Chesar 3 for sector associations

Creating use maps – including SPERCs, SWEDs, and SCEDs

Version	Date	Changes
1.0	November 2016	
1.1	December 2016	Some work arounds which had been explained related to the "skin surface exposed" have been removed as the issue has been fixed in Chesar 3.1.1. Additional explanations on the possibility to create only one Chesar SPERC with several sub-SPERCs to cover substances with different technical functions (and different ERCs) has been added. Also advise on how to report contributing activities for the environment when substances with different technical functions and different ERCs are relevant for the use has been added. All information related to uses in "rigorously contained conditions" have been grouped in a single section.
1.2	June 2017	Adaptation to Chesar 3.2 new functionalities: - New role for use map developers in Box 7 - Use map management from Box 1 - Editability of phrases for communication in the SPERCs and SWEDs Advice on how to check the use map before publication, is also available in the manual.
1.3	October 2021	Adaptation to new functionalities introduced with Chesar 3.6, related to the work on the harmonisation of conditions of use for workers

Disclaimer

Table of Content

1.   Introduction

This manual is meant to support sectors willing to prepare their use maps in Chesar format. Generating a use map in Chesar format (which includes contributing scenarios with links to the relevant SPERCs, SCEDs and SWEDs) will allow registrants to directly upload the Chesar use map files as a starting point for their assessment.

The **Chesar 3 user manual** explains the purpose of Chesar, and how it supports registrants in their chemical safety assessment; it also contains a useful glossary .

Chesar contains a library, which is personal to each user of the tool. This library serves two purposes:

- For sector associations creating use maps, the Chesar library is used to generate the SPERC, SCED and SWED information in a Chesar readable format (XML)

- For registrants, the library enables to store CSA elements that can be used in various assessments.

1.1 Data elements relevant for use maps in Chesar

To build a complete use map, several types of elements shall be created in Chesar.

- A use map consists of several uses relevant for a sector. Each use consists of a number of contributing activities defined from the environmental perspective and contributing activities for workers or consumers respectively.

- For each contributing activity a relevant SPERC (for the environment), SWED (for workers) or SCED (for consumers) can be linked. Those SPERCs, SCEDs and SWEDs need first to be defined in Chesar before they can be linked to a contributing activity.

- SPERCs, SCEDs and SWEDs contain conditions of use. Some are pre-defined in Chesar (the so-called built-in conditions of use), others are not. This for example concerns conditions of use, which are sector-specific for the environment (justifying the release factors reported), or conditions of use relevant for human health exposure estimation tools, other than the ones embedded and/or harmonised. Those conditions of use need first to be defined in Chesar before they can be included in a SPERC, SCED or SWED.

The various data elements of the use map as described above are illustrated in Figure 1.

SPERCs, SCEDs, SWEDs and specific conditions of use are generated in the Library of Chesar (Box 6). More information on Chesar library can be found in section 8 of the Chesar 3 user manual for registrants.

Figure 1: Data elements of a use map
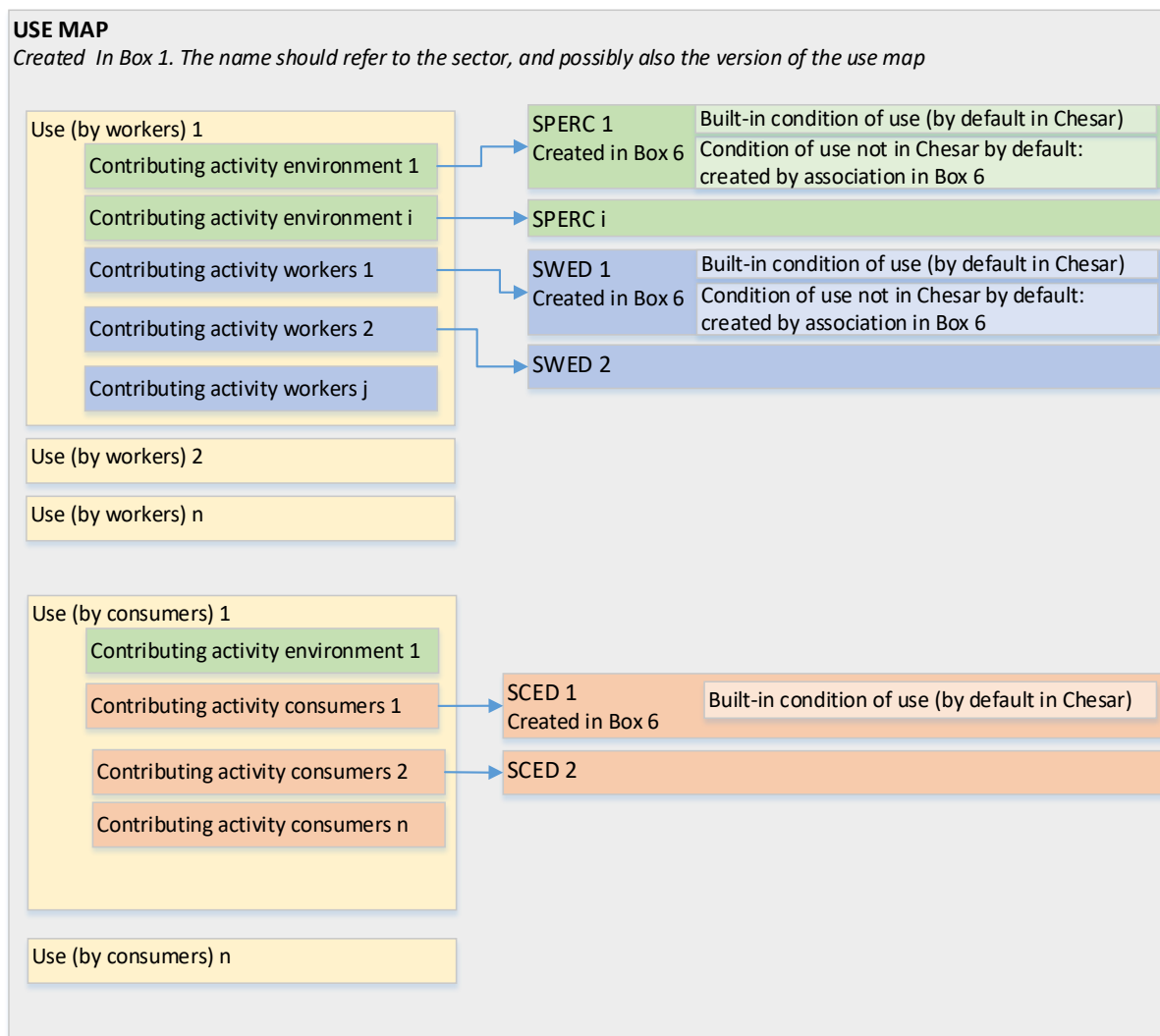
SPERCs, SCEDs, SWEDs and conditions of use, once created, have a unique identifier, and have a clear Author. They can be imported as such (or as part of a use map) by assessors into their own library, for assessing contributing scenarios. However, the single assessor cannot modify them. Chesar includes a versioning management system for those elements (see section 5).

Use maps created in Chesar[1] also have a unique identifier, which allows the tracking of the use map versions. Having a unique identifier means that each use map is unique, and that all versions of the same use map have the same identifier.

When sectors decide to update their use map, they should simply modify its content as needed in Chesar and export a new version. If a registrant had already made use of the use map for his assessment, when he imports the updated version of the use map, the system will only modify the parts of the use map which have been modified.

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[1] From Chesar version 3.2 onward

2. Getting started with Chesar

You can find information on how to install and start Chesar 3 in the Installation manuals available in https://chesar.echa.europa.eu/support/manuals-tutorials.

The boxes referred to in this document correspond to the major groups of functionalities listed below. An icon is associated with each Box. All the icons form the main toolbar:

Figure 2: Chesar main tool bar

Box 1:	Substances
Box 2:	Uses
Box 3 :	Exposure assessment
Box 4:	CSR
Box 5:	ES for extended SDS
Box 6:	Library
Box 7:	Users

Chesar 3 needs to be set up to be ready to be fully functional for you. For that you need to:

- Import a legal entity that contains the name of your sector association, and assign it to your user profile
- Assign a "Use map developer" role to your profile
- Import the ESCom phrase catalogue

2.1 Import a legal entity containing your sector association name

The assignment of a legal entity in Chesar is required to create Chesar library items (condition of use templates, SPERCs, SCEDs and SWEDs) to trace the author of those elements. When a legal entity is available (and assigned to your username) all items created by you will have that specific legal entity as the author. The author of a library item (once finalised) cannot be modified, so the owner of a specific library item is always known.

If you do not have your legal entity yet, you can create one directly in Chesar or import it from IUCLID 6 (i6z file). The name of your legal entity will be the "author" of the Chesar library elements you will create.

To import an existing legal entity (.i6z file) from IUCLID:

1. Click the "Legal entity management" tab in Box 7
2. Click the import button: the import legal entity dialogue box appears
3. Select your legal entity and import it

To create a legal entity in Chesar you need to:

1. Click the "Legal entity management" tab in Box 7
2. Click the "Create" button
3. Enter the legal entity information.

To assign a legal entity to your username, follow these steps:

1. Click the "User management" tab in Box 7
2. Select your username (by default it will be "admin"): the Edit user page appears
3. Go to the legal entity dropdown box and select your legal entity
4. Click the "Save" button

2.2 Assign a "Use map developer" role to your profile

To be able to create a use map and have access to the use map functionalities in Box 1, you need to assign a specific role called "Use map developer" to your profile.

Assigning roles to your profile is very easy:

1. Click the "User management" tab in Box 7
2. Click on your username (by default it will be "admin"): the Edit user page appears
3. Go to the roles and select "Use map developer". Check that the "Library manager role" is also assigned. In order to be able to "check" the content of your use map before publication, you will also need the assessor role. Therefore, you are advised to set all the roles to your profile.
4. Click the "Save" button

Note that if you do not have this role ticked, you will not be able to access to the **Use management tab** in Chesar box 1.

2.3 Import standard phrase catalogue ESCom

It is recommended to upload the standard phrase catalogue, ESCom. ESCom is a catalogue of standard phrases developed by the European chemical industry and which is available in Chesar format on http://www.cefic.org/Industry-support/Implementing-reach/escom/.

Steps for importing ESCom phrase catalogue once downloaded from Cefic webpage:

1. Click the "Standard phrases" tab in Box 6
2. Click the import button and upload the Chesar file for ESCom Phrase Catalogue (ending with .chr3).
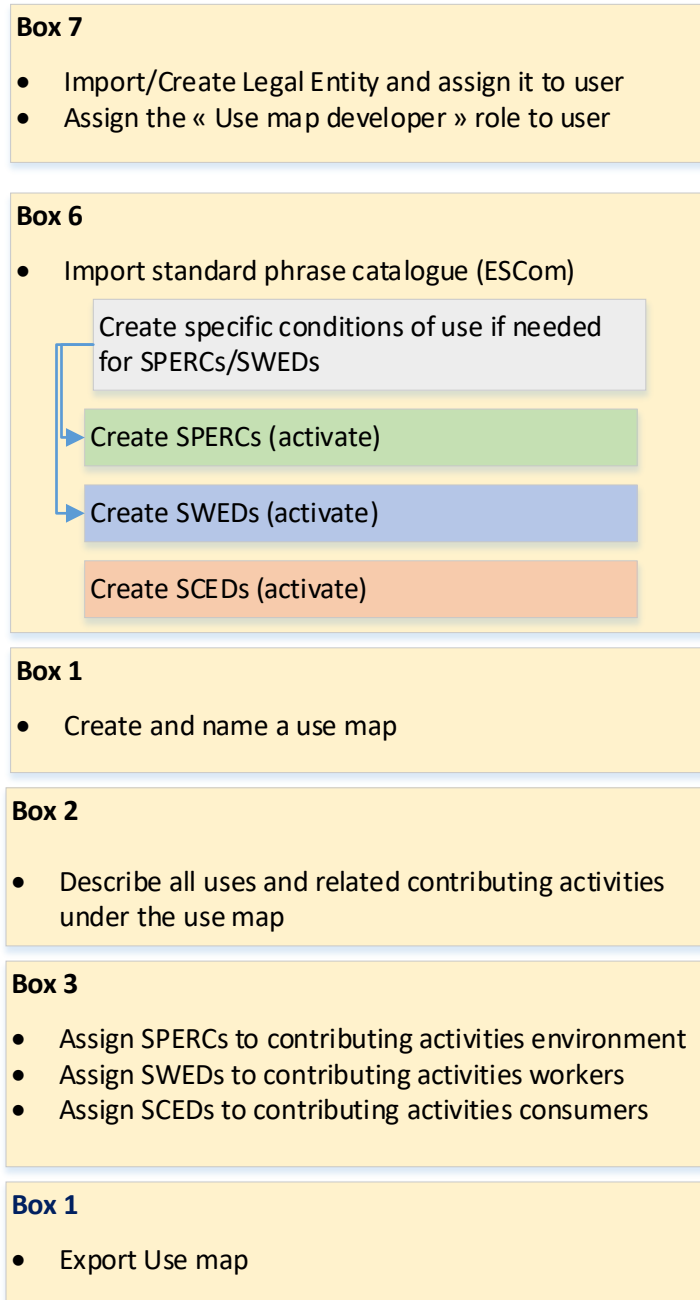
3. Use map creation steps

You can create the various elements of your use maps in any order by saving parts of them and then completing with other elements. Nevertheless, it is important to understand that in order to link an element to another one (e.g. a condition of use in a SPERC or a SPERC to a contributing activity), it has to be created in the Library first.

Therefore, we advise you to create the various elements of a use map in the following order:

- Create condition of use templates if needed for any SPERC, SCED or SWED in Box 6. (Do not forget to check beforehand if a condition of use -CoU- does not already exist in the library. In particular when creating a SWED pay attention to the list of harmonised CoU that are included in the library according to the document Mapping of the Conditions of use (input parameters) of the different tools for workers assessment)

- Create SPERCs, SCEDs, SWEDs in Box 6, including, as relevant, the condition of use templates created in the previous step

- Create and name the use map in Box 1

- Describe all the uses, and their contributing activities under the use map in Box 2

- Associate SPERCs, SCEDs, SWEDs to the relevant contributing activities in Box 3

From Box 1, you can then export the use map. It will include all the SPERCs, SCEDs, SWEDs.

Figure 3: Steps to create a use map

Box 7

- Import/Create Legal Entity and assign it to user
- Assign the « Use map developer » role to user

Box 6

- Import standard phrase catalogue (ESCom)

  Create specific conditions of use if needed for SPERCs/SWEDs

  Create SPERCs (activate)

  Create SWEDs (activate)

  Create SCEDs (activate)

Box 1

- Create and name a use map

Box 2

- Describe all uses and related contributing activities under the use map

Box 3

- Assign SPERCs to contributing activities environment
- Assign SWEDs to contributing activities workers
- Assign SCEDs to contributing activities consumers

Box 1

- Export Use map

3.1 Creating a condition of use template in Chesar

Select the condition of use templates tab in Box 6 and select the **Create** button.
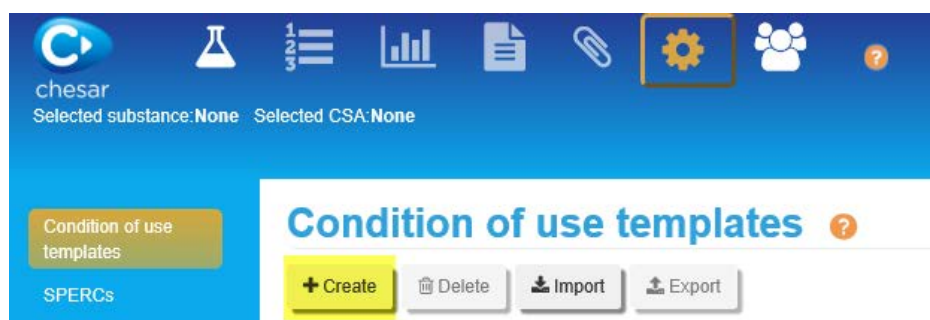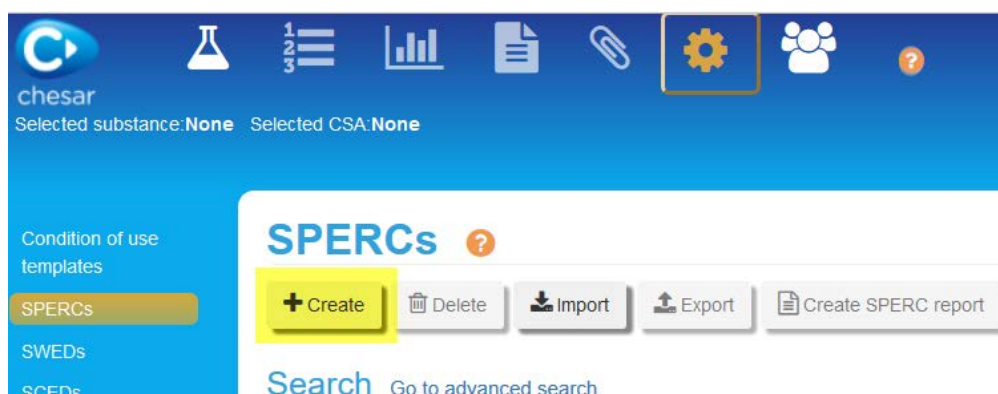

Read the help text in the application to understand the information to be reported in the various fields.

Once you have finalised your condition of use template, **Activate** it. You can then use it when creating SPERCs, SCEDs or SWEDs.

3.2 Creating a SPERC in Chesar format

Select the SPERCs tab in Box 6 and select the create button.

Read the help text in the application to understand the information to be reported in the various fields.

A SPERC describes the conditions of use for a contributing activity, and the related release factors. In most end-uses, mixtures are used rather than substances. In that case the conditions of use apply to all substances in the mixture, but the related release factors may differ from substance to substance, depending on the technical function and the fate properties of each substance. Therefore, sub-SPERCs can be defined to provide differentiated sets of release factors for different types of substances. Sub-SPERCS are created in the Releases tab in Chesar.

Note the following when transferring the information from a SPERC to Chesar:

- Making use of the possibility to create several sub-SPERCs within a SPERC in Chesar has the advantage of ensuring that the set of conditions of use described in the SPERC is consistent for all ingredients of the mixture. It also limits the number of SPERCs in the Chesar library. The selection of the appropriate sub-SPERC for the assessor is automatically made by Chesar on the basis of the ERC selected and the substance properties when relevant.

- There is support for versioning in Chesar. See section 5.

- The entry screens differ depending whether the SPERC is meant for a use being widespread or at a site.

- The information on the operational conditions is to be reported in the following way:

  o The *Place of use*, whether there is *Water contact during use* and whether the site is expected to be connected to *a standard municipal biological STP* can be selected from existing (built-in) conditions of use in the Conditions of use tab

  o Whether the contributing activity takes place in a *Rigorously contained system with minimisation of release to the environment* is to be reported in the tab *SPERC Identifiers.*

  o For all *Further operational conditions impacting on releases to the environment* a condition of use template should have been created in box 6

  o When providing an *explanation for the CSR* for a condition of use using the 💬 , do not repeat the information already specified in the condition of use itself. Provide in this field additional information for readers of the CSR when relevant.

- The *Waste handling and disposal* is also predefined in the condition of use section.

- For all the *obligatory RMM on site* a condition of use template should be created in the library (Box 6) in order for the conditions of use to be added in the Conditions of use tab of the SPERC.

- To report the information from the section 3 "exposure assessment inputs" of the SPERC template:

  o To report the "Fraction of EU tonnage used in region", you should add the condition of use "Percentage of EU tonnage used at regional scale". It is only useful to do so if the value deviates from the defaults (100% for uses at industrial sites and 10% for widespread uses).

  o The *amount of substance used per day* is to be reported in the *Daily use amount at site* field in the condition of use tab.

  o For widespread uses, in Chesar a field enables to report the *Local daily fraction of regional tonnage for the use (widespread)* used to estimate the local daily tonnage from the annual use tonnage. By default, it is set to $5.5 \cdot 10^{-6}$ as described in the guidance on environmental assessment R16. If information is provided in the SPERC factsheet for modifying this value (in the Fraction of Regional tonnage used locally), then the *Local fraction of tonnage for the use (widespread)* is to be modified accordingly in Chesar.

- o The Justification and information sources should be reported in the *explanation for CSR* fields accessed by the 💬 .

- o The *number of emitting days* may be reported in the *Extrapolation factor for annual use amount* for uses at site[2] in case it corresponds to the number of use days. If the number of emitting days does not correspond to the number of use days, Chesar 3 does not support the release estimation.

- To report the *Release factors,* you have to go to the Releases tab and create a sub-SPERC (even if you only need one). Note that in Chesar, in case you have several sub-SPERCs with similar justification you can report some *Explanations for the release factors valid for all the Sub-SPERCs.* In this case, the information included there should not be repeated in the individual sub-SPERCs.

- For the communication of the conditions of use:

  - o If the exposure assessment is SPERC-based, then it is the conditions of use provided in the SPERC that will be communicated in the exposure scenario.

  - o By default, each condition of use is communicated as defined in the condition of use template in the box 6 Library.

  - o Nevertheless, it is possible to adapt the default setting for communication within each SPERC. To do so, click on the "Edit SDS ES" (paperclip icon). You can then see whether the condition of use will be communicated (this is the case when the box is ticked) and the default phrase/text for communication is shown. You can modify both the communication setting and the default phrase if needed.
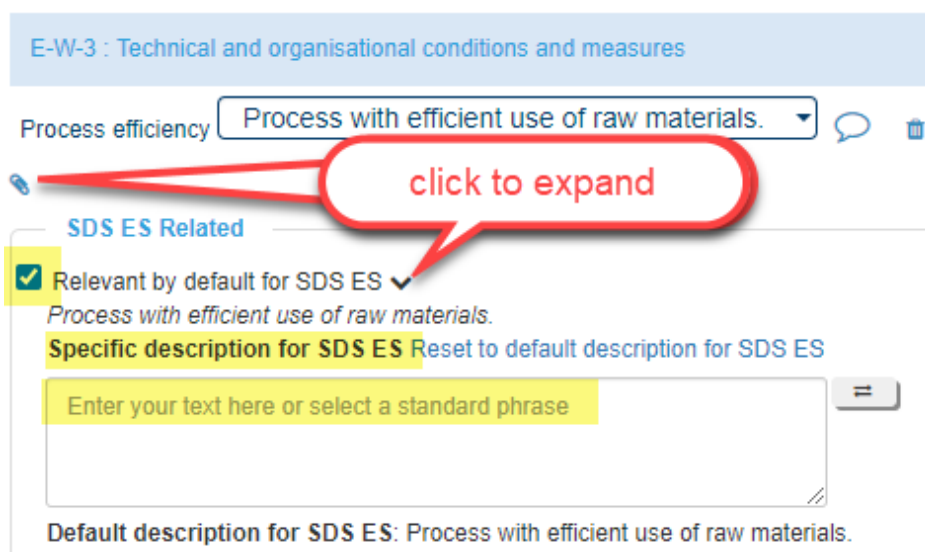

Before activating your SPERC, **Save** it and **Create SPERC report** from the main tab to check that your content is fine. Once you have finalised your SPERC, **Activate** it so that you can link it to a contributing activity in your use map (see section 3.5).

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[2] for widespread uses it cannot be modified. If the use is seasonal this information has to be taken into account for the *Local daily fraction of regional tonnage for the use (widespread)*

3.3 Creating a SWED in a Chesar format

Select the SWEDs tab in Box 6 and select the create button.
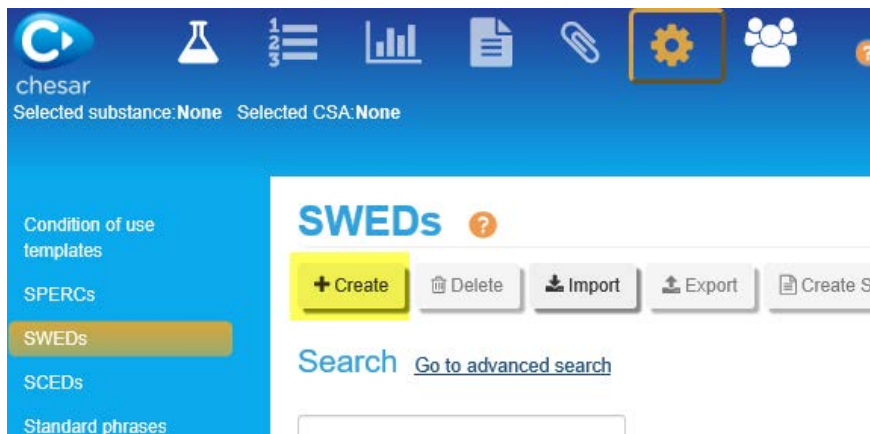
Read the help text in the application to understand the information to be reported in the various fields.
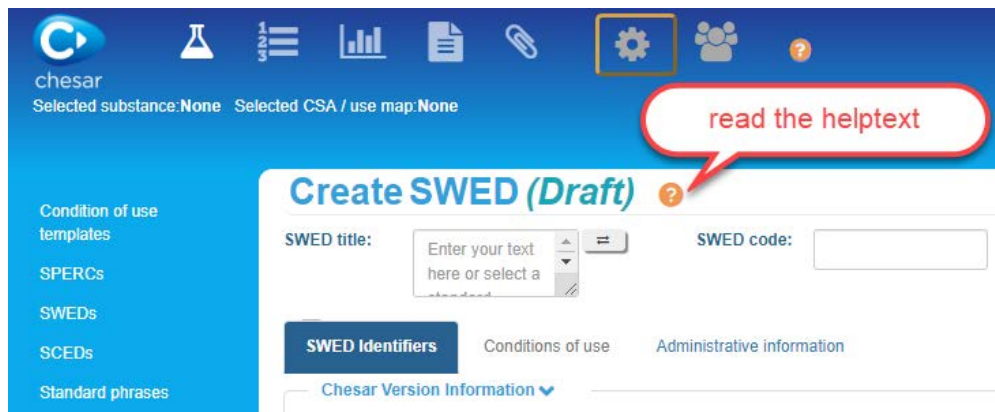
Note the following when creating a SWED to Chesar:

- Although possible, it is not useful to use a standard phrase for the SWED name (it is not foreseen to be communicated downstream). What will be communicated is the contributing scenario name (which may be the same as the SWED name).

- For all conditions of use that are by default present, their values and associated phrases for communication are displayed as agreed within the ENES 3.2 project (https://echa.europa.eu/about-us/exchange-network-on-exposure-scenarios) concerning the harmonisation of conditions of use for workers. More information can be found in the document Mapping of the Conditions of use (input parameters) of the different tools for workers assessment.

- The values of the default conditions of use (always present) are displayed either in bold or normal fonts. The values in bold font refer to inputs that have a direct mapping to a TRA value, whereas the values in a normal font cannot be (directly) mapped to a TRA value.
  If a value in normal font is selected, then TRA will run, using the closest TRA value only when possible.

  If a (quantitative or qualitative) value required to run the TRA workers is missing, it will not be possible for registrants to get an exposure estimation using the TRA embedded in Chesar. All the conditions of use required to run TRA are by default present in a SWED when created in Chesar, and it is advised that no conditions of use are left empty.

  Note that each TRA default condition of use available at SWED creation comes with a

default value, with the exception of "Physical form of the used product" and "Occupational Health and Safety Management System" that are always by default empty: do not forget to always set a value for them before finalising your SWED.

- The operating temperature can only be reported as a numerical value in Chesar. This is because this numerical value is used for recalculating a vapour pressure or comparing to the melting point for solids. The standard default temperature assumed in Chesar (worst case ambient temperature for summer southern Europe) is 40°C.

- For the Local exhaust ventilation, if you expect the registrant to use the effectiveness provided by the ECETOC TRA select the value in bold from the options in the pick list. For SWEDs covering PROC 8b in which the Occupational Health and Safety Management System is set to Basic, two LEV values are in bold format. Specifically, "Yes, specifically designed LEV such as receiving hoods (assumed effectiveness ≥ 80-90%)" is valid for *solid substances* whereas "Yes, specifically designed fixed capturing hood, on tool extraction or enclosing hoods (assumed effectiveness ≥ 90-95%)" is valid for *liquid substances*. Consequently, to get correct exposure estimates when using TRA in Chesar the use map developer is advised to create two contributing scenarios and subsequently two SWEDs to cover both solid and liquid substances.

- To indicate the "rigorously contained system" you should tick the box at the top of the conditions of use tab (see screenshot below and section 6 for more information).
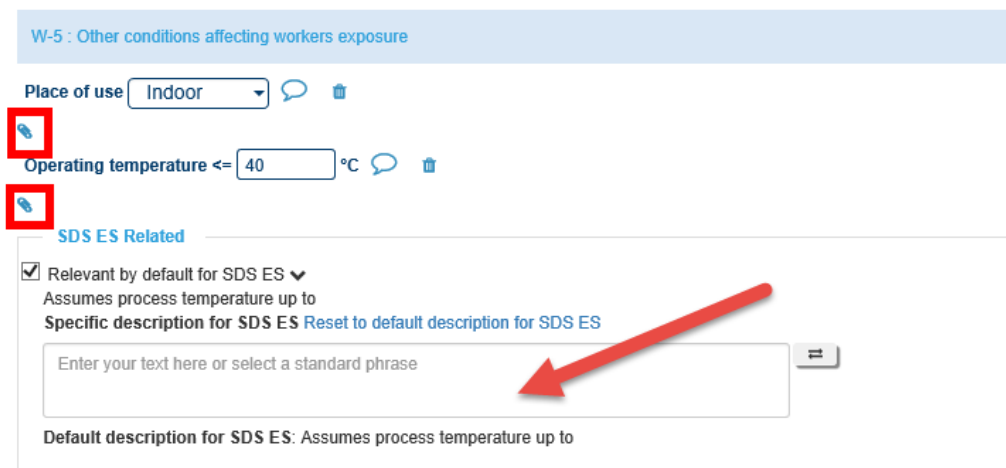

- When a SWED is expected to cover assessments made with other tools than ECETOC TRA, you should provide information in the following fields in Chesar:
  - o **SWED covers** available in the Conditions of use tab. Specify which tool(s) is(are) covered by this SWED. Note that to activate this field, you need to specify the "physical form of the used product" condition of use: only when the physical form is selected, additional tools can be specified.
    Each tool option triggers the addition of the relevant tool specific conditions of use in the condition of use list. Be aware that the tool specific conditions of use are added with their default values as well as their associated phrases for communication.
    Note that some conditions that are automatically added when adding specific tools may not be relevant for your assessment. Please consult the related FAQ available on the Chesar website (https://chesar.echa.europa.eu/support/frequently-asked-questions)
  - o **ART activity class**: select the relevant activity class. This field is mandatory when ART is to be selected in the "SWED covers" field (as indicated by an informative yellow tooltip message appearing underneath). When the selection is made, the specific conditions of use relevant for the selected activity class will be added.
  - o **Stoffenmanager handling class**: select the relevant handling class when relevant (as indicated by an informative yellow tooltip message appearing underneath.

- In the condition of use description, there is no need to repeat in the field "Default explanation for CSR" 💬 the information already specified in the condition of use itself. Provide in this field additional information for readers of the CSR when relevant only.

- For the communication of the conditions of use:
  - If the exposure assessment is SWED-based, then it is the text/standard phrase associated to the conditions of use provided in the SWED that will be communicated in the exposure scenario.
  - By default, each condition of use is communicated as defined in the condition of use template in the Library.
  - Nevertheless, it is possible to adapt the default setting for communication within each SWED. To do so, click the **Edit SDS ES** (paperclip icon). You can then see whether the condition of use will be communicated (this is the case when the box is ticked) and the default phrase/text for communication is shown. You can modify both the communication setting and the default phrase, if needed.

Before activating your SWED, **Save** it and **Create SWED report** from the main tab to check that your content is fine. Once you have finalised your SWED, **Activate** it so that you can link it to a contributing activity in your use map (see section 3.5).

Note that, if you had already prepared your SWEDs in Chesar 3.5 or a previous version, and you migrate them into Chesar 3.6/Chesar 3.7, you will notice that all SWEDs will be set automatically to "Obsolete". As a consequence of this, you will have to update each SWED following the information provided in section 5.1.

3.4 Creating a SCED in Chesar format

Select the SCEDs tab in Box 6 and select the create button.
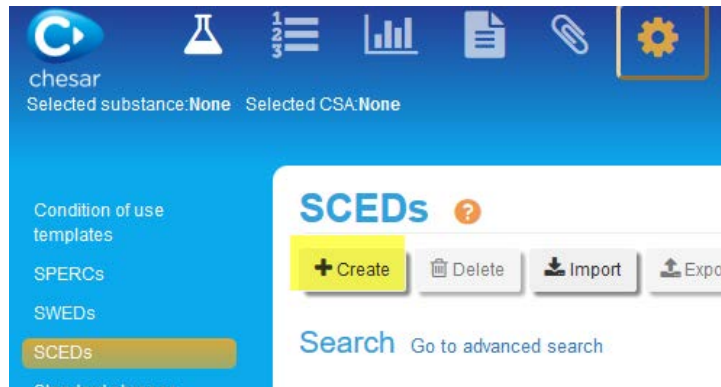
Read the help text in the application to understand the information to be reported in the various fields.
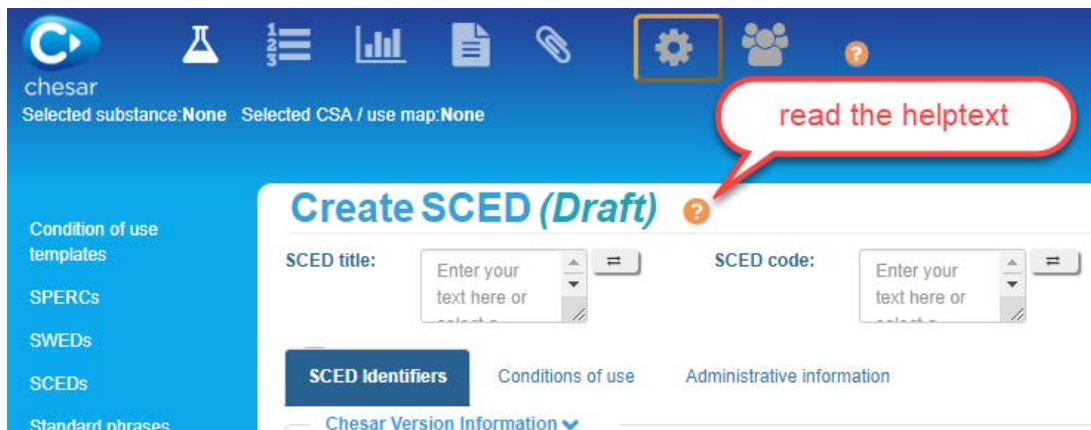
Note the following when transferring the information from a SCED to Chesar:

- In the Common parameters/Frequency of use over the year, the picklist item *Occasional* and *Very infrequent* cannot be selected anymore, as Chesar has been adapted to the update of guidance R15 on consumer exposure assessment. *Infrequent* in Chesar means less than 15 days of exposure per year. To summarise, this means that:
  - o *Frequent* and *Occasional* in SCED are equivalent to *Frequent* in Chesar;
  - o *Infrequent* and *Very infrequent* in SCED are equivalent to *Infrequent* in Chesar.
- In the Dermal parameters/Skin Contact Area:
  - o *2 hands* selected in SCED is equivalent to *Hands* selected in Chesar;
  - o *Inside of 2 hands/palm of 2 hands/ one hand* in SCED is equivalent to *Inside of hands/ one hand /palm 2 hands* in Chesar
- In Inhalation parameters/Exposure via inhalation route, if *Inhalation exposure estimated to be negligible* had been selected, it corresponds to *Inhalation exposure is considered not to be relevant* in Chesar. An explanation has to be provided.
- In Oral parameters/Exposure via oral route, if *Oral exposure not foreseen* had been selected it corresponds to *Oral exposure is considered not to be relevant* in Chesar. An explanation has to be provided.

Before activating your SCED, **Save** it and **Create SCED report** from the main tab to check that your content is fine. Once you have finalised your SCED, **Activate** it so that you can link it to a contributing activity in your use map (see section 3.5).
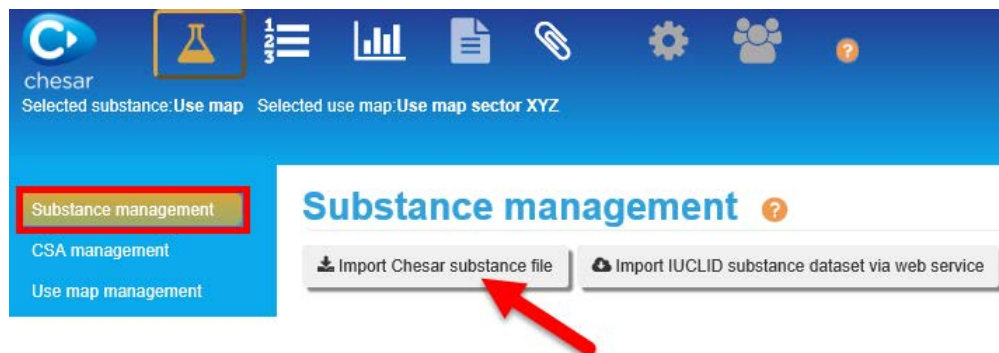
3.5 Creating a use map in Chesar format

To create your use map, follow the step by step instructions below:

- Download the "use map" substance from the Chesar website library (https://chesar.echa.europa.eu/web/chesar/support/library)

- Go to Box 1, in the "Substance management" menu item, select ![Import Chesar substance file] to import the Use map substance in your Chesar.

- Note that in case you have already imported the use map substance before, you should select it using the ![icon] icon on its right or by clicking the name of the substance.

- Go to the "Use map management" tab[3] and click on the **Create** button.
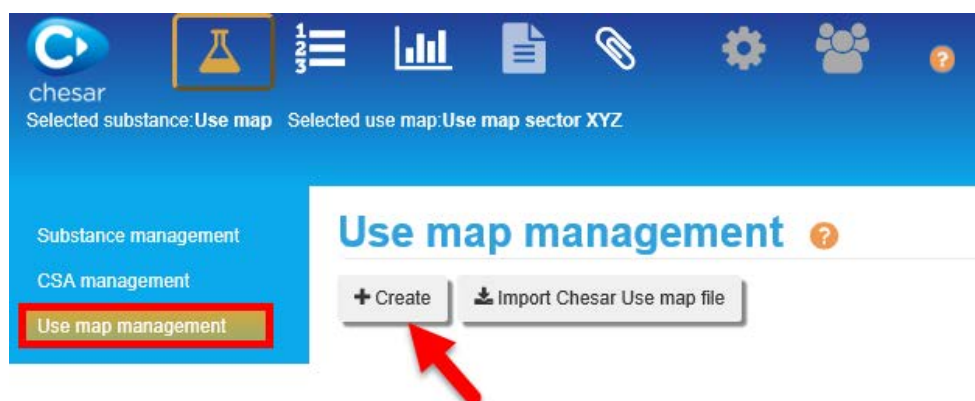
- Provide a name for the use map. The name of the use map could include for example the sector name, possibly a version date or number. You also have the possibility to provide additional information to the assessor. The internal remarks field will not be visible to the assessor, but they could be used by you to record some information (for example regarding the version history of the use map). Save the information you have specified.

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[3] Remember that such tab is only visible if you have the "Use map developer" role.
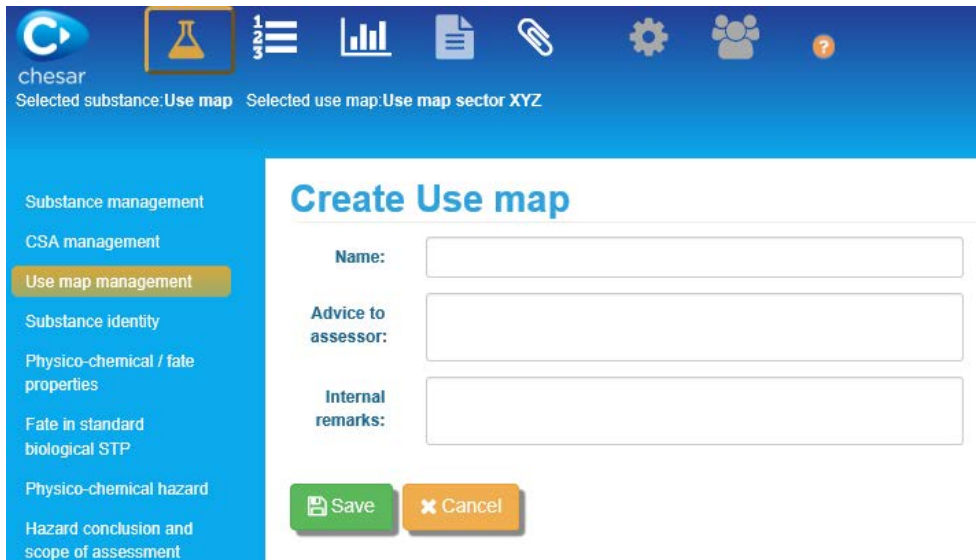
- In Box 2, you can now create the backbone of the use map, i.e. you can describe under the use map name all the uses, and their contributing activities.

  For more information on how to create/add uses and contributing activities, read the related help text in Chesar, accessible from the orange question mark sign as indicated in the screenshot below.
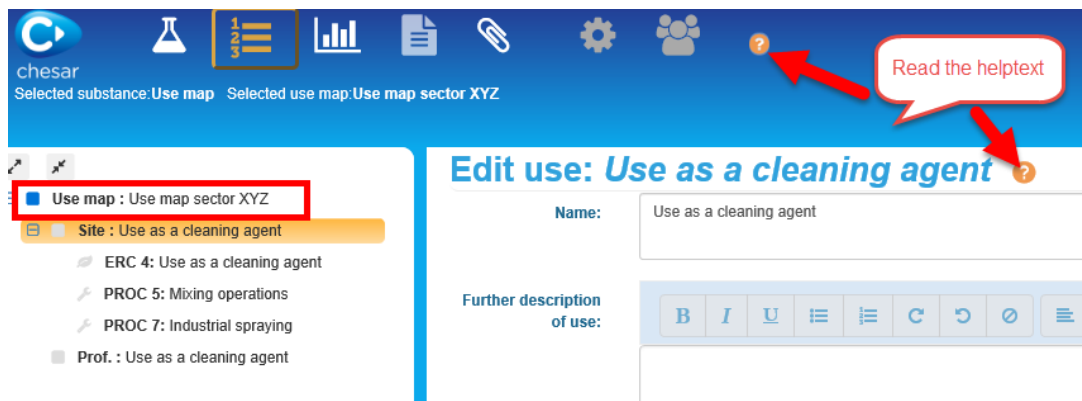
Specific case when a use map was already prepared in Chesar 3.1 format:

Note that, if you had already started preparing your use map in a previous version of Chesar, you can migrate it by using the *Import Chesar Use map file* button available in Box 1. For example, use maps prepared in Chesar 3.1 can be imported/migrated into Chesar 3.2 with this button. It is recommended to always verify the content of your use map after import in the latest version of Chesar.
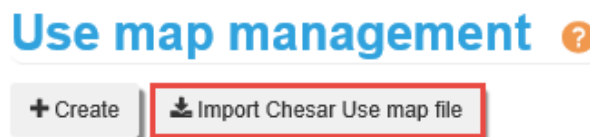
Specific notes when transferring use information from the use map template (excel files) to Chesar:

- o The *link to entry in previous use maps* does not have a corresponding field in Chesar. This information should be reported in the field "Additional information from use map".

- o For an environmental contributing activity, several ERCs may be applicable depending on the technical function of a substance in that activity and its fate during the use. In that situation, several contributing activities with the same name should be created (under one use) in Chesar, but with different ERCs assigned (Note: in Chesar only one ERC can be assigned per contributing activity). The assessor will have to select the relevant contributing activities based on the relevant ERC (depending on the technical function of his substance). In this case, the same SPERC (containing several sub-SPERCs for the releases of substance with different technical functions) can still be associated to all the contributing activities created as described above. The relevant sub-SPERC will automatically be selected for assessors based on the ERC. When service life is part of the use map, it will be up to the assessor to keep or delete the related "uses" depending whether they are relevant for the substance (i.e. if the technical function of the substance implies that the substance will remain in the article). It may be useful to draw the attention of the assessor to the fact that he needs to select the appropriate ERC by adding explanation either at the use map level in the field "Advice to assessor" or at the level of the use in the field "Additional information from use map".

- In Box 3, you can then **for each contributing activity associate a relevant active SPERC, SCED or SWED,** which you should have first created in your library. To do so:

  - o For an environmental contributing activity, in the Conditions of use section, select *Conditions based on* SPERC and Select your SPERC.

  SPERCs proposed by Chesar for selection for a given contributing activity are SPERCs which are relevant for the same ERC as the one in the selected contributing activity.

  Repeat the action for each environmental contributing activity for which a SPERC is available.

  - o The same is to be done for each consumer contributing activity where a SCED can be assigned. SCEDs proposed by Chesar for selection for a given contributing activity are SCEDs which are relevant for the same PC or AC as the one in the selected contributing activity.

  - o The same is to be done for each worker contributing activity. SWEDs proposed by Chesar for selection for a given contributing activity are SWEDs which are relevant for the same PROC as the one in the selected contributing activity.

3.6 Print a use map

A use map can be easily **printed in a harmonised xls format**:

- Go to Box 1, in the "Use map management" menu item, and select the use map you have created.

- Click the print report icon

- Your use map will be printed according to the use map agreed template (https://echa.europa.eu/csr-es-roadmap/use-maps/templates-and-submission)

The use map report contains an overview of the uses arranged by life cycle stages. Each use contains all related contributing activities and for each of them the corresponding exposure assessment input information (SWED, SCED or SPERC).

The use map report in xls can then be made available to all registrants on ECHA webpage https://echa.europa.eu/csr-es-roadmap/use-maps/use-maps-library, together with the Chesr export file (see 3.7 Export the use map section). We strongly recommend that you check/test your use map before publication in the ECHA use maps library. You will find more information in the section 4 on how to check (test) your use map.

3.7 Export the use map

Once finalised, you can **export your use map**:

- Go to Box 1, in the "Use map management" menu item, and select the use map you have created.

- Click the export icon

- Provide an appropriate name (use map name, possibly including a modification date or a version) for the exported file.

Your use map will contain all relevant information. When a registrant imports the use map, the SPERCs, SCEDs and SWEDs linked to it will automatically be imported in his library.

Nevertheless, if you have updated some SPERCs, SCEDs or SWEDs in an updated use map you should also export them from your library as explained in section 5.

Important note: we strongly recommend avoiding exporting the substance you have used to create the use map as once imported again, the use map included in it, will be considered (and handled in Chesar) as a CSA.

The use map you have created (as well as the use map report in xls) can then be made available to all registrants on ECHA webpage https://echa.europa.eu/csr-es-roadmap/use-maps/use-maps-library . We strongly recommend that you check/test your use map before publication in the ECHA use maps library. You will find more information in the section 4 on how to check (test) your use map.

4. Checking of the use map before publication

Before making a use map available to assessors, use maps developers are encouraged to perform the following checks:

- Ensure that a TRA assessment can be run based on the information available (where it is indeed the intention that TRA could be used)

- Ensure that an ART/MEASE/Stoffenmanager/EMKG tool external tool dataset can be added based on the information and the list of conditions of use available (where it is indeed the intention that external tool datasets could be used)

- Ensure that an EUSES assessment can be run based on the information available (where it is indeed the intention that EUSES could be used)

- Check the content of the CSR and ES for communication generated based on their use map

Chesar can help use maps developers in identifying:

- Contributing activities in their use map where it will not be possible for registrants **to run a TRA/EUSES exposure assessment** based on the information provided. This may be useful to check where it is indeed the intention that these exposure assessment tools could be used.

- Whether some phrases for the ES for communication are missing from a SPERC or a SWED.

Chesar can also be used to check the content of the CSR and the ESs for communication generated based on use maps.

Those basic "checking" steps are highly recommended as they can prevent feedback from users of the use map (and therefore prevent the publication of updates).

In addition to these checks, we also recommend that you "test" your use map with a registrant and formulator from your sector, in order to fix potential issues that would not have been highlighted by the basic checking in Chesar.

4.1 Pre-requisite to check the content of your use map

To perform a check in Chesar, you first need to [export](#) the use map you have created from your Box 1. Then you will need to run Chesar as an Assessor.

## 4.2 Checking that no critical information is missing

The following step-by-step instructions enable checking that:

- Appropriate information is included in the use map for running an exposure estimation with built-in exposure estimation tools (TRA worker and consumer and EUSES)

- Appropriate information is included in the use map for using ART/MEASE/Stoffenmanager/EMKG tool datasets (specifically "SWED covers", ART activity class and Stoffenmanager handling class fields) and that

- Information for the ES for communication is available in the use map

1. **Box 1 - Import "dummy substance" files:**

Two Chesar files for dummy substances (solid and liquid) are available on Chesar website in the use map section of https://chesar.echa.europa.eu/support/library. They contain dummy key phys-chem parameters (needed to run TRA and EUSES), as well as fake PNECs and DNELs for systemic effects. For the purpose of this exercise, we recommend using those substance files.
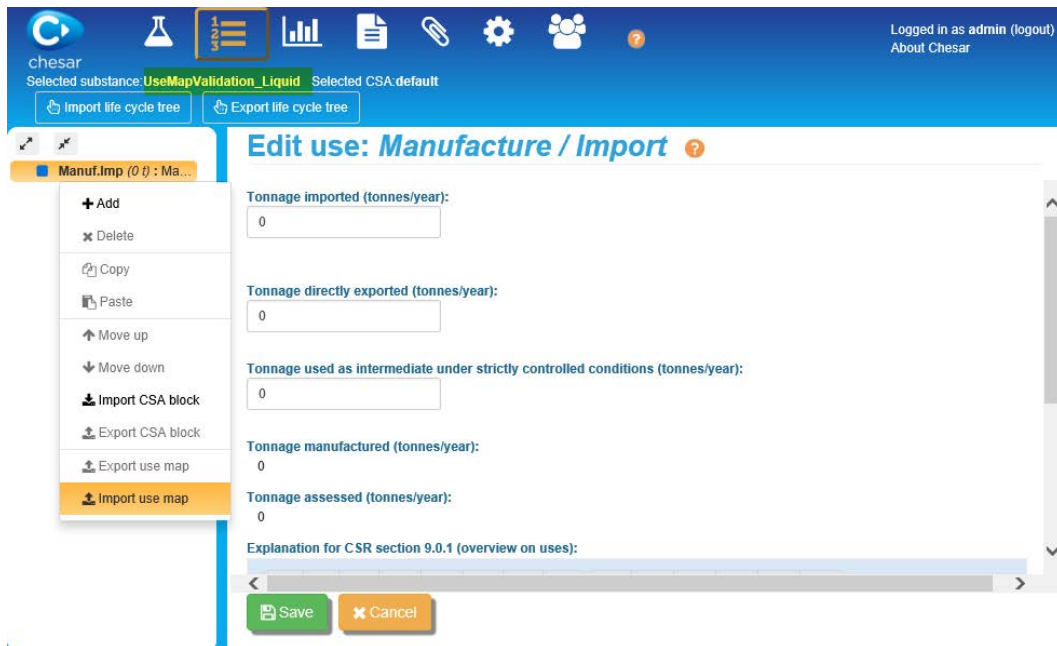
- Import the substance files in Chesar
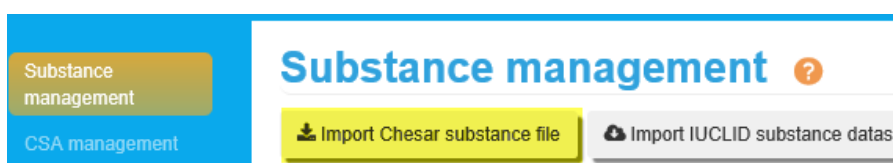
Note that if you had imported the substance previously you just need to select it. Check that the proposed substance is selected and that **a CSA is selected** (not a use map)


## 2. Box 2 - Import the use map you want to check:

3. Checking that an environmental assessment can be run with EUSES

In order to check that, for example, no release factors were missing in any SPERC linked to the use map, you may want to run an EUSES assessment for all the environmental contributing activities using the *UseMapValidation_Liquid* substance. For that you first need to provide a tonnage for each use in Box 2 (you may input a fake value) and then add an EUSES exposure data set for the full life cycle tree. Thanks to the icons appearing in the life cycle tree in Box 3 you will quickly see if information is missing.

a. Box 2 - Provide use tonnage for each use:
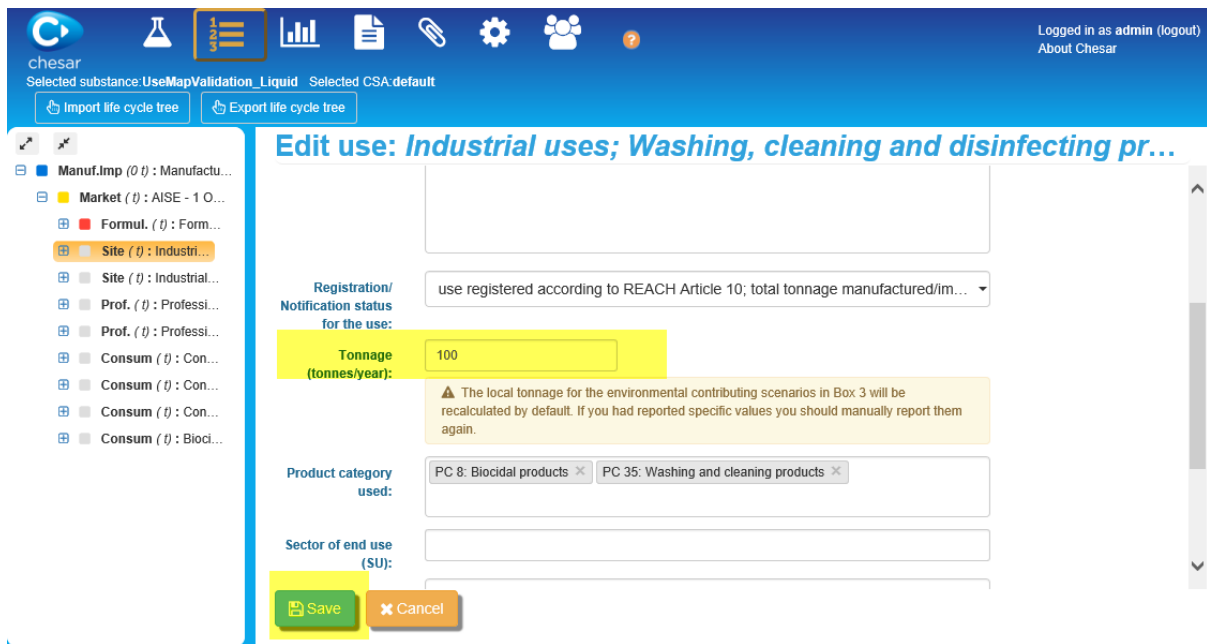
### b. Box 3 - Add EUSES default exposure datasets
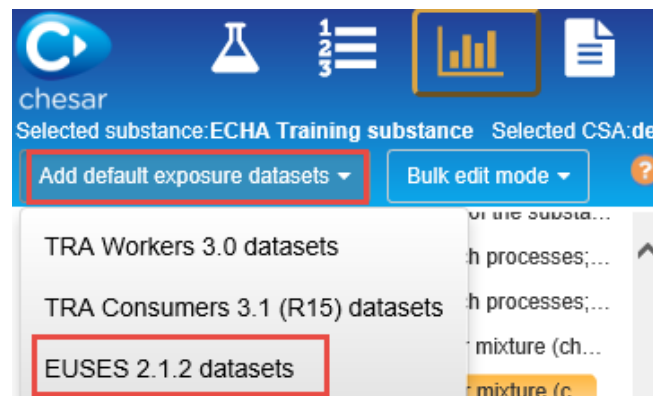
c. Box 3 - Check if EUSES can run

- In Box 3, expand the life cycle tree by clicking ⤢.
- All the contributing scenarios for the environment for which there is a blue question mark ❓ indicate that the exposure assessment could not be calculated. Have a closer look at those. In particular check that all release rates are provided.
  You may notice that for a contributing scenario where a SPERC is assigned in the use map, the SPERC has been replaced by "Manual selection" for the condition of use and the release estimation method by ERC. This may be the case if there is no sub-SPERC in your SPERC valid for the substance properties you have assigned.

4. Checking that a TRA workers can be run

If you expect that a number of registrants will use the TRA to assess their substance on the basis of your use map, you may want to quickly check whether all relevant information is provided in your use map. You may need to run the check twice: for the *UseMapValidationLiquid* and *UseMapValidationSolid* substances.

a. Box 3 - Add TRA workers default exposure datasets
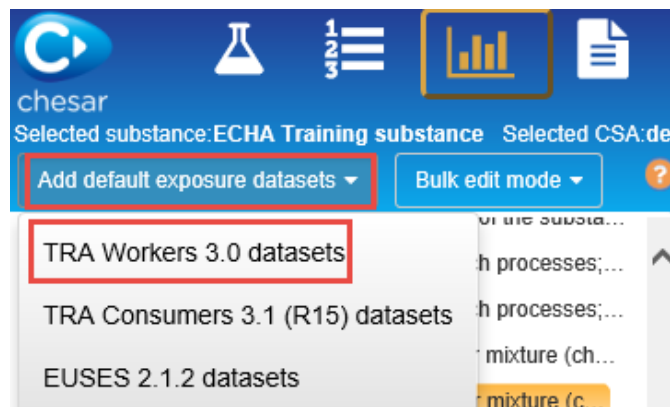
b. Box 3 - Check if ECETOC TRA workers can run

- In Box 3, expand the life cycle tree as shown in the screenshot below.
- You can easily figure out if ECETOC TRA can run, thanks to the symbol in front of each contributing activity.
- The blue question marks ❓ indicate that the exposure assessment could not be calculated.
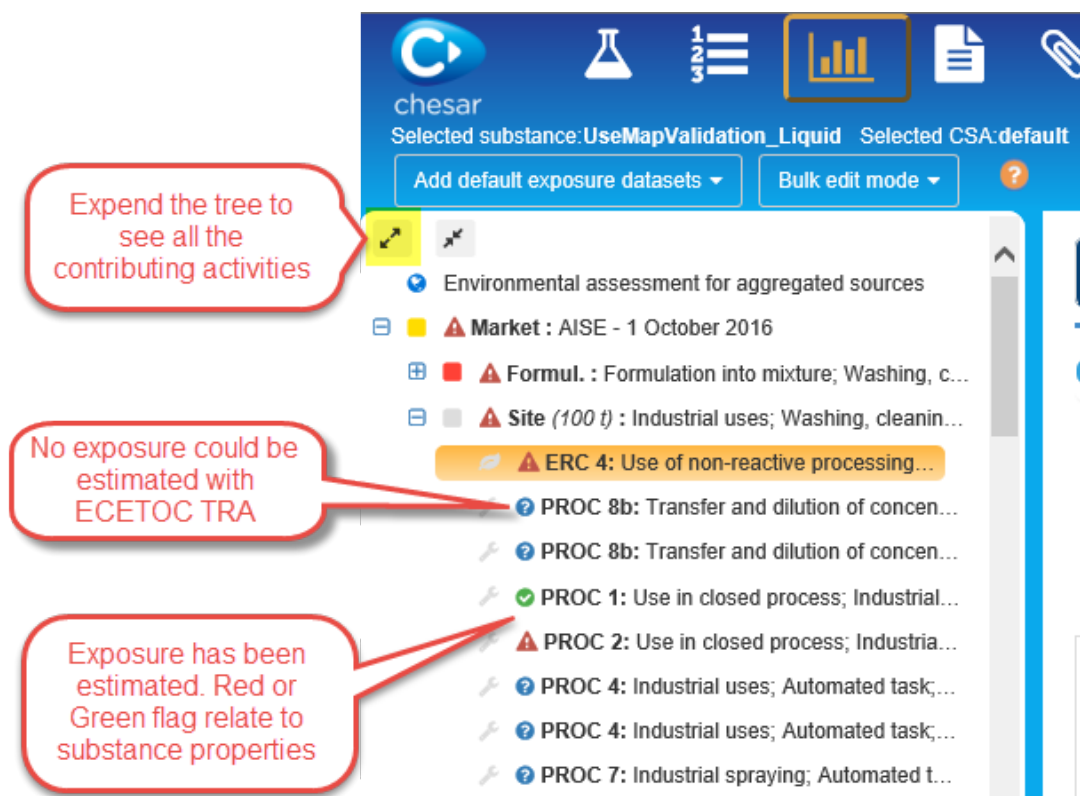
- To understand why exposure assessment could not be calculated, click on the contributing activity with ❓, and press the "Exposure estimates information" button
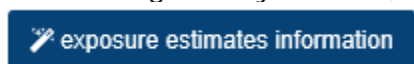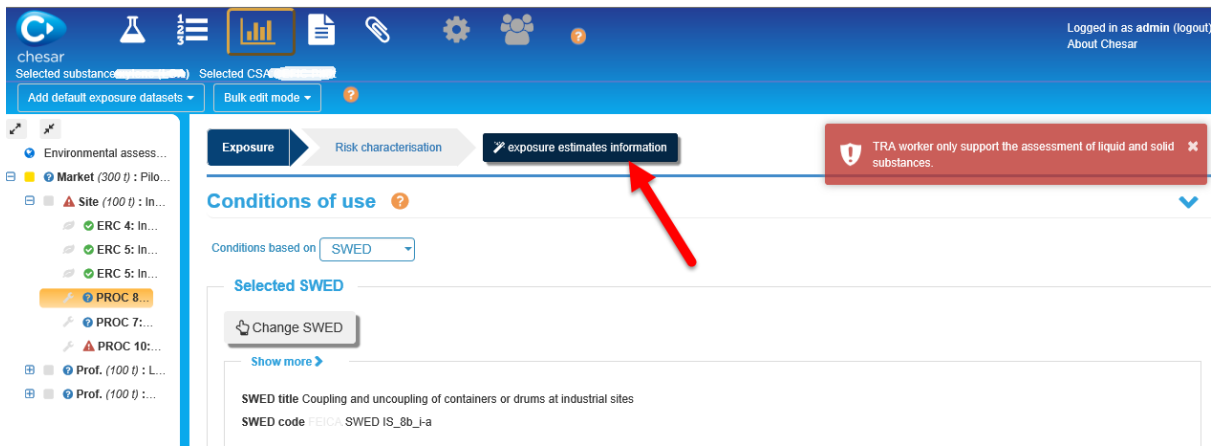
There might be various reasons why an exposure assessment could not be calculated, for example:

- o A condition of use is missing which is required to be able to run the ECETOC TRA assessment in Chesar

- o The condition of use has a value that is not indicated in bold (valid from Chesar 3.6 onwards)

- o The contributing activity has been assigned PROC 7 and the Occupational Health and Safety Management System has been set to Basic

- o The contributing activity has been assigned PROC 21 and the substance being assessed is a liquid

Note that in case a SWED is expected to cover assessments made with other tools (such as ART), ❓ is normal. In that situation, you may want to check that sufficient information is available in the field "Advice to assessor", so an assessor would understand why the TRA assessment in Chesar cannot be run. To view this field, click on "show more/show less" in the contributing activity


5. **Check if ART/MEASE/Stoffenmanager/EKMG tool datasets can be added**

If you expect that a number of registrants will use ART/MEASE/Stoffenmanager/EMKG tool datasets to assess their substances on the basis of your use map, you may want to quickly

check whether all relevant information is provided in your use map.

- In Box 3, add an external tool dataset as shown in the screenshot below.
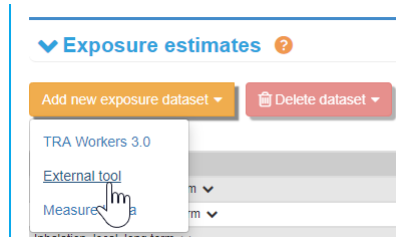

- Inside the dataset view, provide the exposure estimation tool information and the exposure values and click on the "save" button.
  - If the dataset cannot be added, you will see some red messages at the top left corner of the view then the addition cannot be performed because some of the required conditions of use are missing from the associated SWED. In this case you may want to check that the tool you want to use is indicated in the field **SWED covered** in the SWED Condition of use tab.
  - If the dataset can be added, you will be re-directed to the contributing scenario view

6. Checking that all relevant information for communication on conditions of use is part of the use map

Box 5 - Generate the ES for communication
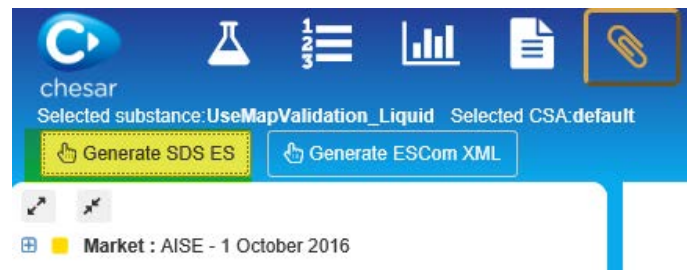
- By clicking **Generate SDS ES**, you can already identify if some phrases are missing in the ES for communication. A warning box will appear.
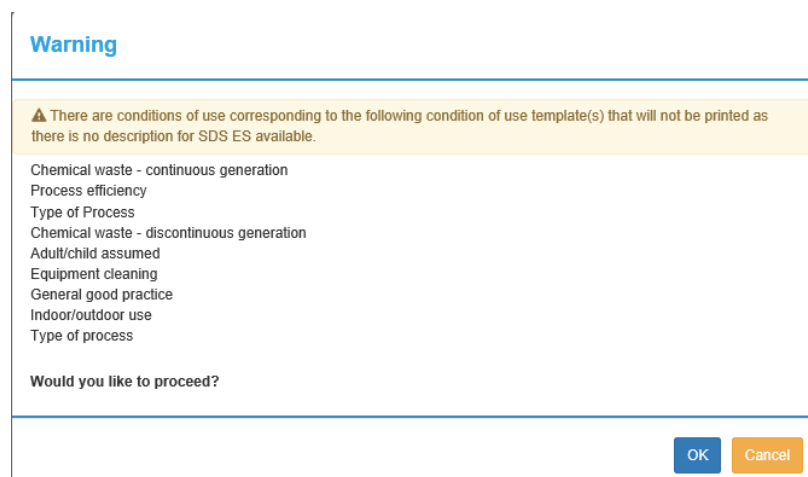
- When a phrase is mentioned as missing

  - You can check whether the assignment of default text for SDS ES is part of the condition of use template in Box 6 (go to Box 6, search for the condition of use and scroll to the SDS ES related information section). If the condition of use is expected to be communicated, in most cases, it is relevant to have a default

phrasing for communication.

- o If the setting in the condition of use template is fine, you may look in which SPERC or SWED the condition of use is used by selecting the **used in** section in the condition of use template definition in Box 6. Go to those SPERC/SWED and check that the settings for the SDS ES are appropriate for the mentioned condition of use.

4.3 Checking that the content of your use map provides the expected outcome

It may be relevant to check a bit further whether your use map contains appropriate information. In particular, you may want to check whether:

- Assessing one or more substances relevant for your sector is supported by your use map.
- The CSR and the ES for communication generated on the basis of your use map convey the relevant information.

Those checks are more time consuming than the previous ones but may ensure that the information you generated is meaningful and corresponds to what you expected.

1. Assessing a relevant substance

You may carry out the same assessment steps as the ones described in section 4.2 using a relevant substance for your sector. This will enable you to check whether:

- It is possible to get RCR <1 for relevant concentrations of the substance in standard products of your sectors.
- Whether the conditions of use support adequately some qualitative hazard which may occur with some substances.

2. Box 4 - Generate CSR section 9-10
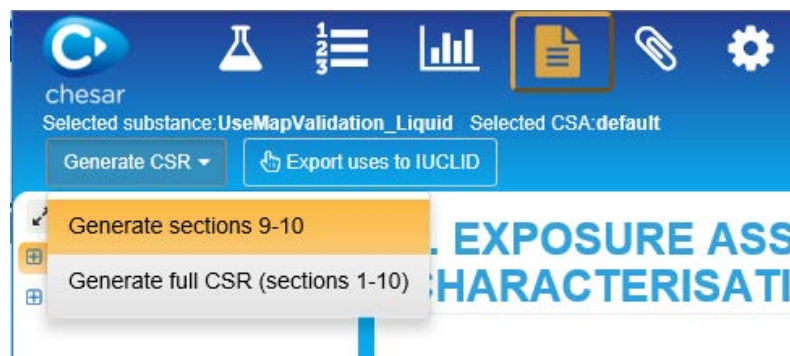
- Check the content of the CSR section 9-10: does it contain what you expected to contain? In particular, pay attention to the following parts of the document:
    - o Title section for each ES (corresponding to your use description)
    - o Conditions of use (coming from SPERC/SCED/SWEDs)
- Generate the ES for communication, and look at it: does it contain what you expected to contain? Pay attention to the following parts of the document:
    - o Table of content: are the structured short titles clear, can you differentiate the different uses from each other?
    - o Conditions for safe use in Section 2 of the ES: is it comprehensive enough for the sector?

5. Updating a use map or use map elements (SCEDs, SPERCs, SWEDs, conditions of use (CoU))
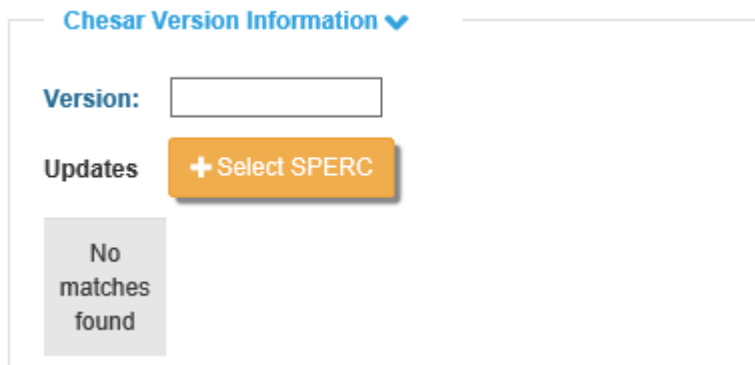
5.1 How to update a SPERC, SCED, SWED

Some functionalities have been implemented in Chesar to better support versioning management of SPERCs, SCEDs and SWEDs.

- Sectors can specify that a new version of a SPERC (SCED/SWED) updates (replaces) a previous version.
- When this information reaches the assessor:
    - The previous version is not available for selection in a new assessment. It is possible to identify in which previously carried out assessment the "old version" SPERC (SCED/SWED) has been used.

When an assessment has been carried out with the "old version" of a SPERC (SCED/SWED) the assessor is warned and has the possibility to replace the old SPERC (SCED/SWED) by the new one.

For updating a SPERC, SCED, SWED the following steps must be followed:

- Select the SPERC (SCED/SWED) you want to update in your library.
- Copy it by pressing .
- In the *Chesar version information* block you are advised to report in the *Version* field a new version number or version/modification date. This version is only relevant for the management for the library and is not part of the communication.
- Then you have to select (again) the SPERC (SCED/SWED) that you want to update with this new one (the one you initially selected and copied for modification) by pressing the **Select SPERC** (SCED/SWED) button.

- Modify the newly created SPERC (SCED/SWED) as needed. Once done (possibly after checking the SPERC (SCED/SWED) report – Pay attention that if you generate a saved SPERC report, then the SPERC which it updates is removed and you need to select it again), **Activate** it.
- When activating the new version of the SPERC (SCED/SWED) the SPERC (SCED/SWED) which has been updated is set to obsolete by Chesar.

5.2 How to update a CoU inside a SPERC/SCED/SWED

The same functionality of SPERC/SCED/SWED update has been implemented in Chesar to better support version management of CoU. This functionality is useful when sectors need to update a specific CoU that was already available in a previous use map version (in SPERC/SCED/SWED).

When the sector defines a new version of a CoU, the previous version will be set as "obsolete". Obsolete CoU will not be available for selection in a new SPERC/SWED/SCED. However, it is still possible to identify in which previously created SPERC/SWED/SCED the "old version" CoU has been used. When opening a SPERC/SWED/SCED that has been created with the "old version" of a CoU the sector user is warned that a new version of a CoU is available as the name of the CoU will be displayed in italic and the symbol ⟳ will appear. If the sector user clicks the ⟳, the new CoU will replace the obsolete one.

For updating a CoU the same steps as for SPERCs/SWEDs/SCEDs need to be followed:
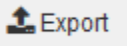
- Select the CoU you want to update in your library.

- Copy it by pressing .

- In the *Chesar version information* block you are advised to report in the *Version* field a new version number or version/modification date. This version is only relevant for the management for the library and is not part of the communication.

- Then you must select (again) the CoU that you want to update with this new one (the one you initially selected and copied for modification) by pressing the **Select CoU** button.

- Modify the newly created CoU as needed. Once done, **Activate** it.

- When activating the new version of the CoU, the CoU which has been updated is set to obsolete by Chesar.

5.3 How to export updated SPERCs, SCEDs, SWEDs and CoU in SPERCs, SCEDs, SWEDs

When creating an export file containing SPERCs (SCEDs/SWEDs/CoU) for assessors you should include all the versions that you had previously made available, to ensure traceability in the recipients' libraries. When assessors import the new files in their own library the following will happen:

- The SPERCs (SCEDs/SWEDs/CoU) for which an update is imported will be automatically set to obsolete. This means that they will not be offered anymore for use for new assessments. They will nevertheless remain in the assessor's library as they may have been used in previously carried out assessments.

- For all the assessments carried out with previous versions of the SPERCs (SCEDs/SWEDs) the assessor will be warned that a new version exists and he may decide to update his assessment.

To export **all** the versions of the SPERCs (SCEDs/SWEDs/CoU) go to advanced search and search for both active and obsolete elements.

Then select all the versions of the various SPERCs (SCEDs/SWEDs/CoU) you want to export by clicking the check box on left and create your export file clicking the ⬆ Export button on the top of the page.

⚠ Note that if you do not include all the previous versions (e.g. very old versions), the assessors who had used those versions and import the new files will not be made aware that their old version may need to be replaced by a newer one.

5.4 How to update a use map

To update a use map, select it in the **Use map management** tab in Box 1 (after having selected the use map substance in the Substance management tab). Then modify it as you need and export it. You are advised to report in the internal remarks field information which will help you track back when and why you introduced some changes. You may also provide some advice to the assessor.

Important note: the versioning management is to be done outside Chesar. If you want to go back to an earlier version of your use map, you will have to import it again. Note that such import will overwrite all the changes you may have performed in the meantime.

5.5 How to export an updated use map

Each use map is identified by a UUID (an alpha-numerical string not visible to the user), which makes it unique. It is important that if a use map developer wants to update his use map, he does it always from the same use map. So once a registrant imports a new version of the use map, the changes between the versions are recognised and are flagged to him.

Updating a use map could mean:

- New use added
- Use removed
- Use description updated (new/update/deletion of contributing activities)
- Update in the SPERCs, SWEDs, SCEDs (or in CoU within SPERCs/SWEDs/SCEDs)

Once the changes have been performed (and checked), the use map developer can export the use map, and publish it in the ECHA library (cf section 3.6).

As a good practice, it is recommended, to keep track of all the changes performed in the use map, and list them carefully in a release note document that could be published together with the Chesar file of the use map in the ECHA library. This will help assessors to determine whether they need to import the updated use map or e.g. importing the updated SPERCs/SCEDs/SWEDs would suffice.

It is also recommended to indicate a version date or a version number in the name of the use map.

6. Uses in "rigorously contained conditions"

6.1 Background

There is a possibility in IUCLID to flag uses that take place under rigorously contained conditions (with a differentiation between workers and the environment). This flag can be used by the authorities, in combination with information on the hazard of the substance and the tonnage for the use, to deprioritise a substance regarding further regulatory actions. The flag needs to be supported by adequate information describing the rigorously contained conditions.

Figure 4: screenshot of IUCLID section 3.5. Detail of a use
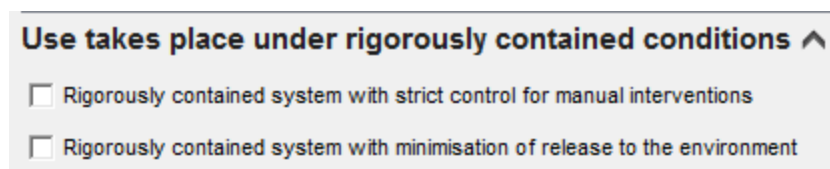
The same type of flag is available in Chesar and if filled in appropriately, it will be exported from Chesar to IUCLID.

The flag in Chesar (and IUCLID) is to be set per use (meaning it should apply to all the contributing activities under that use). If the use may take place under both conditions, rigorously contained or more open (e.g. depending on the companies or technology applied), you should create two uses and support registrants in estimating the tonnage (e.g. via the use map), which is handled in contained conditions.

Note: Without differentiation of tonnage, authorities will have difficulties to use the flag on rigorously contained conditions as described above.

6.2 Specificities in Chesar related to uses in rigorously contained conditions

When some uses in a use map are "in rigorously contained conditions" for the environment and /or human health you may flag this for assessors in Chesar in the Additional information field for the relevant uses. Assessors will then be able to check related checkboxes in Box 3 when selecting their use.

6.2.1 Rigorously contained system with minimisation of release to the environment

If the use takes place in *Rigorously contained system with minimisation of release to the environment* (for all the contributing activities for the environment (if several) of the use) then you should only assign SPERCs which have the flag *Rigorously contained system with minimisation of release to the environment* to each contributing activity for the environment for that use. Note that in such cases the assessor will also have to provide a *Description of non-technical means for rigorous containment and strict control for manual intervention*. Such explanation will also cover the *non- technical means* relevant for the workers activities if they take place in *Rigorously contained system with strict control for manual interventions* (see section 6.2.2). You may provide support for such information in the Additional information from use map for the use in your use map.

6.2.2 Rigorously contained system with strict control for manual interventions

If the use takes place in *Rigorously contained system with strict control for manual interventions* (for all the contributing activities for workers of the use) then you should only

assign SWEDs which have the flag *Description of non-technical means for rigorous containment and strict control for manual intervention* to each contributing activity for workers for that use. In this case, the assessor will also have to provide a *Description of non-technical means for rigorous containment and strict control for manual intervention*. Such explanation will also cover the non-technical means relevant for the environment if the use takes place in *Rigorously contained system with minimisation of release to the environment*. You may provide support for such information in the *Additional information from use map* for the use in your use map.