



Chapter 3 Appendix 2 SPOLD Data Format Import/ Export Results

Table B2-1 Results of exports to SPOLD data format

| Software | Data Set (short name) | Reference | Export Format | Result |
|----------|-----------------------------|--------------|---------------|-------------------|
| KCL-ECO | Bleached Sulfate Board | K_K1_97.txt | SPOLD 97 | 316 Lines of Data |
| | Electric Power, Brown Coal | K_K2_97.txt | SPOLD 97 | 69 Lines of Data |
| | Ethylene | K_K3_97.txt | SPOLD 97 | 130 Lines of Data |
| SimaPro | Electricity, Coal, B250 | S_P1.csv/txt | Other | Tabular Format |
| | Plastics, HDPE B250 | S_P2.csv/txt | Other | Tabular Format |
| | Incineration 2000, B250 | S_P3.csv/txt | Other | Tabular Format |
| TEAM | 211 Cardboard (Recycled) | T_E1.txt | SPOLD 97 | 253 Lines of Data |
| | 2321 Gasoline (leaded) | T_E2.txt | SPOLD 97 | 781 Lines of Data |
| | 241S 2,6-Xylenol Production | T_E3.txt | SPOLD 97 | 46 Lines of Data |

Table B2-2 Results of imports from SPOLD formatted data

| Source Software | Reference | Target Software | Result |
|-----------------|--------------|-----------------|--|
| KCL-ECO | K_K1_97.txt | SimaPro | Cannot Import SPOLD (txt) Files |
| | K_K2_97.txt | SimaPro | Cannot Import SPOLD (txt) Files |
| | K_K3_97.txt | SimaPro | Cannot Import SPOLD (txt) Files |
| | K_K1_97.txt | TEAM* | Units Mismatch Errors; Import Process Failed |
| | K_K2_97.txt | TEAM* | Units Mismatch Errors; Import Process Failed |
| | K_K3_97.txt | TEAM* | Units Mismatch Errors; Import Process Failed |
| SimaPro | S_P1.csv/txt | KCL-ECO | Source file not in SPOLD Format. |
| | S_P2.csv/txt | KCL-ECO | Source file not in SPOLD Format. |
| | S_P3.csv/txt | KCL-ECO | Source file not in SPOLD Format. |
| | S_P1.csv/txt | TEAM* | Source file not in SPOLD Format. |
| | S_P2.csv/txt | TEAM* | Source file not in SPOLD Format. |
| | S_P3.csv/txt | TEAM* | Source file not in SPOLD Format. |

* Imported as SPOLD 99 File. Converted from SPOLD 97 using SPOLD Data Exchange Software 99.

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Table B2-2 continued

| Source Software | Reference | Target Software | Result |
|-----------------|-----------|-----------------|---|
| TEAM | T_E1.txt | KCL-ECO | <i>19 of 253 Lines Imported</i> 5 of 19 Matched Source Data (field name & data) 2 of 19 Matched Source Data (field name only) 12 of 19 Were NOT in Source Data (field names) |
| | T_E2.txt | KCL-ECO | <i>19 of 781 Lines Imported</i> 4 of 19 Matched Source Data (field name & data) 3 of 19 Matched Source Data (field name only) 12 of 19 Were NOT in Source Data (field names) |
| | T_E3.txt | KCL-ECO | <i>19 of 46 Lines Imported</i> 4 of 19 Matched Source Data (field name & data) 3 of 19 Matched Source Data (field name only) 12 of 19 Were NOT in Source Data (field names) |
| | T_E1.txt | SIMAPRO | Cannot Import SPOLD (txt) Files |
| | T_E2.txt | SIMAPRO | Cannot Import SPOLD (txt) Files |
| | T_E3.txt | SIMAPRO | Cannot Import SPOLD (txt) Files |

Export Procedure

KCL-ECO Export Procedure

The KCL-ECO SPOLD Exchange software was used to export data from KCL-ECO. The files were saved as text files.

SimaPro Export Procedure

To export data from SimaPro, the user must select the process to be exported and then select “Export as CSV file” (from the File menu). Processes can only be exported as CSV files. On the “Export processes to CSV file” menu, the following criteria were selected:

- Select: Currently focused process
- Add Data: Related objects (system models, units, etc.)
- Output contains: All data but skip empty fields

The files were exported as CSV files and opened automatically in MS Excel to convert the files to text files.

TEAM Export Procedure

The three data sets were exported from the setac.tdb database using TEAM System Editor. The data sets were exported as SPOLD 97 files.

Import Procedure and Data Exchange Results

KCL-ECO to SimaPro

SimaPro can only import CSV files. According to Michel Oele, from PRE Consultants, it was impossible to import other data sets (i.e., SPOLD 97/99 text files) when the test was performed in 2000 because they were still working on the conversion.

KCL-ECO to TEAM

TEAM recommends that data sets are imported in the SPOLD 99 format. Therefore, the KCL-ECO data sets were run through SPOLD Data Exchange Software 99 to convert the data from SPOLD 97 to SPOLD 99.

The SPOLD 99 files were then imported to TEAM. The following error messages appeared:

Errors for K_K1_97

- Error: The flow 'electric power' currently uses the unit 'kg' in TEAM; this conflicts with the unit 'kg' used by a flow imported in the module 'board.'
- Error: The flow '(w) COD (Chemical Oxygen Demand)' currently uses the unit 'g' in TEAM; this conflicts with the unit 'g' used by a flow imported in the module 'board.'
- Warning: Units mismatch in flow '(w) COD (Chemical Oxygen Demand)' in module 'board.'

Errors for K_K2_97

- Error: The flow 'electric power' currently uses the unit 'kg' in TEAM; this conflicts with the unit 'kg' used by a flow imported in the module 'board.'
- Warning: Units mismatch in flow 'electric power' of module 'electric power.'

Errors for K_K3_97

- Error: The flow 'Fuels (unspecified, in ground)' currently uses the unit 'kg' in TEAM; this conflicts with the unit 'kg' used by a flow in the imported module 'ethylene.'
- Error: The flow '(r) feedstock energy' currently uses the unit 'kg' in TEAM; this conflicts with the unit 'kg' used by a flow in the imported module 'ethylene.'
- Error: The flow '(w) COD (Chemical Oxygen Demand)' currently uses the unit 'g' in TEAM; this conflicts with the unit 'g' used by a flow imported in the module 'ethylene.'

- Warning: Units mismatch in flow '(w) COD (Chemical Oxygen Demand)' in module 'ethylene.'
- The flow '(w) Acids (H+)' currently uses the unit 'g' in TEAM; this conflicts with the unit 'g' used by a flow in the imported module 'ethylene.'
- Warning: Units mismatch in flow '(w) Acids (H+)' of module 'ethylene.'

After the error messages appeared, the data sets did not import.

SimaPro to KCL-ECO

When attempting to import all three SimaPro data sets into KCL-ECO, the following error messages appeared:

- Error: Field 'tblLogicalPersons'. Identification can't be a zero-length string. (3315)
- Error: Can't add or change record. Referential integrity rules require a related record in table 'tblLogicalPersons'. (3201)
- Error: Can't add or change record. Referential integrity rules require a related record in 'tblClassificationCodes'.

Only 15 lines of data were imported into KCL-ECO. See SK_P1.txt, SK_P2.txt., and SK_P3.txt. The imported data was not relevant; the same 15 lines appeared for each SimaPro data set. Therefore, nothing of value was imported into KCL-ECO.

According to SimaPro's User Manual, the process records in SimaPro 4 have been changed to conform to the relevant sections of the SPOLD Common Data Format. However, the exported data from SimaPro did not appear to be in reported in a single row by a defined field name.

SimaPro to TEAM

TEAM recommends that data are imported using the SPOLD 99 format. Therefore, we attempted to

convert the SimaPro data sets to SPOLD 99 using the SPOLD Data Exchange Software 99. The SimaPro data sets could not be imported to the SPOLD Data Exchange Software.

We received the following errors when attempting to import each SimaPro data set:

- Error: The field is too small to accept the amount of data you attempted to add. Try inserting or pasting less data.
- Error: Run-time error '3034.' You tried to commit or roll back a transaction without first using BeginTrans.

After the previous error messages appeared, the SPOLD software simply shut down.

Since we were unable to convert the SimaPro data sets to the SPOLD 99 format, we attempted to import them in the SPOLD 97 format. TEAM did not import the SimaPro data sets and did not provide any error messages. This occurred for all three of SimaPro's data sets.

According to the *SimaPro 4 User's Manual*, the process records in SimaPro 4 have been changed to conform to the relevant sections of the SPOLD Common Data Format (Pré Consultants 1999). However, the exported data from SimaPro did not appear to be in reported in a single row by a defined field name.

TEAM to KCL-ECO

TEAM was able to import to KCL-ECO; however, only a very small amount of data was imported.

The following error message appeared to T_E2 and T_E3:

- Error: Failed to assign the reference function to the new module!

Only 19 lines were imported to KCL-ECO from TEAM. Many of those lines were not from the original TEAM file or they were imported incor-

rectly. Nothing of value was imported to KCL-ECO.

TEAM to SimaPro

SimaPro can only import CSV files. According to Michel Oele, from PRÉ Consultants, it was impossible to import other data sets (i.e., SPOLD 97/99 text files) when the test was performed in 2000 because they were still working on the conversion.

References

PRÉ Consultants. 1999. SimaPro 4 user's manual. Amersfoort, NL: PRÉ Consultants.