

PROLOGA



***SAP® S/4HANA for Waste and Recycling
by PROLOGA***

**Material Flow Management - User
Manual**

SAP® Certified
Powered by SAP NetWeaver®

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Document History



Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location: <http://service.sap.com/instguides> -> SAP Solution Extensions -> SAP S/4HANA for Waste and Recycling

The following table provides an overview of the most important document changes.

Version	Important Changes
1	Initial version

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Glossary



Attention



Note

1 Introduction

The application *Material Flow Management* contains the basic framework to enable your company to integrate processes according to the environmental legislation. This can be applied for different countries in the system in order to map the documentation of waste stream relevant disposal services.

The solution allows the maintenance of necessary master data such as catalogs (EWC in Europe) and the use in corresponding movement data (legal transport documents) during the collection processes. It is fully integrated into the SAP® *Waste & Recycling* business solution which provides all standard data required for monitoring material flows such as waste generation sites, waste disposer sites, materials and quantities.

This document describes the necessary steps after a successful installation of the add-on to use the application *Material Flow Management* in its standard version.

1.1 Components of the application *Material Flow Management*

The application *Material Flow Management* is fully integrated in the industry solution SAP® *S/4HANA for Utilities*, applies the component *Central Business Partner (FS-BP)* as well as the *Material Management (MM)* and includes the following elements:

1.1.1 Basic Configuration

Basic control parameters and components are maintained in this section. Next to partner, certification and document types you are able to maintain permissible data combinations and restrictions. You may define data that are used for monitoring measures such as periods, quantities and threshold values which can trigger warnings or the denial of a transaction. For more information use the document:

Material_Flow_Management_Configuration_Guide.pdf

1.1.2 Master Data

Maintain your master data in order to guarantee a waste disposal process according to the rules. Master data include among others waste generation sites, catalogs as well as the assignment of a monitoring level to a waste material. Generator, transporter and disposal companies are maintained as Business Partner. The waste is maintained as a material in the material master data. Redundant data administration is therefore avoided.

1.1.3 Documents

Information required by authorities can be recorded. You can use input masks to create waste approval/waste stream or transport document/disposal document.

1.1.4 Processing of Waste Disposal Orders

The PROLOGA solution is completely integrated in SAP® *S/4HANA for Utilities*. Therefore, data redundancy is avoided. The program uses the same master data, e.g. when creating an order item from a service frequency, when generating transport documents/disposal documents or when confirming weighing data and orders. In each case the corresponding material postings, waste balances etc. are updated and therefore, immediately at hand for analyses.

1.1.5 Analyses

The software provides you with extensive figures based on a continuous process of updating waste quantities which are to be used in business assessments. Based on the SAP standard report functionalities statistics can be created based on the collected information during the waste and recycling process.

1.1.6 Partner in the Waste Disposal Process

Several business partners participate in the waste disposal process. The relevant data can easily be maintained in your SAP® system. The SAP® Business Partner may be defined as a waste generator, waste transporter and/or waste disposal company.

Moreover, you may assign a catalog to waste disposal facilities defining the wastes that might be delivered to/accepted at the facility as well as assign the related waste disposal company.

Waste generation sites are defined by Generator and Container Location (functional location of a property).

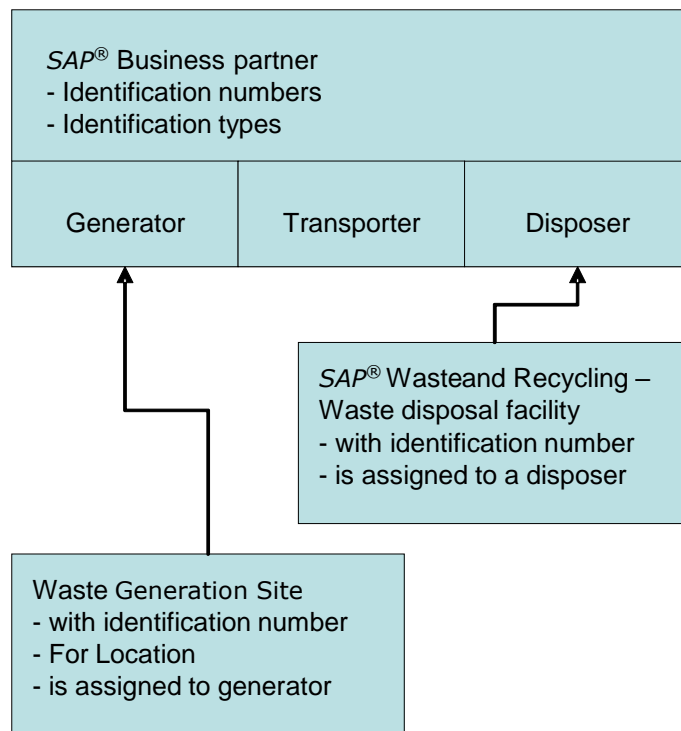


Figure 1: Partners in the waste disposal process

1.1.7 Catalogs and Waste

In Europe the European Waste Catalog (EWC) is the standard catalog for the disposal of hazardous and non-hazardous waste. Other catalogs for different countries can be included easily. As an example the EWC is used in this document.

The waste catalog defines standardized nomenclatures and monitoring levels of the various waste types. The catalog can either be imported through an interface or entered manually. Finally, the waste (material) can be assigned to the catalog entries.

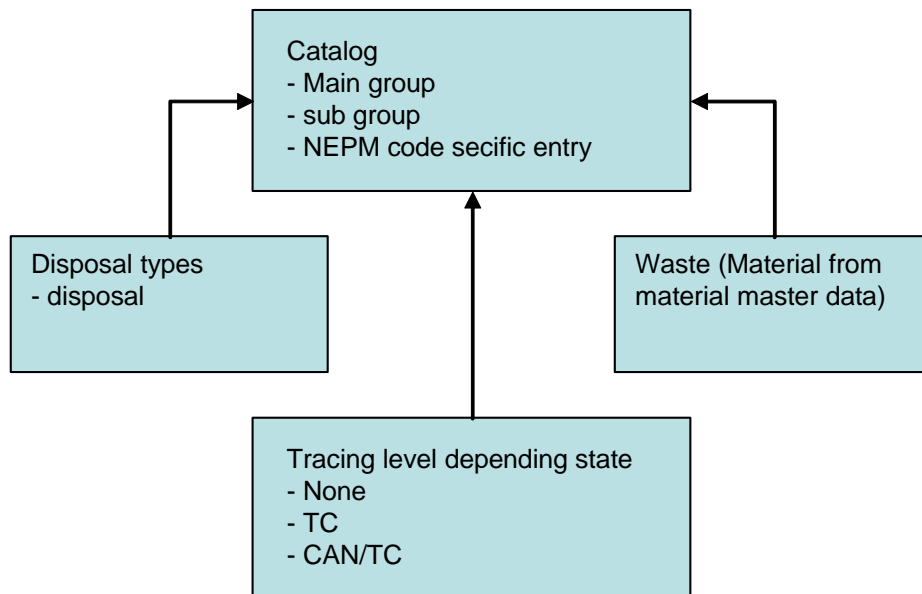


Figure 2: Allocation of waste, waste disposal type and monitoring level to a EWC-code

Although, the catalog defines the basic necessity of monitoring certain wastes, the monitoring level can be adapted to your special needs. It is because of requirements imposed by authorities, customers or internal regulations.

The direct management of the waste as a material avoids time losses through multiple data entry of information while applying all advantages of the SAP® *Material Management Component*.

In addition to the EWC- catalog the classification of the waste as hazardous goods for disposal plays an essential role.

Besides the EWC-catalog, the application *Material Flow Management* offers the possibility to import a prepared file of the UN/ADR catalog into the system. The file has to be provided by the customer. Moreover, the required information can be printed on the disposal documents.

1.1.8 Disposal Documents and other Documents

The transport and disposal of waste, requires a transport document based on a certain waste disposal order item.

The consistent documentation and disclosure of the waste lifecycle (i.e. from cradle to grave) requires a lot of documentation.

Of course, the wide-spread waste collection and its respective Consignment Authorization Numbers and Transport Documents/Disposal Documents are integrated in the software as kind of template. These provided templates can be used or customer specific enhanced. The manual handling of these documents is often faulty which results in loss of time and additional costs. Therefore the application *Material Flow Management* supports you in providing output, reporting back and monitoring these papers and provides for daily updating of the respective documents.

In some countries, the disposal documents are based on waste streams which are a central element in the disposal of waste. Approvals define the material, the source of the material, the destination of the material, transport and quantities and approvals are used for monitoring and control of material flows.

The application *Material Flow Management* provides the possibility to manage waste streams and the adjustable volume. With the integrated status management the condition of a waste stream document are described and defined, whether the document should be used and which information can be changed.

1.1.9 Processing of Waste Disposal Orders

After entering the required master data, such as Business Partner, Catalogs and Waste Approval/Waste Stream into the system the actual waste disposal process can be recorded in SAP® S/4HANA for Utilities.

Basis for waste disposal orders are service frequencies. In these are approvals or disposal document templates stored, from which in order creation disposal documents are generated. The information contained in the approvals or disposal document templates are included in the service frequency and can be edited.

The application *Material Flow Management* is completely integrated in the industry solution SAP® S/4HANA for Utilities. Some areas of the standardized input forms are supplemented by waste relevant data by the module. This avoids unnecessary duplication of data.

1.1.9.1 How to Create a Service Frequency

The service frequency is used as a template for the creation of waste disposal order items. Accordingly all relevant data such as business partners, waste, EWC- code and waste disposal procedures are stored on the service frequency.

Alternatively it is possible to assign the service frequency a waste approval or disposal document template.

Each time an order item is generated from the service frequency the application *Material Flow Management* generates a disposal document and enters the data of the template.

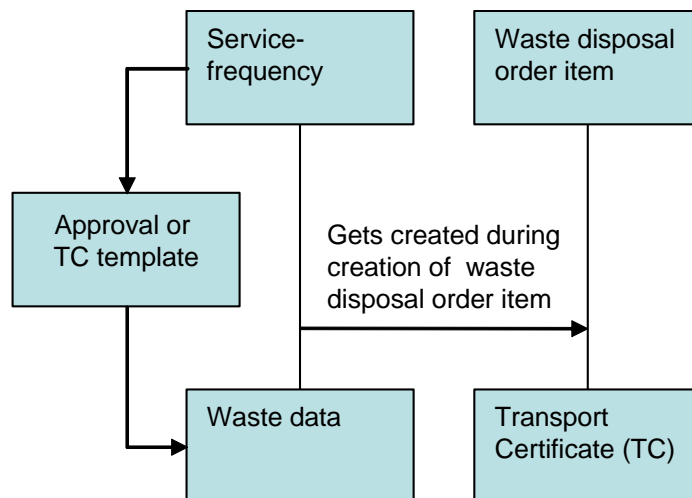


Figure 3: Template as data source

1.1.9.2 How to Create a Waste Disposal Order Item

Plausibility checks are performed when creating a new waste disposal order item from the service frequency assessing the acquired information as to different criteria.

If the checks turn out negative, a warning or error message is given. In case of a warning, you can create a waste disposal order item and correct the faulty data afterwards. In case an error message occurs, the creation of the waste disposal order item is canceled.

With creation of the waste disposal order items, the assigned disposal documents are automatically generated (but not yet put out).

The checks performed during order creation are country template dependent. Further explanation can be found in the chapter with the country-specific characteristics.

1.1.9.3 How to Print Documents

Printing of a document is done via the standard SAP® print functionality.

To achieve requirements for reports, for any type of disposal documents the reports to be used (Smart Forms) can be defined by the customer and were involved in the process. Delivered example reports can serve as a template.

Further information e.g. how to include your own reports can be found in the document *Material_Flow_Management_Configuration_Guide*.

1.1.9.4 How to confirm a Waste Disposal Order Item

With the completion of a waste disposal order item, the acquired data can be reported back to SAP® S/4HANA for Utilities. System checks are also available here. If these checks are negative or conditions have changed, the necessary corrections in the order item can be carried out.

Necessary corrections can be:

- Specifying a different waste approval.
- Specifying a different waste.
- Change of the disposal document and the disposal document number.
- Change of the transporter.

1.1.9.5 Confirmation at the Weighbridge

The application *Material Flow Management* is also fully integrated into the weighing process. The integration has the advantage, that when posting a weighbridge operation, the appropriate system checks and quantity updates are performed. If necessary, warning may be issued to the user. There is also the possibility that disposal documents can be generated, modified and printed, directly from the weighbridge.

1.1.10 Statistics and Analyses

To understand the disposal operations carried out without gaps the application *Material Flow Management* supports the user in the analysis of collected information.

All information will be displayed in list form which can be customized with standardized SAP® functionality. The list allows you to accomplish simple arithmetic operations on one or more columns. Of course there is the possibility to transfer this information into a text file to edit the information further as known in the *Office products*. The settings used by the user, for example the number of the displayed columns and their order can be saved as a variant.

2 Operation

2.1 General operation

The following functions may be applied generally:



Update – updates display of data records after changes



New – creates a new entry



Edit – the data of a record may be changed



View – the data of a record are displayed



Clicking on the list next to the filter symbol opens a context menu where you can select from a list of default filter criteria.



Via *Collapse nodes* the display can be made clearer. Subordinate entries are hidden.



Via *Edit layout* additional columns can be displayed.



Delete – the entry will be deleted



Via *Sorting* the data can be sorted in ascending order



Via *Sorting* the data can be sorted in descending order



Via *Reset Sorting* the sorting can be reset



Search – Clicking on the list next to the search symbol opens a context menu where you can select from a list of default search criteria.



Via *Transport* the customizing/workbench order can be created



Via *Continue searching* the previous search request can be continued



New allocation – adds a subentry to a main entry



Delete allocation – deletes a subentry of a main entry



Via *Expand/Enlarge* additional fields are displayed on a screen



Shows the initial dialog for reselection (not available in all transactions) / transport order can be changed

In most areas a tree display was chosen for reasons of clarity. Here the left side shows all equivalent elements in list form. On the right side a detail view is provided (if available) that matches the selected tree node. This detail view includes additional information.

2.2 Working with the tree

For expanding and collapsing the tree, an arrow in form of a small triangle exists on the left of the node. If you click on this arrow with the left mouse button, you expand the tree branch and all sub nodes are displayed (arrow changes from pointing to the right in pointing downward). If further sub-sub nodes exist, a corresponding arrow is displayed in turn.

The collapsing takes place analogous to the expanding by left-clicking the arrow. The arrow changes from pointing downward back in pointing to the right. It is also possible to collapse all nodes simultaneously.

By clicking on the respective line on the left of the tree, the corresponding form (mask) opens on the right side. It displays additional information of the tree entry.

2.3 Additional Tasks

And context-dependent functions, depending on the tree, a tree knot and position, such as:

- Create EWC subgroup
- Delete EWC group

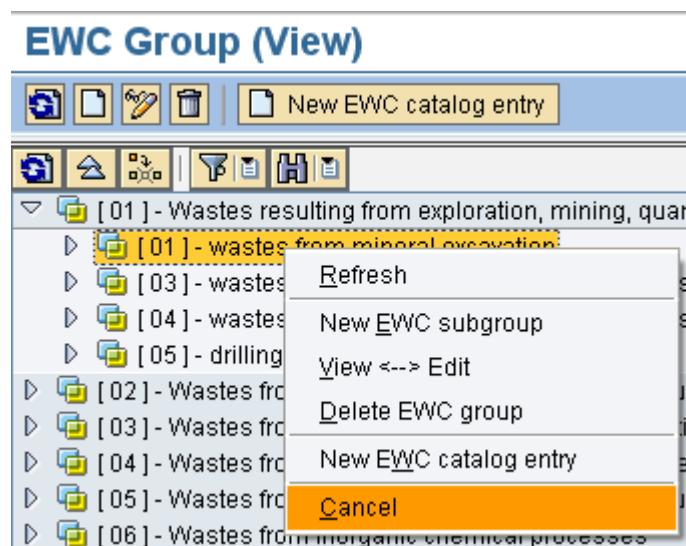


Figure 4: Context menu



The available context menu functions vary between the transactions and the trees which used there.

2.4 Basic Configuration (Transaction /N/WATP/ARB_CONFIG)

In this section key control parameters and waste stream template specific setting can be set up.

Here are the partner types, waste approval types, disposal document types and combinations of these and other constraints and functions for basic waste legislation defined. Deadlines, quantities and limits can be defined, which are examined in the disposal process and lead to warning and error messages to prevent unauthorized processes.

The basic configuration is adjusted according to customer requirements.

For more information refer to the document *Material_Flow_Management_Configuration_Guide*.

2.5 Master Data

With the application *Material Flow Management* the master data required for proper operation are managed. This includes besides the enhancements to the business partners, especially the waste generation sites, the catalogs and the administration of waste.

2.5.1 Business Partner (Transaction BP)

The application *Material Flow Management* uses the central standard SAP® *Business Partner (BP)* and extends it to waste stream specific data.

Open the business partner with the transaction *BP* and search for the business partner data to be edited in using the offered search functionalities.

2.5.1.1 Identification Number on Business Partner

On the tab *Identification* under *Identification Numbers* is the option to deposit waste legislative identification numbers at the business partner. This can for example be:

- *Waste generator number*
- *Waste transporter number*
- *Number of waste disposal company*

Any number of different identification numbers can be stored to a business partner. The possible identification number types can be defined in Customizing.

Identification types can be used as filter criteria in search helps or as templates when creating a waste generation site or a waste disposal facility.

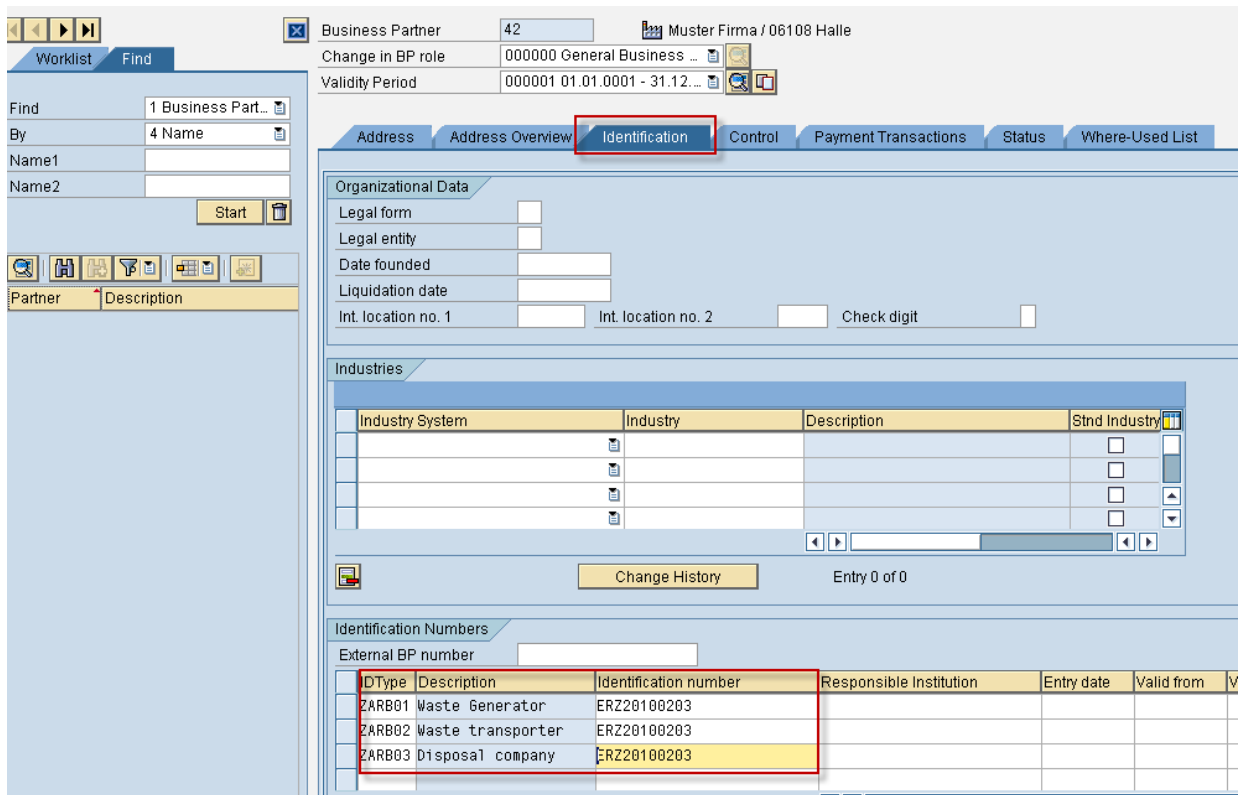


Figure 5: Additional business partner data

More information on customizing for the identification numbers can be taken out of the document *Material_Flow_Management_Configuration_Guide*.

How to record the data:

1. Call transaction *BP*
2. Enter Business Partner or call Search (F4) and select Business Partner
3. Change to edit mode (F6) – if not already activated
4. Go to tab Identification
5. Go to identification numbers and select and assign identification type (ID type) (F4)
6. Enter identification number
7. Define validity from and validity to dates
8. Save entry (header)



In many countries there can be only one identification number per identification method and business partners at a certain time. Therefore, identification numbers may be provided with a validity period.

2.5.1.2 Waste Disposal Facility (Transaction EWAELO4)

The existing disposal facility in SAP® S/4HANA for Utilities can be supplemented by a further waste legal information. At a disposal facility, the associated disposer (business partner) and the corresponding identification number can be maintained.



With a large number of business partners, the search help for partner identification number should be used because the search on the identification method disposers is limited.

Waste Disposal Facility (Display)

Search for Waste Disp. Facility: 71

Waste Disposal Facilities:

- Landfill
 - 53 Papier
 - 71 Landfill**
 - KOMP1 Kompost
 - Sorting
 - 21 Concrete
 - 33 Sorting
 - SO_WEGDENMUELI Sorting
 - Transfer station

General Vendor Cust. Routes Forms Scale

Plant: ZW01 Functional loc.: 10000341
 Stor. Location: ZL01 City: 06108 Halle
 Warehouse No.: 001 Street: Große K1ausstraße

Human Resources: Personnel area: ZDE1 Capacity: Capacity cat.:
 Sales and Distribution: Sales Org.: 0001
 Distr. Channel: 01
 Division: 06

Additional info to functional location: Name 1 / Name 2: Skynet Systems 2

Disposal company: BPartner: 1000010 Sortieranlage Wegdenmüll / Mansfelderstraße 42 / D-06108 Halle

Description	Identification number	Valid from	Valid To	Ctry	Rg
Disposal company	N0123456789	18.05.2010	31.12.9999		

Waste:

EWC code	Description
010101	wastes from mineral metalliferous excavation
150101	Verpackungen aus Papier und Pappe
170101	concrete
170106	mixtures of, or separate fractions of concrete, bricks, tiles and c...


Figure 6: Additional data with waste disposal facility

2.5.1.3 EWC- Positive Catalog

At the disposal facility, EWC codes which are only permissible for this system can be maintained (positive list). If the disposal facility serves as the destination of a transport, it is checked whether the EWC-code specified in the disposal document is permitted for this facility. If not, a corresponding error message is given.

Figure 7: EWC- Positive Catalog at the waste disposal facility

How to record a waste:


1. Call transaction *EWAELO4*
2. Open the relevant facility type in the tree or search for the facility via its number
3. Select the facility in the tree (click on the entry) → the relevant data are displayed (right screen)
4. Activate edit mode (F5) – if not already activated
5. Create new data record in tab *Waste* with button *New allocation* 
6. Search for EWC code (F4) or enter EWC code and confirm (Next button or F8)
7. Repeat transaction for all wastes that are authorized for this facility
8. Save data (header)



The positive catalog may be created during the data migration process.




If EWC codes are not assigned to a facility, all wastes will be declared permissible for a facility. Therefore, plausibility checks are only executed if entry restrictions are defined.

The recorded data can be deleted with button .

Further SAP® standard functionalities are given:



 *Details*: Display details of marked items

 *Sort records* (ascending/descending)

 *Search*

 *Filter*

 *Edit Layout*

2.5.2 EWC Catalog (Transaction /N/WATP/ARB_EWC)

The EWC is maintained in the application *Material Flow Management*.

In the EWC catalogue the assignments of the waste are beside the waste key numbers and waste names (e.g., 200301, mixed settlement waste) also to the EWC main-group/EWC sub-group, the monitoring types, depending on realization / removal as well as the classification of the waste in collective categories (waste oil categories) maintained.

All EWC code entries are defined in time slices. Therefore, they can always be edited and any changes can be tracked.

The EWC-catalog can be imported during system implementation (specific file formats may be required). Afterwards it is maintained by the end user.

Several materials can be assigned to a EWC-code on a separate register. When creating a waste disposal order and at the weighbridge, plausibility checks guarantee that EWC-code and waste material match. This prevents, for example, that the material concrete breakage meets with a waste approval of waste oil.

How to manually record the EWC:

1. Call transaction /N/WATP/ARB_EWC
2. Call function *Create EWC group* (F7) or by clicking the button *New EWC Group* and enter main group with number and name, save entry
3. Select a main group and with right-mouse button open the context menu; select function *Create EWC sub-group*, enter sub-group with name and number; save entry
4. Select a sub-group and with right-mouse button open the context menu; select function *Create EWC catalog entry*, enter EWC code with name and number as well as validity and classification of quantity regulation in collective procedures; save entry

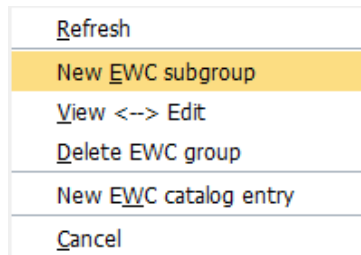


Figure 8: Creation of EWC-Sub Group

- At the subgroup in the context menu choose the function *New EWC catalog entry* and enter the EWC code reference number and name as well as validity and classification for the quantity control in the collection process and save.

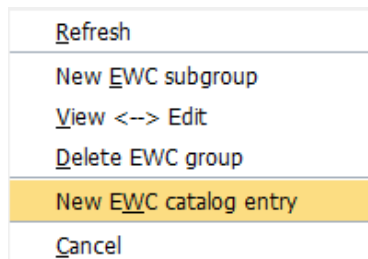


Figure 9: Creation of Catalog Entry

- At the level of the EWC-catalog entry in the level monitoring per disposal the classification of the required inspection per disposal method takes place (recycling or disposal).

Monitoring level per disposal procedure			
W.Dis.Proc	Description	Categoriz.	Description
BE	Disposal	NGEF	non hazardous
VE	Recycling	NGEF	non hazardous

Figure 10: Monitoring Level per disposal procedure



The need for monitoring is defined in the base configuration in the knot monitoring level. Further information can be found in the document: *Material_Flow_Management_Configuration_Guide*.



Per disposal method, a need for monitoring is to associate.

New entries in the navigation tree will be displayed after saving the data on the tab *General* (right screen).

By creation the EWC-code in time slices with a validity period, the necessary changes can be imaged. Changes for example the monitoring level of waste, another time slice can be created. There is the function to create time slice, which is also callable in the context menu on the level of the EWC-catalog entry.

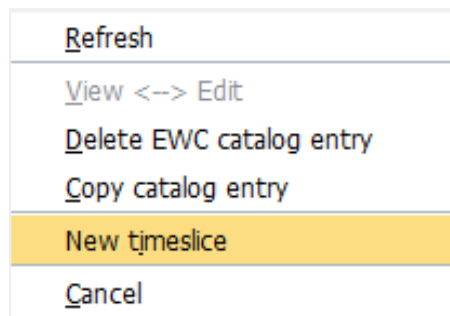


Figure 11: Create a time slice

Further SAP® standard functionalities are given:



Delete:

EWC codes, sub-groups or main groups can only be deleted if they haven't been used before. The delete functions are also available in the context menu of each level.



Copy:

EWC codes can be copied within a main or sub-group. The record can then be edited via the edit-function.



Refresh:

The data should be updated after new entries or changes (Ctrl + F8).



Characteristics to the EWC can be expanded / changed flexibly in Customizing, when changes are necessary. Further information is contained in the document:


Material_Flow_Management_Configuration_Guide.

Assigning materials to a EWC code:

Any number of materials on the register *Material Assignment* can be assigned to the European Waste Catalogue entry (EWC).

How to assign a material:

Go to the tab *Material assignment*

1. Activate edit mode (F5) – if not already activated
2. Create new data record with function *New assignment* or with the button 
3. Search for material (F4) or enter material and confirm with the *green hook*
4. Repeat previous transaction for all further materials
5. Save record (header)

The European Waste Catalogue entries are now available as a choice for the assignment in the waste approval, disposal document or the disposal facility.

The material-EWC-assignment is checked at several points, including on service frequency and on the weighbridge.



If known, the UN number can also be specified by using the material assignment to the European Waste Catalogue entry.

2.5.3 Dangerous Goods Catalog

The Dangerous Goods Catalog (ADR/UN catalog) can be maintained in the application *Material Flow Management*.

The Dangerous Goods Catalog contains the ADR classes including the ADR classification codes as well as the packing groups.

The respective transactions are:

- /N/WATP/ARB_ADRUNCA (UN- Catalog)
- /N/WATP/ARB_ADRCLASS (ADR- Classes)
- /N/WATP/ARB_ADRVPGRP (ADR- Packaging Group)

A UN catalog can be compiled for all dangerous materials, listing all required data:

- UN numbers and names
- Assignment to ADR class and ADR code
- Assignment to packing group
- additional data

Any number of special regulations, for example special regulation 274, can be assigned to an UN number. The special regulation can be maintained in *Customizing*.

Further information is contained in the document *Material_Flow_Management_Configuration_Guide*.

The UN- catalog can be imported at one time at system implementation. The further maintenance is performed by the user.

This data can be assigned to waste approvals and disposal documents and printed on the forms as required.

2.5.3.1 ADR Classes (Transaction /N/WATP/ARB_ADRCLASS)

ADR classes can be maintained in the transaction /N/WATP/ARB_ADRCLASS. The data to be maintained are name and number of the ADR class and their description as well.

The following SAP® *standard functionalities* are available:



Update – updates display of data records after changes



New – creates a new entry



Edit – the data of a record may be changed



Delete – the entry will be deleted



Edit: Edits an existing entry




New allocation – adds a subentry to a main entry



Delete allocation – deletes a subentry of a main entry

The creation / change of the data in the tree view is possible by the known procedure.

The ADR- class standing on left side in the tree, the associated ADR- numbers shall be set right in the window above function .

The data are available as a choice assignment for the UN ADR catalog and can be modified and deleted as required.

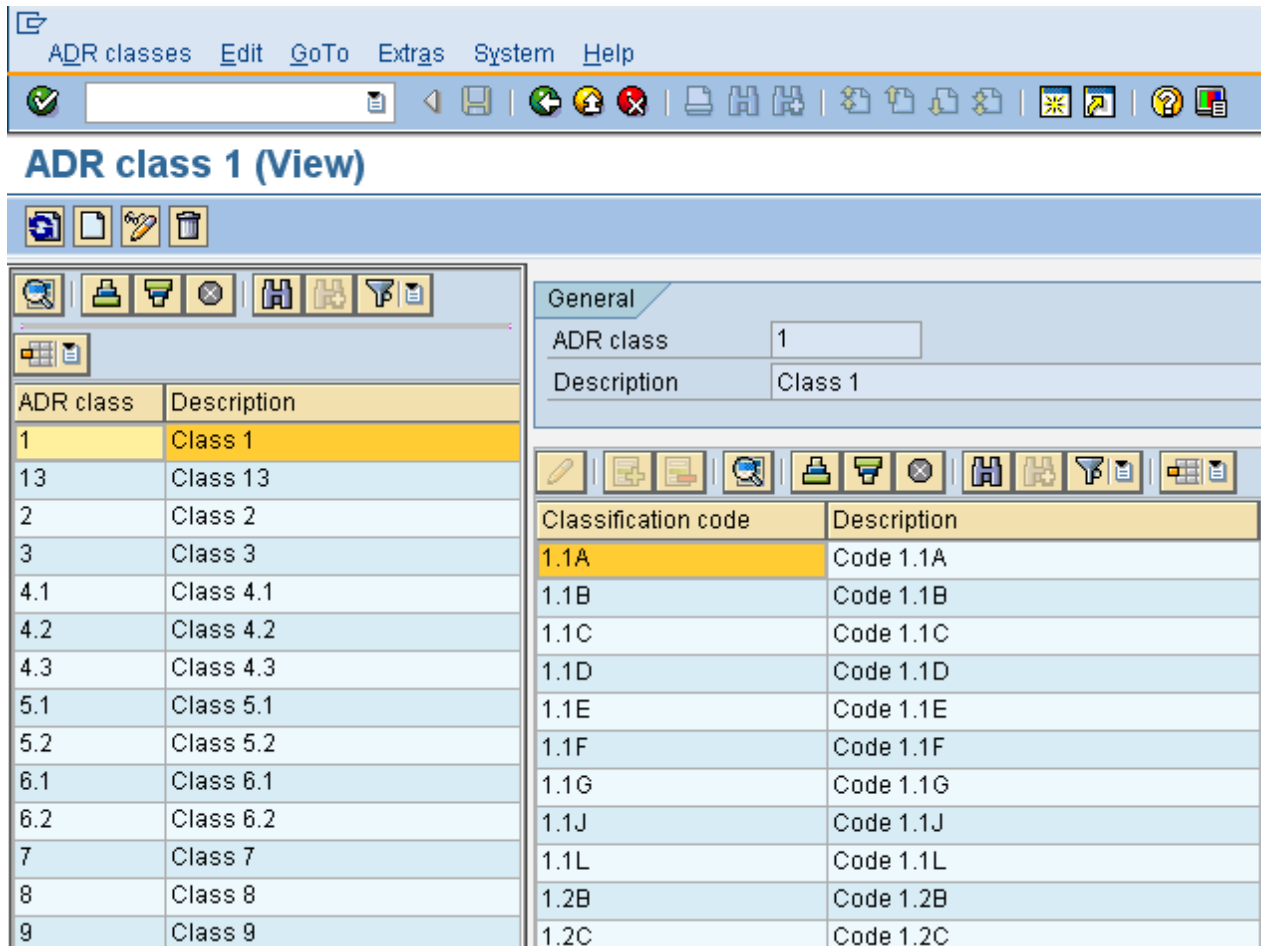








Figure 12: ADR class and classification

2.5.3.2 ADR Packing Group (Transaction /N/WATP/ARB_ADRVGRP)

Packing groups are maintained in the transaction /N/WATP/ARB_ADRVGRP. The data to be maintained are name, number and their description.

The following SAP® standard functionalities are available:

-  *Update* – updates display of data records after changes
-  *New* – creates a new entry
-  *Edit* – the data of a record may be changed
-  *Delete* – the entry will be deleted
-  *Edit*: Edits an existing entry
-  *New allocation* – adds a subentry to a main entry



Delete allocation – deletes a subentry of a main entry

The creation / change of the data in the tree view is possible by the known procedure.

The data are available as a choice assignment for the UN ADR catalog and can be modified and deleted as required.

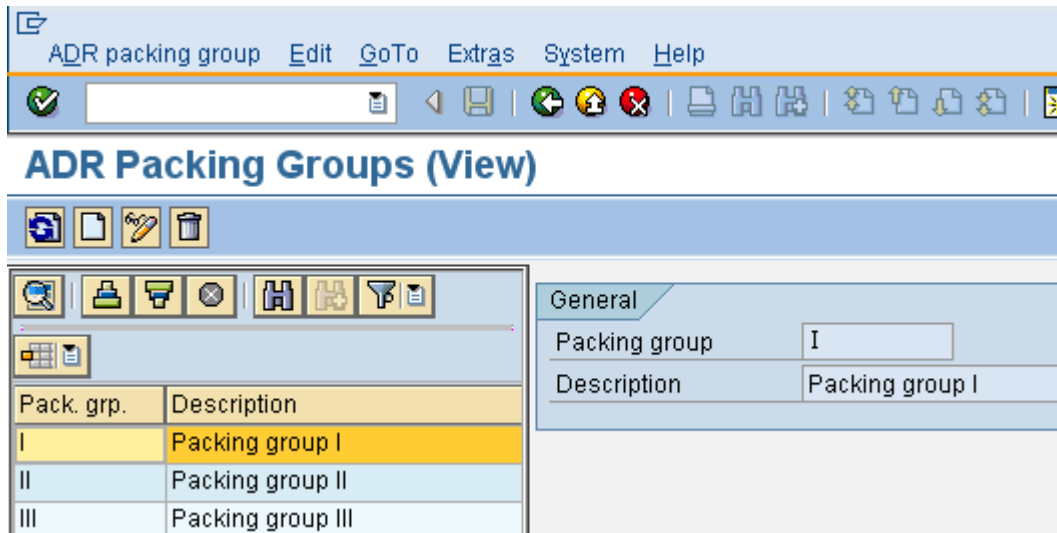


Figure 13: ADR packing groups

2.5.3.3 UN Catalog (Transaction /N/WATP/ARB_ADRUNCA)

The UN catalog centralizes the individual elements of the Dangerous Goods classification, such as class, number, packing group and special regulations. Special regulations/exceptions are defined in Customizing and can be assigned to the respective *UN- catalog- entry*. Further information can be found in the document *Material_Flow_Management_Configuration_Guide*.

In the UN- catalog the following SAP® *standard functionalities* are available:



Update – updates display of data records after changes



New – creates a new entry



Edit – the data of a record may be changed



Delete – the entry will be deleted



Edit: Edits an existing entry



New allocation – adds a subentry to a main entry



Delete allocation – deletes a subentry of a main entry

The creation / change of the data in the tree view is possible by the known procedure.

The data are available in waste approvals and disposal documents as a choice for assignment and can be modified and deleted as required.

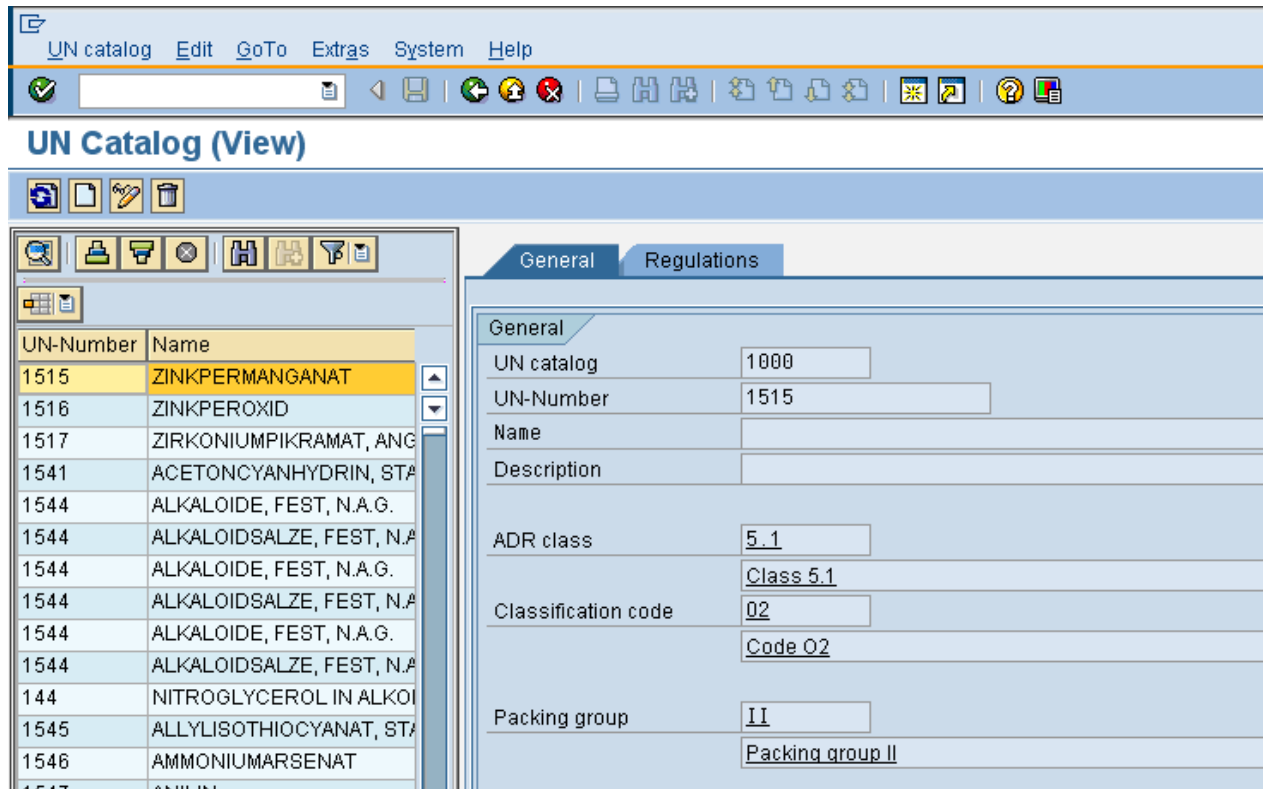




Figure 14: UN-catalog

How to assign (manually):

1. Call transaction `/N/WATP/ARB_ADRUNCA` in order to open the *UN catalog*
2. Create a new data record with function *New/Create* (F7) or the button 
3. In the select box set internal and external UN number for the entry
4. Define name and description
5. Select (F4) or enter ADR class
6. Select (F4) or enter ADR classification code
7. Assign packing group (F4)
8. If required, enter additional data manually
9. Change to tab *Regulations* and deposit special provisions as required over the function *Assign New*
10. Save data 
11. Repeat the procedure for all UN entries.



The UN catalog may be imported with system implementation. Afterwards, it has to be maintained by end-user. Catalog settings of the United Nations can be increased or edited in the customization (if necessary, for example by changes in the law).

2.5.4 Waste Generation Sites (Transaction /N/WATP/ARB_SRCPLACE)

The waste generation sites are the central element to describe the source of a waste. The address defines the place, where a waste is generated.

Therefore, the address always lists:

- the waste generator (Business Partner) and
- a container location.

Waste generation sites have generator numbers that are to be deposited with temporal validity. When creating a waste generation site, the generator number of the business partner is carried forward, if existent. The waste generation site can be modified or supplemented at any time.

A waste generator (BP) may have several waste generation sites and, therefore, several numbers. The generator number valid for a location is defined in the waste generation site. Additional data, such as contact person, telephone number etc. that might be important to print on a document are maintained with the container location.

The following SAP® *standard functionalities* in the waste generation site are available:



Update – updates display of data records after changes



New – creates a new entry



Edit – the data of a record may be changed



Delete – the entry will be deleted



Edit: Edits an existing entry




New allocation – adds a subentry to a main entry



Delete allocation – deletes a subentry of a main entry

How to assign:

1. Open waste generation sites data with transaction /N/WATP/ARB_SCRPLACE
2. Create new data record with function *New/Create* (F6) or the button 
3. In the check box: Choose and assign a business partner and a generator with F4
4. Select (F4) and assign container location
5. Define whether this container location is the standard location or not
6. Save record



Use the search help Waste generator to search for the business partner.

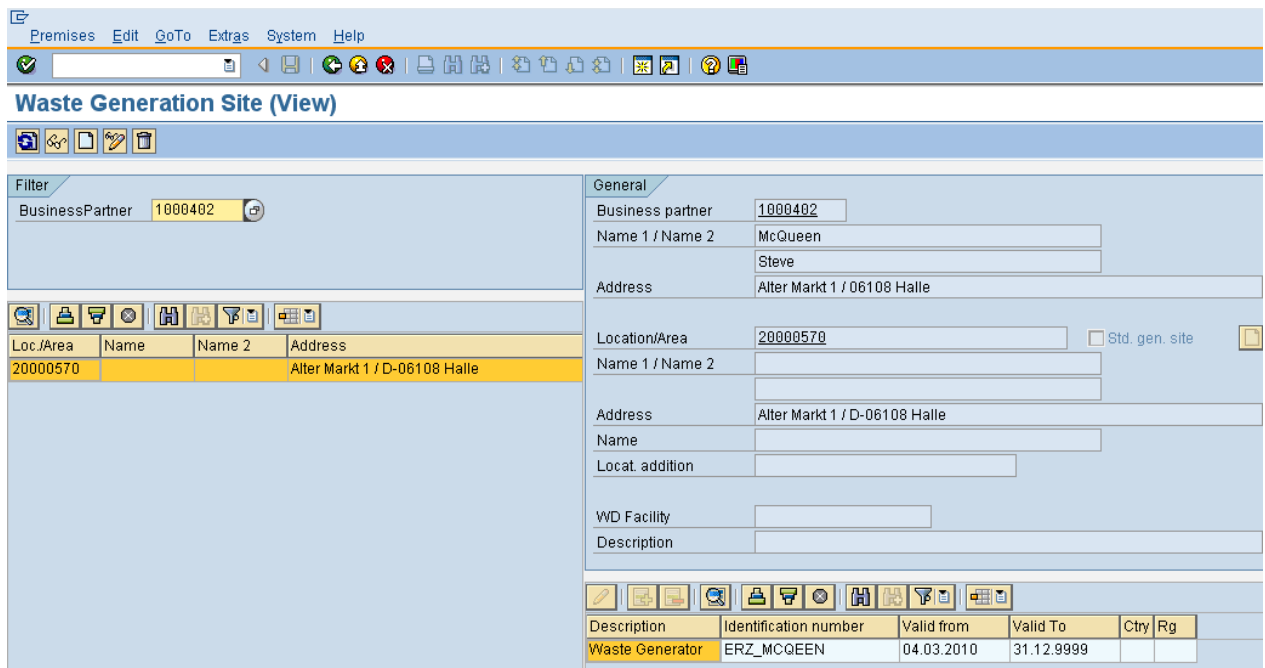


Figure 15: Create Waste Generation Sites

If the container location of a new waste generation site is not available in the system, it can be created by using the function *New/Create* next to the field *Container Location*.

The Container Location has to be created according to the rules of the solution SAP® *Waste & Recycling*. Therefore, it has to be assigned to a device location and connection object.



The standard container location defines the location of the business partner that is used most frequently.



It is to be deposited a valid generator number at the waste generation site.

2.5.5 Waste Approvals/Waste Stream (Transaction /N/WATP/ARB_NW)

The documentation of the waste management activity prior to disposal and before transportation and recycling/disposal of material requires a waste approval/waste stream in some countries.

In the transaction */N/WATP/ARB_NW* you can maintain these master data.

The waste approval types can be flexibly managed in the configuration of *Material Flow Management*. Besides the name, the allowable types of disposal documents per monitoring level can be defined there.

Material Flow Management already contains country specific templates and basic functionality for several European countries which can be used according to the basic framework or customer specifically enhanced. In addition they can be reused in order to create new country templates.

For more information, see the document:

Material_Flow_Management_Configuration_Guide

The waste approvals/waste streams are managed in tree form. On the left side, the waste approval types are displayed according to configuration. The number of relevant records per record type will be displayed behind it in brackets:



Figure 16: Waste Approval Management

Below the approval type, divided according to status, the available approvals/waste streams in the system are displayed. The number of relevant documents for each status will be displayed after the status in brackets. Each approval/waste stream is displayed with an external number and behind it in square brackets with an internal system number. The external number is indicated in the approval/waste stream.

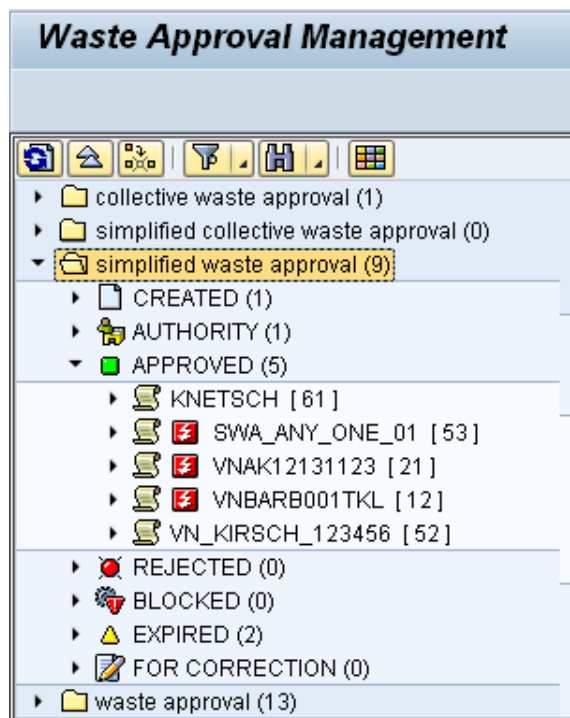


Figure 17: Numbers of Waste Approval Management by State

Below the actual waste approval/waste stream, the corresponding declaration analyses and the disposal documents produced from the approval/waste stream are visible:



Figure 18: Display Declaration analyzes and Disposal documents

By clicking on the *waste approval/waste stream*, the forms for waste approval/waste stream will be visualized on the right side.



Waste approval/waste stream forms have to be defined and created during the implementation phase.

In this transaction, the following SAP® *standard functionalities* are available:



Update – updates display of data records after changes



New – creates a new entry



Edit – the data of a record may be changed



Delete – the entry will be deleted



Edit: Edits an existing entry





New allocation – adds a subentry to a main entry



Delete allocation – deletes a subentry of a main entry

Procedure for the creation of a waste approval/waste stream:

1. With transaction / n / WATP / ARB_NW change in the approval/waste stream management.
2. Click on the appropriate approval type and create a new record with the button  or F6
3. Internal approval/waste stream number is automatically filled
4. The external approval/waste stream number is filled with the internal approval/waste stream number and can be changed in the official number if known and required

5. Record the data, needed for approval/waste stream, in the available registers
6. Define a validity period for the approval/waste stream
7. Save 



Every approval/waste stream has an internal system number and an external approval/waste stream number. The internal system number is assigned by the SAP®-system after the save operation. The external approval/waste stream number is maybe given by the environmental authority and can be entered by the user in the approval/waste stream.

Search and filter of waste approvals/waste streams:



The approvals/waste streams can be searched and filtered by an internal number or an official approval/waste stream number. This is possible with the functions  and .



Figure 19: Search and Filters by Waste Approval

2.5.5.1 Enhanced Filter for Waste Approvals/Waste Streams

If the enhanced waste approval/waste stream filter is activated within the object configuration (transaction /N/WATP/BASE_OBJCONFIG), then the directly filtering for waste approvals can be executed after start of the waste approval/waste stream management.

Further information concerning activation of enhanced approval/waste stream filter is available in the document *Material_Flow_Management_Configuration_Guide*.

Figure 20: Enhanced approval filter

2.5.5.2 Display land allocation in the waste approval/waste stream management

If the waste approval types are assigned to the associated country in the configuration (transaction /N/WATP/ARB_CONFIG) and *Display Country Assignment* is activated, then the waste approvals/waste streams will be displayed below the country knot within the navigation tree.



Figure 21: Display of associated country of waste approval/waste stream

With help of this functionality you get a better overview, if several country-specific material flows are active in the system.



If the waste approval types are assigned to an associated country, then only disposal document types and partner types can be used with this waste approval type, which have the equal assigned country.

Further information is available in the document *Material_Flow_Management_Configuration_Guide*.

2.5.5.3 Status of Waste Approvals/Waste Streams

The waste approval/waste stream management owns a status management. Depending on status, different editing options are available. In the disposal process, the status of an approval/waste stream is checked at various points.

The following status values can have waste disposal records:

- *CREATED*
- *AUTHORITY*
- *APPROVED*
- *REJECTED*
- *CLOSED*
- *EXPIRED*
- *REVISION*

The creation of a status change via functions:



Authority

Puts an approval/waste stream in the status *AUTHORITY*

Revision

Puts an approval/waste stream in the status *REVISION*

Approved

Puts an approval/waste stream in the status *APPROVED*

Rejected

Puts an approval/waste stream in the status *REJECTED*

Expired

Puts an approval/waste stream in the status *EXPIRED*

Blocked

Puts an approval/waste stream in the status *BLOCKED*

For the status change of an approval/waste stream the approval/waste stream itself has to be highlighted and the function to the respective status change must be executed. Afterwards the approval/waste stream adjusts itself automatically in the status assigned.



Only approval/waste stream in status *APPROVED* can produce the follow-on documents such as a transport document.

The comments on the status values and their interactions are shown in the following table:

Approval Status	Comments	Possible Following Status	Edit Mode
CREATED	Waste Approval/waste stream new in system.	AUTHORITY	Edit
AUTHORITY	Waste Approval/waste stream on way to apply for authority.	REVISION, APPROVED, REJECTED	Edit
APPROVED	Normal case: Waste Approval/waste stream can be used.	EXPIRED, BLOCKED	Display
REJECTED	Waste Approval/waste stream was rejected by authority.		Display
BLOCKED	Approved Waste Approval/waste stream shall short-term not be used.	APPROVED	Edit
EXPIRED	Waste Approval/waste stream is expired in its validity.		Display
REVISION	Waste Approval/waste stream after apply for authority need for correction.	AUTHORITY	Edit

Table 2: Status values of waste stream documents

In the production of disposal documents, the user gets references and error messages, that the critical values are reached or exceeded, if the approval/waste stream should be used.

2.5.6 Printing of Waste Approvals/Waste Streams

You can also print waste approvals/waste streams. You click on the particular approval/waste stream in



the tree and call the standard functionality for printing.

Depending on the defined form the waste approval/waste stream data can be printed in an official form or printed as a complete document on white paper.

For more information, such as how own printing forms can be assigned are in the document

2.5.7 Declaration Analysis (Transaction /N/WATP/ARB_DECLANLS)

As a supplement to the waste approval/waste stream, declaration analysis to the waste approval/waste stream can be maintained as master data in the transaction /N/ WATP / ARB_DECLANLS.

In the transaction, the following SAP® standard functionalities are available:



Copy - Copies a selected entry (waste approval/waste stream)



Update - updates display of data records after changes



New - creates a new entry



Edit - the data of a record may be changed



Delete - the entry will be deleted



Edit: Edits an existing entry





New allocation - adds a subentry to a main entry



Delete allocation - deletes a subentry of a main entry

Process for creating a declaration analysis:

1. With transaction /N/WATP/ARB_DECLANLS change to the declaration analysis management.
2. With  or F6 create a new data set.
3. The internal number of DA is awarded.
4. In the field *Waste Approval*, the approval/waste stream is indicated by F4 or by manually entering, the declaration analysis is assigned to it.
5. Choose in the field *NEW PLANT*, whether it is a change / addition (to an existing certificate) or a first position.
6. Treatment methods allocation
7. Switch to the tab Parameters and enter here the physical, chemical and technical parameters that are relevant to the waste classification.
8. More information and additional parameters fill to register miscellaneous.
9. Save 

Declaration analysis can be printed by pushing this button .

Depending on the defined report the data can be printed in a form or printed as a complete document on white paper.

For more information, such as how custom printing forms can be deposited, are in the document *Material_Flow_Management_Configuration_Guide*

2.5.8 Disposal Documents as Document Templates

The documentation of the waste management activities in the field of transport and recycling or disposal of waste materials takes place via the usage of waste disposal documents (e.g. waste approval/waste stream).

It is possible to create templates for the waste disposal document generation with all essential data already existing in it (waste, generators, disposer, classification, etc.). This template can be used for a waste disposal document (transport document) or in service frequencies. Therefore only the variable components such as date must be added.

2.6 Process

The application *Material Flow Management* is an integrated component which interacts with logistic and facility processes.

In logistics, this is related to the recording of required master data with the service frequency of a container/cleaning object. When creating a waste disposal order item, waste relevant data such as the waste disposal facility, the waste type are copied into the waste disposal order data. Plausibility checks can be performed and analyses prepared.

The application *Material Flow Management* interacts also with the weighbridge. The EWC code is assigned to the material and the *Transport Document* can directly be created or edited at the weighbridge. When finishing the weighing procedure the weights are copied to the document thereby allowing a quantity tracking and monitoring.

2.6.1 Maintain Container Locations and Create Waste Disposal Orders (Transaction ELOC)

In the container location management the required waste data is maintained on a separate tab.

After selecting a *container location* → *container* → *service frequency*, you can directly record the following data:

- EWC-Code (EWC-Code)
- Waste /material
- Waste disposal facility
- Disposal method
- Planned quantity and unit
- Waste disposal document

Header Data		Technical data		Waste Data	
EWC code	<input type="text"/>	<input type="checkbox"/>	W.Dis.Proc	<input type="text"/>	<input type="text"/>
Waste	ABF_RESTMUELL	municipal waste	Quantity	560	KG
WD Facil.	<input type="text"/>	Dest:SLoc	<input type="text"/>	Plant	<input type="text"/>
Disp. doc.	no disposal document				
Origin	<input type="text"/>				

Figure 22: Tab Waste Data in Service Frequency

The disposal document generated at the order entry is based on a template. The type of template is defined by the field *Disp.doc*. There are three possibilities:

- *No Disposal Document*
- *X out of Note Template*
- *E out of Waste Approval/Waste Stream*

When selecting *Note Template*, the template document is either created directly in the container location administration, or it is generated in the disposal document management (Transaction /N/WATP/ARB_NOTES). For the user it is also possible to modify the template paper.



If the template is generated in the disposal document management, the document must be put in the status *SERVICE TEMPLATE* before using. The disposal document, which is generated at the order creation, will be defined in the field *Disposal doc. Type*.




If only one disposal document type exists according to Customizing which can be generated from the template, the field *disposal doc. type* is automatically filled.

While generating the waste disposal order, a waste disposal document (transport document) will be created from the defined template at the same time and is assigned to this order.



Depending on the used template, it may be necessary to supplement data generated in the disposal document in the waste disposal process.

How to assign waste relevant master data at service frequency:

1. Open container location management with transaction *ELOC*
2. Select the container location and activate the edit mode – if not already activated
3. Select the container
4. Click on the button *Service frequency*
5. Go to tab *Waste data*
6. Select (F4) and assign EWC- Code
7. Select (F4) and assign waste (material)
8. Select (F4) and assign waste disposal facility
9. Select Disposal Procedure (Recycling/Disposal) with *F4*
10. Define planned quantity and unit
11. Select the template for the waste disposal document
12. Search for template or approval/waste stream (via "New" it is possible to create a new document template )
13. Define the *Disposal doc.Type* if it is not already prepared



It is possible that the fields of the service frequency are automatically filled with characteristic values of the service product configuration of the related SD-contract.

More information, are in the document *Material_Flow_Management_Configuration_Guide*.

2.6.2 Administration of Cleaning Objects / Producing of Waste Disposal Contracts (Transaction EWAROB, EWACLEAN)

In the administration of the cleaning objects (*EWAROB and EWACLEAN*) the waste data can also be maintained in the service frequency. The procedure for entering data and the waste disposal document management is analogous to the administration of the location.

2.6.3 Disposal document Administration (Transaction /N/WATP/ARB_NOTES)

The application *Material Flow Management* helps you to manage waste disposal documents (transport documents). The disposal document types can be flexibly managed in the configuration of the application *Material Flow Management*. The available types and their names are defined there. Further information is available in the document *Material_Flow_Management_Configuration_Guide*.

The disposal documents are managed in a tree view. On the left side, the disposal document types are displayed according to the configuration. The number of disposal documents per disposal document type is displayed in brackets:

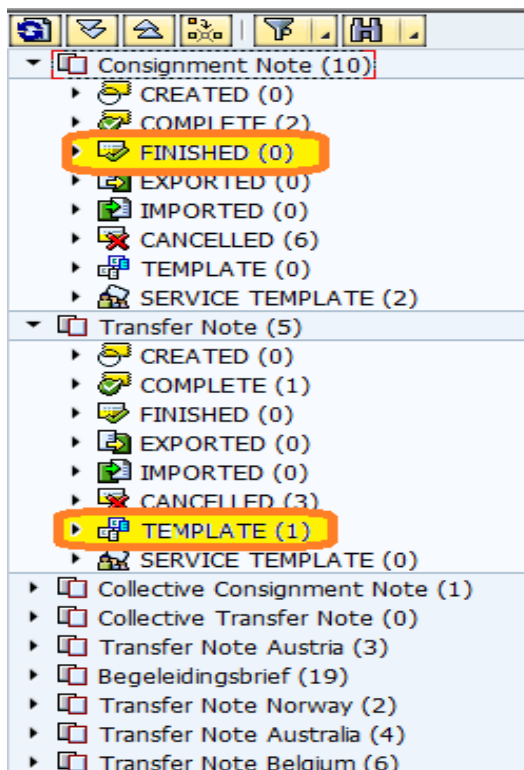


Figure 23: Tree of disposal document administration

In customizing for material flow management disposal document types can be created based on internal requirements.

Below the disposal document type, depending on the status, the available disposal documents are shown in the system. The numbers of disposal documents are displayed in brackets after the status. Each document will be displayed with the external number and in square brackets with the internal system number behind this. The external number is indicated in the disposal document.

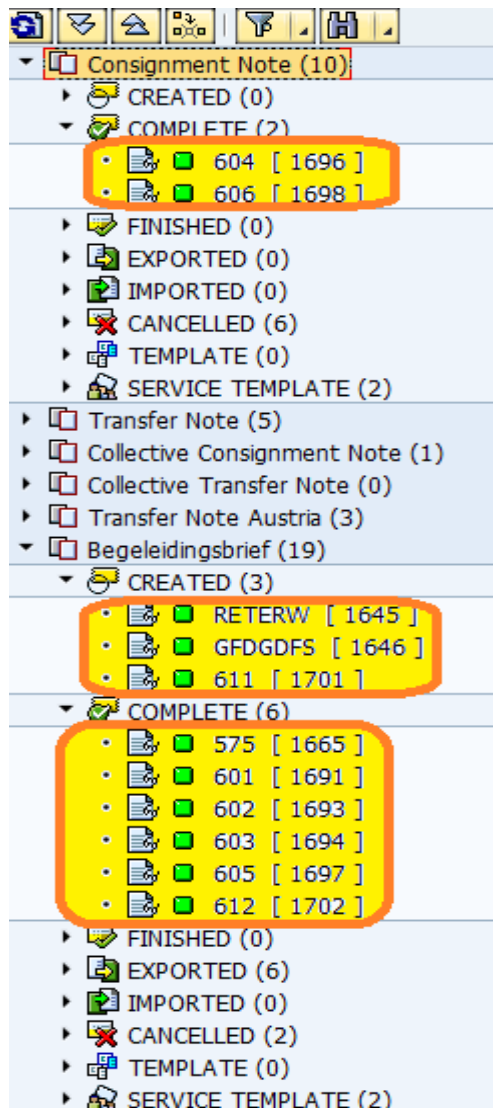




Figure 24: Numbers of disposal documents



Each disposal document has two numbers. An internal system number and an external number, which can be awarded by an authority and registered in the disposal document by the users.

By clicking on a disposal document on the left side of the tree, the detailed information of the note for viewing or editing will open at the right side.

Search and filter of disposal documents:



In the tree, the disposal document can be find by using the function . It can be searched for an internal and external disposal document number. Additional to this function a filter  can be set. At the beginning of the transaction, the filter function is called automatically.

The screenshot shows a 'Selection' dialog box with the following sections and fields:

- Disposal document:** Disp. doc. No. (int) (highlighted), Disposal Doc. No., Status, Disposal doc. type, Indicator light, EWC code, UN catalog, UN-Number.
- Organisational data:** Sales Organization, Sales Office, Distribution Channel.
- Waste Disposal Order:** Waste Disposal Order, Sequence Number, Order date, Route, Container category, Waste.
- Waste approval:** Approval# (internal), Waste approval No.
- Waste generator:** ID, Business Partner, Container Location, Delivery date, Country Key, Region.
- Disposal company:** ID, Business Partner, Waste Disp. Facility, Acceptance date.
- Waste transporter:** ID, Business Partner, Acceptance Date.
- Temporary storage facility:** ID, Business Partner, Waste Disp. Facility, Acceptance Date, Delivery date.

Figure 25: Filter at the disposal documents

How to create a document:

1. Open document management with transaction /N/WATP/ARB_NOTES.
2. Create new data record with function  *Create transport document* (F6 key).
3. (Internal document number is automatically issued).
4. The external number of the disposal document is initially filled with the internal disposal document number and can be changed in the official number, if known.
5. If the disposal document is based on a waste approval/waste stream, this is to be entered → automatic data transfer from the approval/waste stream.
6. Change or capture the data required for the disposal document.
7. Save .

If the required data are maintained, the status of the document can be changed in COMPLETE. Plausibility checks guarantee that all mandatory fields are filled before the status can be changed.

The following tabs are available:

Tab *Quantity Posting*:

- Shows posted quantity at the disposal document

- These volumes can be edited, created or deleted by using the functions



Figure 26: Quantity Posting

cons...	Description	Description	Quantity	Unit	Batch	man...	Rese...	Short text
1	Waste disposal o...	7009/0020	0,065	TO			X	RM EA 7009 0020

Figure 27: Display quantity tracking

Tab *Process*:

- Display status change of the disposal document with time stamp and user.

Icon	Status	Date	Time	Created by	Description
	CREATED	01.02.2010	15:44:08	HWILDAU	Disposal document created.
	COMPLETE	01.02.2010	15:44:08	HWILDAU	Disposal document data completely r...
	FINISHED	28.09.2010	12:33:06	SLANGNICKEL	Disposal document finished.

Figure 28: Process of a disposal document

The disposal document may be printed after saving the existing data.

2.6.3.1 Display land allocation in Disposal Document Management

If the disposal document types are assigned to the associated country in the configuration (transaction /N/WATP/ARB_CONFIG) and the Country allocation is activated, then the disposal documents will be displayed below the country node within the navigation tree.

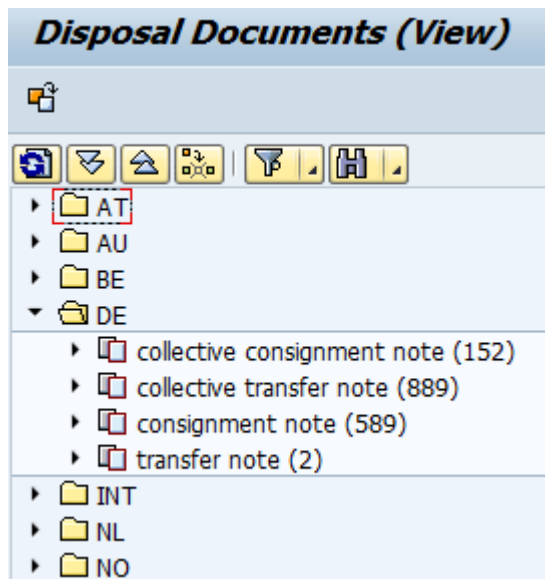


Figure 29: Display of associated country of disposal document

With help of this functionality you get a better overview, if several country-specific waste approvals/waste streams are active in the system.



If the disposal document types are assigned to an associated country, then only waste approval types and partner types can be used with this disposal document type, which have the equal assigned country. Further information is available in the document *Material_Flow_Management_Configuration_Guide*.

2.6.3.2 Status of Disposal documents

The disposal document management owns a status management. Depending on status, different editing options are available. At the disposal process, the status of a disposal document is examined at different points and depending on customizing automatically adjusted.

For more information refer to the document

Material_Flow_Management_Configuration_Guide.

The settings of the status values are functions that are displayed in the header. Depending on the status of the current notes, only certain following statuses are possible.

Disposal documents can contain the following status:

- *CREATED*
- *COMPLETE*
- *FINISHED*
- *EXPORTED*
- *IMPORTED*
- *TEMPLATE*
- *SERVICE TEMPLATE*

A status change is performed manually by using the following functions:



Complete - Puts the disposal document on the status COMPLETE



Finished - Puts the disposal document on the status FINISHED



Cancelled - Puts the disposal document on the status CANCELLED



Template - Puts the disposal document on the status TEMPLATE



Service Template - Puts the disposal document on the status SERVICE TEMPLATE

For a status change, the disposal document is to be selected and performs the function for each status change. Then the disposal document is automatically moved to the tree in the corresponding node.

The explanations on the status values and their interaction have the following overview:

Approval/Waste Stream Status	Comments	Possible following Status	Treatment Options
CREATED	New disposal document manually created.	COMPLETE CANCELLED TEMPLATE SERVICE TEMPLATE	Edit
COMPLETE	Completed disposal document or service frequency generated.	FINISHED CANCELLED	Edit
FINISHED	Completed disposal document with all sorts of data including posted weights.	CANCELLED	Display
EXPORTED	Exported disposal document.	COMPLETE CANCELLED	Display
IMPORTED	Currently not used		
CANCELLED	Cancelled disposal document, if necessary posting returned.		
TEMPLATE	Template for notes within the disposal document administration.	CANCELLED	Edit
SERVICE TEMPLATE	Disposal document template for service frequency.	CANCELLED	Edit

Table 3: Status values of waste disposal documents

2.6.3.3 Automatic Quantity Posting for the Disposal Document by the Weighbridge

If disposal documents/transport documents are directly weighed by posting an inbound weighing in the weighing process, the quantity of the delivered waste material will be directly transferred to the disposal document. The quantity posting includes the weighing ticket number, which is visible in the disposal document.



The quantity posting of weighing notes on the disposal documents are set in the configuration. Further information are contained in the document

Material_Flow_Management_Configuration_Guide.

2.6.3.4 Automatic Quantity Posting to the Disposal document by the Confirmation of a Waste Disposal Order Item

If waste disposal order items are used in combination with a disposal document/transport document in the system, by confirming the order items the quantity will be assigned to the disposal document directly. The posting quantity includes the order number, which is visible in the note.



The posting quantity of waste disposal order item on the disposal documents are set in the configuration. Information is contained in the document:

Material_Flow_Management_Configuration_Guide.



It may only be one of the two posting functions (weighing notes and order items) switched on, otherwise it comes to a multiple posting quantity to the disposal document.

2.6.4 Printing Disposal documents

After the waste disposal orders are planned, the order documents and the related disposal documents can be printed out.


2.6.4.1 Mass – Print (Transaction EWAORDERDOWN)

For mass printing, the standard mechanisms of SAP® S/4HANA for Utilities will be used. After the settings have been specified for the waste disposal order (see the documentation SAP® S/4HANA for Utilities) it can be determined which printer and settings the disposal documents should have, by using the button Waste Disposal Document. The successful configuration is indicated by clicking the check box *Waste Disposal Documents*.

The screenshot displays the 'Output waste disposal orders' configuration interface. It includes tabs for 'Order Data', 'Contract Data', 'Regional Structure', and 'Customer Fields'. The 'Order Data' section contains fields for Route (CD_LEER), Waste Disposal Order, Sequence Number, Service Area, Service Type, and Winter Maint. Level, each with a 'to' field and a right-pointing arrow button. The 'Scheduling' section has a 'Period' field set to '16.03.2011'. The 'Form type' section has radio buttons for 'Output "Full"', 'Output "Cover sheet"', and 'Output "Items"', with a 'Waste Disp.Ord.Form' field set to 'IS_U_WA_ORDER_DOWNLOAD'. At the bottom, the 'Defines Print and Archiving Parameters' section has two unchecked checkboxes: 'For Waste Disposal Orders' and 'For Waste Disposal Documents'.

Figure 30: Output of Waste Disposal Document

2.6.4.2 Single Print (Transaction /N/WATP/ARB_NOTES)

Individual disposal documents can also be printed out directly from the disposal document management (transaction /N/WATP/ARB_NOTES). Therefore mark the printable disposal document and call a print dialog over the standard print functionality . Then select the form and the printing parameters:

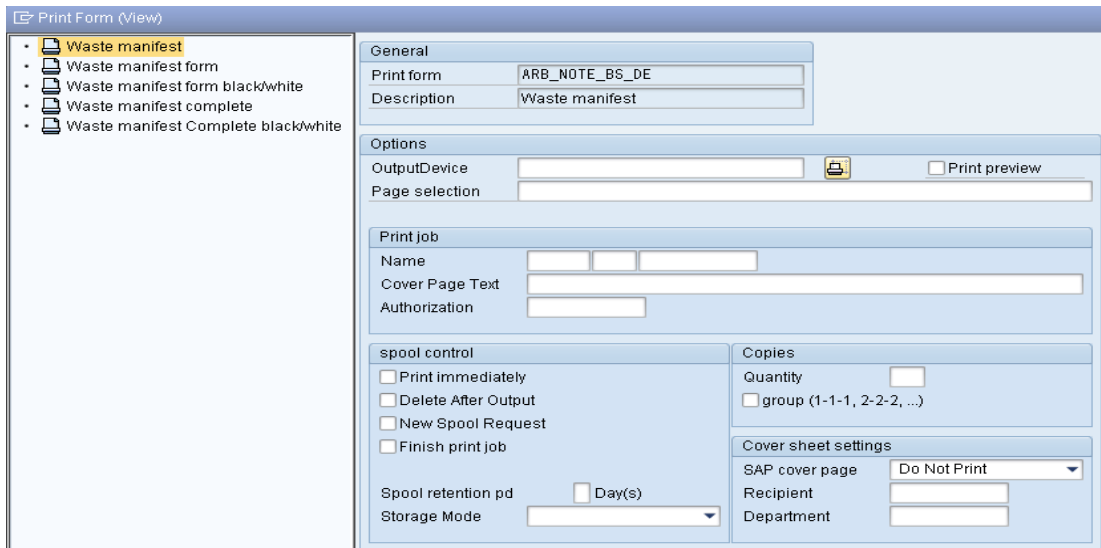


Figure 31: Selection print form

The available forms can be defined in the basic configuration. Further information are contained in the document *Material_Flow_Management_Configuration_Guide*.

3 Integration the application *Material Flow Management* into SAP S/4HANA for Utilities

3.1 Integration at the Accelerated Weighing Entry (Transaction EWAWA01)


The application *Material Flow Management* is fully integrated into the accelerated weighing entry of SAP® S/4HANA for Utilities. In this way, weight data are recorded on both ways, with and without reference to a waste disposal document. If a waste disposal document shall be applied the checkbox has to be flagged – *Appl. disp. doc.*

The screenshot displays the SAP S/4HANA 'Accelerated Weighing Entry' transaction interface. The form is titled '(Create) Accelerated Weighing Entry' and contains several sections: Vehicle, Trailer, Waste Disposal Order, Waste, Additional Data, EWC code, and Addresses. The 'Appl. disp. doc.' checkbox is highlighted with a red box. The 'Waste Disposal Order' section shows 'WD Order' as 8202 and 'Sequence Number' as 1. The 'Waste' section shows 'Waste' as 'ABF PAPIER'. The 'Addresses' section shows 'Origin' and 'Destination' information.

Figure 32: Apply disposal document on weighbridge


3.1.1 Waste Disposal Document in the System

By searching the disposal document number, there is a possibility to select an existing waste disposal document.

If a waste disposal document is selected, the data stored there are transferred to the weighbridge transaction and is displayed. Missing data can be added in the weighbridge transaction. Of course, the associated waste disposal document - if allowed by the status - can also be edited directly by forward navigation. 

If an additional waste disposal order is selected only that disposal document appears which is associated with the waste disposal order item. With information of the waste disposal order item the associated disposal document is automatically transferred to the weighing transaction.


Figure 33: Enter disposal document on weighbridge

After the data has been completed for a full weighing process, weighing can take place. When there is a need, it is possible to print the waste disposal document with the standard printing functionality . With posting the weighing ticket the quantity will be transferred directly into the disposal document.



The quantity posting on the disposal documents must be set in the configuration. See Chapter 2.3.3.2 Automatic Quantity Capture to Disposal document by the Scale.

3.1.2 Creating a Waste Disposal Document in the System

For direct deliverer of waste, in addition to a weighing ticket a disposal document can be created at the weighbridge. When creating the first weighing a new waste disposal document can be created by using the appropriate button *Create* .

If a new waste disposal document should be created, a selection box appears in which the type of the waste document can be specified. Existing disposal documents or waste approvals/waste streams can be used as a template in order to copy them for data matching.

Figure 34: Create disposal document on weighbridge

Then you can enter the data as required and save the waste disposal document.

collective transfer note 1445 (New)

General Addit. address UN catalog Quant. posting Process

Dock receipt
 In proof of acceptance of waste

No. 18808000234
 int.No. 1445
 Alloc. collect. document

This document (white) has to be signed by transporter/
 disposal company and is to be filed with generator/transporter when transporter changes.

Waste name 1)
 concrete

Waste code 1) Waste approval number Quantity IQ
 170101 0000000000000000082 0

Waste generator	Waste transporter	Disposal company
ID: NMAXIMILIAN01	ID:	ID: N0123456789
Gen. site: 20000325	Acceptance Date:	DispFacil: SO WEGDENMUELL
Partner: 1000160	Partner:	Descript: Sortieranlage Wegdenmüll
Name: Maximilian Lange	Name:	Partner: 1000010
Name 2:	Name 2:	Name: Transferstation ABC
Street: Mansfelderstraße 42	Street:	Name 2:
City: DE 06108 Halle	City:	Street: Mansfelderstraße 42
Signature:	Signature:	City: DE 06108 Halle
Country: DE Germany		Signature:
Region: 15 Saxony-Anhalt		
Code: N		

Figure 35: Create disposal document on weighbridge

After the waste disposal document has been created and saved, the relevant data will be copied and displayed in the weighing transaction. According to the characteristics of your SAP® system, while saving the weighing data, checks for completeness and data consistency are taking place.

For one waste disposal document multiple weighing tickets can be captured.



There is the possibility to set the disposal documents automatically to the status FINISHED while posting the weighing ticket. More information, such as how to handle this function is in the document

Material_Flow_Management_Configuration_Guide

If a disposal document has the status FINISHED, no more weighing processes can be added.

3.2 Integration in Multiple Item Weighing (Transaction EWAWA_MULTI)

The application *Material Flow Management* is fully integrated into the multiple item weighing of SAP® S/4HANA for Utilities. In this way, weight data can be recorded in both ways with and without reference to a waste disposal document. If a waste disposal document shall be applied, it can be assigned to each weighing item or can be directly created out of the weighing transaction.


Figure 36: Disposal document information in multiple item weighing

3.2.1 Selection of a Waste Disposal Document

By searching the disposal document number, there is a possibility to select an existing waste disposal document. If a waste disposal document is selected, the data stored there is transferred to the weighbridge transaction and will be displayed.

If a waste disposal order item is selected the associated disposal document is automatically transferred to the weighbridge transaction.

Figure 37: Selection of a disposal document in multiple item weighing

After the data has been completed for a full weighing process, weighing can take place. When there is a need, it is possible to print the waste disposal document with the standard printing functionality . With posting the weighing transaction, the quantity will be transferred directly into the disposal document.




The quantity posting and the status change of the disposal documents must be set in the configuration of the application *Material Flow Management*.

More information how to handle this function is in the document: *Material_Flow_Management_Configuration_Guide*.

If a disposal document has the status FINISHED, no more weighing processes can be added.

3.2.2 Creation of a Waste Disposal Document

For direct deliverer of waste in addition to a weighing item a disposal document can be created at the weighbridge. When creating the first weighing a new waste disposal document can be created by using the appropriate button *Create* .

If a new waste disposal document should be created, a selection box appears in which the type of the waste document can be specified. Existing disposal documents or waste approvals/waste streams can be used as a template in order to copy them for data matching.

Figure 38: Create a new disposal document on multiple item weighing

Then you can enter the data as required and save the waste disposal document.

Consignment Note (NL) 2171 (New)

General | UN Catalog | Quant. Posting | Process | Log | EBA

Consignor
 Generator Disposer Car./Gen. Carrier
 Consignor: 1000037 NL001
 Name: _____
 Street: Adam-Kuckhoff-Strasse 1
 City: 06114 Halle
 VIHB Number: _____

Debtor
 Customer: _____
 Name: _____
 Street: _____
 City: _____

Waste generator
 Waste generator: 1000037 NL001
 Name: _____
 Street: Adam-Kuckhoff-Strasse 1
 City: 06114 Halle

Waste manifest
 Doc. no. (int.): 2171
 Waste Code: 1961
 Text: _____
 Text: _____
 Text: _____
 Text: _____
 Text: _____
 Export date: _____ 00:00:00
 Export. By: _____
 Exp. type: _____

Container location
 Container Loc.: 20000033
 Name: _____
 Street: Adam-Kuckhoff-Strasse 1
 City: 06114 Halle
 Delivery date: _____

Figure 39: Create disposal document on multiple item weighing

After the waste disposal document has been created and saved, the relevant data will be copied and displayed in the related weighing item of the weighing transaction. According to the characteristics of your SAP® system, while saving the weighing data, checks for completeness and data consistency are taking place. For one waste disposal document multiple weighing tickets can be captured.



There is the possibility to set the disposal documents automatically to the status FINISHED while posting the weighing transaction. More information such as how to handle this function is in the document

Material_Flow_Management_Configuration_Guide.

If a disposal document has the status FINISHED no more weighing tickets can be added.

3.3 Integration in the Waste Disposal Order Confirmation (Transaction EAWDOC)

3.3.1 Confirmation of Waste Disposal Orders

With an appropriate configuration of SAP® S/4HANA for Utilities the Confirmation Cockpit provides the possibility to display the associated waste disposal document number while confirming a waste disposal order item or a weighing ticket (tab *Confirm.Data*).



By appropriate configuration of the application *Material Flow Management* it can be achieved that disposal documents will automatically receive the status *FINISHED* by a positive confirmation of the disposal order item. It also can be specified that the deposited quantity in an order item will automatically posted in the disposal document with a positive confirmation.

(Display) Waste disposal order item 8202/0001

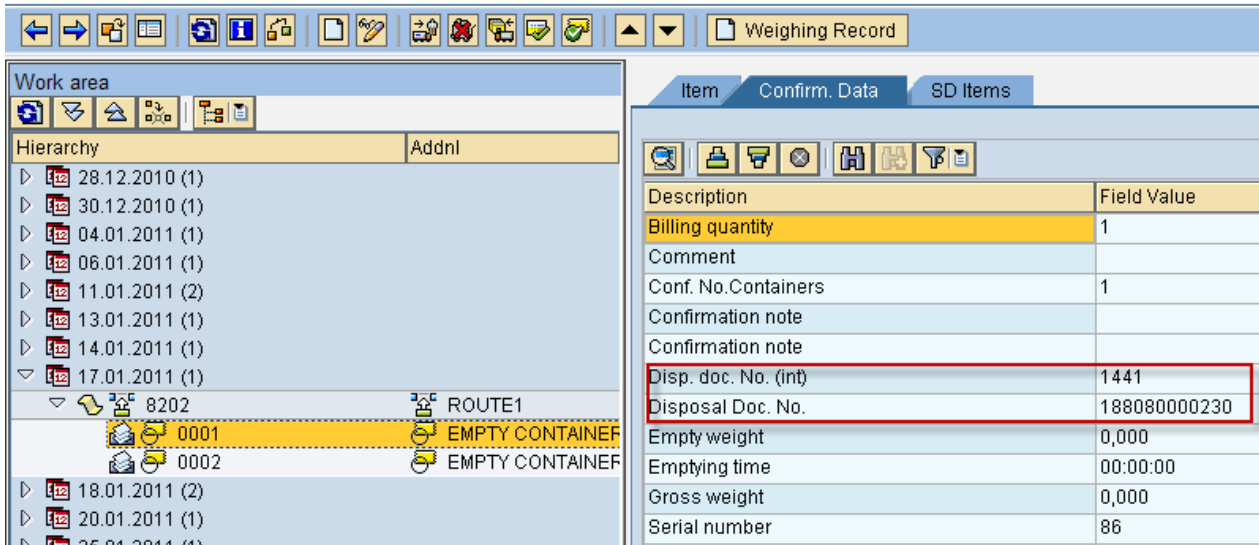


Figure 40: Confirmation on waste disposal order item level

With a BAi implementation it is also possible to integrate additional checks which should be performed during the confirmation of an order item. So it is conceivable to write back the weight of the waste disposal document directly into the order item to simplify the subsequent recording. For re-declaration it is possible to indicate a new waste disposal document (internal number and external number) in the confirmation.

3.4 Statistics (Transaction /N/WATP/ARB_NW_STATIST)

Through the update of the processes and quantity to the appropriate disposal partner (and approvals/waste streams) you receive extensive data that can be used for the evaluations.

3.5 Interfaces (Transaction /N/WATP/BASE_IECONFIG)

The electronic exchange of data between companies or with environmental agencies involved in the networked world, increasingly gaining in importance in many countries and is already prescribed by the authorities.

Since there are substantial differences in the way of data exchange, data content and data formats, it is not possible to deliver all the required interfaces in the standard.

The application *Material Flow Management* takes this fact into account by providing a powerful Import-/Export-Interface including example configurations for essential business operations.

To import data into the system or to export from the system you must first create an appropriate configuration. In addition to the data content and the data format in this configuration also the type of output (*File or Web Service*) is defined.

Once the configuration has been created the Import-/Export-Process can be started manually, scheduled as a job or called in the program.

The examples provided in the standard in the Import / Export Configuration is listed under the *Waste Legislation Parameters*.

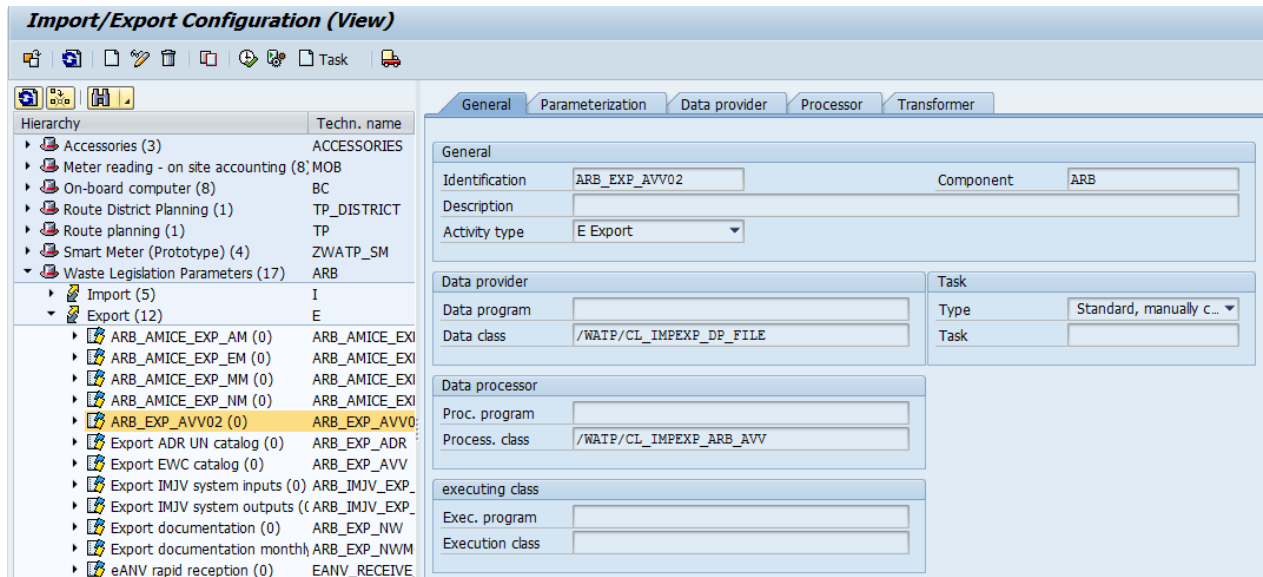


Figure 41: Import/Export Configuration

The samples can be used directly or used as a starting point for your own configurations.

4 Country-Specific Characteristics

This chapter contains country-specific characteristics which are based on existing templates for several countries and special features that are included in the standard system.

4.1 German Template

4.1.1 Waste Approval/Waste Stream Template Germany

In Germany, according to waste management legislation different waste approval/waste stream templates will be distinguished, which not only differ in the authorization process but in the use as well. So there are for example individual waste approvals/waste streams for the disposal of larger waste producer or waste approvals/waste streams for the collection of similar waste from small producers in the so-called collection process.

The document types described in the next chapters work as templates for custom owned

The forms for the German approval/waste stream templates contain the following data:

- Cover with type of approval/waste stream, disposal procedure, producer of the waste generation site, representative of the producer and its identification number (and the public corporation of the producer)
- Responsible declaration and type of declaration (...), location of the waste generation site with its identification number of individual waste approvals/waste stream, regions of the collection in collecting approvals/waste stream and carrier with identification number, contact name, duration of approval, description of the waste by EWC code, description, pre-treatment, waste characteristics (consistency, odor, color), the amount of concept approvals/waste stream and signature data
- Acceptance by way of explanation (...), Disposal facility with identification number and disposer, contact person, treatment methods, if necessary exemption number, utilization of the material, the assignment for the responsible statement, duration of the declaration of acceptance and signature data
- Official confirmation and the way of explanation (...), Duration of the BB, assignment for the responsible statement, valid to date of the approval/waste stream, conditions and signature data
- Tab *Misc.* with waste material, predecessor disposal approval/waste stream , UN number and special instructions
- Tab *Info* with start date of the approval/waste stream, current status and current posted quantity at the approval/waste stream

Furthermore, the following registers are available:

Tab *History*:

- Display, status changes of approval/waste stream with time stamp and user

Tab *Generation Site Data (only with individual approvals/waste streams)*:

- Display, details of additional stands of the producer, for which approval/waste stream may be used
- (special case)

Tab *collateral clauses to BB*:

- Display the remedies by the public agency for the use of approval/waste stream

EN VE1 VE2 AE1 AE2 BB Misc. Info History Generat. site eANV

Cover sheet of waste approval

Waste approval

Waste approval / collective waste approval (to be filled in by generator) No. (Not to be filled in by submitter.)

int. waste approval no 171

Vorl.Nachweis-Nr.

Waste approval type

Approv.type EN waste approval W. disp. procedure BE Disposal

Waste Generator

Waste generator data

Corporation / Organization

Mr. Bring Weg Partner 1000020

Street House#

Bärgasse 3

Zip code City

06108 Halle

Contact person Name

Phone Fax

Angaben zum Bevollmächtigten

Bevollmächtigter

Number

If several waste types of a generator are disposed off in one waste disposal facility, they can be summarized on one waste approval. The form VERANTWORTLICHE ERKLÄRUNG has to be filled in for each premise. Premises are to be numbered consecutively. The number has to be expressly referred to in document stating acceptance of generator and - if applicable - in acknowledgement of authority.

Figure 42: Entry Form Waste approval/waste stream

4.1.2 Disposal Document Templates Germany

In Germany four different templates of disposal documents exist:

Consignment note

Collective consignment note

Transfer Note

Collective Transfer Note

The form of the disposal document contains the following data:

- Posted quantity
- EWC-Code
- Waste approval/waste stream number
- Waste generation site (producer with location) with identification number of the producer
- Carrier with its identification number
- Waste disposal facility with disposer identification number
- Date of delivery, assumption and acceptance
- Comments
- Special notes from the waste approval/waste stream
- Other companies involved in the transportation (other carrier with identification numbers)
- UN catalog data and special provisions
- Additional and print texts

Waste manifest

Document to prove disposal No.
 int.No.
 Sales Org. / /

The pink copy has to be signed by the waste disposer and the waste transporter.
 Send the pink and the blue copy to the respective authority.

Waste name 1)

Waste code 1) Waste approval number Quantity
 0,000

Waste generator	Waste transporter	Disposal company
ID <input type="text"/>	ID <input type="text"/>	ID <input type="text"/>
Gen. site <input type="text"/>		DispFacil <input type="text"/>
		Descript. <input type="text"/>
Delivery date <input type="text"/>	Acceptance Date <input type="text"/>	Acceptance date <input type="text"/>
Partner <input type="text"/>	Partner <input type="text"/>	Partner <input type="text"/>
Name <input type="text"/>	Name <input type="text"/>	Name <input type="text"/>
Name 2 <input type="text"/>	Name 2 <input type="text"/>	Name 2 <input type="text"/>
Street <input type="text"/>	Street <input type="text"/>	Street <input type="text"/>
City <input type="text"/>	City <input type="text"/>	City <input type="text"/>
Signature <input type="text"/>	Signature <input type="text"/>	Signature <input type="text"/>
Country <input type="text"/>		
Region <input type="text"/>		
Code <input type="text"/>		

Comments

Special notes to waste approval

Other companies that are involved in transport.

Waste transporter	Waste transporter	Interim storage
ID <input type="text"/>	ID <input type="text"/>	ID <input type="text"/>
		DispFacil <input type="text"/>
		Descript. <input type="text"/>
Acceptance Date <input type="text"/>	Acceptance Date <input type="text"/>	Acceptance Date <input type="text"/>
Partner <input type="text"/>	Partner <input type="text"/>	Partner <input type="text"/>
Name <input type="text"/>	Name <input type="text"/>	Name <input type="text"/>
Name 2 <input type="text"/>	Name 2 <input type="text"/>	Name 2 <input type="text"/>
Street <input type="text"/>	Street <input type="text"/>	Street <input type="text"/>
City <input type="text"/>	City <input type="text"/>	City <input type="text"/>
Signature <input type="text"/>	Signature <input type="text"/>	Delivery date <input type="text"/>
		Signature <input type="text"/>

1) According to EWC directive, regulation on waste requiring special supervision,
 regulation on waste requiring special supervision to be recycled.

Figure 43: Disposal document Germany

The form for Collective consignment note template contains the following data:

- Posted quantity
- EWC-Code
- Waste approval/waste stream number
- Producer with its identification number
- Carrier with its identification number
- Waste disposal facility with disposer identification number
- Date of delivery, assumption and acceptance
- Comments
- Special notes from the waste approval/waste stream
- Other companies involved in the transportation (other carrier with identification numbers)
- UN catalog data and special provisions


- Additional and print texts

The screenshot shows a SAP S/4HANA 'Waste manifest' form for Germany. The form is organized into several sections:

- Waste manifest:** Includes fields for 'Document to prove disposal', 'No.', 'int.No.', and 'Sales Org.' with a note: 'The pink copy has to be signed by the waste disposer and the waste transporter. Send the pink and the blue copy to the respective authority.'
- Waste name 1):** Includes 'Waste code 1)', 'Waste approval number', and 'Quantity' (0,000).
- Waste generator, Waste transporter, Disposal company:** Each has a grid of fields for ID, Delivery/Acceptance date, Partner, Name, Name 2, Street, City, and Signature. The generator also includes Cntry, Region, and Code.
- Comments and Additional details to waste approval:** Two text areas with icons for actions like print, save, and delete.
- Other companies that are involved in transport:** A section with three columns: 'Waste transporter' and 'Interim storage', each with fields for ID, Acceptance Date, Partner, Name, Name 2, Street, City, and Signature.

Figure 44: Collective disposal document Germany



The batch in the Collective consignment note is generated by merging of the batches out of the allocated transfer notes by the function .

The form for the transfer note template contains the following data:

- Posted quantity
- EWC-Code
- Allocated collective disposal document
- Waste approval/waste stream number
- Waste generation site (producer with its identification number and location)
- Carrier with its identification number
- Waste disposal facility with disposer identification number
- Date of delivery, assumption and acceptance
- Comments
- Special notes from the waste approval/waste stream
- UN catalog data and special provisions

Figure 45: Transfer Note Germany


The form of the collective transfer note template contains following data:

- Posted quantity
- EWC-Code
- Allocated collective disposal document
- Waste approval/waste stream number
- Waste generation site (producer with its identification number and location)
- Carrier with its identification number
- Waste disposal facility with disposer identification number
- Date of delivery, assumption and acceptance
- Comments
- Special notes from the waste approval/waste stream

- Collector with batch and allocated transfer note
- UN catalog data and special provisions

Figure 46: Collective Transfer Note Germany



The batch in the collective transfer note template is generated by merging of the batches out of the allocated transfer notes by the function .

With the application *Material Flow Management* the scenario of a collective waste disposal can be fully mapped.

At the service frequency of the container (or the cleaning object), the templates of the original producer notes are maintained, so a disposal document can be generated parallel to the disposal order.

In addition to these notes templates (for non-hazardous waste - the transfer notes, for hazardous waste – consignment note), the collector still requires a collective note, which contains the transfer notes of the first circuit of the collection.

In Germany, the legislator determines the types of the note templates, which must be set in Customizing:

- For hazardous waste: collective consignment note template with associated transfer note template (mandatory)
- non-hazardous waste: collective transfer note template with associated transfer note template (optional)

Further information can be found in the configuration guide *Material_Flow_Management_Configuration_Guide*

Manual creation of the collective note:

- In the transaction */N/WATP/ARB_NOTES* it is possible to create manually a new collective consignment note/collective transfer note (SBS/SÜS). An SBS/SÜS is created by selecting the type template of the note and then run the function "Create". About the collective waste approval/waste stream the note can be filled with content.

Automatic creation of the collective note:

- It is also possible via the activation of the Plug-In *Create a collective note* to generate automatically a new collective note (SBS/SÜS). Here is the scheduling of the first order with respect to a collective waste approval/waste stream a collective note created in the system, and the transfer note assigned to the collector.

Assignment of the transfer note to the collective note:

- With manually created notes, the transfer note has assigned to the collective note.

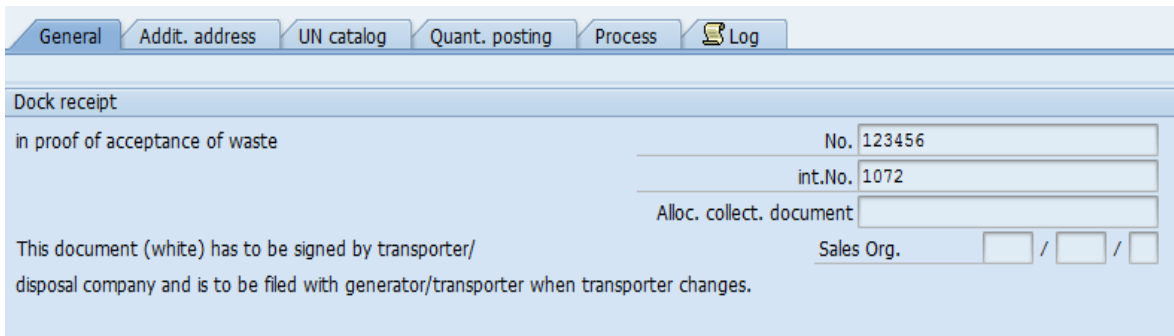


Figure 47: Allocation transfer note to collective note

With automatically generated notes, the transfer note will be automatically allocated to the collective note on the basis of regional affiliation. This assignment can be changed if necessary. In the collective note, the allocated transfer notes will be displayed.

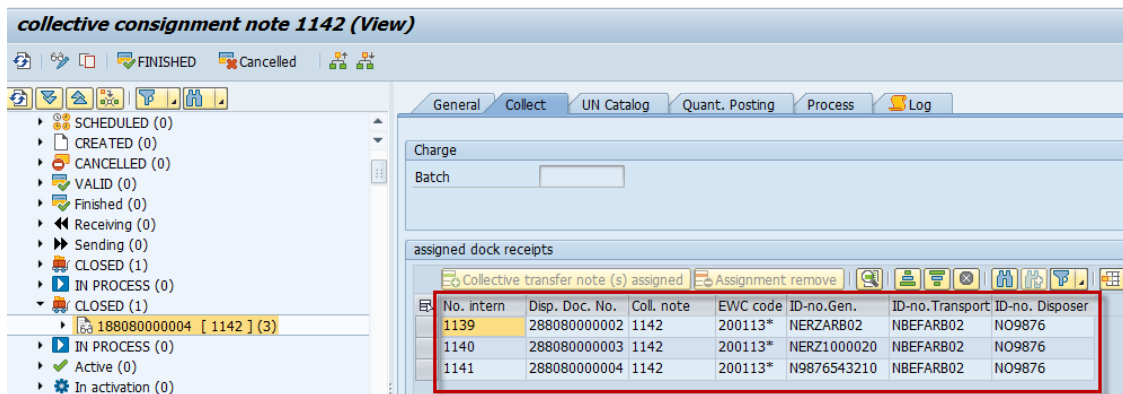


Figure 48: Allocated transfer note of the collective note

Aggregation of the amounts of the allocated transfer notes at the collective note:

For the feedback, it is possible to aggregate the amount of the individually weighed transfer note to the collector. This is required if the collections are recorded in individual weights and it is important for billing a quantity of collective note.

For this purpose, a summation function at the collective note is available.

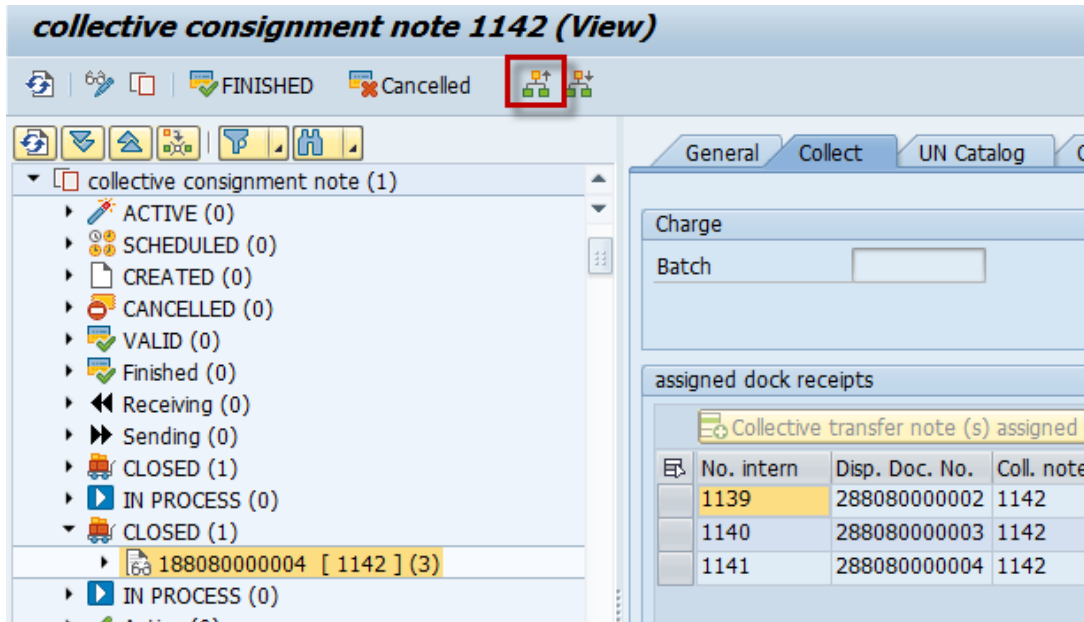


Figure 49: Summation function at the collective note

Quantitative distribution of the collective note on assigned transfer notes:

For the feedback, it is possible to distribute the amount of a collective note on the corresponding transfer notes. A distribution is inter alia required if the collection has only volume information, the collective note is weighed and for billing a quantity in the transfer note is necessary.

For this purpose a distribution function at the collective note is available.

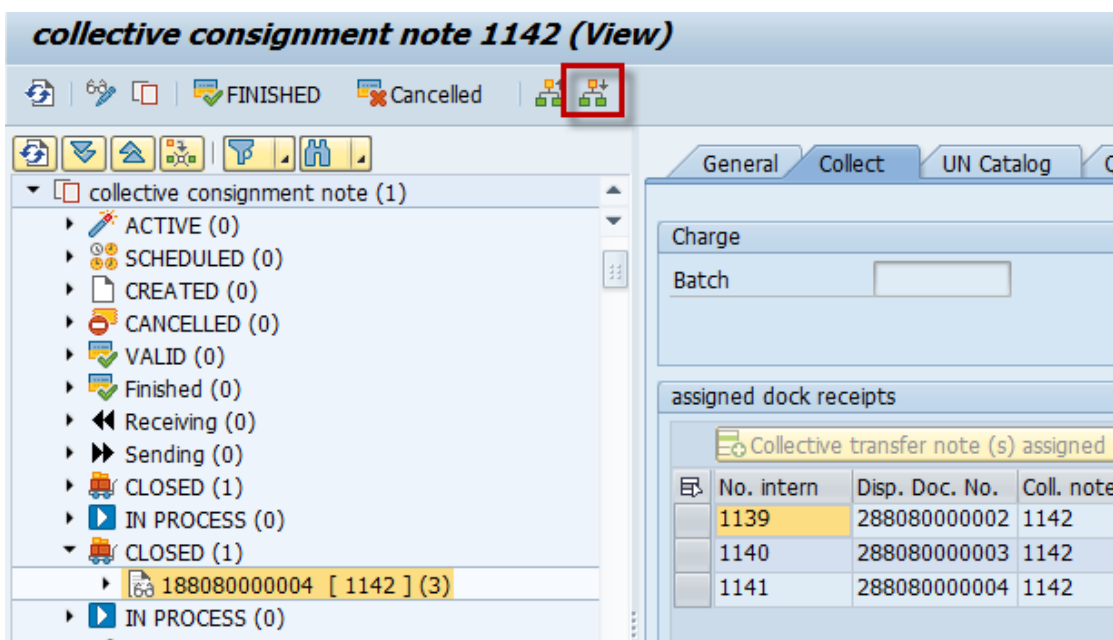


Figure 50: Distribution function at the collective note

4.1.3 Checks during Order Creation

If a service frequency has allocated a waste approval/waste stream, the following tests will be started when creating a waste disposal order item:

- Is the specific waste approval/waste stream valid?
- Do the data in the service frequency correspond with the waste approval/waste stream data?
- Is the disposal document to be produced, permissible in conjunction with the waste approval/waste stream?
- When collective waste disposal: Do the specified federal state in the waste approval/waste stream, matches the federal state of the waste generation site?
- Exceeds the amount posted on the waste approval/waste stream and the estimated amount of waste in the service frequency the deposited concept quantity on the waste approval/waste stream?



When using collective waste approval/waste stream template, collective note template can also be created for each federal state.

The federal state allocation is obtained from the address of the waste generation site. When your creation will be checked whether the license numbers are issued by the printing house or maintained in the system. If maintenance takes place in the system, then the corresponding number is determined and entered into the disposal order item. Otherwise, this assignment can be done manually - for example in the feedback - , that means the appropriate note number in the feedback is taken from the original and recognized in the order item, and then transferred into the appropriate note.

4.1.4 Updating the Quantity of the Weighbridge

The waste approval/waste stream only allows the production / disposal of a certain amount of waste in a certain period.

The application *Material Flow Management* ensures that this amount is not exceeded and reminded in good time to apply for a new waste approval/waste stream. For this purpose, the solution automatically logs all disposal operations that were carried out with this waste approval/waste stream - separately for producers, transporters and disposers - and updates the amount of waste. Upon reaching the stored limit, in the use of this waste approval/waste stream, a warning is issued or acceptance denied.

4.2 Austria

4.2.1 Ö-Norm Catalog (Transaction /N/WATP/ARB_AVK)

Especially for Austria the administration of the standard catalog has been integrated. In this transaction the catalog records can be maintained and the assignment of a waste material to a EWC code can be made.

4.2.2 Creating Disposal Document Templates according to ANV2003

The basis for the disposal document template in Austria is the existing service note / consignment note.

The disposal document template contains the following data:

- Associated assigned note
- Ö-Norm key with specification
- Quantity
- Probable treatments
- Waste generation site (producers with stand) with waste holder identification number
- Year of the disposal document
- Date of the transportation beginning
- Postal code of the place of dispatch

- Carrier and type of transport way (road, rail, waterway, air or combined transport)
- Disposer and identification number
- Date of receiving
- Postal code of receiving point
- Comments

General	UN Catalog	Quant. Posting	Process	Protokoll
Waste manifest				
Accompanying document for hazardous waste as to para 5 to 7 Abfallnachweisverordnung 2003 (ANVO 2003)			Doc. No. (int.)	<input type="text"/>
Zugehöriger Schein (intern)			1626	Zugehöriger Schein
			536	
Waste type				
Waste	Waste code	Spec.	Weight /kg	R / D
<input type="text"/>	<input type="text"/>	<input type="text"/>	0,000	<input type="text"/>
(blank line for correction)				intended
<input type="text"/>	<input type="text"/>	<input type="text"/>	0,000	Treatment
<input type="text"/>	<input type="text"/>	<input type="text"/>	0,000	procedure
Delivery				
Name, address	<input type="text"/>		serial document#	Year
Container Loc.	<input type="text"/>		<input type="text"/>	<input type="text"/>
			hazardous waste handed over by	Ident# of waste generator
			<input type="text"/>	
			Date of	Zip of sender
			transport(start)	<input type="text"/>
			<input type="text"/>	<input type="text"/>
Signature				
Transport				
Name, address	<input type="text"/>		Type of transport	
			<input type="text"/>	
			1 = Road	
			2 = Rail	
			3 = Sea	
			4 = Air	
			5 = cross transport	
Signature				
Acceptance				
Name, address	<input type="text"/>		serial document#	Year
			<input type="text"/>	<input type="text"/>
			hazardous waste taken over by	Ident# of waste generator
			<input type="text"/>	
			Date of	Zip of sender
			receipt	<input type="text"/>
			<input type="text"/>	<input type="text"/>
Signature				
Comments				
<input type="text"/>				

Figure 51: disposal document Austria

4.2.3 Creating Disposal Document Templates according to ANV2012

The basis here is the electronic message (EDM) for "dispatch notes of hazardous waste". The standard provides information to the customer, for example the waste generator, the carrier, waste manager and the AT-norm catalog.

In the standard the user is able to store his identification numbers at the business partner, waste collection points and waste disposal facility (producer, transporter, transferee, waste manager, and waste collector).

A material flow shall be integrated, which can include material inspection for example. In this manner, notes can be created, as well. A quantity posting can also be made on that material flow.

A disposal document template shall be generated, in which the following relevant information for the EDM data is collected:

- Delivery (normally waste producer): Partner + Ident + place of origin
- Carrier: Partner + identification number, the partner role SP – carrier is assigned to the vehicle
- Transferee (normally the waste manager): Partner + Ident + waste disposal facility
- Additional transferees

If the standard information is not sufficient the solution can be adjusted during implementation.

4.2.3.1 Generation of material flows

A material flow shall automatically be generated from the service frequency with all relevant data.

Requirements:

- A waste disposal document template needs to be registered in the transaction /N/WATP/ARB_CONFIG for ANV 2012(ARB_NOTE_AT_BS2012) and for the material flow it needs to be ARB_NW_AT.
- The connector plugins for the ANV2012 needs to be active in the transaction /N/WATP/BASE_OBJCONFIG:
- ARB AT PLG AUTO NOTE: While creating a waste disposal order automatically a note will be generated.
- ARB_AT_PLG_BO_ORDER: While dispatching a waste disposal order actualize data in the note (for example using a transporter).
- ARB_AT_PLG_ORDERPOS: While storing a waste disposal order position actualize the assigned note.
- Further plugins are needed for displaying information in the waste approval/waste stream management and the note management (see also *Material_Flow_Management_Configuration_Guide*).
- Following data is needed for the location maintenance:
- Generally: location, container with assigned contract (business partner with identification number, waste collection point)
- Service frequency – waste data: specify waste material (needs to be assigned to the AT-norm catalog), waste disposal facility with identification number and assigned business partner (in the field destination), and the quantity
- Choose "no waste disposal paper" in the field waste disposal paper. Using the field create order a waste disposal order with assigned waste disposal order position can be generated now.
- A check of source, target and waste. A material flow document (ARB NW AT) is generated, if there is no other entry for this combination. Check in the transaction /N/WATP/ARB_NW is possible. The material flow should be accessible in the status "checked".

The forms for the Austrian material flow template contain the following data:

- Register: in general:

- Material flow: Material flow number, internal material flow number, validity
- Waste: AT Norm code with description
- Delivery: Business partner (producer) with address and identification number and address.
- Carrier: business partner (transferee) with identification number
- Transferee: Business partner (waste manager) with identification number and address.
- Sender: location with address
- Recipient: waste disposal facility with address
- Register: UN-catalog:
 - UN-catalog, UN-Number, Name and Description
 - ADR class, Description, Classification code and Description
 - Packing group and Description
 - Hazard label, hazard label information and Kemler code
- Register: Report:
 - Entries about status etc. with date/time/user-stamp
- Register: History:
 - Status with user.

4.2.3.2 Disposal document ANV2012

While generating a material flow simultaneously a disposal document is created for the waste disposal order. Check the display for: disposal document from 2012.

A disposal document for hazardous waste will be created immediately. This one needs to be checked in the transaction /N/WATP/ARB_NOTES in the status complete.

The template for the Austrian disposal document includes the following data:

- Register: in general:
 - AT-norm key, quantity, quantification methods and procedures of treatment
 - Delivery: Business partner (producer) with address and identification number and address, delivery date
 - Transport: Business partner (transferee) with identification number, transport route
 - Acceptance: Business partner (waste manager) with identification number and reception place, acceptance data
- Register: UN-Catalog:
 - UN-Catalog, UN-Number, name and description
 - ADR-class, description, classification code and description
 - Packing group and description
 - Hazard label, Hazard label info, Kemler code
 - Additional text
 - Special regulation
- Register: Quant. Posting:
 - Quantity, unit, short text, reservation, cancelation, cancelation text
- Register: Status information:
 - Under which status the note is stored.
- Register: Process:
 - Which status the note already have had
- Register: Log:
 - Entries about status etc. with date/time/user stamp
- Register: Additional data:
 - Additional information: procedure of treatment, quantification methods

- Assignment to material flow: material flow number and internal material flow number
- Details for waste: Material and AVV code
- Assigned note: Assigned note and internal note number (for transmission of the waste)

4.3 Netherlands

4.3.1 Identification Numbers

In the Netherlands there are in addition to general business partner roles (producers, transporters, disposers), the partners roles Handelaar and Bemiddelaar.

For use in the Netherlands, the identification numbers for the roles Handelaar and Bemiddelaar can be assigned at the business partner level.

At the disposal facility the AVST number is assigned in addition. These are the first 5 digits of the waste approval/waste stream number and are considered in the LMA-message.

4.3.2 GN-Catalog (Transaction /N/WATP/ARB_KNCODE)

The combined nomenclature is needed for the Dutch legislation on waste. KN-Codes are used in waste approvals/waste streams. For this, a so-called AfgifteMelding is made.

KN-Codes can be managed in the transaction /N/WATP/ARB_KNCODE. The indication of the KN-code and its description has to be maintained. Furthermore, the entries with a valid-from date have to be provided.

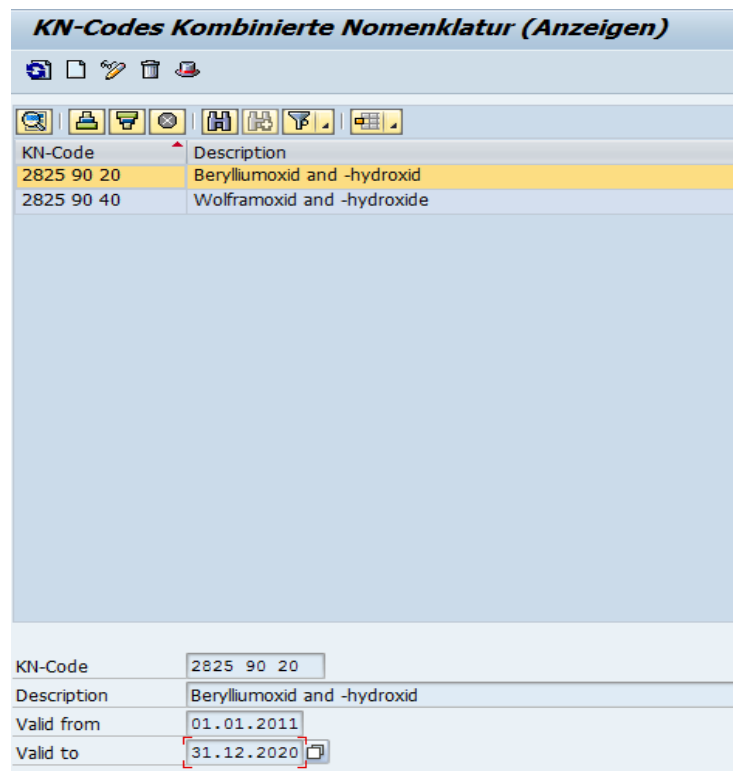


Figure 52: KN-Code catalog

4.3.2.1 Waste Approval/Waste Streams Template Netherlands

In the Netherlands, so-called waste streams (Afvastroom) are used for the shipment of waste.

The template for the waste stream contains the following data:

- Senders in the role of producer, disposer, trader (Handelaar) or agent (Bemiddelaar) with AMICE number and VIHB number.

- Debtor
- Waste generation site (producer with stand) with AMICE-number
- Waste disposal facility with AMICE-number, AVST-number and disposer
- Carrier with AMICE-number and VIHB-number
- Role of carrier (sender, producer, disposer, collector, carrier or rented carrier)
- Number of freights
- Mark for multiple freights (Repeterende vracht)
- Mark for route collection (Route inzameling) or special regulation (Inzamelaarsregeling)
- Rented carrier with AMICE-number and VIHB-number
- EWC-Code
- Waste material
- Treatment methode
- GN-Code
- Components (chemical and physical parameters)
- Type of package (drum, tank, bulk, box, bag, container or mixed / other)
- Valid from-to-date
- Code as internal approval/waste stream (no LMA-report)
- Methods of disposal (disposal or recycling)
- Export data (data of the first report of LMA are filled by system)


General		UN catalog	Protokol	History
Consignor <input type="radio"/> Generator <input type="radio"/> Disposer <input type="radio"/> Car./Gen. <input checked="" type="radio"/> Carrier Absender: 1000321 222222222 Name: NL01 Beförderer Straat+Nr: Veendamstraat 2 Postcode+woonpl: 2222 BB Veendam VIHB Number: 222222VIHB		Waste approval Internal#: 183 Afvalstroomnr: 07777000002 Int.w.appr. no.: Ent.sg.nw.: Valid from: 01.01.2010 <input type="checkbox"/> Intern.document # Valid to: 31.12.2013 Nr.Omschrijfsf.: PLUTONIUM W.Dis.Proc: Disposal Target quantity: 50.000,000 kg Wiegetyp (i/o): 1 <input type="checkbox"/> Date record exported 00:00:00 Exported by: MeldingsNummerMelder:		
Debtor Customer: Name: Straat+Nr: Postcode+woonpl:		Container location Container Loc.: 20000023 Name: Straat+Nr: Triftstraße 1 Postcode+woonpl: 06114 Halle		
Waste generator Waste generator: 1000323 ERZ4444444 Name: DE01 Erzeuger Straat+Nr: Bärgeasse 4 Postcode+woonpl: 06108 Halle		Waste Disposal Facility WD Facility: 21 Bauschutttaufbereitung Halle Süd Straat+Nr: Graseweg 3 Postcode+woonpl: 06108 Halle		
Disposal company Disp. Company: 1000040 ENT_NUMMER Name: Bauschutttaufbereitun... Straat+Nr: Graseweg 3 Postcode+woonpl: 06108 Halle		Waste transporter Carrier: Carrier Beförderer: 1000321 222222222 Name: NL01 Beförderer Straat+Nr: Veendamstraat 2 Postcode+woonpl: 2222 BB Veendam VIHB Number: 222222VIHB <input type="checkbox"/> Collective note <input type="checkbox"/> Special regulation Shipment: 0		
Waste EWC code: 170902 Material: ABF_BAUSCHUTIVERUN Treatment: D1 Bau- und Abbruchabfälle, die PCB enthalten (z.B. PCB-haltige Dichtungsmassen, PCB-... construction waste contaminated				
Components Consist. <input type="checkbox"/> Exploding <input type="checkbox"/> Corrosive <input type="checkbox"/> Very toxic <input type="checkbox"/> Aggressive <input type="checkbox"/> Toxic <input type="checkbox"/> Aqua toxic pH property: Heat value: Inflammation: 0,0 Consistency: Weight propor.: 0,0				
Packaging Packaging type:				
Declaration  SampPrmtr. PmtrValue Unit				

Figure 53: Waste approval/waste stream Netherlands

It is possible to form waste approval/waste stream groups. For this purpose use the field waste approval/waste stream under the actual waste approval/waste stream number.

Waste approval	
Internal#	183
Afvalstroomnr	077770000002
Int.w.appr. no.	141
Ent.sg.nw.	SN_BE_170301_GEF_01
Valid from	01.03.2009 <input type="checkbox"/> Intern.document #
Valid to	31.12.2013

Figure 54: Creation of a waste stream group

Proceed with the formation of a waste approval/waste stream group as follows:

1. First, create the main waste stream of the group.
2. Then create a second waste stream.
3. The second waste stream in the input field *waste approval/waste stream* under the actual approval/waste stream number of the second waste stream the number of major waste stream has to be registered.
4. Confirm with *ENTER* (all information from the main waste stream)
5. In the second waste stream, the waste can be maintained, which deviates from the main waste stream and corresponds the same EWC-code.
6. The number of major waste stream in the field of external waste approval/waste stream number copy in the second waste stream.
7. The copied number expand with *_02*
8. Repeat this procedure for all other required waste streams from the waste stream group.



The available treatment methods are defined in the base configuration. For more information, see the document: *Material_Flow_Management_Configuration_Guide*.



For the order creation and the LMA-record only waste approvals/waste streams in status *APPROVED* can be used.

Furthermore, the following tabs are available:

Tab *UN catalog*:

- Allocation of an UN-number

Tab *Protocol*:

- Presentation the results of the export to LMA and imports of the RetourMelding to a LMA-report.
- High Range: date, time and user who performed the import.
- Low Range: error in the waste approval/waste stream, status change of the waste approval/waste stream and reset affected reported disposal documents.

Date/Time/User	Number	External ID	Object txt	Sub-object text	Tran	Program	Mode	Log number
01.03.2011 12:22:25 NDAMM	2	000000000000...	/WATP/ARB	/WATP/ARB...	/WATP/B...		Dialog pro...	0000000000000061702
• Problem class Additional inform 2								
01.03.2011 12:32:34 NDAMM	2	000000000000...	/WATP/ARB	/WATP/ARB...	/WATP/B...		Dialog pro...	0000000000000061704
• Problem class Additional inform 2								
01.03.2011 14:38:32 NDAMM	2	000000000000...	/WATP/ARB	/WATP/ARB...	/WATP/B...		Dialog pro...	0000000000000061708

Type	Message Text
Message Text	Nachweis 77770000001 mit Menge 5.550,000 KG, Frachten 1, Periode 032011 exportiert!
Message Text	Status des Entsorgungspapiers 613 [1703] wurde in "EXPORTIERT" geändert!

Figure 55: Protocol Import RetourMelding

Tab *History*:

- Display status changes of waste approval/waste stream with time stamp and user.

After saving, the waste stream data are available for printing on documents and other processes like creation of disposal documents and the LMA-record.

4.3.2.2 Disposal Document Template Netherlands

The disposal document template of the Netherlands is based on the so-called Begeleidingsbrief.

The disposal document template for this purpose contains the following data:

- Senders in the role of producer, disposer- , trader (Handelaar) or agent (Bemiddelaar) with AMICE- number and VIHB- number.
- Debtor
- Waste generation site (producer with stand) with AMICE-number
- Waste disposal facility with AMICE-number, AVST-number and disposer
- Carrier with AMICE-number and VIHB-number
- Role of carrier (sender, producer, disposer, collector, carrier or rented carrier)
- License plate number
- Mark for multiple freights (Repeterende vracht)
- Mark for route collection (Route inzameling) or special regulation (Inzamelaarsregeling)
- Rented carrier with AMICE-number and VIHB-number
- Waste approval/waste stream number (Afvalstroomnummer)
- Date transfer and receiving
- EWC-Code
- GN-Code
- Treatment methods
- Estimated quantity
- Posted quantity
- Total package
- Comments
- Special details of the waste approval/waste stream
- Data of the UN-catalog and special provisions
- Export data of the LMA-record

Figure 56: Disposal Document / Begeleidingsbrief Netherlands

4.3.3 LMA-Interface Netherlands (Transaction /N/WATP/BASE_IECONFIG)

For the Netherlands 4 interfaces were integrated for the LMA-record. The configuration of the interfaces is done in transaction /N/WATP/BASE_IECONFIG.

ErsteOntvangstMelding (Export)

MaandeklijksteMelding (Export)

AfgifteMelding (Export)

RetourMelding (Import)

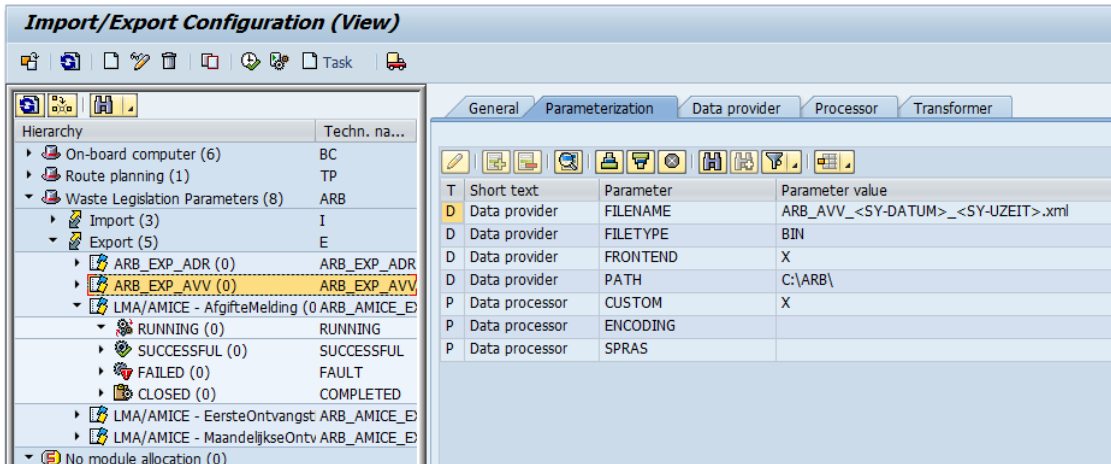




Figure 57: LMA-Interfaces Netherlands

For each of these interfaces the interface parameters are defined. For this, select by clicking the corresponding interface in the tree, then open the register *Parameterization* in the right mask. Go here with the button  and change in the edit mode. In the form of the right side, new parameters can be defined with the button .

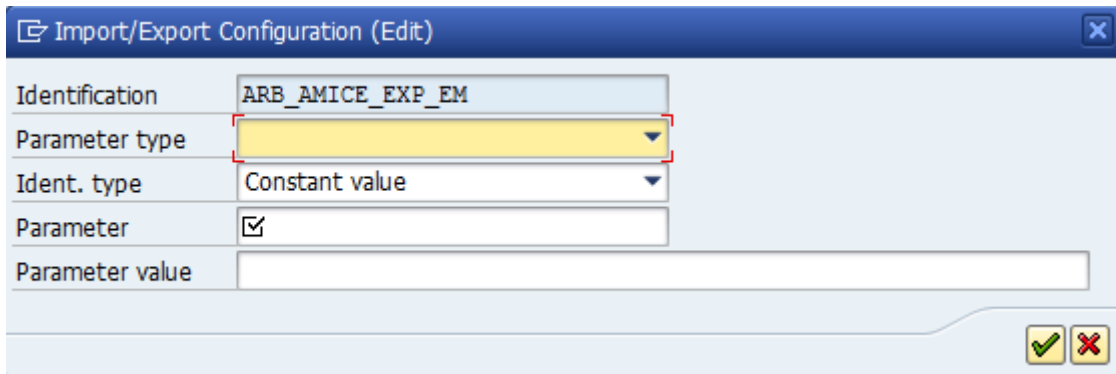


Figure 58: Parameterization of an Interface

In the following, the parameters for the various messages are displayed.

4.3.3.1 EersteOntvangstMelding (Export)

For export use the function in the path ARB_AMICE_EXP_EM *Waste Regulatory framework* → *export*. Change in the parameterization at this transaction and enter the following parameters.

Data provider	FILENAME	Defines the name of the XML file that is generated if the interface is defined.	EersteOntvangstMelding_<SY-UNAME>_<SY-DATUM>_<SY-UZEIT>.xml For example: EersteOntvangstMelding_Nutzername_Systemdatum_Systemzeit
Data provider	FILETYPE	Required parameter.	BIN
Data provider	FRONTEND	When the parameter is set, the generated XML file on the client computer is saved in the specified path. If the parameter is not set the path on the SAP® application server is used.	X
Data provider	PATH	Defines the path where the generated XML files are saved.	C:\EersteOntvangstMelding_Verzeichnis
Data processors	AVST	Defines the waste streams that are exported.	= all waste streams or these which are defined for the user 12345=these waste streams which begins with 12345 and are defined for the user
Data processors	EXPORTTYPE	Defined the determination of the data to be exported.	BS or WS
Data processors	EXPORT_TO_WEBSERVICE	Defines the transfer of data using the LMA-web service.	X
Data processors	EXPORT_TO_XML_FILE	Defines the generation of an XML file containing the export data	X
Data processor	LOGICAL_PORT_NAME	Defines the RFC connection	Customer-specific expression required.
Data processors	NWLOG	Log the export data of waste stream	X
Data processors	PERIODE_MONTH_FROM	Defines the start period (month) for export.	1-12
Data processors	PERIODE_MONTH_TO	Defines the ending period (month) for export.	1-12
Data processors	PERIODE_YEAR_FROM	Defines the starting year for export.	
Data processors	PERIODE_YEAR_TO	Defines the ending year for export.	
Data processors	PROOFTYPES	Defines the type of waste approval/waste stream for export	NW_NL
Data processors	RANGEDEF_NAME	Defines the boundary area for export.	ARB_AMICE_EXP_EM
Data processors	RANGEDEF_REQD_EFS	Defines the parameters of the selection area for export.	AVST
Data processors	RANGEDEF_USER_DEP	Defines the user-specific analysis of the selection	X

Data processors XML_VERSION area Specifying the XML version to be created. 1.3 or 2.0

Table 4: Parameters of the LMA-Interface EersteOntvangstMelding (Export)



All parameter have the *determination type* = constant value.



The user specific selection areas are in the transaction /N/WATP/BASE_ADMIN in the node *Legal Requirements* → *definition of selection* → *definition of selection to the LMA/AMICE Interface* → *Export*: To define *Eerste ontvangstmelding*. Here use the register *AVST number* and arrange the required *AVST numbers* with *Sign=I*, *Option = CP* and *waste approval/waste stream = 12345**. 12345 stand for the first 5 numbers of the waste stream numbers which are to be exported for the respective user.

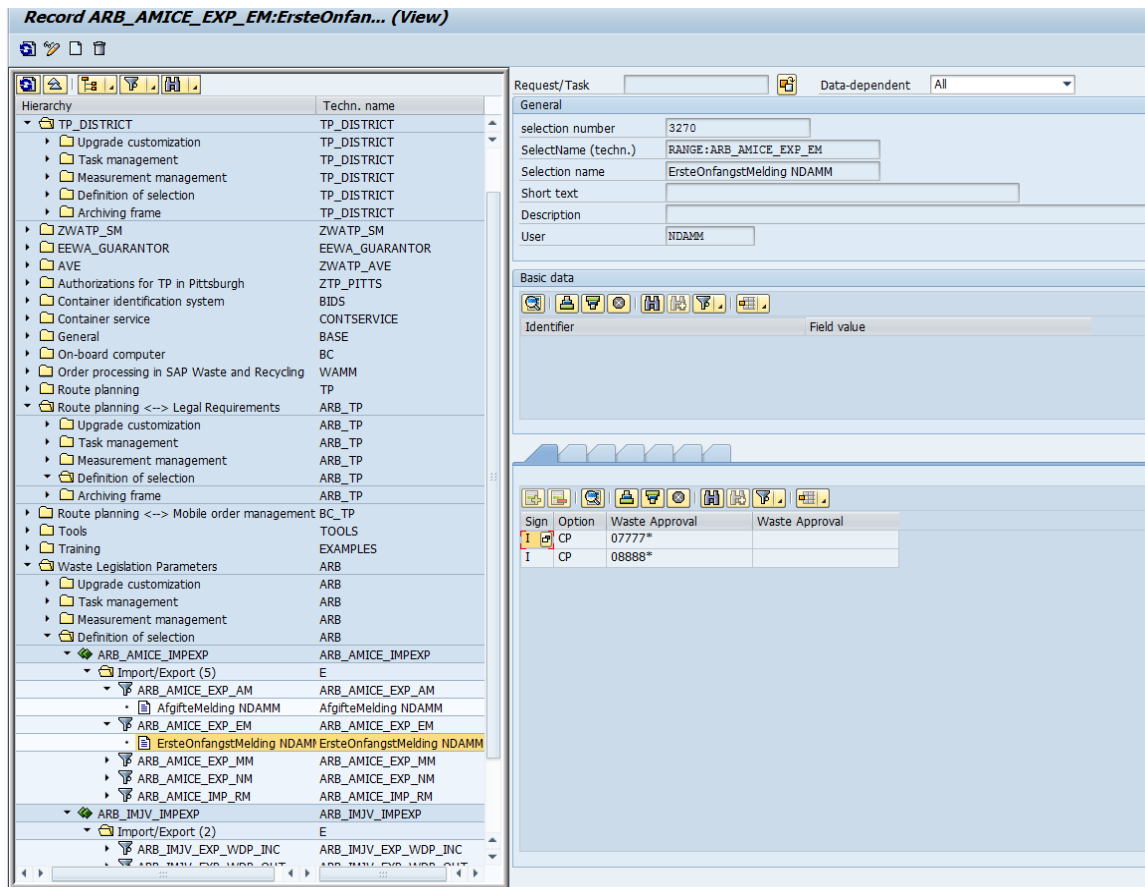


Figure 59: AVST-Definition of selection for EersteOntvangstMelding

Depending on the parameter EXPORT TYPE different data selections are taking place:

Exporttype = BS

All disposal documents with a posted weight are announced in the status FINISHED whose acceptance date lies within the stated period. Besides, every disposal document is a cargo. The weight of the ascertained disposal documents is added up to waste stream.

Exporttype = WS

All posted weighing notes with a posting date within the stated period are announced. Besides, every weighing note is a cargo. The weight of the ascertained weighing notes is added up to waste stream.

The sources of the report data are waste approvals (waste streams). In the following table and in the picture, the sources are shown in the waste stream.

MeldingsNummerMelder	0.	Number given by the system
RouteInzameling	1.	<i>False</i> if code is not set, <i>true</i> if code is set
InzamelaarsRegeling	2.	<i>False</i> if code is not set, <i>true</i> if code is set
Ontdoener	3.	Identification number of the waste generation site
LocatieHerkomstPostcode	4.	Postal code of the waste generation site
LocatieHerkomstHuisnummer	5.	House number of the waste generation site
LocatieHerkomstHuisnummerToevoeging	6.	House number addition of the waste generation site
LocatieHerkomstWoonplaats	7.	City of the waste generation site
LocatieHerkomstStraatnaam	8.	Street of the waste generation site
LocatieHerkomstNabijheidsBeschrijving	9.	Name of the waste generation site. Is filled only if house number, street name or postal code is empty or contains the sign &.
LocatieHerkomstLand	10.	Land of the waste generation site. The logon language is transmitted in the system.
LocatieOntvangst	11.	AVST number of the waste disposal facility from the waste stream
Afzender	12.	Identification number of the sender
Inzamelaar	13.	Identification number of the carrier. Is reported only if 1 or 2 = True.
Handelaar	14.	See source 12th. Is only sent if 14th is selected, otherwise 0.
Bemiddelaar	15.	See source 12th. Is only sent if 15th is selected, otherwise 0.
AfvalstroomNummer	16.	Number of waste stream

Afvalstof	17.	EWC-code of waste stream
GebruikelijkeNaamAfvalstof	18.	Description of the waste. If the field is not filled, the description of the EWC will be sent in logon language
VerwerkingsMethode	19.	Treatment type out of waste stream
TotaalGewicht	20.	Sum of the weights of the selected disposal documents or weight notes.
AantalVrachten	21.	Total of selected disposal documents or weight notes.
PeriodeMelding	22.	Period of the acceptance date of the disposal document or the posting date of the weight note.

Table 5: Fields of the LMA-Interface EersteOntvangstMelding (Export)

The screenshot displays the SAP S/4HANA interface for waste stream management, organized into several sections:

- General:** Includes tabs for 'General', 'UN catalog', 'Protokol', and 'History'.
- Consignor:** Features radio buttons for 'Generator', 'Disposer', 'Car./Gen.' (14), and 'Carrier' (15). Below are fields for 'Absender' (12), 'Name', 'Straat+Nr', 'Postcode+woonpl', and 'VIHB Number'.
- Debtor:** Includes fields for 'Customer', 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Waste generator:** Features a dropdown for 'Waste generator' (3), 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Container location:** Includes 'Container Loc.' (10), 'Name' (9), 'Straat+Nr' (8, 5, 6), and 'Postcode+woonpl' (4, 7).
- Disposal company:** Includes fields for 'Disp. Company', 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Waste Disposal Facility:** Includes 'WD Facility' (11), 'Straat+Nr', and 'Postcode+woonpl'.
- Waste transporter:** Includes a dropdown for 'Carrier' (13), 'Beförderer', 'Name', 'Straat+Nr', and 'Postcode+woonpl'. It also has a 'VIHB Number' field and 'Shipment' options for 'Collective note' (1) and 'Special regulation' (2).
- Waste:** Includes fields for 'EWC code' (17), 'Material', and 'Treatment' (19).
- Waste approval:** Includes 'Internal#' (224), 'Afvalstroomnr' (16), 'Int.w.appr. no.', 'Ent.sg.nw.', 'Valid from', 'Valid to', 'Nr.Omschrijfsf.' (18), 'W.Dis.Proc', 'Target quantity', 'Wiegetyp (i/o)', 'Date record exported' (00:00:00), 'Exported by', and 'MeldingsNummerMelder'.

Figure 60: Data source at the waste stream for EersteOntvangstMelding



After the successful export all waste approvals/waste streams will be flagged as exported. Waste approvals/waste stream with this flag are not considered by the selection.



Waste approvals/waste stream with code *internal document* will be not considered in export function.

4.3.3.2 MaandelijkseMelding (Export)

Use to export the function in `ARB_AMICE_EXP_MM` in the path *Waste Legal Requirements*→*Export* and enter the following parameters in the parameterization.

Data provider	<i>FILENAME</i>	Defines the name of the XML file that is generated if the interface is defined.	MaandelijkseMelding_<SY-UNAME>_<SY-DATUM>_<SY-UZEIT>.xml For example: MaandelijkseMelding_Username_Systemdate_Systemtime
Data provider	<i>FILETYPE</i>	Required parameters	BIN
Data provider	<i>FRONTEND</i>	If the parameter is set, the generated XML file on the client computer is put in the stated path. If the parameter is not set, the path on SAP® application server is used.	X
Data provider	<i>PATH</i>	Defines the path where the generated XML files are stored.	C:\Maandelijkse_Verzeichnis
Data processors	<i>AVST</i>	Defines the waste streams that are exported.	*= all waste streams or all which are defined for the user 12345=all waste streams which begins with 12345 and are defined for the user
Data processors	<i>EXPORTTYPE</i>	Defined the determination of the data to be exported.	BS or WS
Data processors	<i>EXPORT_TO_WEBSERVICE</i>	Defines the transfer of the data by using the LMA-Web Service.	X
Data processors	<i>EXPORT_TO_XMLFILE</i>	Defines the generation of an XML file containing the export data	X
Data processors	<i>LOGICAL_PORT_NAME</i>	Defines the RFC connection	Customer specific expression required.
Data processors	<i>NWLOG</i>	Log the export data of the waste stream.	X
Data processors	<i>PERIODE_MONTH_FROM</i>	Defines the starting period (month) for export.	1-12
Data processors	<i>PERIODE_MONTH_TO</i>	Defines the ending period (month) for export.	1-12
Data processors	<i>PERIODE_YEAR_FROM</i>	Defines the starting year for the export	
Data processors	<i>PERIODE_YEAR_TO</i>	Defines the ending year for the export	
Data processors	<i>PROOFTYPES</i>	Defines the type of waste approval/waste stream for export	NW_NL
Data processors	<i>RANGEDEF_NAME</i>	Defines the selection area for export.	ARB_AMICE_EXP_MM
Data processors	<i>RANGEDEF_REQDEFS</i>	Defines the parameters of the selection area for export.	AVST
Data processors	<i>RANGEDEF_USERDEP</i>	Defines the user-specific analysis of the selection area	X
Data	<i>XML_VERSION</i>	Specifying the XML	1.3 or 2.0

processors

version to be created.

Table 6: Parameters of the LMA-Interface MaandeklijksteMelding (Export)



All parameters have the *determination type*= constant value.



The user specific selection areas are in the transaction /N/WATP/BASE_ADMIN in the node *waste Legal Requirements* → *definition of selection* → *definition of selection to the LMA / interface AMICE* → *Export*: To define Maandeklijkse ontvangstmelding. Here use the register AVST- number and arrange the required AVST- numbers with Sign=I, Option = CP and waste approval/waste stream = 12345. 12345 stand for the first 5 numbers of the waste stream numbers which are to be exported for the respective user..

The dates required for the report come from the waste approval/waste stream. In the following table and in the picture on top the sources are shown in the waste stream.

MeldingsNummerMelder	0.	Number given by the system
AfvalstroomNummer	1.	Number 16. In Figure 58.
TotaalGewicht	2.	Sum of the weights of the selected disposal documents or weight notes.
AantalVrachten	3.	Total of selected disposal documents or weight notes.
PeriodeMelding	4.	Period of the acceptance date of the disposal document or posting date of the weight notes.

Table 7: Fields of LMA-Interface MaandeklijksteMelding (Export)



At the export function only the waste approvals/waste streams will be considered, which already have the flag of *EersteOntvangstMelding*.

4.3.3.3 AfgifteMelding (Export)

For export use the function *ARB_AMICE_EXP_AM* in the path *Waste Legal Requirements* → *Export* and enter the following parameters in the parameterization:

Parameter Type	Parameter	Function	Parameter Value/Example/Details
Data provider	FILENAME	Defines the name of the XML file that is generated if the interface is defined	AfgifteMelding_<SY-UNAME>_<SY-DATUM>_<SY-UZEIT>.xml Example: AfgifteMelding_Username_Systemdate_Syst emtime
Data provider	FILETYPE	Required parameter.	BIN
Data provider	FRONTEND	When the parameter is set, the generated XML file on the client computer is stored in the specified path. If the parameter is not set the path on the SAP® Application Server is used	X
Data provider	PATH	Defines the path on which the created XML files will be stored	C:\Afgifte_Verzeichnis
Data processors	AVST	Defines the waste streams to be exported	* = all waste streams or all which are defined for the user With this selection all waste streams are exported with a waste generation site with an ID number which is assigned to partner's type AVST in the waste legislation configuration. The first 5 places of the waste stream number for the selection are not checked here.
Data processors	EXPORTTYPE	Defined for determination the data to be exported	BS or WS
Data processors	EXPORT_TO_WEBSERVIC E	Defines the transfer of data using the LMA-web.	X
Data processors	EXPORT_TO_XMLFILE	Defines the generation of an XML file containing the export data	X
Data processors	LOGICAL_PORT_NAME	Defines the RFC connection	Customer-specific expression required.
Data processors	NWLOG	Log export data of the waste stream	X
Data processors	PERIODE_MONTH_FROM	Defines the starting period (month) for export	1 -12
Data processors	PERIODE_MONTH_TO	Defines the ending period (month) for export.	1 -12
Data processors	PERIODE_YEAR_FROM	Defines the starting year for export	
Data processors	PERIODE_YEAR_TO	Defines the ending year for export	
Data processors	PROOFTYPES	Defines the type of	Customer-specific expression required.

		waste approval/waste stream for export.	There is a separate type of waste approval/waste stream (ZNW_NL) to form and use.
Data processors	RANGEDEF_NAME	Defines the selection area for export.	ARB_AMICE_EXP_AM
Data processors	RANGEDEF_REQDEFS	Defines the parameters of the selection area for export.	AVST
Data processors	RANGEDEF_USERDEP	Defines the user-specific evaluation of the selection area	X
Data processors	XML_VERSION	Specifying the XML version to be created.	1.3 or 2.0

Table 8: Parameters of the LMA-Interface AfgifteMelding (Export)



All parameters have the *determination type*= constant value.



The user specific selection areas are in the transaction /N/WATP/BASE_ADMIN in the node waste Legal Requirements → definition of selection → definition of selection to the LMA/interface AMICE →Export: To define Afgiftemelding. Here use the register AVST- number and arrange the required AVST- numbers with Sign=I, Option = CP and waste approval/waste stream = 12345. 12345 stand for the first 5 numbers of the waste stream numbers which are to be exported for the respective user.

The data needed for reporting derived from the waste approvals/waste streams. The following table and in the picture above are the sources shown in the waste stream.

MeldingsNummerMelder	0.	Number given by the system.
LocatieHerkomst	1.	AVST-Number of the waste generation site of waste stream.
EersteAfnemer	2.	Identification number of waste disposal facility
Afvalstof	3.	EWC-Code of waste stream.
GebruikelijkeNaamAfvalstof	4.	Description of the waste. If the field is not filled, the description of the EWC will be sent in logon language.
WijzeVanNuttigeToepassing	5.	Treatment out of waste stream
TotaalGewicht	6.	Sum of the weights of the selected disposal documents or weight notes
AantalVrachten	7.	Total of selected disposal documents or weight notes.
PeriodeMelding	8.	Period of the acceptance date of the disposal document or posting date of the weight note.
GNcode	9.	GN-Code of waste stream.

Table 9: Fields of the LMA-Interface AfgifteMelding (Export)



If the GN-code and the EWC- code are filled in the waste stream, only the GN-code is transmitted.

Waste Generation Site (View)

Filter
BP Number: 7001003779

General
Business partner: 7001003779
Name 1 / Name 2: Customer C CMR
Address: To Test BTW Verlag.
Bedrijvenpark Twente 88 / 1111 BC Almelo

Loc./Area	Name	Name 2	Address
20010239	Customer	To Test Pe	Bedrijvenpark Twente 11 / 1111 BC Almelo
20010272	Customer	To Test B.	Bedrijvenpark Twente 88 / 1111 BC Almelo
20010273	Customer	To Test B.	Bedrijvenpark Twente 88 / 1111 BC Almelo

Location/Area: 20010239 Std. gen. site

Name 1 / Name 2: Customer A CMR
Name 2: To Test Person
Address: Bedrijvenpark Twente 11 / 1111 BC Almelo
Name:
Locat. addition:
WD Facility:
Description:

Description	Identification number	Valid from	Valid To	Ctry. Rg
	1111111	01.01.2010	31.12.2015	
AVST-number (fr. 07777		01.01.2010	31.12.2015	

Figure 61: AVST-Number at waste generation site

The screenshot displays the SAP S/4HANA interface for waste management, specifically the 'Data source at waste stream for AfgifteMelding' screen. The interface is organized into several sections:

- General:** Includes tabs for 'UN catalog', 'Protokol', and 'History'.
- Consignor:** Features radio buttons for 'Generator', 'Disposer', 'Car./Gen.', and 'Carrier'. The 'Generator' option is selected. Fields include 'Absender' (containing '1000040'), 'Name', 'Straat+Nr', 'Postcode+woonpl', and 'VHB Number'.
- Waste approval:** Includes 'Internal#' (223), 'Afvastroomnr' (000000000000000000223), 'Int.w.appr. no.', 'Ent.sg.nw.', 'Valid from', 'Valid to', 'Nr.Omschrijfsf.' (containing '4.'), 'W.Dis.Proc', 'Target quantity' (kg), 'Wiegetyp (Vo)', 'Date record exported' (00:00:00), 'Exported by', and 'MeldingsNummerMelder'.
- Debtor:** Fields for 'Customer', 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Waste generator:** Fields for 'Waste generator', 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Container location:** Fields for 'Container Loc.', 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Disposal company:** Fields for 'Disp.Company' (containing '2.'), 'Name', 'Straat+Nr', and 'Postcode+woonpl'.
- Waste Disposal Facility:** Fields for 'WD Facility', 'Straat+Nr', and 'Postcode+woonpl'.
- Waste transporter:** Fields for 'Carrier', 'Beförderer', 'Name', 'Straat+Nr', 'Postcode+woonpl', 'VHB Number', 'Collective note', 'Special regulation', and 'Shipment'.
- Waste:** Fields for 'EWC code' (containing '3.'), 'Material', 'Treatment' (containing '5.'), and 'KN-Code' (containing '9.').
- Components:** Includes checkboxes for 'Exploding', 'Aggressive', 'Corrosive', 'Toxic', 'Very toxic', and 'Aqua toxic'. Also includes 'pH property', 'Heat value', 'Inflammation', and 'Weight propor.'.
- Packaging:** Field for 'Packaging type'.
- Declaration:** Includes a toolbar with icons and a table with columns 'SampPrmtr.', 'PrmtrValue', and 'Unit'.

Figure 62: Data source at waste stream for AfgifteMelding

4.3.3.4 RetourMelding (Import)

For the export use the function `ARB_AMICE_EXP_MM` in the path *Waste Legal Requirements*→*Import* and enter the following parameters in the parameterization.

Parameter Type	Parameter	Function	Parameter Value/Examples /Details
Data provider	ARCHIVEPATH	Defines the path where the imported XML files will be archived after the import.	
Data provider	FILETYPE	Required parameter.	BIN
Data provider	FRONTEND	When the parameter is set, the generated XML file on the client computer is stored in the specified path. If the parameter is not set the path on the SAP® Application Server is used	X
Data provider	PATH	Defines the path from which the XML files will be imported.	C:\IMPORT_Verzeichnis
Data providerr	FILEMASK	Defines the name or the name structure of the files that are imported.	*. XML to import all XML files in the PATH. It is also possible to rename the files before and import them separately.

Table 10: Parameters of the LMA-Interface RetourMelding (Import)



All parameters have the *determination type*= constant value.



The import function is used exclusively in connection with the EXPORT TYPE = BS in export features!

4.4 EBA Netherland – Elektronische Begeleidingsbrief Afvalstoffen

The EBA is an electronic form of the disposal document template with reference to a waste stream. Concerning the contents, it has the same information as the disposal document. Additionally the license plate of the transporting vehicle is also transferred. With the application *Material Flow Management* it is possible to send and to receive EBA´s. The functionality is based on the TNO recommendation, which has been defined by the Dutch waste disposal companies. Inside SAP the EBA information can be provided and processed. To receive the EBA messages 3 RFC´s are available:

- /WATP/RECEIVE_TRANSDOC – Transport document
- /N/WATP/RECEIVE_STATUSDOK – Document status
- /N/WATP/RECEIVE_WEIGHDOC – Weighing confirmation

The sending of EBA messages can take place in different ways and is implemented on the basis of a customer specific version. The information needed for the sending process will be prepared by SAP only.

4.4.1 EBA - Roles

The following roles can be distinguished within the EBA process regarding to waste origin, transport, and target.

- Waste generator
- Waste recipient (intermediaries or waste manager)
- Sender (orders the waste transport)
- Waste generator
- Trader
- Intermediary
- Waste recipient (Intermediaries or waste manager)

4.4.2 EBA messages

The following messages are replaced within the EBA processes

- Transport document
- This message contains all relevant data for the transport. After a successful import into SAP a disposal document will be created. .
- Document status
- This message contains cancellation information which belongs to a transport document. This one is sent by the consignor of the transport document, if the transport document which was sent before has been wrong or is not needed anymore.
- Weighing confirmation
- This message contains the weighing information which belongs to the transported waste. The weighing confirmation is sent by the waste recipient with reference to the transport document to the sender of the transport document.

4.4.3 Extension at the waste stream template and disposal document template

In order to use waste streams and disposal documents for the EBA process, a new tab has been integrated into the waste stream template and disposal document template.

In this screen the following settings can be made:

- EBA relevant:
Here, it is possible to determine, whether the waste stream takes part in the EBA process. If the box has been checked the disposal document processing will be accepted automatically. At the disposal document the tick is not changeable anymore.
- EBA for transporter
Here, it is possible to determine, whether the transporter shall get the EBA messages during the sending process. If the box has been checked it will be adapted automatically for the disposal document generation. At the disposal document the tick can be removed manually.

Later in the process, there will always be a validation, whether the disposal document or the waste screen are EBA relevant.

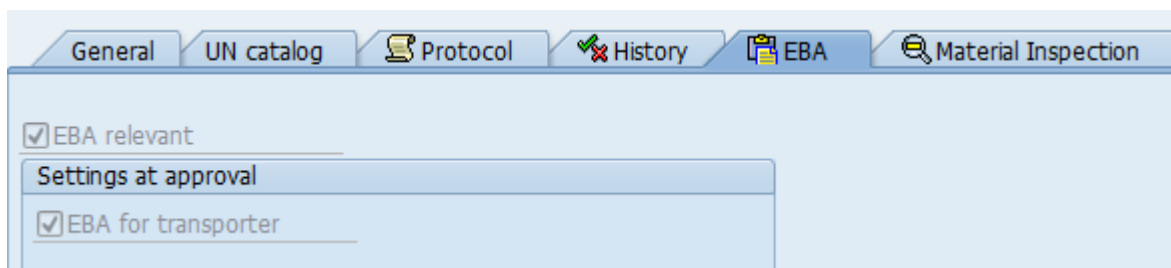


Figure 63: EBA tab on Waste Stream NL

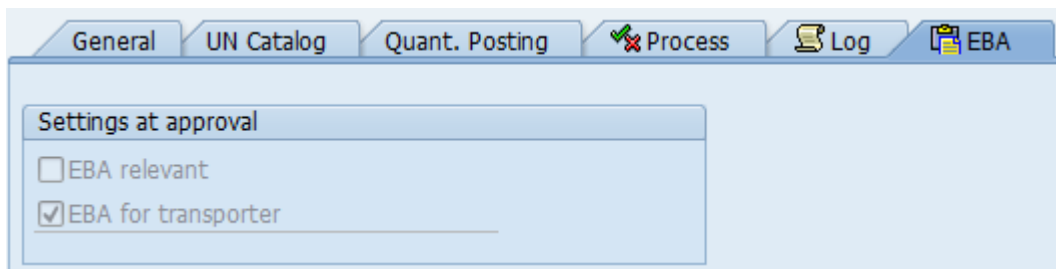


Figure 64. EBA tab on Disposal Document NL

4.4.4 Content structure of the EBA messages

In the following the structure of the 3 EBA messages including the mandatory fields and the Dutch terms is described.

4.4.4.1 Transport document

The information of the message "transport document" is stored in the ABAP structure /WATP/SARB_EBAMSG_TRANSDOC.

Title	NL-TNO Title	Mandatory	Field in ABAP - Structure	Internal Field Mapping SAP
Unambiguously number of the transport document	<i>Technische bericht identifier</i>	Yes	TRANSPORT_DOC_NR	
Technical document number for the sender	<i>Transport document nummer</i>		NOTENR	/WATP/TARBNOTES-NOTENR
Free comment field	<i>Vrij opmerkingen veld</i>		NOTE	/WATP/TARBNOTES-DESCRIPTION
Container: for the sender	<i>Afzender</i>		SENDER	
List container: Identification attributes	<i>Identifier</i>		PARTY_IDENT	
Identification number	<i>ID</i>	Yes	ID_NUMBER	
Abbreviation of the issuing authority	<i>Uitgevende instantie</i>	Yes	AGENCY_NAME	
Role	<i>Rol</i>	Yes	ROLE	/WATP/TARBNOTENL-FLAG_*
Name	<i>Naam afzender</i>	Yes	NAME	
Container: Address	<i>Adresgegevens</i>		POSTAL_ADDRESS	
Street	<i>Straatnaam</i>	Yes	STREET	
House number 1	<i>Huisnummer</i>	Yes	HOUSE_NUM1	
House number 2	<i>Huisnummer toevoeging</i>	Yes	HOUSE_NUM2	
Zip code	<i>Postcode</i>	Yes	POSTCODE	
City	<i>Plaatsnaam</i>	Yes	CITY	
Country	<i>Land</i>	Yes	COUNTRY	
Container: Generator	<i>Ontdoener</i>		GENERATOR	
List container: Identification attributes	<i>Identifier</i>		PARTY_IDENT	
Identification number	<i>ID</i>	Yes	ID_NUMBER	
Abbreviation of the issuing authority	<i>Uitgevende instantie</i>	Yes	AGENCY_NAME	
Name	<i>Naam ontdoener</i>	Yes	NAME	

Container: Address	<i>Adresgegevens</i>		POSTAL_ADDRESS	
Street	<i>Straatnaam</i>	Yes	STREET	
House number 1	<i>Huisnummer</i>	Yes	HOUSE_NUM1	
House number 2	<i>Huisnummer toevoeging</i>	Yes	HOUSE_NUM2	
Zip code	<i>Postcode</i>	Yes	POSTCODE	
City	<i>Plaatsnaam</i>	Yes	CITY	
Country	<i>Land</i>	Yes	COUNTRY	
Container: Transporter	<i>Vervoerder</i>		Transporter	
List container: Identification attributes	<i>Identifier</i>		PARTY_IDENT	
Identification number	<i>ID</i>	Yes	ID_NUMBER	
Abbreviation of the issuing authority	<i>Uitgevende instantie</i>	Yes	AGENCY_NAME	
Name	<i>Naam ontdoener</i>	Yes	NAME	
Container: Address	<i>Adresgegevens</i>		POSTAL_ADDRESS	
Street	<i>Straatnaam</i>	Yes	STREET	
House number 1	<i>Huisnummer</i>	Yes	HOUSE_NUM1	
House number 2	<i>Huisnummer toevoeging</i>	Yes	HOUSE_NUM2	
Postleitzahl	<i>Postcode</i>	Yes	POSTCODE	
City	<i>Plaatsnaam</i>	Yes	CITY	
Coubntry	<i>Land</i>	Yes	COUNTRY	
Container: Disposer	<i>Ontvanger</i>		DISPOSER	
List container: Identification attributes	<i>Identifier</i>		PARTY_IDENT	
Identification number	<i>ID</i>	Yes	ID_NUMBER	
Abbreviation of the issuing authority	<i>Uitgevende instantie</i>	Yes	AGENCY_NAME	
Name	<i>Naam ontdoener</i>	Yes	NAME	
Container: Address	<i>Adresgegevens</i>		POSTAL_ADDRESS	
Street	<i>Straatnaam</i>	Yes	STREET	
House number 1	<i>Huisnummer</i>	Yes	HOUSE_NUM1	
House number 2	<i>Huisnummer toevoeging</i>	Yes	HOUSE_NUM2	
Zip code	<i>Postcode</i>	Yes	POSTCODE	
City	<i>Plaatsnaam</i>	Yes	CITY	
Country	<i>Land</i>	Yes	COUNTRY	
Container: Waste origin	<i>Locatie van herkomst</i>		WASTEGEN	
Waste location	<i>Type locatie</i>	Yes	LOC_TYPE	
Name of place of origin	<i>Naam locatie</i>		LOC_NAME	
Name of the route	<i>Route</i>		ROUTE	
Street	<i>Straatnaam</i>		STREET	
House number 1	<i>Huisnummer</i>		HOUSE_NUM1	
House number 2	<i>Huisnummer toevoeging</i>		HOUSE_NUM2	
Zip code	<i>Postcode</i>		POSTCODE	
City	<i>Plaatsnaam</i>		CITY	

Closer description of the place of origin	<i>Nabijheidsbeschrijving</i>		LOC_DESC	
Date of the transport start	<i>Datum aanvang transport</i>	Yes	DATE_DELIVERY	/WATP/TARBNOTE-DATE_DELIVERY
Time of the transport start	<i>Tijdstip aanvang transport</i>		TIME_DELIVERY	
Container: Waste recipient	<i>Locatie van bestemming</i>		WASTEGEN	
Waste location	<i>Type locatie</i>	Yes	LOC_TYPE	
Name of the location	<i>Naam locatie</i>		LOC_NAME	
Disposer number	<i>Verwerkersnummer</i>		AVST_NR	
Street	<i>Straatnaam</i>		STREET	
House number 1	<i>Huisnummer</i>		HOUSE_NUM1	
House number 2	<i>Huisnummer toevoeging</i>		HOUSE_NUM2	
Zip code	<i>Postcode</i>	Yes	POSTCODE	
City	<i>Plaatsnaam</i>	Yes	CITY	
Closer description of the waste	<i>Nabijheidsbeschrijving</i>		LOC_DESC	
Expected acceptance date	<i>Datum ontvangst transport</i>		DATE_ACCEPT	/WATP/TARBNOTE-DATE_ACCEPT
Expected acceptance time	<i>Tijdstip ontvangst transport</i>		TIME_ACCEPT	
Container: Data for transport	<i>Gegevens zending</i>			
Waste stream number	<i>Afvalstroomnummer</i>	Yes	NWNR	/WATP/TARBW-NWNR
Hazardous?	<i>Gevaarlijke stoffen indicator</i>		DANGEROUSGOODS	
Number of the packed waste	<i>Aantal</i>	Yes	PACK_SUM	/WATP/TARBNOTENL-PACK_SUM
Package type	<i>Verpakkingsomschrijving</i>		PACKTYPE	/WATP/TARBWNL-PACKTYPE
Weight (kg)	<i>Geschatte hoeveelheid</i>		NOTEQUANT_ESTIM	/WATP/TARBNOTENL-NOTEQUANT_ESTIM
Container: Container list	<i>Container</i>		CONTAINER	
Serial number	<i>Containernummer</i>		SERNR	
Container: Waste data	<i>Gegevens afvalstroom</i>		WASTE_DATA	
Common name of the waste	<i>Gebbruikelijke benaming</i>	Yes	MAT_NAME	
AVV-CODE	<i>Eural code</i>	Yes	AVVCODE	/WATP/TARBNOTES-AVVCODE, Check: /WATP/TARBW-AVVCODE
ADR information	<i>ADR informatie</i>		ADR_INFO	/WATP/TADRUNCA-ADRCLASSNR
Treatments	<i>Verwerkingsmethode</i>	Yes	TREATMENTMETHOD	/WATP/TARBNOTENL-TREATMENTMETHOD, Check: /WATP/TARBWNL-TREATMENTMETHOD
Collective disposal note?	<i>Route-inzameling</i>	Yes	ROUTE_COLLECT	/WATP/TARBNOTENL-ROUTE_COLLECT
Special regulation?	<i>Inzamelaarsregeling</i>	Yes	SPECIAL_RULES	/WATP/TARBNOTENL-SPECIAL_RULES
Container: Various indicators	<i>Diverse indicatoren</i>		INDICATORS	

Indicator CODE			IND_CODE	
Indicator aktive?			IND_ACTIVE	
Container: Administrative attributes	<i>Administratieve kenmerken</i>		ADMIN_DATA	
Reference ID for sender	<i>Referentie van afzender</i>		REF_SENDER	
Reference ID for disposer	<i>Referentie van ontvanger</i>		REF_DISPOSER	
Reference ID for transporter	<i>Referentie van vervoerder</i>		REF_TRANSPORTER	
Reference ID for intermediary	<i>Referentie van agent</i>		REF_AGENT	
Container: Physical attributes of the transport	<i>Fysieke transport kenmerken</i>	Yes	TRANS_ATTR	
License plate	<i>Kenteken</i>	Yes (XOR)	LICENSE_NUM	/WATP/TARBNOTENLICENSE_NUM
Name of the ship	<i>Scheepsnaam</i>	Yes (XOR)	SHIP_NAME	/WATP/TARBNOTENLICENSE_NUM
Train number	<i>Treinnummer</i>	Yes (XOR)	TRAIN_NR	/WATP/TARBNOTENLICENSE_NUM

Table 11: Structure of EBA – message for the Transport Document

4.4.4.2 Document Status

The information of the message “document status” is stored in the ABAP structure /WATP/SARB_EBAMSG_DOCSTATE.

Title	NL-TNO Title	Mandatory	Field in ABAP - Structure	Internal Field Mapping SAP
Unambiguously number of the transport document	<i>Referentie transport document</i>	Yes	TRANSPORT_DOC_NR	/WATP/SARB_EBAMSG_DOCSTATE
Unambiguously number of the status document	<i>Technische bericht identifier</i>	Yes	STATUS_DOC_NR	/WATP/SARB_EBAMSG_DOCSTATE
Status	<i>Status</i>	Yes	STATUS	/WATP/SARB_EBAMSG_DOCSTATE
Explanations for the status change	<i>Reden status verandering</i>		STATUS_COMMENT	/WATP/SARB_EBAMSG_DOCSTATE

Table 12: Structure of EBA – message for the Document Status

4.4.4.3 Weighing Confirmation

The information of the message “weighing confirmation” is stored in the ABAP structure /WATP/SARB_EBAMSG_WEIGHING.

Title	NL-TNO Title	Mandatory	Field in ABAP - Structure	Internal Field Mapping SAP
Unambiguously number of the transport document	<i>Referentie transport document</i>	Yes	TRANSPORT_DOC_NR	
Unambiguously number of the weighing confirmation	<i>Technische bericht identifier</i>	Yes	WEIGHING_DOC_NR	
Weighing process number	<i>Weegbevestiging nummer</i>		WEIGHINGNR	

Net weight in kg	<i>Nettogewicht</i>	Ja	NOTEQUANT	
Container: Weighing process related waste data	<i>Afvalstroom</i>		WASTE_DATA	
Deviating waste	<i>Markering afwijking</i>		DEVIANT_WASTE	
Deviating waste: Explanation	<i>Toelichting afwijking</i>		DEVIANT_DESC	
Document number	<i>Afvalstroomnummer</i>		NWNR	
Common name of waste	<i>Gebbruikelijke benaming</i>		WASTE_NAME	
Container: Weighing information	<i>Weging</i>	Ja	WEIGHING_INFO	
Weighing type	<i>Type</i>	Ja	WEIGHING_TYPE	
Weight (in kg)	<i>Gewicht</i>	Ja	WEIGHT	
Tare weight (in kg)	<i>Tarra correctie</i>		TARA_WEIGHT	
Weighing time	<i>Datumtijd</i>	Ja	WEIGHINGTIME	
Name of the Weighing bridge	<i>Name weegbrug</i>		WEIGHBRIDGE_NAME	EWA_WA_WEIGHPROC- DEVGRPNR_TARE EWA_WA_WEIGHPROC- DEVGRPNR_GROSS
Weighing number (Event number of the scale)	<i>Volgnummer weegbrug</i>		WEIGHING_NR	EWA_WA_WEIGHPROC- TARE_ID EWA_WA_WEIGHPROC- GROSS_ID
Container: Administrative attributes	<i>Administratieve kenmerken</i>		ADMIN_DATA	
Reference ID for sender	<i>Referentie van afzender</i>		REF_SENDER	
Reference ID for disposer	<i>Referentie van ontvanger</i>		REF_DISPOSER	
Reference ID for transporter	<i>Referentie van vervoerder</i>		REF_TRANSPORTER	
Reference ID for intermediary	<i>Referentie van agent</i>		REF_AGENT	
Container: Transport information	<i>Transport kenmerken</i>		TRANSP_DATA	
Plate	<i>Kenteken</i>		LICENSE_NUM	
Container: Container list			CONTAINER	
Serial number	<i>Containernummer</i>		GERNR	

Table 13: Structure of EBA – message for the Weighing Confirmation

4.4.5 EBA Status Overview

The following table provides an overview about the possible EBA statuses.

Process	EBA Status	Description
Inbound transport	Created	EBA entry has been created
	Document was received	Transport Document was received
	Error Document Import	Error occurred when importing a Transport Document
	Weighing sent	Weighing was sent
	Cancellation received	Cancellation of Transport Document was received
	Error Cancellation Import	Error occurred when importing the Transport Document cancellation
Outbound transport	Created	EBA entry has been created
	Document was sent	Transport Document was sent
	Weighing received	Weighing Confirmation received and entered in the Transport Document
	Error weighing imp	Error occurred when importing weighing confirmation data
	Cancellation sent	Transport document cancellation was sent

Table 14: EBA status overview

4.4.6 Checks for incoming EBA messages

For incoming EBA messages the following checks will be processed:

1. Check whether the mandatory fields are entered.
2. Plausibility check, which means whether the data in the system are still valid (Here the standard check for creating a disposal document is used).

4.4.6.1 Notifications for Transport documents

If the reference waste approval/waste stream does not exist in the system, then an incorrect EBA entry will be created- Status: Error approval import.

4.4.6.2 Notifications for Document status

If you receive a document status message which refers to a not existing transport document, then an incorrect EBA entry will be created- Status: Error cancellation import.

The same status will be set when a weighing confirmation for a received transport document has already been sent. In this case the transport document may not be cancelled.

4.4.6.3 Notifications for weighing confirmation

If you receive a weighing confirmation which refers to a not existing transport document, then an incorrect EBA entry will be created- Status: Error weighing import.

4.4.7 EBA-Process at Incoming transports

4.4.7.1 Requirements

Requirement for the EBA process by incoming transports is an EBA relevant waste approval/waste stream with status "Complete". This will be checked when you receive the transport document and then an EBA relevant waste disposal document with the status "Complete" will be created.

4.4.7.2 Process overview

The following table overviews the standard process.

No.	Process	Action	EBA Status	Waste disposal document status	Notifications
1	Transport document received	<ol style="list-style-type: none"> 1. EBA entry created 2. EBA waste disposal document will be created. 3. License plate will be assumed to waste disposal document. 	<i>Approval has been received</i>	<i>Complete</i>	<ol style="list-style-type: none"> 1. Waste disposal document cannot be cancelled manually. 2. If an error occurs by receiving, an incorrect EBA entry will be created with the status: Error approval import. No subsequent processes.
2	Incoming weighing conducted and weighing is posted.	<ol style="list-style-type: none"> 1. Quantity posting on the EBA waste disposal document 2. EBA waste disposal document gets the status <i>Finished</i>. 3. Sending weighing confirmation. 	<i>Weighing has been sent</i>	<i>Finished</i>	<ol style="list-style-type: none"> 1. By saving the weighing transaction it will be checked if the license plate corresponds with the one in the transport document; if not, the weighing process cannot be saved. 2. EBA waste disposal documents which were created out of an incoming transport document can only be used for weighing entries, not for outgoing weighing. 3. The weighing process cannot be cancelled anymore.
3	Document status – Message received	<ol style="list-style-type: none"> 1. Transport document will be cancelled 2. Related EBA waste disposal document will be cancelled. 	<i>Cancellation has been received</i>	<i>Cancelled</i>	<ol style="list-style-type: none"> 1. When you receive a document status message for a transport document where the weighing confirmation has already been sent, then the transport document and the related waste disposal document cannot be cancelled anymore because the process has been finished successfully.

Table 15: EBA process overview at incoming transports

4.4.8 EBA process at Outgoing Transports**4.4.8.1 Requirement**

Requirement for the EBA process by outgoing transports is an EBA relevant waste approval/waste stream with status "Complete". According to this an EBA relevant waste disposal document for the weighing transaction with the status "Complete" has to be created.

4.4.8.2 Process Overview

The following table overview the standard process.

No	Process	Action	EBA Status	Waste disposal document status	Notifications
1	Outgoing weighing conducted and weighing transaction has been posted.	<ol style="list-style-type: none"> Quantity posting on the EBA relevant waste disposal document The license plate will be transferred to the EBA relevant waste disposal document. EBA waste disposal document gets the status <i>Completed</i>. Transport document will be prepared for sending 	<i>Approval sent.</i>	<i>Completed</i>	<ol style="list-style-type: none"> You are only allowed to conduct an outgoing weighing on EBA waste disposal documents without a related transport document because in this case a transport document for sending will be just created. An error will be raised during saving the weighing transaction when a weighing entry is conducted.
2	Weighing confirmation has been received.	<ol style="list-style-type: none"> The weighing confirmation is saved under the related transport document in the system. 	<i>Weighing received.</i>	<i>Completed</i>	
3	Cancellation of an EBA waste disposal document.	<ol style="list-style-type: none"> EBA waste disposal document gets the status "Cancelled" The document status message is prepared for sending. 	<i>Cancellation sent.</i>	<i>Cancelled</i>	<ol style="list-style-type: none"> The related weighing transaction has to be cancelled manually. In case of having already received a weighing confirmation, the EBA waste disposal document can be cancelled anyway according to TNO.
4	Cancellation of weighing transaction with EBA waste disposal document	<ol style="list-style-type: none"> Weighing transaction is cancelled EBA waste disposal document is cancelled The document status message is prepared for sending 	<i>Cancellation sent.</i>	<i>Cancelled</i>	

Table 16: EBA - process overview at outgoing transports

4.4.9 EBA Overview Transaction

With the help of the transaction */N/WATP/EBA_OVERVIEW* you get an overview of all received and sent EBA's in the system and the subsequent documents. The central element is the EBA. Here all information and statuses about the EBA messages are stored.

The process protocol shows all errors which occur when one of the technical or functional checks has failed by receiving/ importing EBA's.

4.4.9.1 Filter dialog

Starting the transaction a filter dialog opens at first. This enables you to filter the EBA data. Following parameters are provided:

- EBA number

- Transport document number
- Waste disposal number (internal) – Number of the EBA waste disposal document
- License plate
- EWC code
- BPartner sender
- Ident-No. sender
- BPartner generator
- Ident-No. generator
- BPartner transporter
- Ident-No. transporter
- BPartner disposer
- Ident-No. disposer
- Status
- Edited on

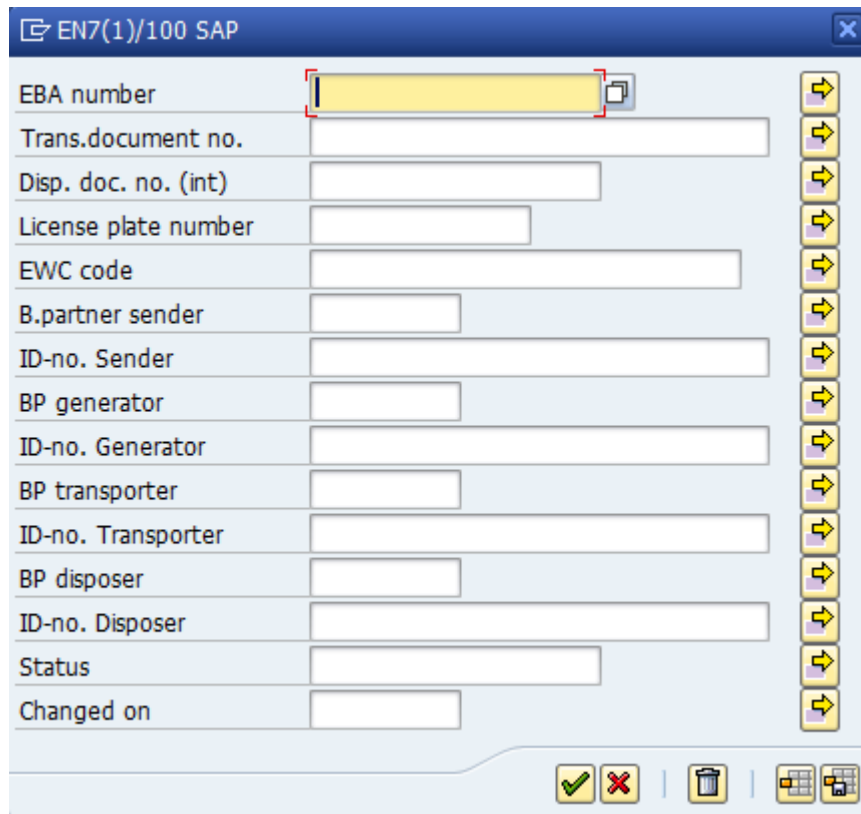


Figure 65: Filter dialog at EBA overview transaction

4.4.9.2 Structure

The transaction consists of a list view with all received and sent EBA´s, the related transport document, the EBA status, the related EBA waste disposal document incl. status. Additionally it will be displayed if it´s an internal or external EBA. External EBA was received by SAP. If you choose an EBA, all detailed information will be shown in the lower transaction area.

EBA 451216

Send and receive

EBA no.	Ext.Doc ID	Transport document	Changed on	Modified	Plate no.	S.	Status EBA document	Doc. no. (int.)	Doc. No.	Symbo...	Status disposal doc.
451216	E6B2EA0937EF0EF19148001B212F3586		25.11.2016	09:35:33	HAL-SK13		Cancellation sent	5741	4375		CANCELLED
450166	E6A4DFBF97083F19148001B212F3586		07.11.2016	16:27:40	HAL-SK91		Weighing received	5727	4364		FINISHED
450152	E6A4EBF3E3953FF19148001B212F3586			14:14:41	HAL-SK91		Cancellation sent	5726	4363		CANCELLED
450146	E6A4EB3DCCC6A3F19148001B212F3586			14:10:22	HAL-SK91		Cancellation sent	5725	4362		CANCELLED
450138	E6A4E8B8A058F2F19148001B212F3586			13:52:37	HAL-SK91		Cancellation sent	5724	4361		CANCELLED
449881	E6A28DB2872504F19148001B212F3586		04.11.2016	13:57:36	HAL-SK91		Cancellation sent	5723	4360		CANCELLED
449789	E6A278A11F2393F19148001B212F3586			11:27:16	HAL-SK01		Cancellation sent	5684	4321		CANCELLED
449558	E6A1DCC7ECF61FF19148001B212F3586		03.11.2016	16:48:58	HAL-SK80		Cancellation sent	5682	4319		CANCELLED
449522	X E6A1CC4CECA88BF19148001B212F3586			14:53:16	HAL-SK80		Weighing Conf. sent	5674	4311		FINISHED
449514	X E6A1CA6C35DA98F19148001B212F3586			14:38:11	HAL-SK80		Cancel. received	5673	4310		CANCELLED
449068	X E6A103BD10A81EF19148001B212F3586			13:16:29	HAL-SK79		Cancel. received	5658	4297		COMPLETE
449063	X E6A103A81428C2F19148001B212F3586		02.11.2016	14:52:59			Created				

EBA History Last EBA import/export

EBA Message

Trans.document no. E6B2EA0937EF0EF19148001B212F3586

ID-no. Sender

Created on 25.11.2016

Changed on 25.11.2016

Assigned disposal document in the system

Disp. doc. no. (int) 5741

Disposal Doc. No. 4375

Figure 66: Layout of the EBA overview transaction

EBA History Last EBA import/export

EBA Message

Trans.document no. E6B2EA0937EF0EF19148001B212F3586

ID-no. Sender

Created on 25.11.2016

Changed on 25.11.2016

Assigned disposal document in the system

Disp. doc. no. (int) 5741

Disposal Doc. No. 4375

Figure 67: EBA details in the EBA overview transaction

EBA History Last EBA import/export

Status Cancellation sent

Icon	Status	Date	Time	Created by	Description
	Created	25.11.2016	09:34:53	SKALFA	EBA entry has been created
	TransDoc w...	25.11.2016	09:34:53	SKALFA	Transport Document was sent
	Cancellation...	25.11.2016	09:35:33	SKALFA	Cancellation of Transport Document ...

Figure 68: Status history in the EBA overview transaction

Date/Time/User	Nu...	External ID	Object txt	Sub-object text	Tran	Program	Mode
06.05.2014 18:26:59 SKALFA	1	000000000000...	/WATP/DEFAULT	/WATP/IMPEXP	SE38		Dialog
Problem class Important		1					

Figure 69: Import/ export information in the EBA overview transaction

4.5 Belgium

4.5.1 EWC-Code at the business partner

With the application *Material Flow Management* it is possible to maintain a EWC- catalogue at the business partner. The EWC-catalogue serves as a positive list for the carrier and will be checked while creating a consignment note.

Information, how to set up a EWC-list at the business partner, can be taken out of the document *Implementation Guide-Maintaining EWC codes for business partner*.

4.5.2 Waste Approval Template Belgium

The template for the waste stream contains the following data:

General

- Internal waste approval/waste stream number - customer owner number.
- Waste approval number/waste stream - Display, entry of selection of waste approval/waste stream number.
- Validity
- Waste approval/waste stream type: Direct delivery and Collective route
- Waste disposal procedure: Disposal or Recycling
- Waste generator number and identification number (awarded by the latter authority)
- Name and address of waste generator.
- Disposal company number and identification number.
- Name and address of disposal company.
- Collector number, identification type and identification number (awarded by the latter authority).
- Name and address of the collector.
- Container Location on will executed the order.
- Waste disposal facility to which the waste is to be transported.
- Transporter number and identification number. (awarded by the latter authority).
- Name and address of the transporter.
- Waste: waste (internal name) and EWC-Code.

UN-Catalog:

- UN-catalognumber and description
- ADR-class, description, classificationcode and description

- ADR packaging group and description
- Hazard label, Hazard label info and Kemmler number
- Special notes

Protocol

- Display orders of material flow

History

- Symbol for Status, Date, Time, User, Description

General		UN catalog		Protocol		History		Material Inspection	
Waste approval					VerificationCategory				
Int.w.appr. no.	362				Waste approval type	NW_BE Material Flow - Belgium			
W.Approval	00000000000000000000362				Direct delivery	<input type="checkbox"/>			
Valid from	01.06.2013				Collective route	<input type="checkbox"/>			
Valid to	01.01.2014				W. disp. procedure	BE Disposal			
Waste generator					Container location				
BP generator	20242	ID-no.Gen.	XXX		Container Loc.	20031627			
Name	Erzeuger BE neu				Name				
Street	Beersestr.	House No.	5		Street	Steenbakkersdam	House No.	19	
Postal Code	9999	City	Beerse		Postal Code	2340	City	Beerse	
Collector					Waste transporter				
Collector	20248	Collector	COLBE_1		BP transporter	20244	ID-no.Tran	ABC	
ID type coll.					ID-type carrier				
Name	Collector BE neu				Name	Beförderer BE neu			
Street	Dijkstraat	House No.	5		Street	Beekakkersstraat	House No.	4	
Postal Code	2340	City	Beerse		Postal Code	2340	City	Beerse	
Disposal company					Waste Disposal Facility				
BP disposer	20243	ID-no.Disp	X		WD Facility	BE DEPONIE			
Name	Entsorger BE neu				Description	BE Deponie			
Street	Abdijstraat	House No.	5		Street	Graseweg	House No.	3	
Postal Code	2340	City	Beerse		Postal Code	06108	City	Halle	
Waste									
EWC code	010101		Abfälle aus dem Abbau von metallhaltigen Bodenschätzen						
Material	ABF_BAUSCHUTT		construction waste						
Miscellaneous									
File number									

Figure 70: Waste Stream Template Belgium

4.5.3 Consignment Note Template Belgium

The disposal document template Belgium is based on the so-called form ‚Identificatie van Afvalstoffen‘ for hazardous and non-hazardous waste.

The template for this contains the following data:

- Collector with identification number and identification type (producer or authorized carrier)
- Type of note (waste collection, plant input or plant output)
- Reference consignment note
- Export data from the authorities report
- Waste generation site (producer with location) with register number
- Carrier with register number
- Waste disposal facility with register number, disposer and code for foreign plant
- Date for surrender, transfer and assumption
- Waste data (waste material, EWC-code, waste disposal procedure, treatment methods, transportation, packaging sum, estimated quantity and posted quantity, waste collection code, type of waste pretreatment, secondary raw material characters, certificate number)
- Transport notices
- Signature data

General		UN Catalog		Quant. Posting		Process		Log	
Collector					Waste manifest				
Collector	8000000074	Collector	ZCOLBE0123...	Doc. no. (int.)	4627				
ID type coll.	ZCOLBE			Doc. No.	3357				
Name	BE NW_BE ZCOLBE 01			Int.w.appr. no.	532	532			
Street	Rue de Fripiers	49		Waste approval type	NW_BE Material Flow - Belgium				
City	1000	BRUSSELS		<input type="checkbox"/> Date record exported					
Country	BE	Belgium		Export date		Exp. time	00:00:00		
Region				Exported by		Exp. type	<input type="checkbox"/>		
Waste generator					Container location				
BP generator	8000000082	ID-no.Gen.	ZERZBE0123...	Container Loc.	STP BE NW_BE ZERZBE 01				
Name				Name					
Street	Rue de Fripiers	13		Street	Rue de Fripiers	13			
City	1000	BRUSSELS		City	1000	BRUSSELS			
Country	BE	Belgium		Country	BE	Belgium			
Region				Region					
				Delivery date	04.04.2014				
Waste transporter					ID-type carrier				
BP transporter	8000000063	ID-no.Tran	BETB100123...	ID-type carrier	BETB10				
Name	BE NW_BE BETB10 01			License plate					
Street	Rue de Fripiers	26		Acceptance Date	04.04.2014				
City	1000	BRUSSELS							
Country	BE	Belgium							
Region	<input checked="" type="checkbox"/>								
Disposal company					Waste Disposal Facility				
BP disposer	8000000078	ID-no.Disp	ZENTBE0234...	WD Facility	BE NW_BE ZENTB... BE NW_BE ZENTBE 01				
Name				Street	Rue de Fripiers	38			
Street	Rue de Fripiers	38		City	1000	BRUSSELS			
City	1000	BRUSSELS		Country	BE	Belgium			
Country	BE	Belgium		Region	<input checked="" type="checkbox"/>				
Region	<input checked="" type="checkbox"/>			Acceptance date	04.04.2014	<input type="checkbox"/> Extern.Facility			
Waste data									
Material	ABF_RESTIMUELL	municipal waste							
EWC code	200301	Gemischte Siedlungsabfälle							
W. disp. procedure	<input checked="" type="checkbox"/>	Treatment procedures							
Transport		<input type="checkbox"/> Waste collection							
Number of packag	0	Estim. quantity	0	Quantity	1	TO			
Waste Characteristics									
Waste pretreatment									
<input type="checkbox"/> Use as sec. raw mat.									
Certificate number									
Comments on transport									
Signature data									
Type	Company	Waste generator	Waste transporter	Disposal company					
Date									
Name									
Signature									

Figure 71: Consignment Note Template Belgium

4.6 Australia

4.6.1 Waste Approval/Waste Stream Template Australia

The waste approval/waste stream template for Australia contains the following data in the two tabs *General* and *Waste*:

- NEPM-Code=EWC-Code
- Waste material
- Waste classification (no, dangerous, industrially, group A, Group B, group C or inert)
- Valid from- to
- Waste disposal procedure
- Waste disposal facility (generator with location) with generator identification number
- Waste transporter with identification number and transport type (street, rails or street and rails)
- Waste disposal facility with disposer and disposer identification number
- Description
- Target quantity in tons per year
- Nature
- Description of process waste generation
- Proposed waste treatment in the target waste disposal facility
- Information about dangerous goods (UN number, packing number, additional risk and special instructions)

Figure 72: Waste Approval/Waste Stream Template Australia-Tab *General*

Figure 73: Waste Approval/Waste Stream Template Australia- Tab Waste

Furthermore, the following registers are available:

Tab Information:

- Shows the current status of the waste approval/waste stream

Tab History:

- Displays status changes of waste approvals/waste streams with time stamp and user

4.6.2 Disposal Document Template Australian

The template for the disposal documents in Australia contains the following data:

- EWC-Code
- Waste classification (hazardous, industrial, group A, group B, group C or inert)
- Waste material
- Waste approval/waste stream
- Waste generation site (generator with location) with generator identification number
- Contact person generator
- Waste transporter with identification number (street, rails or street and rails)
- Contact person transporter
- Waste disposal facility with identification number and disposer
- Nature of waste
- Description of waste generation
- Proposal of waste treatment
- Information about dangerous goods (ADR, UN numbers and special instructions)
- Collector assigned entrance note

Figure 74: Consignment Note Template Australia 01

Figure 75: Consignment Note Template Australia 02

The screenshot displays the SAP S/4HANA interface for a Consignment Note Template (Australia 03). The top navigation bar includes tabs for 'General', 'Waste', 'Collect', 'Quant. posting', 'Information', 'History', and 'Protokoll'. The main area is divided into sections: 'Assignment' with input fields for 'Coll. note IN' and 'Disp. Doc. No.', and 'assigned documents' which features a toolbar with icons for search, print, refresh, and other functions. Below the toolbar is a table header with columns: 'No. intern', 'Disp. Doc. No.', 'Batch', 'EWC code', 'Waste c...', 'Generator', 'Transporter', and 'Disp. Company'.

Figure 76: Consignment Note Template Australia 03

4.7 Norway

4.7.1 Consignment Note Template Norway

The template for the consignment note in Norway contains the following data:

- Waste generation site (generator with location) with generator identification number
- Debtor
- Contact person
- Waste data (EWC-Code, waste material number, quantity, packaging, physical and chemical characteristics, detailed description)
- Transport classification (ADR- and UN-data)
- Transporter with identification number
- Comment of the transporter (business partner ID, EWC-code, waste material number, quantity, packaging)
- Other transporters with identification numbers
- Collectors with batch and associated input and output notes

General		Collect In/Out	Quantity posting	Process	Protokoll	
Declaration of hazardous waste						
Doc. No. (int.) <input type="text"/>			Disp. Doc. No. <input type="text"/>			
A. Waste generator			B. Debtor			
Waste generator <input type="text"/>			Customer <input type="text"/>			
Container Loc. <input type="text"/>						
BusinessPartner <input type="text"/>						
Name <input type="text"/>			Name <input type="text"/>			
Name 2 <input type="text"/>			Name 2 <input type="text"/>			
Street <input type="text"/>			Street <input type="text"/>			
City <input type="text"/>			City <input type="text"/>			
Contact person						
Contact Person	<input type="text"/>	Name	<input type="text"/>	Telephone	<input type="text"/>	
Waste						
EWC code	<input type="text"/>	Waste code	<input type="text"/>	Quantity	<input type="text"/>	
Consist.	<input type="text"/>			Unit	<input type="text"/>	
<input type="checkbox"/> f.househ.	<input type="checkbox"/> Halogen	<input type="checkbox"/> heavy m.	<input type="checkbox"/> frozen	Quant. con	<input type="text"/>	
				<input type="checkbox"/> Bulkwaste		
				packaging	<input type="text"/>	
				ign. point	<input type="text"/>	
				Wastecolor	<input type="text"/>	
Detailed description			Transport classification			
<input type="text"/>			Trans.c.	<input type="text"/>	UN No.	<input type="text"/>
			ADR class	<input type="text"/>	Class.code	<input type="text"/>
			IMO class	<input type="text"/>	Pack. grp.	<input type="text"/>
			EMS No.	<input type="text"/>	MFAG No.	<input type="text"/>
			Del. date	<input type="text"/>	<input type="checkbox"/> Marine pollutant	
					Signature	<input type="text"/>
1. Transporter						
Transporter	<input type="text"/>	Partner	<input type="text"/>	KOM. No.	<input type="text"/>	
Name	<input type="text"/>	Accep.date	<input type="text"/>	Signature	<input type="text"/>	
Notes of transporter						
EWC code	<input type="text"/>	Waste code	<input type="text"/>	Quantity	<input type="text"/>	
Description	<input type="text"/>			Unit	<input type="text"/>	
Transporter	<input type="text"/>	Partner	<input type="text"/>	Quant. con	<input type="text"/>	
Name	<input type="text"/>			<input type="checkbox"/> Bulkwaste		
				packaging	<input type="text"/>	
				Accep.date	<input type="text"/>	
				Signature	<input type="text"/>	
Additional Transporter				Waste Disposal Facility		
Carrier	<input type="text"/>	Partner	<input type="text"/>	Disp.Comp	<input type="text"/>	
Name	<input type="text"/>			Partner	<input type="text"/>	
Accep.date	<input type="text"/>			WD Facil.	<input type="text"/>	
				Acc. date	<input type="text"/>	
				Descript.	<input type="text"/>	
Ref. No.	<input type="text"/>	Accep.date	<input type="text"/>	Name	<input type="text"/>	
				Signature	<input type="text"/>	

Figure 77: Disposal Document Template Norway 01

General Collect In/Out Quantity posting Process **Protokoll**

Additional Information

Batch


Collective note In/Out

Allocate input/output

Coll. note IN Disp. Doc. No.


Coll.note out Disp. Doc. No.

Allocated input



No. intern	Disp. Doc. No.	Batch	EWC code	Waste c...	Generator	Transporter	Disp.Company

Allocated output



No. intern	Disp. Doc. No.	Batch	EWC code	Waste c...	Generator	Transporter	Disp.Company

Figure 78: Consignment Note Template Norway 02

5 Cross-national functions

5.1 International Notification

The cross-border transportation of hazardous waste within the European Union requires specific administrative documents, which can be managed with the application *Material Flow Management*:

- Notification document
- Transport document for notification

5.1.1 Notification Template (Transaction /N/WATP/ARB_NTY)

The notification template is a required document for the written application of shipments of waste to another country. The exporter of the waste has to report the planned waste shipment. The waste shipment must be authorized by the authorities of the exporting country and the importing country.

Notification documents are managed in the transaction */N/WATP/ARB_NTY*.

A notification document contains the following data:

- Exporter- notifier
- Importer- receiver
- Shipment data, disposal and treatment methods and quantity data
- Scheduled transportation companies
- Waste generator
- Waste disposer
- Waste data (identification and physical characteristics)
- Affected States
- Customs
- Statements, confirmation and acceptance


General	Miscellaneous	History
1. Exporter - Notifier ID <input type="text"/> Partner <input type="text"/> Name <input type="text"/> Street <input type="text"/> City <input type="text"/> Name <input type="text"/> Telephone <input type="text"/> Fax <input type="text"/> E-Mail Address <input type="text"/>		
2. Importer - consignee ID <input type="text"/> Partner <input type="text"/> Name <input type="text"/> Street <input type="text"/> City <input type="text"/> Name <input type="text"/> Telephone <input type="text"/> Fax <input type="text"/> E-Mail Address <input type="text"/>		
3. Notification Int. notification# <input type="text"/> Notification # <input type="text"/> Off-site disposal <input type="text"/> W. disp. procedure <input type="text"/> Plant with preliminary approval <input type="checkbox"/>		
4. Total intended number of shipments Scheduled total off-site disposals <input type="text" value="0"/>		
5. Total intended quantity Scheduled quantity <input type="text" value="0,000"/> <input type="text"/>		
6. Intended period of time for shipment(s) First start <input type="text"/> Last <input type="text"/>		
7. Packaging type(s) Packaging type <input type="text"/> Special treatment regulations <input type="checkbox"/>		
8. Intended carrier(s) ID <input type="text"/> Partner <input type="text"/> Name <input type="text"/> Street <input type="text"/> City <input type="text"/> Name <input type="text"/> Telephone <input type="text"/> Fax <input type="text"/> E-mail address <input type="text"/> Transport <input type="text"/>		
9. Waste generator(s) - producer(s) ID <input type="text"/> Partner <input type="text"/> Name <input type="text"/> Street <input type="text"/> City <input type="text"/> Name <input type="text"/>		
10. Disposal facility or recovery facility W. disp. procedure <input type="text"/> ID <input type="text"/> Partner <input type="text"/> WD Facility <input type="text"/> Name <input type="text"/> Street <input type="text"/> City <input type="text"/> Name <input type="text"/> Telephone <input type="text"/> Fax <input type="text"/> E-mail address <input type="text"/>		
11. Disposal/recovery operation(s) Treatment procedures <input type="text"/> Applied technol. <input type="text"/> Export reason <input type="text"/>		
12. Designation and composition of the waste  <div style="border: 1px solid black; height: 40px; width: 100%;"></div> Li 1, Co 1 Ln 1 - Ln 1 of 1 lines		
13. Physical characteristics Basler Übereinkommen <input type="text"/> OECD-Code <input type="text"/> EWC code <input type="text"/> Nation. Code Ausfuhr <input type="text"/> Nation. Code Einfuhr <input type="text"/> Sonstige (Code) <input type="text"/> Y-Code <input type="text"/> H-Code <input type="text"/> ADR class <input type="text"/> UN-Number <input type="text"/> Name <input type="text"/>		

Figure 79: Data at the Notification Document – Tab *General*

The screenshot shows the 'Miscellaneous' tab of a SAP Notification Document form. It is divided into several sections:

- Section 15:** Countries/states concerned, (b) code No. of competent authorities where, (c) specific points of exit or e. It includes fields for State of export-dispatch, State(s) of transit (entry and exit), and State of import-destin, with sub-fields (a), (b), and (c) for each.
- Section 16:** Customs office of entry and/or exit and/or export (European Community). It has fields for Entry, Exit, and (EU) Export.
- Section 17:** Exporter's - notifier's / generator's - producer's declaration. It includes fields for Exporter and Generator, each with Signature and Date.
- Section 18:** Number of annexes attached. It has a single input field with the value '0'.
- Section 19:** Acknowledgement from the relevant competent authority. It includes fields for Country, Notification received on, Acknowledgment sent on, Name of competent authority, and Stamp and/or signature.
- Section 20:** Written consent to the movement provided by the. It includes fields for Consent given on, Consent valid from, to, Special conditions (checkbox), Name of competent authority, and Stamp and/or signature.
- Section 21:** Specific conditions on consenting to the movement or reasons for objecting. It features a toolbar with icons for cut, copy, paste, undo, redo, print, and save, followed by a large empty text area.

At the bottom of the form, there is a status bar showing 'Ln 1, Co 1' and 'Ln 1 - Ln 1 of 1 lines'.

Figure 80: Data at the Notification Document – Tab *Miscellaneous*

5.1.2 Transport Document for Notification (Transaction /N/WATP/ARB_NOTES)

The transport documents are managed similarly to the other disposal documents in the transaction for the disposal documents/transport documents.

The form for the transport document notification contains the following data:

- Exporter – notifier
- Importer – receiver
- Quantity, date transfer, packaging
- Transport company
- Waste generator
- Waste disposer
- Disposal or recycling methods
- Waste data (identification and physical characteristics)
- Entrance and output confirmations
- Stamp of customs

General		Extras		Quant. Posting		Process	
1. Corresponding to notification No:				Movement document			
Notific.# <input type="text"/>				Disp. Doc. No. <input type="text"/>			
				Doc. No. (int.) <input type="text"/>			
2. Serial/total number of shipments:				Sales Org. <input type="text"/> / <input type="text"/> / <input type="text"/>			
cons. number <input type="text"/> Total off-site disp. <input type="text"/> 0 <input type="text"/> 0 <input type="text"/>							
3. Exporter - notifier				4. Importer - consignee			
ID <input type="text"/> Partner <input type="text"/>				ID <input type="text"/> Partner <input type="text"/>			
Name <input type="text"/>				Name <input type="text"/>			
Street <input type="text"/>				Street <input type="text"/>			
City <input type="text"/>				City <input type="text"/>			
Name <input type="text"/>				Name <input type="text"/>			
Telephone <input type="text"/> Fax <input type="text"/>				Telephone <input type="text"/> Fax <input type="text"/>			
E-Mail Address <input type="text"/>				E-Mail Address <input type="text"/>			
Actual quantity:		6. Actual date of shipment		7. Packaging			
Quantity <input type="text"/> 0,000 <input type="text"/>		Delivery date <input type="text"/>		packaging <input type="text"/>			
Packages <input type="text"/> 0 <input type="text"/>				Spec. treatment <input type="checkbox"/>			
8.a) 1st carrier		8.b) 2nd carrier		8.c) Last carrier			
ID <input type="text"/>		ID <input type="text"/>		ID <input type="text"/>			
Partner <input type="text"/>		Partner <input type="text"/>		Partner <input type="text"/>			
Name <input type="text"/>		Name <input type="text"/>		Name <input type="text"/>			
Name 2 <input type="text"/>		Name 2 <input type="text"/>		Name 2 <input type="text"/>			
Street <input type="text"/>		Street <input type="text"/>		Street <input type="text"/>			
City <input type="text"/>		City <input type="text"/>		City <input type="text"/>			
Name <input type="text"/>		Name <input type="text"/>		Name <input type="text"/>			
Phone <input type="text"/> Fax <input type="text"/>		Phone <input type="text"/> Fax <input type="text"/>		Phone <input type="text"/> Fax <input type="text"/>			
E-mail <input type="text"/>		E-mail <input type="text"/>		E-mail <input type="text"/>			
Trans. Typ <input type="text"/>		Trans. Typ <input type="text"/>		Trans. Typ <input type="text"/>			
Acceptance Date <input type="text"/>		Acceptance Date <input type="text"/>		Acceptance Date <input type="text"/>			
Signature <input type="text"/>		Signature <input type="text"/>		Signature <input type="text"/>			
9. Waste generator(s)/producer(s)				12. Designation and composition of the waste			
ID <input type="text"/> Partner <input type="text"/>							
Name <input type="text"/>				<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p>Ln 1, Co 1 Ln 1 - Ln 1 of 1 lines</p>			
Street <input type="text"/>							
City <input type="text"/>							
Name <input type="text"/>							
Telephone <input type="text"/> Fax <input type="text"/>							
E-Mail Address <input type="text"/>							
Site and operat <input type="text"/>							
10. Disposal facility or recovery facility				13. Physical characteristics			
W. disp. procedure <input type="text"/>				Physical property <input type="text"/>			
WD Facility <input type="text"/>				14. Waste identification			
ID <input type="text"/> Partner <input type="text"/>				Basler Übereinkommen <input type="text"/>			
Name <input type="text"/>				OECD-Code <input type="text"/>			
Street <input type="text"/>				EWC code <input type="text"/>			
City <input type="text"/>				Nation. Code Ausfuhr <input type="text"/>			
Name <input type="text"/>				Nation. Code Einfuhr <input type="text"/>			
Telephone <input type="text"/> Fax <input type="text"/>				Sonstige (Code) <input type="text"/>			
E-Mail Address <input type="text"/>				Y-Code <input type="text"/>			
Actual site D/R <input type="text"/>				H-Code <input type="text"/>			
11. Disposal/recovery operations(s)				ADR class <input type="text"/>			
Treatment proc. <input type="text"/>				UN-Number <input type="text"/>			
				Name <input type="text"/>			
				Zollnummer <input type="text"/>			

Figure 81: Data at the Transport Document in Notification-Tab *General*

General	Extras	Quant. Posting	Process
15. Exporter's -notifiers's/generator's/producers's declaration			
Name 1	<input type="text"/>	Signature	<input type="text"/>
Date	<input type="text"/>		
16. For use by any person involved in the transboundary movement in case additional information is required:			
Description	<input type="text"/>		
17. Shipment received by importer - consignee (if not facility):			
Name 1	<input type="text"/>	Signature	<input type="text"/>
Date	<input type="text"/>		
18. Shipment received at disposal facility:		19. I certify that the disposal/recovery of the waste	
Disposal oper.	<input type="text"/>	described above has been completed.	
Accept. date	<input type="text"/> <input type="checkbox"/> Receipt refused	Date	<input type="text"/>
Quantity	<input type="text"/> 0,000 <input type="text"/>	Name 1	<input type="text"/>
Approx. date	<input type="text"/>	Signature	<input type="text"/>
Recovery oper.	<input type="text"/>		
Date	<input type="text"/>		
Name 1	<input type="text"/>		
Signature	<input type="text"/>		
20. COUNTRY OF EXPORT-DISPATCH OR CUSTOMS OFFICE OF EXIT		21. COUNTRY OF IMPORT-DESTIN. OR CUSTOMS OFFICE OF ENTRY	
Date	<input type="text"/>	Date	<input type="text"/>
Signature	<input type="text"/>	Signature	<input type="text"/>
22. STAMPS OF CUSTOMS OFFICES OF TRANSIT COUNTRIES			
Country	<input type="text"/>	Country	<input type="text"/>
Entry	<input type="text"/>	Entry	<input type="text"/>
Date	<input type="text"/>	Date	<input type="text"/>
Exit	<input type="text"/>	Exit	<input type="text"/>
Date	<input type="text"/>	Date	<input type="text"/>
Country	<input type="text"/>	Country	<input type="text"/>
Entry	<input type="text"/>	Entry	<input type="text"/>
Date	<input type="text"/>	Date	<input type="text"/>
Exit	<input type="text"/>	Exit	<input type="text"/>
Date	<input type="text"/>	Date	<input type="text"/>

Figure 82: Data at the Transport Document in Notification- Tab Extras

6 Material Inspection

The material inspection concentrates on material streams which arrives or is leaving a waste disposal facility. These material streams can be controlled by using the material inspection.

For material inspections there are various reasons, like default of authorities (notifications), customer arrangements or default by user. Thereby it is defined what and when something has to be controlled.

6.1 Controlling setting in the material master and at waste approval/waste stream level

The material is the central element of a material stream in a waste disposal facility or from a waste disposal facility. Therefore it is defined whether a material should be controlled in a waste disposal facility and in which intervals these controls generally should occur in this waste disposal facilities. This setting can be conducted in the master data of the material in the transaction *MM01 - 03*.

By the view *Material Inspection* the waste disposal facilities are assigned to the material. Then this allocation serves for the control and strategy allocation.

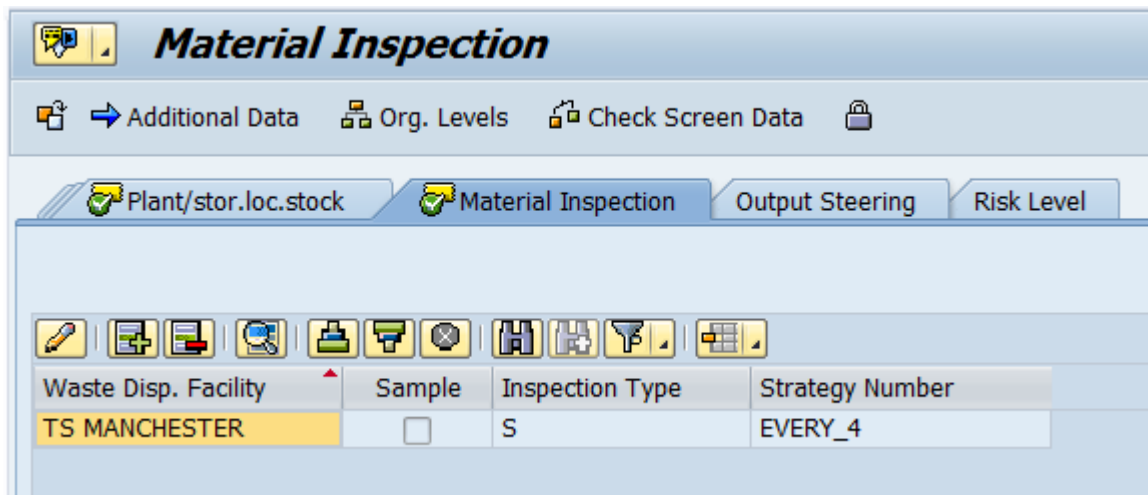


Figure 83: Definition of the material inspection control strategy in the material master data

In addition the Material Inspection will be performed per customer (producer of the waste material), material and destination (waste disposal facility). This means a waste approval/waste stream is always the basis for Material Inspection. If no waste approval/waste stream is created for a certain delivery no Material Inspection will be triggered. By checking the material inspection control strategy the waste approval/waste stream can use the material set up or it can be overruled at waste approval/waste stream level with another set up here.

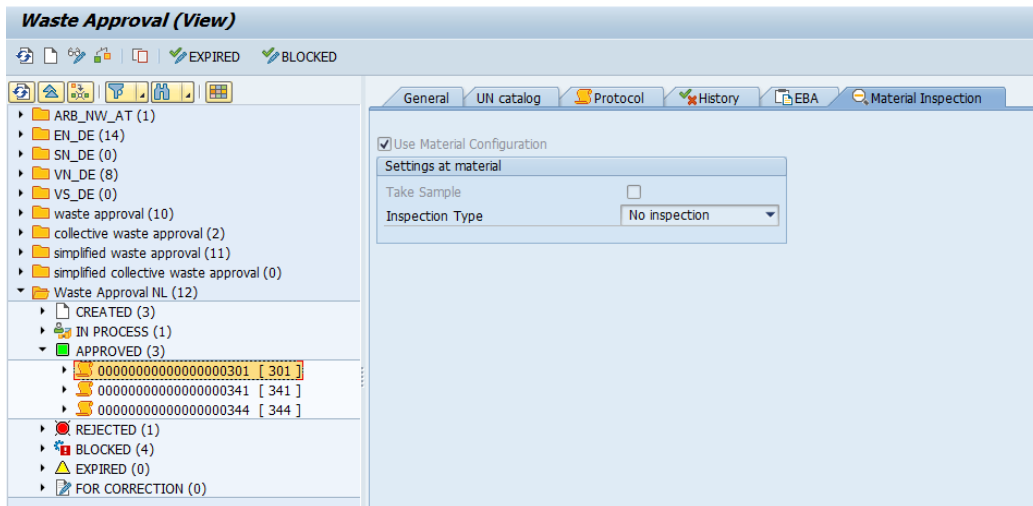


Figure 84: Figure 1 Definition of the material inspection control strategy in the Waste Approval/Waste Stream

The interval of controls is defined over the allocated strategy. By the setting of the characteristic *sample* every generated inspection record receives these characteristics too and gives so the responsible person the information to take a sample when the waste disposal facility receives such a customer delivery.

6.2 Definition of Controlling Strategies

In the transaction `/WATP/ARB_CONFIG` the following global settings for the material inspection can be made:

- Automatic Completion (the period in which the inspection records are automatically completed)
- Recalculation period (the recalculation of the detailed inspection trigger based on new deliveries raised)
- Document type for outbound deliveries (Defines which waste disposal facilities exits in the material inspection are considered)
- Clarification case categories (used in case of a non-conformity process, where the quality of the material does not meet the expectations agreed in the contract)

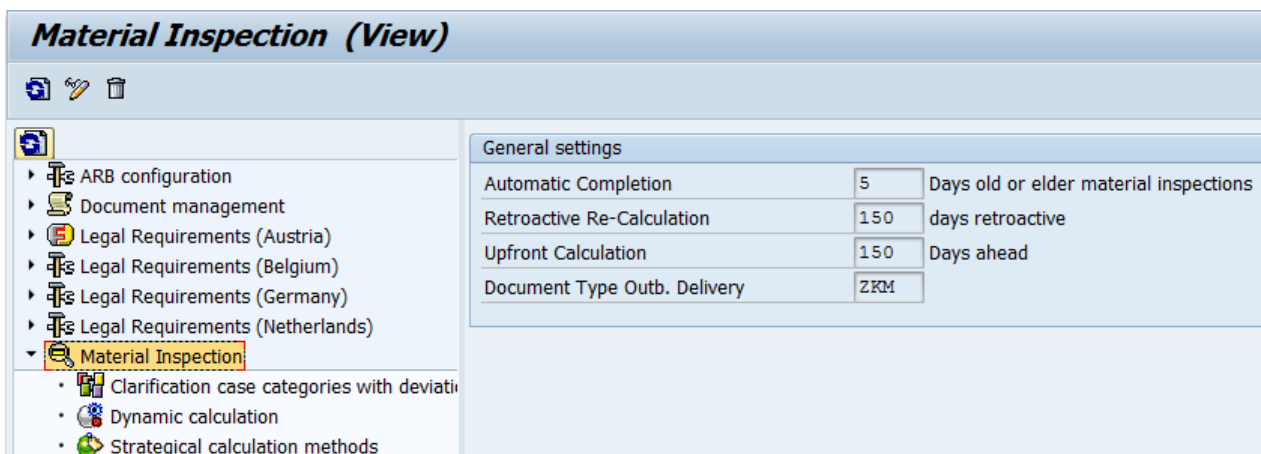


Figure 85: Basic settings to the material inspection

Two types of control strategies are available:

1. Strategic control
2. Dynamic control

With both strategies material inspection records with a certain status are created either at the time of dispatching a waste disposal order item or while generating a weighing ticket (case: external/direct delivery).

6.3 Strategic Control Strategy

Strategic control utilizes a defined time period or amount.

The strategic control strategy works with so-called strategy numbers which can be set and defined in the configuration. Every strategy has an own number, the so-called strategy number with which it is identified. This strategy number can be named freely and has a maximum length of 20 signs. Beside the number every strategy has a description. There is the possibility to maintain the description text into different languages with a maximum length of 254 signs.

For each strategy one of the following 3 strategy types has to be selected:

All N deliveries

For all N deliveries of the material inspection records are generated on/from a WDF. The number N is to be fixed in the strategy number.

The first N deliveries

It the first N deliveries of the material inspection records are generated on/from a WDF. The number N is to be fixed in the strategy number.

All N tons

For all N tons of deliveries of the material inspection records are generated on/from a WDF. The number N is to be fixed in the strategy number.

Strategy Number	Strategy Type	Quanti...	Quanti...	Description
EN	E	5	0,000	
EVERY		1	0,000	Each Delivery
EVERY_2		2	50,000	check every 2nd delivery
EVERY_3		3	0,000	
EVERY_4		4	0,000	
EVERY_5		5	0,000	
EVERY_6		36	0,000	check every 6th
EVERY_7		7	0,000	
EVERY_8		12	0,000	
FIRST_2	F	2	0,000	
FIRST_5		5	0,000	
EVERY_200TO	T	0	200,0...	
EVERY_50TO		0	50,000	
TONS_7_5		0	7,500	

Strategy			
New text 6	EVERY_6	Description	check every 6th
Strat Type	E Every N deliveries	Quant.Deliv.	36

Figure 86: Definition of strategic controls

6.4 Dynamic control

Dynamic control is a control where the inspection frequencies adapt automatically depending on the existing controls and their results. The basis of the inspection intervals is the classification of risk of a certain material which defines the control intensity. These classifications of risk in combination with a waste disposal facility are defined in the transaction /WATP/ARB_CONFIG.

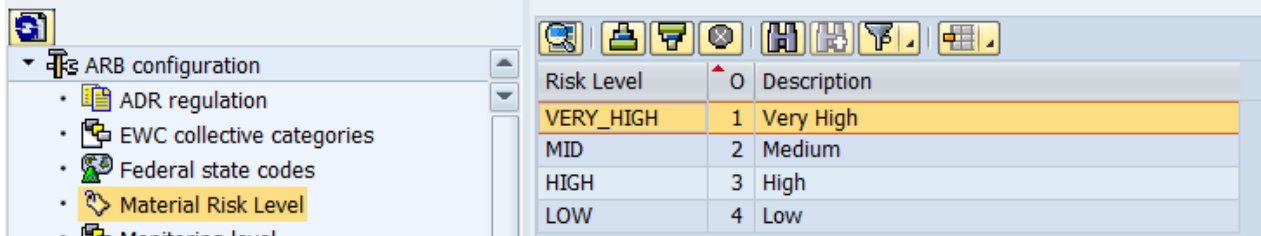


Figure 87: Definition of risk levels

The classifications of risks are known as the risk level. They are defined separately and used in dynamic controlling strategies.

Every risk level has a unique ID and a corresponding description with a maximum length of 20 signs. There is the possibility to maintain the description text into different languages with a maximum length of 254 signs.

Per waste disposal facility and classification of risk it is fixed in the configuration when a control takes place. Furthermore it is fixed when a change of the classification of risk occurs.

Example:

For waste disposal plant 21 3 classifications of risk are defined (HIGH, MID, LOW). For classification of risk HIGH is defined that every delivery (N = 1) is controlled. The change of risk HIGH to MID occurs after 3 inspections in which 0 divergences were noticed. For classification of risk MID is defined that every 3rd delivery (N = 3) is controlled. The change of risk MID to HIGH occurs after 3 inspections in which 1 divergence was noticed. The change of risk MID to LOW occurs after 5 inspections in which no (0) divergences could be noticed. For classification of risk LOW is defined that every 10th delivery (N = 10) is controlled. The change of risk LOW to MID occurs after 3 inspections with 1 divergence.

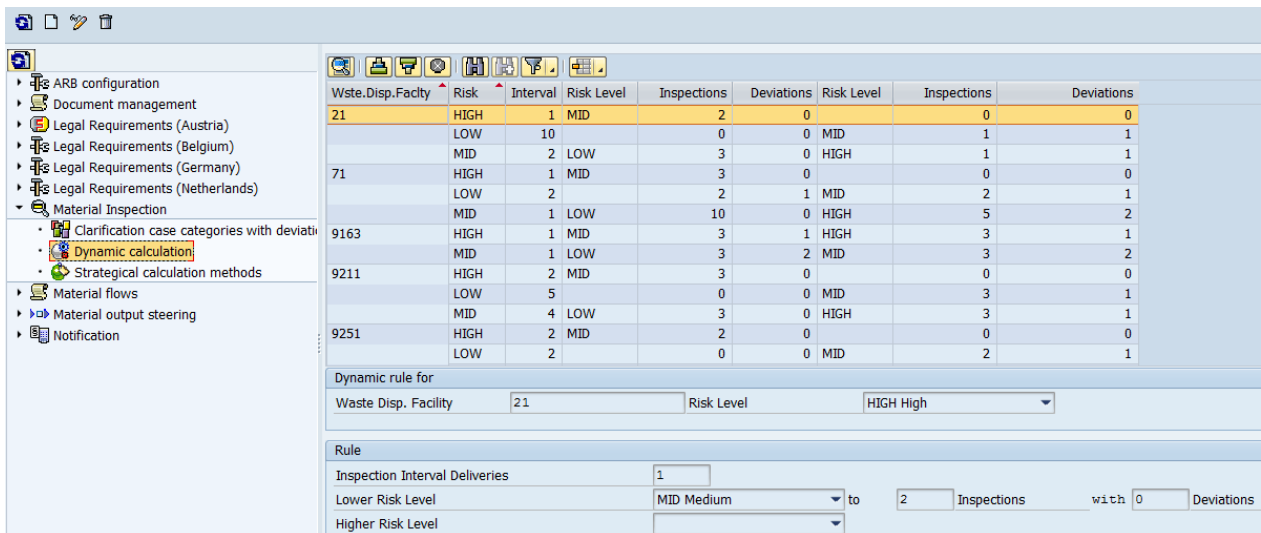


Figure 88: Definition of risk levels for a specific WDF

Condition for the application of the dynamic control is the allocation of an initial risk in the material master record. On the tab RISK LEVEL in the transaction MM01-03 the initial classification of risk of a material can be assigned.

Is at the level of the waste approval/waste stream no change made the setting of the material master is taken into account when an inspection record will be created. The creation of inspection records will be executed when dispatching a waste disposal order item. The system proofs at the creation of the first inspection record with this material and waste approval/waste stream in the settings which were deposited in the material master record. On the basis of this initial classification of risk a check interval is calculated.

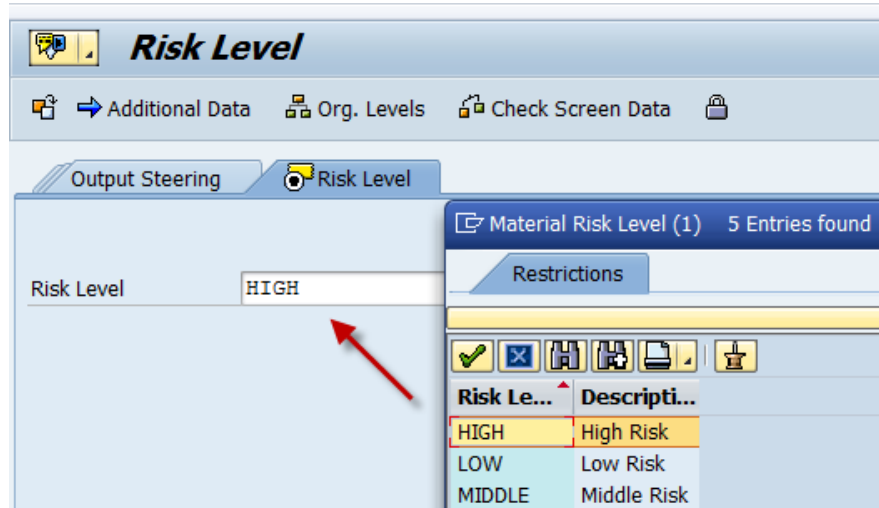


Figure 89: Risk level at the material master data

6.5 Working with Inspection Records of the Material Inspection

Result of the settings of the material inspection is the creation of inspection records. These inspection records can be released either by a disposal order item or a weighing record, for example, by a direct delivery. Every inspection record displays an accomplished control of a material in a plant. A transaction is available for the management and the editing of the material inspection records - /WATP/ARB_MAINS.

Material Inspection 441673

Inspect.	WD Facility	TT	Date	I...	Status	Material	Case	Weighing Transaction	Int.w....	Risk	WD Order
441673	164	E	11.03.2015		Validate	ABF_BAUSCHUTT		2036	269		
440456	164	E	10.03.2015		No check	ABF_BAUSCHUTT		2035	267		
440449	164	E			Verified	ABF_BAUSCHUTT		2034	267		
433189	164	E	05.03.2015		No check	ABF_BAUSCHUTT		2030	263		
433181	164	E			Closed	ABF_BAUSCHUTT		2029	263		
433126	164	E			No check	ABF_BAUSCHUTT		2026	262		
433118	164	E			Deviation	ABF_BAUSCHUTT	241	2025	262		
433104	164	E			No check	ABF_BAUSCHUTT		2024	262		
433100	164	E			No check	ABF_BAUSCHUTT		2023	262		
428412	TS MANCH...	E	02.03.2015		No check	DA_200101-001			163	LOW	12561

Material Inspection | History | Protocol

General		Inspection	
Inspection No	441673	Deliv.Quantity	2,000
WD Order		Take Sample	<input type="checkbox"/>
Order position	0	Risk Level	(material)
Weighing Trans.	2036	Status	Validate
Inspection Date	11.03.2015		
Material	ABF_BAUSCHUTT		
Int.w.appr. no.	269		
WD Facility	164		
OutFacility			

Figure 90: Inspection Records of Material Inspections

Every material inspection record contains transactional data like the order item created, the appending date, the material, the waste disposal facility and data to the applied control strategy. Furthermore every inspection record has an active status. In the following table the possible status are indicated:


















Inspection record status	Notes	Possible succession status	Notes
NO CHECK 	The delivery requires no control.	VALIDATE  CLOSED 	
VALIDATE 	The delivery the Material Inspection was marked by use as too examining. Or an inspector has valued the delivery, in addition, as too examining.	VERIFIED  CONFIRM DEVIATION  NO CHECK 	With 'CONFIRM DEVIATION' the system requires the input of a defined clarification case category from the configuration. This category is an object which is used in case of the clarification case creation if the deviation is confirmed by the second Quality Control Operative.
VERIFIED 	The delivery was carried out with a positive result (= Validation with expected result).	VALIDATE  CLOSED 	The validation process ends normally in the status VERIFIED.
CONFIRM. DEVIATION 	A deviation was ascertained by an inspector. Now this deviation must be confirmed by a second person.	DEVIATION  VALIDATE 	
CLOSED 	The inspection record was closed by hand.		
DEVIATION 	An ascertained deviation divergence was confirmed by a second inspector. A clarification case was generated to the inspection record.	CLOSED 	
CALCULATION RUNS 	Data record is in the defined new calculation period and is updated.		

Table 17: Control Status

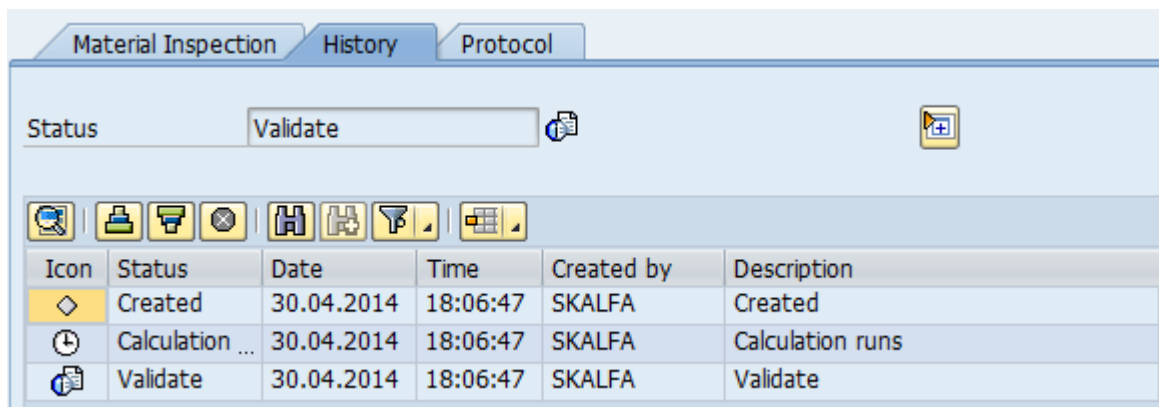
The following functional buttons are available for some status changes in the transaction.

-  : Verified
-  : Deviation
-  : ConfirmDeviation
-  : No Deviation

Further changes are possible with the menu entries.

The entrance in the transaction `/WATP/ARB_MAINS` occurs about an entrance dialogue which can be filtered for the relevant waste disposal facility and a date or a time interval. Only those inspection records which are arranged in the pre-filtered waste disposal facility and in the defined time period are indicated. Furthermore the SAP standard functions for sorting, searches, filters, exporting and printing and for the layout management can be used in the list of the inspection records. In addition, it is possible for every material controller to generate a list of deliveries which have to be inspected.

Furthermore the transaction for every inspection record contains a history. In this the accomplished status changes with date, time and user are shown.






Icon	Status	Date	Time	Created by	Description
	Created	30.04.2014	18:06:47	SKALFA	Created
	Calculation ...	30.04.2014	18:06:47	SKALFA	Calculation runs
	Validate	30.04.2014	18:06:47	SKALFA	Validate

Figure 91: History of an inspection record of the material inspection

6.6 Settings for the Waste Stream

For customer specific material inspection the created control rules and control strategies for the waste streams will be stored at the tab *Material Inspection*.

The following settings are possible:

- Used material configuration
- If this setting is active, the control rules and the control strategies will be used by the material master data. Precondition is the material assignment in the waste stream
- Settings at the disposal document
- If this setting is active, the control rules and the control strategies can be set directly at the waste stream.

Figure 92: Material Inspection – Settings on Waste Stream I

Figure 93: Material Inspection – Settings on Waste Stream II

These settings can be used for all available waste stream document templates.

7 Output Steering / Routing

For the area "Output" it is necessary to steer the outgoing material flow from plants to guarantee by contract agreed contingents of delivery. Different possibilities are available - output steering and route planning.

Output steering steers the delivery from a plant to a destination, the route planning steers the delivery from a plant to different destinations.

To meet the requirements, of the steering outgoing material flows, PROLOGA allocates suitable functions from Add-On 5.0. These functions are described in the following chapters.

7.1 Definition of Output-Planning at Material Level

The material forms the central element of a material flow from a plant. Therefore it is defined which output steering is used.



Figure 94: Definition of Output-Planning on the Material

In the new release two steering types are available for the output planning - Output steering and Route planning.



One of these two types is assigned to the material. Initial is a material intended for the type 'output steering'. If no setting is found for it, the output of the material is not controlled.

7.2 Basic Setting of Output Planning

In the configuration the following global settings for the material inspection can be made:

- Standard currency (Defines the currency of the output planning)
- Standard weight format (Defines the standard unit of weight of the output planning)
- Accepted contract types (Defines the standard contract types of the output planning)

The definition of the basic settings can be done via the configuration in the following transaction:

Transaction	Name
/WATP/ARB_CONFIG	Configuration

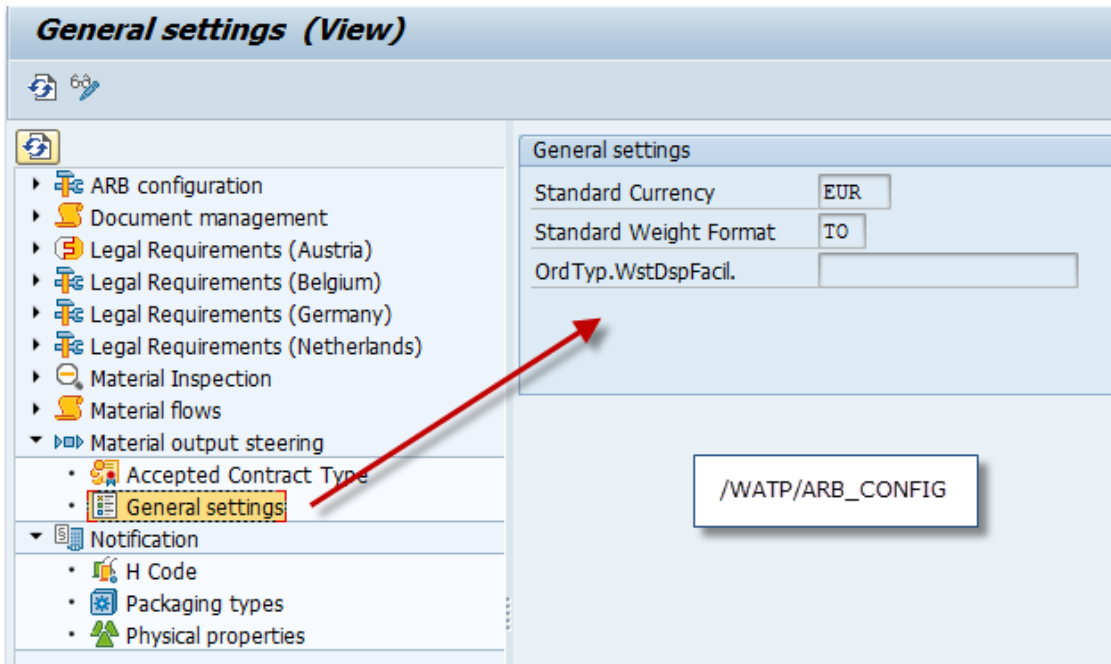


Figure 95: General Settings

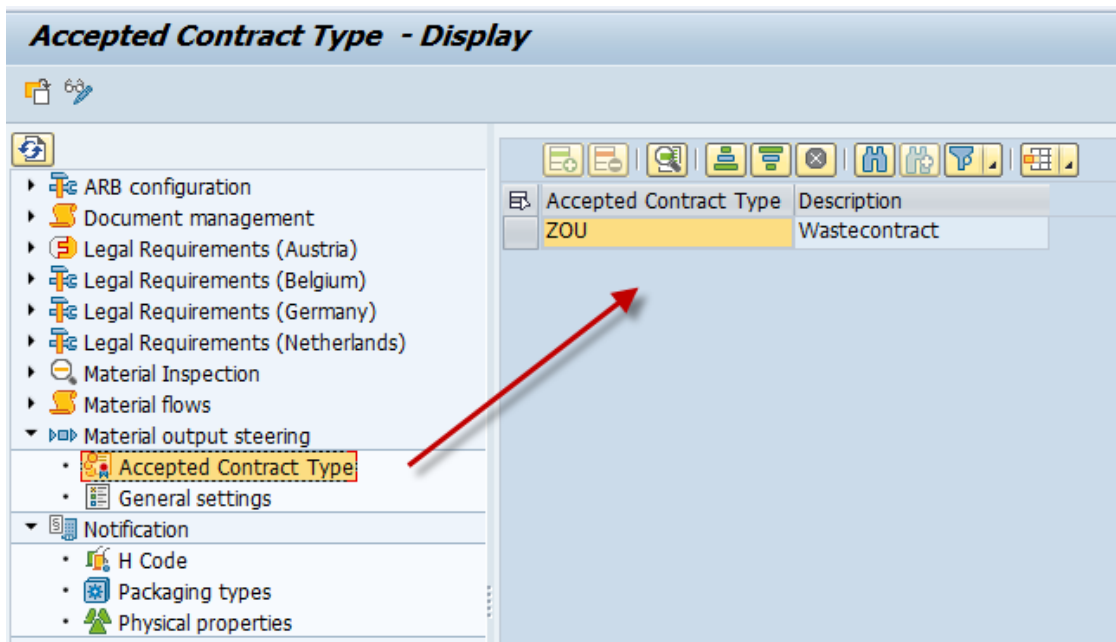


Figure 96: Accepted Contract Types

7.2.1 Output Steering

For the controlling type 'Output steering' an own transaction exists (/N/WATP/ARBST_STEERING) in which it is fixed where a material from a certain plant must go to. Per material or currently intended per group of goods combinations of possible sources and targets are defined.

Outbound Facility	Target Waste Disp.Fac	Material	Main Group	Prio...
21	33		BAUSCHUTT	3
21	53		BAUSCHUTT	10
21	53	ABF_BETON_MI		5

Figure 97: Definition of Output Steering

Every combination is maintained with a certain priority. The priority steers, which entry from the table is used for the waste disposal order item creation. The user who creates the order has no possibility to intervene the steering later and to change the destination. The destination is firmly given by the steering plan.



Example:

In the figure for the material ABF_BETON is defined that it comes from the plant SO_WEGDENMUELL and can be brought to 3 target waste disposal facilities 21, 33 and 71. The entry with destination 21 has priority 1 and therefore the highest priority. If a suitable order with the material ABF_BETON and the outbound facility SO_WEGDENMUELL is generated, 21 is used as a destination. Should the waste disposal plant 21 be closed, the next destination with priority 2 would be used automatically.

For the entrance in the transaction a filter is available with which the displayed control records are filtered for outbound plant, main group and material. Therefore a user can only get in with the data which are relevant for him.

The steering plan of the output steering is maintained with the following transaction:

Transaction	Name	Comment
/WATP/ARBST_STEERING	Output steering	

7.3 Route Planning

The controlling type 'route planning' is based on a defined plan of possible outbound plants and destinations. This plan is loaded with data and helps in the order acceptance to generate required orders for certain destinations to achieve certain contingents.

As already mentioned the first step of the route planning is the definition of the routing plan. After the plan is developed, certain users have to fill it with planning data so that it can be analyzed at the order creation. Both steps are described in the following.

7.3.1 Definition of the Routing Plan

In the administration different routing plans are defined in the form of definition of selection.

The screenshot displays the SAP routing plan definition interface. At the top, there are fields for 'Request/Task' and 'Data-dependent' (set to 'All'). The 'General' section includes fields for 'selection number' (5371), 'SelectName (techn.)' (RANGE:ARB_STEERING), 'Selection name' (WASTE_ABF), 'Short text' (Waste Disposal Routing Plan), 'Description', and 'User'. The 'Basic data' section features a toolbar with icons and a table with columns 'Identifier' and 'Field value'. The table contains two rows: 'Main Group' with value 'SMWW' and 'Time Horizon for RoutePlanning' with value 'Y'. At the bottom, there are tabs for 'User', 'X-axis', 'Y-axis', and 'Material', and a 'User Name' field containing 'AHAERTLING'.

Figure 98: Definition of a Routing Plan

Each of these plans receives a name (selection name) of maximum 30 signs. In the plan it is defined for which waste main group (intended is the group of goods of the material) or which material(s) the plan is valid. Furthermore with help of the time horizon is defined on which temporal base the plan works. Three selectable time horizons exist:

- Weekly
- Monthly
- Yearly

It is defined which users should have the possibility to maintain the plan. The list of the target waste disposal facility is defined over the X axis and over the Y axis the list of the output plants.

The definition of the routing plan occurs with the following transaction:

Transaction	Name	Comment
/WATP/BASE_ADMIN	Administration	

7.3.2 Maintaining of the Routing Plan

For the maintenance of the routing plan an own transaction is available. This transaction is to be used by qualified users to maintain the required contingents for the fulfilment of contractual agreements.

Choose a routing plan and a deadline to enter in the transaction. If the deadline stays blank the time horizon starts with the day date. According to deadline and routing plan a suitable time horizon is displayed.

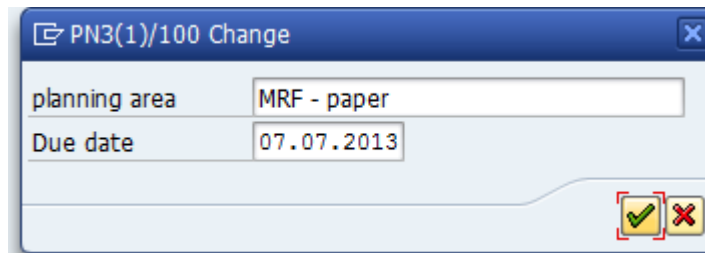


Figure 99: Entry Filter Routing Plan

In the transaction a matrix is formed from the defined output plants (Y axis) and the defined input plants (X axis).

Per line the following values are displayed:

Total: Sum of the planned delivery amounts of all source facilities.

Previous: Sum of the delivered amounts of all source facilities of the preceding period.

Output facility: In the column of the source facility the delivery amount of the current period is defined.

Current weight: In this column the already produced delivery amount from the appendant source facility is shown in this period.

Transport costs: Defined delivery amount Output facility*Transport costs.

Disposal costs: Defined delivery amount Output facility*Disposal costs.

MRF - paper (01) - 01.07.2013 to 07.07.2013 (Display)												
From / To	Plan Value	Total	U...	Cu...	Pilsworth South Landfill	Current weight	Transport Costs	Disposal costs	SHOTTON PAPER MILL	Current weight	Transport Costs	Disposal...
	29.000,000	0,000	TO	EUR	15.000,000	0,000	720.000,00	530.000,00	14.000,000	0,000	227.500,00	647.5...
Mixed MRF Crayford	6.000,000	6.000,000	TO	EUR	3.500,000	0,000	175.000,00	87.500,00	2.500,000	0,000	30.000,00	60.00...
Paper Sorting Facility	8.000,000	8.000,000	TO	EUR	4.000,000	0,000	220.000,00	80.000,00	4.000,000	0,000	60.000,00	200.0...
Centre d'enfouissement...	10.000,000	10.000,000	TO	EUR	5.000,000	0,000	275.000,00	275.000,00	5.000,000	0,000	50.000,00	275.0...
Recyclinganlage Locker...	5.000,000	5.000,000	TO	EUR	2.500,000	0,000	50.000,00	87.500,00	2.500,000	0,000	87.500,00	112.5...

Figure 100: Maintaining of a Routing Plan

The creation of waste disposal order items from an output facility with a material which uses a routing plan an extract from the plan is displayed to the user suitable to the order data. Then he has the possibility to generate accordingly of the shown values orders for the destinations with which the necessary contingent is reached.

The maintenance of the routing plan can be done with the following transaction:

Transaction	Name
/WATP/ARBST_PLANNING	Output steering

With help of the forward navigation (double click in a sum field) it is possible to jump directly in the transaction/N/WATP/ARBST_T COST (maintain of the transport and disposal costs), you are automatically on the field intended for it, this is accentuated in color.

MRF - paper (01) - 01.07.2013 to 07.07.2013 (Display)

From / To	Plan Value	Total	U...	Cu...	Pilsworth South Landfill	Current weight	Transport Costs	Disposal costs
	29.000,000	0,000	TO	EUR	15.000,000	0,000	720.000,00	530.000,00
Mixed MRF Crayford	6.000,000	6.000,000	TO	EUR	3.500,000	0,000	175.000,00	87.500,00
Paper Sorting Facility	8.000,000	8.000,000	TO	EUR	4.000,000	0,000	220.000,00	10.000,00
Centre d'enfouissement...	10.000,000	10.000,000	TO	EUR	5.000,000	0,000	275.000,00	275.000,00
Recyclinganlage Loacker...	5.000,000	5.000,000	TO	EUR	2.500,000	0,000	50.000,00	87.500,00

Figure 101: Jump field in /N/WATP/ARBST_PLANNING

W	Planungsbereich	Ausgangs-Anlage	Zielentsorgungsanlage	Valid from	Valid to	Preis pro Tonnage	Preis für Entsorgung	Währung
	Waste	21	KOMP1	01.04.2012	31.12.9999	5,00	20,00	EUR
		53		01.04.2012	31.12.9999	6,00	25,00	EUR
	WASTE_ABF	33	21		31.12.9999	3,00	5,00	EUR
			71		31.12.9999	0,00	0,00	EUR
			SO_WEGDENMUELL		31.12.9999	0,00	0,00	EUR
		53	21	04.01.2012	31.12.9999	13,00	14,00	EUR
			71		31.12.9999	0,00	0,00	EUR
			SO_WEGDENMUELL		31.12.9999	6,00	7,00	EUR
		KOMP1	21		31.12.9999	0,00	0,00	EUR
			71		31.12.9999	0,00	0,00	EUR
			SO_WEGDENMUELL		31.12.9999	30,00	0,00	EUR

Figure 102: Destination field in /N/WATP/ARBST_TCOST

7.4 Maintaining of the Transport and Disposal Costs

The transport and disposal costs are maintained on an own transaction. This transaction can be called about the suitable transaction name or about forward navigation from the routing plan.

The costs are maintained there on the basis of time discs in an interval ,Valid from '- ,Valid to'.

Transport costs maintenance for Key Date 07.07.2013 - Display

planning area	Outbound Facility	Target Waste Disp.Fac	Valid from	Valid to	Price per Tonnage	Price for Disposal	Currency
Bauschutt monatlich	ASQ1	21	01.10.2012	31.12.9999	10,00	25,00	EUR
	ASQ2		01.10.2012	31.12.9999	11,00	25,00	EUR
	ASQ3		01.11.2012	31.12.9999	11,50	25,00	EUR
MRF - paper	LOAGOE	LF PILSWORTH SOUTH	01.06.2013	31.12.9999	20,00	35,00	EUR
		SHOTTON PAPER MILL	01.06.2013	31.12.9999	35,00	45,00	EUR
	MIXED MRF CRAYFORD	LF PILSWORTH SOUTH	01.06.2013	31.12.9999	50,00	25,00	EUR
		SHOTTON PAPER MILL	01.06.2013	31.12.9999	12,00	24,00	EUR
	SITE_FR	LF PILSWORTH SOUTH	01.06.2013	31.12.9999	55,00	55,00	EUR
		SHOTTON PAPER MILL	01.06.2013	31.12.9999	10,00	55,00	EUR
	SO_PAPIER	LF PILSWORTH SOUTH	01.06.2013	31.12.9999	55,00	20,00	EUR
		SHOTTON PAPER MILL	01.06.2013	31.12.9999	15,00	50,00	EUR
Transfer station	TS MANCHESTER	LF PILSWORTH SOUTH	01.06.2013	31.12.9999	23,00	22,00	EUR
		MIXED MRF CRAYFORD	01.06.2013	31.12.9999	11,00	23,00	EUR
	TS TAUNNTON	LF PILSWORTH SOUTH	01.06.2013	31.12.9999	55,00	25,00	EUR
		MIXED MRF CRAYFORD	01.06.2013	31.12.9999	55,00	25,00	EUR

Figure 103: Maintaining of the Transport and Disposal Costs

The maintenance of the costs can be done with the following transaction:

Transaction	Name
/WATP/ARBST_T COST	Cost maintenance

In the first column a warning sign is indicated, if necessary. By pressing such a sign you get information which values perhaps should be still maintained.

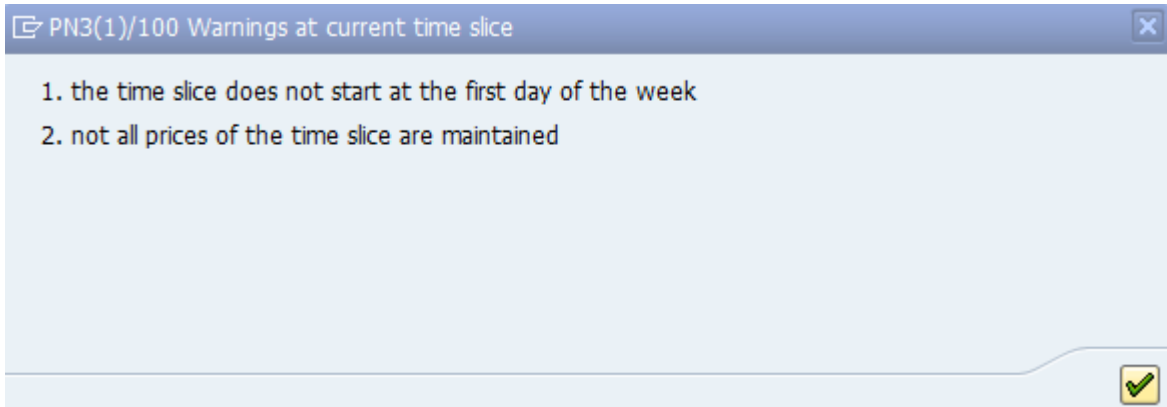


Figure 104: Warning Message in /N/WATP/ARBST_T COST



This is a warning, the planning is not concerned.

7.5 Closing time of waste disposal facility

At the output planning closing times are considered at facilities (destinations). For the maintenance of these times a transaction exists in the Add-On.

Outside Office Hours of waste disposal facilities - Display			
Waste Disp. Facility	Description	Term start	Outside Office End
LF PILSWORTH SOU...	Pilsworth South Landfill	02.07.2013	02.07.2013
TS MANCHESTER	Manchester Transfer Station	29.04.2013	05.05.2013

Figure 105: Maintenance of Closing Times

In this transaction the periods in which facilities are closed have to be maintained on weekly base. These periods are checked with the creation of output orders.

The maintenance of closing times of waste disposal facilities can be done with the following transaction:

Transaction	Name	Comment
/WATP/ARBST_CLOSING	Closing times of waste disposal facilities	

If a facility is concerned of a closing time it will be disabled in the planning transaction.

MRF - paper (01) - 01.07.2013 to 07.07.2013 (Display)

From / To	Plan Val...	Total	U...	C...	Pilsworth South Landfill	Current...	Transp...	Disposal...
	29.00...	0,000	TO	E...	15.000,000	0,000	720.0...	530.0...
Mixed MRF Crayford	6.000,...	6.000,...	TO	E...	3.500,000	0,000	175.0...	87.50...
Paper Sorting Facility	8.000,...	8.000,...	TO	E...	4.000,000	0,000	220.0...	80.00...
Centre d'enfouissement...	10.00...	10.00...	TO	E...	5.000,000	0,000	275.0...	275.0...
Recyclinganlage Locker...	5.000,...	5.000,...	TO	E...	2.500,000	0,000	50.00...	87.50...

Figure 106: Closed Facility