever (1) a new General Emergency EAL is entered, (2) a General Emergency event is selected or (3) any met data field is updated. Changing a classification from a General Emergency will clear any selected ERPAs.

Emergency Data Form -- Description Tab

Description	Text Box	Provides an editable area for event information. Text for the brief non-technical description is automatically loaded whenever an EAL # has been entered.

Emergency Data Form -- Part 2 Tab

Duration	Text Box	Projected release duration entered as greater than **0 to 96** hours. The default value is four (4.00) hours. The release duration is automatically entered when DAPAR data is loaded.
Start Date	Text Box	Date the release of radioactive materials began entered as **MM/DD/YY.** The system date is entered as the default value.
Start Time	Text Box	Time the release of radioactive materials began entered as **HHMM.**
Finish Date	Text Box	Date the release of radioactive materials ended entered as **MM/DD/YY.**
Finish Time	Text Box	Time the release of radioactive materials ended entered as **HHMM.**

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Bases	List Box	Available selections are: • In-Plant Measurements • Field Measurements • Assumed Source Term 'Assumed Source Term' is automatically selected when DAPAR data is loaded.
Xu/Q(s)	Text Boxes	Xu/Q values for Site Boundary, 2 miles, 5 miles and 10 miles downwind. Xu/Q values are automatically entered when DAPAR data is loaded.
TEDE(s)	Text Boxes	TEDE values for Site Boundary, 2 miles, 5 miles and 10 miles downwind. TEDE values are automatically entered when DAPAR data is loaded.
TODE(s)	Text Boxes	TODE values for Site Boundary, 2 miles, 5 miles and 10 miles downwind. TODE values are automatically entered when DAPAR data is loaded.
Noble Gas	Text Box	Noble Gas Release Rate for an airborne release in Ci/sec. The text box is enabled when an airborne release is chosen. The Noble Gas release rate is automatically entered when DAPAR data is loaded.
Iodine	Text Box	Radioiodine Release Rate for an airborne release in Ci/sec. The text box is enabled when an airborne release is chosen. The radioiodine release rate is automatically entered when DAPAR data is loaded.
Particulate	Text Box	Particulate Release Rate for an airborne release in Ci/sec. The text box is enabled when an airborne release is chosen.
Total	Text Box	Information only (non-editable). Gives the total airborne radioactive release rate in Ci/sec.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
NG:I Ratio	List Box	Available selections are: • Assumed • Actual
Isotopes	Text Box	List of the primary isotopes identified or presumed to be in the release. Entries can be made beyond the length of the text box however, information printed on the report will be limited by the amount of space provided on the form itself.
Volume	Text Box	Volume of radioactive liquid for a waterborne release in gallons. The text box is enabled when a waterborne release is chosen.
Concentration	Text Box	Concentration of gross radioactivity of the liquid for a waterborne release in µCi/cc. The text box is enabled when a waterborne release is chosen.
Total	Text Box	Information only (non-editable). Gives the total waterborne radioactive release in Curies.

Emergency Data Form -- Field Data Tab

Vector	Text Box	Location of the radiological sample or survey in reference to the plant. Entered as distance from plant in miles and direction from plant as sector or degrees (miles/sector or miles/degrees).
Location	Text Box	Brief physical description of the radiological sample or survey location.
Time	Text Boxes	Time the radiological survey or sample was performed entered as **HHMM**.
Reading	Text Boxes	Value of the radiological survey or sample reading.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Units	Option Buttons	Available selections are: • mR/hr • $\mu Ci/cm^2$

DAPAR -- Main Data

Time After S/D	Text Box	Time since reactor shutdown from **0 to 270** hours. Zero is used to indicate the reactor is still critical.
Wind Speed	Text Box	Wind speed value between **0 - 45** m/sec. Wind speed is automatically entered when Load Met data is selected.
Wind Direction	Text Box	Wind direction entered as degrees from in the range of **000º to 360º**. Wind direction is automatically entered when Load Met data is selected.
Stability	Text Box	Pasquil category entered as **A-G** describing the applicable stability class. Stability is automatically entered when Load Met data is selected.
Unit	Option Buttons	Choose the affected Unit to ensure proper constants and conversion factors are used to calculate Release Rate.
Plant Vent	Command Button	Opens the plant vent release data window. Disabled until the meteorological information has been entered.
Air Ejector	Command Button	Opens the air ejector release data window. Disabled until the meteorological information has been entered.
MSL	Command Button	Opens the main steam line master data window. Disabled until the meteorological information has been entered.
SGBD	Command Button	Opens the steam generator blow down release data window. Disabled until the meteorological information has been entered.
Data Set(s)	Check Box	Information only (non-editable). A checked box indicates data has been entered for the applicable release point. The check box is cleared when Cancel is selected from the release point's data entry window.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Calculate	Command Button	Calculates dose and determines PARs. Opens the dose rate data window. Disabled until meteorology and at least one release point have been entered.
Exit	Command Button	Closes the DAPAR main data window and returns to the main switchboard. All entries and selections are retained until the MEANS application is exited (quit).

Release Point Data

Method	Option Button	Available selections are: • NG:I Ratio • Chem Sample Establishes the method for which the radiolodine concentration is determined. NG:I Ratio is the default selection.
Flow	Text Box	Effluent flow rate in: • CFM (cubic feet per minute for plant vent and air ejector) • Lbs/Hr (pounds per hour for main steam line) • GPM (gallons per minute for steam generator blow down)

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Noble Gas Reading	Text Box	Monitor or sample reading in µCi/cc or survey results in mR/Hr.
Vent[2]	Option Buttons	Available selections are: • R-44 / R-14 • R-27 • Survey • Sample Selecting the Survey option changes the reading prompt from µCi/cc to mR/Hr.
Isotopic Concentrations	Text Boxes	Monitor or sample reading in µCi/cc or survey results in mR/Hr. The text boxes are disabled until the Chem. Sample option button is selected. Data for any or all isotopes can be entered after the text box has been enabled.
Isotopic Release Rate	Text Boxes	Information only (non-editable). Shows the calculated isotopic radioiodine release rates based on the inputs for vent flow rate and isotopic concentrations when Chem. Sample is selected.
Noble Gas Release Rate	Text Box	Editable only when a R-27 vent release is selected, otherwise the field is for information only (non-editable). Shows the calculated Noble Gas release rate in Ci/sec based on the inputs for effluent flow rate and monitor reading or survey/sample results.
Total Iodine Release Rate	Text Box	Information only (non-editable). Shows the total radioiodine release rate based on the inputs for vent flow rate and method selected.

[2] The vent option buttons are only applicable to the plant vent monitored release point.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Set Data	Command Button	Accepts the information in the active release point data window and returns to the main data window.
Cancel	Command Button	Deletes any release data entered in the active window and returns to the DAPAR main data window.

MSL Summary Data

Monitor	Command Buttons	Closes the MSL master data window and opens the selected MSL release point data window.
Set	Check Box	Information only (non-editable). A checked box indicates data has been entered for the applicable release point. The check box is cleared when Cancel is selected from the release point's data entry window.
Release Rate	Text Boxes	Information only (non-editable). Indicates the total Noble Gas and radioiodine release rates in Ci/sec.
Set Data	Command Button	Accepts all of the entered MSL release data and returns to the main data window.
Cancel	Command Button	Deletes all of the entered MSL release data and returns to the main data window.

Dose Assessment and PAR Summary

Release Duration	Text Box	Projected release duration entered as greater than **0 to 96** hours. The default value is four (4.00) hours.
Source	Check Boxes	Information only (non-editable). Indicated the source term release point(s).
Affected Sectors	Check Boxes	Information only (non-editable). Describes the downwind sectors, which are affected under the provided meteorological data.
ERPAs	Text Button	Information only (non-editable). Illustration of the ERPAs, which meet the dose criteria for evacuation.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Release Rates	Text Boxes	Information only (non-editable). Indicates the total Noble Gas release rate and the amount of radioiodine released, which are used to determine the TODE, dose rates.
Dose Rates	Text Boxes	Information only (non-editable). Indicates the downwind Xu/Q, TEDE and TODE (in units of Rem/Hr) values.
Print/Preview	Command Button	Opens another window, which allows printing a summary. NOTE: Only printing saves saves dose assessments in historical data.
Export	Command Button	Saves the meteorological, dose projection and protective action recommendation information for export to the radiological emergency data forms. The export button will automatically reset whenever any information is changed.
Done	Command Button	Closes the PAR summary window and returns to the main data window.

Reports Information and Functions

Report Type	Option Buttons	Available selections are: • Dose Assessment and PAR Summary • Dose Rate Assessments: Summary Form Affects the choices for the release points
Release Point	Option Buttons	Available selections are: • Plant Vent • MSL R-28 through R-31 (Unit 2) R-62a-d (Unit 3) • Air Ejector • SG Blowdown • All When Summary type is selected, individual release points cannot be chosen.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Preview	Command Button	Opens a print preview window for the selected report type.
Print/Save	Command Button	Prints the selected report. Saves Historical Data
Done	Command Button	Closes the Reports window and returns to the DAPAR Summary window.

EAL Selection

Category	Option Buttons	Available selections are: 1.0 CSFST Status 2.0 Reactor Fuel 3.0 RCS 4.0 Containment 5.0 Radioactive Release and Area Radiation 6.0 Electrical Failures 7.0 Equipment Failures 8.0 Hazards 9.0 Other
Unit	Option Button	Chooses appropriate Unit to display data for.
Sub-Category	Option Buttons	The available selection depends on the selected category.
Classifications	Text Boxes	Information only (non-editable). Describes the number of event EALs for each classification level based on the selected sub-category.
EAL #	Text Box	Information only (non-editable). Provides the EAL number of the current EAL record.
EAL Classification	Text Box	Information only (non-editable). Provides the classification level of the current EAL record.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Description	Text Box	Information only (non-editable). Provides the EAL description of the current EAL record.
Plant Modes	Command Button	Opens an information window, which provides the definitions for each plant mode. This control is not visible until a category and sub-category have been selected.
Applicable Modes	Text Boxes	Information only (non-editable). Provides the applicable plant modes of the current EAL record.
EAL Area	N/A	Provides an area within the EAL selection window where individual EAL information is provided. Controls common to windows based applications within this area include: • Navigation Buttons: Allows navigation among records within the table. They include 'Go To First', 'Go To Previous', Go To Next' and 'Go To Last'. • Record #: A record number can be entered directly to go to the desired record. • Of #: Displays the number of records found to match the search criteria.
Foreword	Command Button	Opens a text window, which allows scrolling through the foreword section of the EAL technical bases manual.
Description	Command Button	Opens a text window, which allows scrolling through the discussion of the selected category. This control is disabled until a category has been selected.
Definitions	Command Button	Opens a window, which provides a list box of definitions for key words and phrases of the EAL technical bases manual.
Basis	Command Button	Opens a window, which allows for text and numeric searches of the EAL technical Bases.
Tables	Command Button	Opens a window, which allows the display the tables and attachments associated with or referenced by the EALs.

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
Exit	Command Button	Closes the EALCIS window and returns to the MEANS interface. All entries and selections are retained until the interface itself is exited (quit).

Foreword

Text View Area	Vertical Scroll Bar	Allows for scrolling through the foreword. Enabled when the text area is selected by using a pointing device or the tab key.
OK	Command Button	Closes the foreword window and returns to the EAL selection window.

Category Description

Text View Area	Vertical Scroll Bar	Allows for scrolling through the description. Enabled when the text area is selected by using a pointing device or the tab key.
OK	Command Button	Closes the category description window and returns to the EAL selection window.

Definitions

Word List	List Box	Allows selection of the desired word or phrase by: • Direct selection from the drop-down list • Typing directly into the text area of the list box.
OK	Command Button	Closes the definitions window and returns to the EAL selection window.

EAL Basis

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
EAL Number	Text Box	Search criteria based on a desired EAL number or portion. Entry can consist of a category, subcategory or individual EAL number. Can be utilized alone or with text criteria.
Text	Text Box	Search criteria based on a desired text string. Can be utilized alone or with EAL Number criteria.
Search	Command Button	Conducts the record search based on the provided EAL number and text criteria.
Done	Command Button	Closes the EAL Basis window and returns to the EAL selection window.
Search Results Area	N/A	Provides an area within the EAL Basis window where search results can be viewed. Controls common to windows based applications within the search area include: • Navigation Buttons: Allows navigation among records within the table. They include 'Go To First', 'Go To Previous', Go To Next' and 'Go To Last'. • Record #: A record number can be entered directly to go to the desired record. • Of #: Displays the number of records found to match the search criteria. • Vertical Scroll Bar: Allows scrolling through the record when the text extends beyond the length of the viewing area.

EAL Tables

Table Buttons	Command Buttons	Available selections are: • Table 4.1 • Table 4.2 • Table 4.3 • Table 5.1 • Table 5.2 • Table 5.3 • Table 8.2 • Attachment A

Attachment 9.6

MEANS Windows Summary

MEANS Program Information and Functions

Object	Type	Information or Functional Description
OK	Command Button	Closes the tables window and returns to the EAL selection window.

Admin. Main Switchboard

Object	Type	Information or Functional Description
Foreword	Command Button	Opens a text window, which allows editing of the foreword section of the EAL technical bases manual.
Category Description	Command Button	Opens a text window, which allows editing of the category descriptions.
Technical Basis	Command Button	Opens a window, which allows for text and numeric searches and editing of the EAL technical Bases.
Non-Technical Description	Command Button	Opens a window, which allows for text and numeric searches and editing of the EAL non-technical descriptions.
Definitions	Command Button	Opens a text window, which allows the editing, and addition of definitions for key words and phrases of the EAL technical bases manual.
Exit	Command Button	Closes the application and returns to the MEANS main switchboard.