

## **OLI Tips #15**

### **Importing a stream into ESP...**

There are many instances when your previously saved work can be imported into another process. These steps show you how to import a saved stream into ESP/Process.

In this example, we have previously created a stream that is the result of a gas stream that has been scrubbed with a wash solution. Here we have opened up a MIX block.

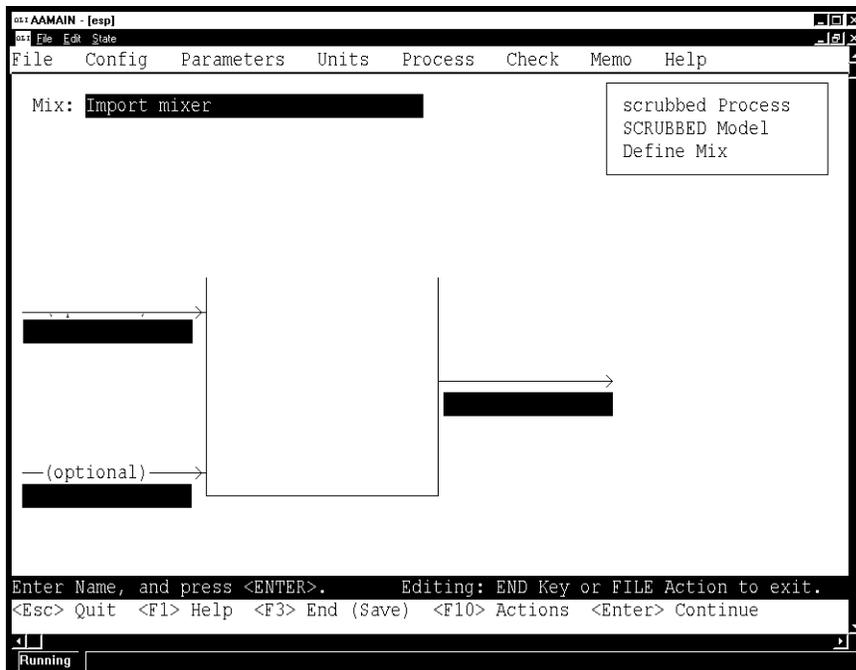


Figure 1 Inlet streams to an ESP Block

Position the cursor on an empty inlet stream and then press the <Enter> key.

When you press the <Enter> key on a blank inlet stream, a list of available streams in the process will appear. In this case, there are no available stream. Select **New Stream**.



Figure 2 Selecting from available streams

An empty stream definition screen will be displayed. The species present were originally entered in the Chemistry Model.

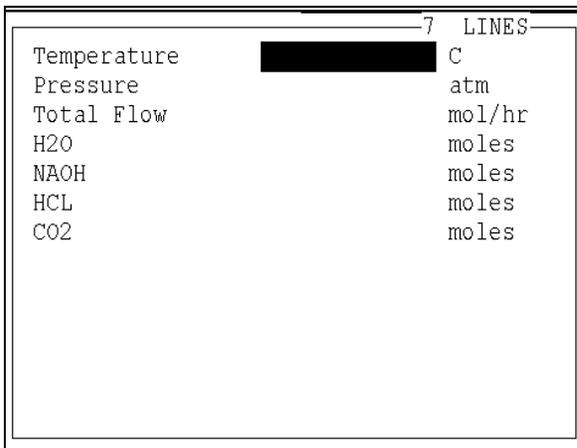


Figure 3 An empty stream

Use the <Action> key (normally F10) and select **File** .

There are several options, position the cursor on the **Open** item.



Figure 4 Using the File action

The open dialog box will appear.

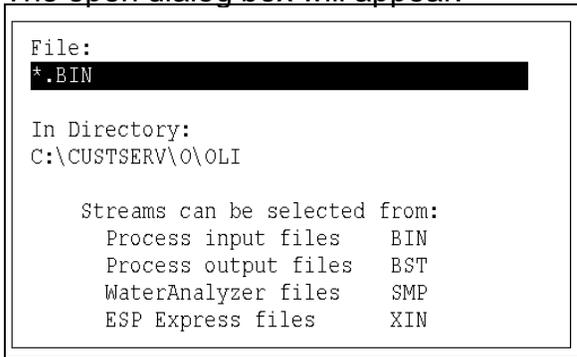


Figure 5 Selecting which file to open

By default, the file type for opening will be the BIN file. This is the ESP/Process input file. Also, by default, the folder where the files are located will be the current folder. You can change this location as needed.

There are four types of files that can be opened.

- |     |  |
|-----|--|
| BIN | ESP/Process input file   |
| BST | ESP/Process output file (speciated values)                                   |
| SMP | OLI/Toolkit WaterAnalyzer file. This file has an ESP stream already created. |
| XIN | OLI/Toolkit Express input file.  |

For our example, the stream to be imported is the output stream of another process. Please overwrite the \*.BIN field with \*.BST. Replace the extension with the type of file you desire.

```
File:
*.BST

In Directory:
C:\CUSTSERV\O\OLI

Streams can be selected from:
Process input files   BIN
Process output files  BST
WaterAnalyzer files   SMP
ESP Express files     XIN
```

Figure 6 Selecting our target file

This will display a list of files of the type you selected. Select the file you want.

```
Select from:
BAT1
BAT2
TC2
CAUSTIC
```

Figure 7 Files of the type selected that exist in the current folder.

```
Select from:
BAT1
BAT2
TC2
CAUSTIC
```

Figure 8 Selecting the target file, Selecting CAUSTIC as the file.

Once the file is selected, a list of available streams will be displayed. Select the stream of interest.

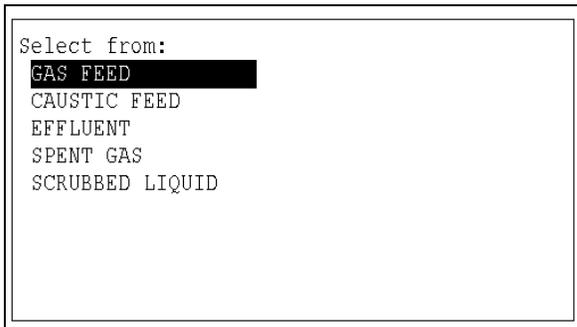


Figure 9 A listing of the available streams in the target file

Frequently the imported stream will have a different model associated with it than the one you created in the Chemistry Model section. The import process will ask if you want to switch to the original model. It is recommended that you Keep working with the model you recently created. Highlight **Keep** and press <Enter>

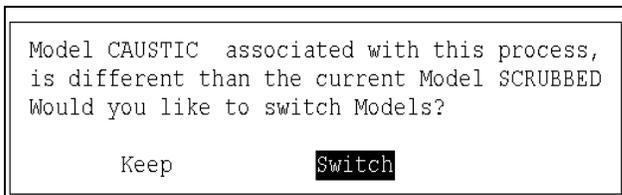


Figure 10 Switching models

Most likely, the stream that you are importing will contain species not currently in your model. You can add all the species to your model automatically, or enter them manually. It is recommended that you add them all.

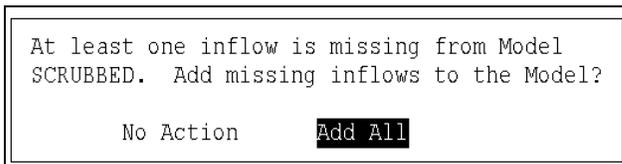


Figure 11 Adding missing species

Adding any species will force the program to re-generate the chemistry model before the process calculation will begin.

After the import, you will see the values of the stream. You may make any changes you want. Be careful changing units, a new species will not have the molecular weight available until the chemistry model has been regenerated.

9 LINES		
Temperature	62.939	C
Pressure	1.	atm
Total Flow	97.3428	mol/hr
H2O	79.9915	moles
NAOH	1.76966	moles
HCL		moles
CO2	0.0121722	moles
NH3	8.23943	moles
SO2	7.33003	moles

Figure 12 The imported stream

Once imported, the original name of the stream will be displayed.

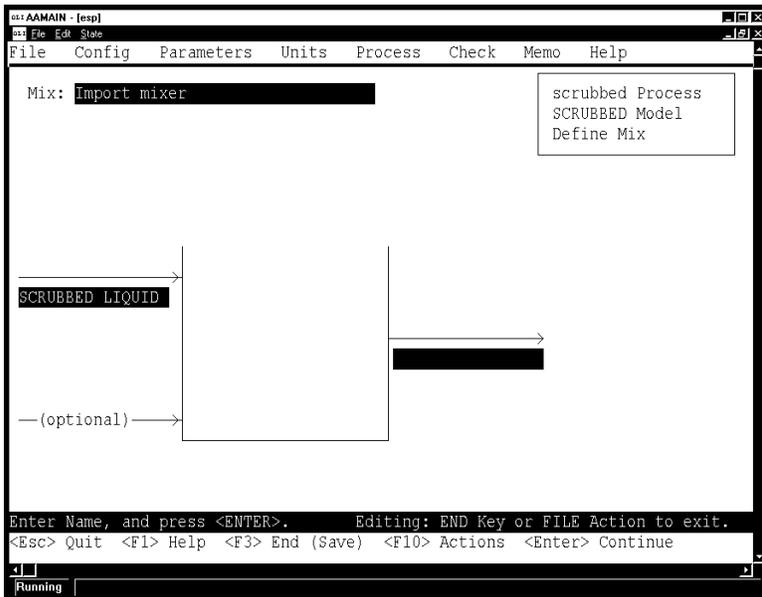


Figure 13 The imported stream

You may now enter more streams as required. Attempts to re-import the stream may result in strange behavior. It is recommended that you delete the stream from the current BIN file before re-importing.