

CNV-1164 Waste Materials

In Progress

Status	In Progress
Owner	THAPETA-ext, Ram
Stakeholders	

Purpose

The purpose of this document is to define the conversion approach to create **Materials (Waste and Emissions)** in S/4 HANA.

Data Ownership & System Architecture: It is critical to highlight that the lifecycle and governance of these materials are split across two distinct functional domains:

- **Source-to-Pay (S2P) / Supply Chain:** The foundational Material Master record (e.g., Basic Data, Plant Data, purchasing views) is owned and managed in S/4HANA by S2P. They are responsible for creating the base material shell.
- **Environmental Health and Safety (EHS):** The environment-related and compliance-specific data (e.g., Waste Codes, Waste Types, Physical/Chemical Properties, Emissions applicability) is managed in EHS using the *Manage Material Data Fiori* app.

The Role of Logistics Roles in EHS: A key driver for this specific EHS data conversion is the assignment of **Logistics Roles**. While S2P defines *what* the material is, the EHS enrichment defines *how* the material behaves within environmental processes. By assigning specific Logistics Roles in the Fiori app, the system dictates the material's function:

- **Transport:** Identifies materials utilized in the transportation routing and documentation of waste.
- **Emission:** Flags the material as a subject for environmental compliance, meaning it generates trackable emissions or is used in emission calculations.
- **Disposal:** Identifies the actual physical waste product being generated, stored, and sent to a facility for disposal.
- *Note: A single material record can hold multiple logistics roles simultaneously if applicable.*

Currently, in the legacy ECC system, this data is partially represented across Material Master (MARA) and Vendor Master (LFA1 for waste disposal partners/facilities). In S/4HANA, the EHS data model requires these S2P base materials to be explicitly extended with these Logistics Roles, Chemical Compliance Information, and Waste Management parameters.

Conversion Scope

The scope of this document covers the approach for converting active Waste Materials from Legacy Source Systems into S/4HANA following the Waste Materials Master Data Design Standard.

This conversion will utilize a **Data Collection Template (DCT)** approach. The Data Team will extract a baseline of records from ECC based on strict relevancy criteria and map them to the corresponding S2P base materials. The business will then review this baseline and enrich the DCT with S/4HANA-specific EHS attributes (like the Logistics Roles) before the final load.

In S/4HANA, Environment, Health & Safety (EHS) provides dedicated Fiori apps where users assign environmental roles to existing materials:

Transport and Disposal Logistics role for Waste-relevant materials

Emissions role for Emission-relevant materials

Physical-chemical properties relevant to waste or emissions are maintained per material.

This conversion specifically focuses on migrating:

Material-level role assignments as Waste or Emission relevant

Associated physical-chemical properties per material and region

The data from legacy system includes:

1. Materials flagged as Waste-relevant or Emission-relevant
2. Role assignments linking materials to environmental classifications
3. Physical-chemical properties linked to these materials for compliance
4. Country or region-specific tagging relevant to regulatory needs
5. Active Materials in ECC (MARA) where the Material Type corresponds to Waste or Emission categories (e.g., FERT, HALB, or custom legacy waste material types like WAST). *Note: These materials MUST be confirmed as in-scope for the S2P Material Master load.*
6. Active Vendors in ECC (LFA1/LFB1) flagged with specific Account Groups or industry codes denoting them as Waste Partners/Disposal Facilities (required to build the *Waste Partner UUID* relationships).
7. Materials linked to existing environmental health and safety (EHS) specifications or hazard classifications in legacy systems.

The data from legacy system excludes:

1. Core Material Master data (already migrated by S2P team)
2. Actual waste quantities, volumes, or emissions data (thresholds, limits)
3. Materials flagged for deletion (LVORM = 'X' at client or plant level) in ECC.

4. Standard direct/indirect procurement materials not associated with waste generation or environmental emissions.
5. Blocked vendor accounts (Waste Partners) with no recent transactional activity.

List of source systems and approximate number of records

Source	Scope	Source Approx No. of Records	Target System	Target Approx No. of Records
WP2/PF2	Active Waste/Emission Materials	TBD	S/4 HANA	TBD
WP2/PF2	Active Waste Partners / Facilities	TBD	S/4 HANA	TBD

Additional Information

Multi-language Requirement

Descriptions for Materials and Waste Types must be loaded in English.

Document Management

Not Applicable

Legal Requirement

Must align with REACH, GHS, and local environmental agency waste coding structures. Data validation must ensure EHFND_CCI_PURP-PURPOSE_UUID (Compliance Purpose) is accurately mapped.

Special Requirements

S2P Dependency: The S2P team *must* successfully load the base Material Master records before the EHS extension load can occur.

Target Design

The technical design of the target for this conversion approach.

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
EHEWAD_WA_MAT	UUID	EHEWA_WP_MAT_UUID	Waste Material UUID	RAW	16	System generated
EHEWAD_WA_MAT	WASTE_PARTNER_UUID	EHEWA_WASTE_PARTNER_UUID	Waste Partner UUID	RAW	16	System generated
EHEWAD_WA_MAT	FACILITY_UUID	EHEWA_WASTE_FACILITY_UUID	Waste Disposal Facility UUID	RAW	16	System generated
EHEWAD_WA_MAT	CCI_UUID	EHFND_CCI_UUID	Chemical Compliance Information UUID	RAW	16	System generated
EHEWAD_WA_MAT	MC_CODE	EHEWA_WASTE_MC_CODE	Waste Management Method Code	CHAR	10	Required
EHEWAD_WA_MAT	CREA_DATE_TIME	TIMESTAMPL	Created On	DEC	21	System generated
EHEWAD_WA_MAT	CREA_UNAME	UNAME	Created By	CHAR	12	System generated
EHEWAD_WA_MAT	LCHG_DATE_TIME	TIMESTAMPL	Changed On	DEC	21	System generated
EHEWAD_WA_MAT	LCHG_UNAME	UNAME	Changed By	CHAR	12	System generated
EHEWAD_WA_MAT	DUMMY_EHEWA_MAT	CFD_DUMMY	Dummy Field	CHAR	1	Not Used
EHFND_CCI_MAT	UUID	EHFND_CCI_MAT_UUID	Product Assignment UUID	RAW	16	System generated

EHFNDD_CCI_M AT	CREA_DATE_TIME	TIMESTAMPL	Created On (UTC)	DEC	21	System generated
EHFNDD_CCI_M AT	CREA_UNAME	UNAME	Created By	CHAR	12	System generated
EHFNDD_CCI_M AT	LCHG_DATE_TIME	TIMESTAMPL	Last Changed On (UTC)	DEC	21	System generated
EHFNDD_CCI_M AT	LCHG_UNAME	UNAME	Last Changed By	CHAR	12	System generated
EHFNDD_CCI_M AT	CHEMICAL_COMPLIAN CE_UUID	EHFNDD_CCI_UUID	Chemical Compliance Information UUID	RAW	16	System generated
EHFNDD_CCI_M AT	MATNR	EHFNDD_MAT_ID	Product	CHAR	40	Required
EHFNDD_CCI_M AT	IS_PRIMARY	EHFNDD_CCI_CCOMP_IS_PRIM ARY	Name Representing the Product	CHAR	1	Conditional
EHFNDD_CCI	UUID	EHFNDD_CCI_UUID	Chemical Compliance UUID	RAW	16	System generated
EHFNDD_CCI	CREA_DATE_TIME	TIMESTAMPL	Created On	DEC	21	System generated
EHFNDD_CCI	CREA_UNAME	UNAME	Created By	CHAR	12	System generated
EHFNDD_CCI	LCHG_DATE_TIME	TIMESTAMPL	Last Changed On	DEC	21	System generated
EHFNDD_CCI	LCHG_UNAME	UNAME	Last Changed By	CHAR	12	System generated
EHFNDD_CCI	RESPONSIBLE_UNIT	EHFNDD_CCI_RESPONSIBLE_U NIT_PSS	Responsible Unit	CHAR	10	System generated
EHFNDD_CCI	RESPONSIBLE_UNIT_D GR	EHFNDD_CCI_RESPONSIBLE_U NIT_DG	Responsible Unit – Dangerous Goods	CHAR	10	Required
EHFNDD_CCI	INTERNAL_NAME	EHFNDD_CCI_INTERNAL_NAME	Internal Name	CHAR	132	Required
EHFNDD_CCI	IS_BASE_PRODUCT	EHFNDD_CCI_IS_BASE_PRODU CT	Base Product Indicator	CHAR	1	Not Used
EHFNDD_CCI	IS_SOLD	EHFNDD_CCI_IS_SOLD	Sold Indicator	CHAR	1	Not Used
EHFNDD_CCI	IS_TRANSPORTED	EHFNDD_CCI_IS_TRANSPORTED	Transported Indicator	CHAR	1	Required
EHFNDD_CCI	IS_SOURCE	EHFNDD_CCI_IS_SOURCED	Sourced Indicator	CHAR	1	Not Used
EHFNDD_CCI	IS_PRODUCED	EHFNDD_CCI_IS_PRODUCED	Produced Indicator	CHAR	1	Not Used
EHFNDD_CCI	SPECIFICATION_ID	EHFNDD_INTERNAL_NR	Specification ID	CHAR	12	Not Used
EHFNDD_CCI	IS_RESEARCHED	EHFNDD_CCI_IS_RESEARCHED	R&D Sample Indicator	CHAR	1	Not Used
EHFNDD_CCI	SPECIFICATION_REF	EHFNDD_EHS_ESERECN	Specification Reference	NUMC	20	System generated
EHFNDD_CCI	TYPE	EHFNDD_CCI_TYPE	CCI Type	CHAR	2	System generated
EHFNDD_CCI	IS_NOT_DG_RELEVANT	EHFNDD_CCI_IS_NOT_DG_RLVT	Not Dangerous Goods Relevant	CHAR	1	Required
EHFNDD_CCI	IS_NOT_PMA_RELEVA NT	EHFNDD_CCI_IS_NOT_PMA_RL VT	Not Product Marketability Relevant	CHAR	1	Not Used
EHFNDD_CCI	IS_NOT_PS_RELEVANT	EHFNDD_CCI_IS_NOT_PS_RLVT	Not Product Safety Relevant	CHAR	1	Not Used
EHFNDD_CCI	IS_NOT_LR_RELEVANT	EHFNDD_CCI_IS_NOT_PCS_RL VT	Not Legal/Regulatory Relevant	CHAR	1	Conditional
EHFNDD_CCI	IS_EMISSION_RELEVA NT	EHFNDD_CCI_IS_EMISSION_RL VT	Emission Relevant	CHAR	1	Required
EHFNDD_CCI	IS_DISPOSED	EHFNDD_CCI_IS_DISPOSED	Disposed Indicator	CHAR	1	Required
EHFNDD_CCI	PRODUCT_CATEGORIZ ATION	EHFNDD_CHM_PROD_CATZTNP HRS_UUID	Chemical Product Categorization	RAW	16	System generated
EHFNDD_CCI	IS_MCP	EHFNDD_CCI_IS_MCP	Product Is a Multi-Component Product	CHAR	1	System generated
EHFNDD_CCA_ ADLPR	UUID	EHFNDD_CCA_ADLPR_UUID	Chemical Compliance Additional Property UUID	RAW	16	System generated
EHFNDD_CCA_ ADLPR	CHEMICAL_COMPLIAN CE_UUID	EHFNDD_CCI_UUID	Chemical Compliance Information UUID	RAW	16	System generated

EHFNDD_CCA_ADLPR	CREA_DATE_TIME	TIMESTAMPL	Created On	DEC	21	System generated
EHFNDD_CCA_ADLPR	CREA_UNAME	UNAME	Created By	CHAR	12	System generated
EHFNDD_CCA_ADLPR	LCHG_DATE_TIME	TIMESTAMPL	Last Changed On	DEC	21	System generated
EHFNDD_CCA_ADLPR	LCHG_UNAME	UNAME	Last Changed By	CHAR	12	System generated
EHFNDD_CCA_ADLPR	VERSION_NUMBER	EHFND_VERSION_NUMBER	Version Number	INT4	10	System generated
EHFNDD_CCA_ADLPR	RELEASE_STATUS	EHFND_CCA_ADLPR_STATUS	Release Status	CHAR	2	System generated
EHFNDD_CCA_ADLPR	VALID_FROM	EHFND_VALID_FROM_TSTMP	Valid From	DEC	15	System generated
EHFNDD_CCA_ADLPR	VALID_TO	EHFND_VALID_TO_TSTMP	Valid To	DEC	15	System generated
EHFNDD_CCA_PRPTY	UUID	EHFND_CCI_PRPTYAS_UUID	Property Assignment UUID	RAW	16	System generated
EHFNDD_CCA_PRPTY	CCA_ADLPR_UUID	EHFND_CCA_ADLPR_UUID	Additional Property UUID	RAW	16	System generated
EHFNDD_CCA_PRPTY	CREA_DATE_TIME	TIMESTAMPL	Created On	DEC	21	System generated
EHFNDD_CCA_PRPTY	CREA_UNAME	UNAME	Created By	CHAR	12	System generated
EHFNDD_CCA_PRPTY	LCHG_DATE_TIME	TIMESTAMPL	Last Changed On	DEC	21	System generated
EHFNDD_CCA_PRPTY	LCHG_UNAME	UNAME	Last Changed By	CHAR	12	System generated
EHFNDD_CCA_PRPTY	PROPERTY_KEY_REF	EHFND_CCI_PRPTY_UUID	Property Key Reference UUID	RAW	16	System generated
EHFNDD_CCA_PRPTY	UNIT_KEY_REF	EHFND_CCI_PRPTY_UNIT_UUID	Unit Key Reference UUID	RAW	16	System generated
EHFNDD_CCA_PRPTY	VALUE	EHFND_CCI_PRPTY_VALUE	Property Value	DF16_RAW	16	Conditional
EHFNDD_CCA_PRPTY	UNIT	EHFND_UNIT_CODE	Unit of Measure	UNIT	3	Conditional
EHFNDD_CCA_PRPTY	COMMENT_TEXT	EHFND_NAME	Comment / Description	CHAR	60	Conditional
EHFNDD_CCI_P_URP	UUID	EHFND_CCI_PURP_UUID	Purpose Assignment UUID	RAW	16	System generated
EHFNDD_CCI_P_URP	CHEMICAL_COMPLIANCE_UUID	EHFND_CCI_UUID	Chemical Compliance UUID	RAW	16	System generated
EHFNDD_CCI_P_URP	CREA_DATE_TIME	TIMESTAMPL	Created On	DEC	21	System generated
EHFNDD_CCI_P_URP	CREA_UNAME	UNAME	Created By	CHAR	12	System generated
EHFNDD_CCI_P_URP	LCHG_DATE_TIME	TIMESTAMPL	Last Changed On	DEC	21	System generated
EHFNDD_CCI_P_URP	LCHG_UNAME	UNAME	Last Changed By	CHAR	12	System generated
EHFNDD_CCI_P_URP	PURPOSE_UUID	EHFND_CMPLNC_PRPS_UUID	Purpose UUID	RAW	16	System generated
EHFNDD_CHM_COMP	DB_KEY	/BOBF/CONF_KEY	Root Node Key	RAW	16	System generated
EHFNDD_CHM_COMP	ROOT_KEY	/BOBF/CONF_KEY	Root Key	RAW	16	System generated
EHFNDD_CHM_COMP	PARENT_KEY	/BOBF/CONF_KEY	Parent Node Key	RAW	16	System generated
EHFNDD_CHM_COMP	DATETIME_CR	/BOBF/DATETIME_CR	Created On	DEC	15	System generated

EHFNDD_CHM_COMP	USER_ID_CR	/BOBF/USER_ID_CR	Created By	CHAR	12	System generated
EHFNDD_CHM_COMP	DATETIME_CH	/BOBF/DATETIME_CH	Last Changed On	DEC	15	System generated
EHFNDD_CHM_COMP	USER_ID_CH	/BOBF/USER_ID_CH	Last Changed By	CHAR	12	System generated
EHFNDD_CHM_COMP	LIS_SUB_KEY_REF	EHFND_LISU_ROOT_REF_KEY	Listed Substance Root Key	RAW	16	System generated
EHFNDD_CHM_COMP	PROPORTION	EHFND_CHM_PROPORTION_MIN	Proportion	DF16_RAW	16	Conditional
EHFNDD_CHM_COMP	UNIT	EHFND_UNIT_CODE	Unit	UNIT	3	Conditional
EHFNDD_CHM_COMP	EEW_CHM_COMPOS_D	DUMMY	Dummy Field	CHAR	1	Not Used
EHFNDD_CP_TEXT	COMPLIANCE_PURPOSE_ID	EHFND_CMLPNC_PRPS_ID	Purpose ID	CHAR	15	System generated
EHFNDD_CP_TEXT	COMPLIANCE_PURPOSE_UUID	EHFND_CMLPNC_PRPS_UUID	Compliance Purpose	RAW	16	System generated
EHFNDD_CP_TEXT	LANGUAGE	SYLANGU	Language Key	LANG	1	System generated
EHFNDD_CP_TEXT	COMPLIANCE_PURPOSE_NAME	EHFND_CMLPNC_PRPS_NAME	Compliance Purpose Name	CHAR	120	Required
EHFNDD_PHRM_NM	BCO_ID	EHFND_BCO_ID	BCO ID	CHAR	40	System generated
EHFNDD_PHRM_NM	BCO_KEY	EHFND_BCO_KEY	BCO Key	CHAR	32	System generated
EHFNDD_PHRM_NM	DB_KEY	/BOBF/CONF_KEY	NodeID	RAW	16	System generated
EHFNDD_PHRM_NM	PARENT_KEY	/BOBF/CONF_KEY	Parent Key	RAW	16	System generated
EHFNDD_PHRM_NM	DATETIME_CR	/BOBF/DATETIME_CR	Created On	DEC	15	System generated
EHFNDD_PHRM_NM	USER_ID_CR	/BOBF/USER_ID_CR	Created By	CHAR	12	System generated
EHFNDD_PHRM_NM	DATETIME_CH	/BOBF/DATETIME_CH	Last Changed On	DEC	15	System generated
EHFNDD_PHRM_NM	USER_ID_CH	/BOBF/USER_ID_CH	Last Changed By	CHAR	12	System generated
EHFNDD_PHRM_NM	LANGUAGE	EHFND_LANGU	Language	LANG	1	System generated
EHFNDD_PHRM_NM	TEXT	EHFND_PHYSICAL_PARAMETER_NAME	Name	CHAR	60	Required
EHFNDD_PHRM_NM	TEXT_NORMED	EHFND_PHYSICAL_PARAMETER_NAME	Normalized Name	CHAR	60	System generated
EHFNDD_PHRM_NM	EEW_PHPAR_ROOT_D	DUMMY	Dummy Field	CHAR	1	Not Used
EHFNDD_LISU_NAME	LISTSUB_ID	EHFND_REGBASLST_SUB	Listed Substance ID	CHAR	12	System generated
EHFNDD_LISU_NAME	BCO_KEY	EHFND_BCO_KEY	BCO Key	CHAR	32	System generated
EHFNDD_LISU_NAME	DB_KEY	/BOBF/CONF_KEY	NodeID	RAW	16	System generated
EHFNDD_LISU_NAME	PARENT_KEY	/BOBF/CONF_KEY	Parent Key	RAW	16	Not Used
EHFNDD_LISU_NAME	NODE_CAT_KEY	/BOBF/CONF_KEY	Node Category Key	RAW	16	System generated
EHFNDD_LISU_NAME	DATETIME_CR	/BOBF/DATETIME_CR	Created On	DEC	15	System generated
EHFNDD_LISU_NAME	USER_ID_CR	/BOBF/USER_ID_CR	Created By	CHAR	12	System generated

EHFNDD_LISU_NAME	DATETIME_CH	/BOBF/DATETIME_CH	Last Changed On	DEC	15	System generated
EHFNDD_LISU_NAME	USER_ID_CH	/BOBF/USER_ID_CH	Last Changed By	CHAR	12	System generated
EHFNDD_LISU_NAME	LANGUAGE	EHFND_LANGU	Language	LANG	1	System generated
EHFNDD_LISU_NAME	TEXT	EHFND_LISU_NAME_TEXT	Listed Substance Name	CHAR	1333	Conditional
EHFNDD_LISU_NAME	TEXT_NORMED	EHFND_LONG_NAME	Normalized Name	CHAR	255	Not Used
EHFNDD_LISU_NAME	SEQUENCE_NUMBER	EHFND_LISU_SEQ_NUM	Name Sequence Number	INT1	3	Not Used
EHFNDD_LISU_NAME	NAME_ID	EHFND_LISU_NAME_ID	Name ID	INT4	10	System generated
EHFNDD_LISU_NAME	EEW_LONG_TEXT_D	DUMMY	Dummy Field	CHAR	1	Not Used

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
CL-01	High	"Orphaned Legacy Vendor"	Legacy vendors targeted as Waste Partners must not have a deletion flag (LFA1-LOEVM)	Exclude from Extract	ECC
CL-02	High	"Missing Base Product in Target"	If an EHS Material maps to a Product ID, that ID must exist in the approved S2P Product Master manifest	Reject Record	DCT
CL-03	Medium	"Invalid State of Matter"	State of Matter must be populated with target values (e.g., 01=Solid, 02=Liquid, 03=Gas)	Flag for Enrichment	DCT
CL-04	High	"Missing Logistics Role"	Every material must have at least one Logistics Role marked as 'Y'	Reject Record	DCT

Conversion Process

The high-level process is represented by the diagram below:

For every waste material in source system, a material has to be created in target system.

Extract all active materials from MARA from source system and determine waste materials from the list by filtering with waste in the descriptions and based on historical transactions involving materials to waste transporters/disposers. For these materials, create material using manage material data fiori app or automated process.

Also, need to update properties, waste code details for the materials using the same fiori app "manage material data" or automated process.

This object will be managed as a **Hybrid/Enrichment DCT**.

Phase 1: Data Extraction & Baseline Generation (Data Team)

1. **Extract:** Query ECC tables using the relevancy criteria.
2. **Cross-Reference:** Check the extracted list against the S2P Material Master load manifest to ensure the base product will exist in S/4HANA.
3. **Generate DCT:** Produce the Data Collection Template pre-populated with baseline S2P identifiers (Product ID) and descriptions.

Phase 2: Business Enrichment (EHS Business Team)

1. **Review:** EHS business stakeholders review the baseline DCT.
2. **Enrich:** The business populates missing, S/4HANA-specific EHS data directly into the DCT. Key enrichment fields aligned with Fiori "Manage Material Data" include:
 - **Logistics Roles:** (Checkboxes for Transport, Emission, Disposal)
 - Waste Codes & Waste Type
 - Physical/Chemical Properties (State of matter, Density, Flashpoint)
 - Compliance Scenario assignments
 - Compliance purposes

Phase 3: Validation & Load (Data Team)

1. **Validate:** Run automated pre-load validations against the enriched DCT. Verify that the Material ID exists in the target system (loaded by S2P).
2. **Load:** Data is loaded into S/4HANA EHS.

Data Privacy and Sensitivity

No PII or sensitive data is included in the Material (Waste & Emissions) data object.

Extraction

Extract data from a source into Syniti Migrate. There are 2 possibilities:

1. The data exists. Syniti Migrate connects to the source and loads the data into Syniti Migrate. There are 3 methods:
 - a. Perform full data extraction from relevant tables in the source system(s).
 - b. Perform extraction through the application layer.
 - c. Only if Syniti Migrate; cannot connect to the source, data is loaded to the repository from the provided source system extract/report.
2. The data does not exist (or cannot be converted from its current state). The data is manually collected by the business directly in Syniti Migrate. This is to be conducted using DCT (Data Collection Template) in Syniti Migrate

The agreed Relevancy criteria is applied to the extracted records to identify the records that are applicable for the Target loads

Extraction Run Sheet

Req #	Requirement Description	Team Responsible
EX-01	Extract Legacy Waste Materials from MARA / MAKT based on relevancy criteria	Data Team
EX-02	Extract Legacy Waste Vendors from LFA1 / LFB1 based on Selection Screen	Data Team
EX-03	Cross-reference extracted legacy materials against the final S2P Product Master load manifest.	Data Team
EX-04	Generate pre-populated DCT containing Legacy Material IDs, Material Descriptions, and Legacy Vendor IDs for Business Enrichment.	Data Team

Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set

Data Collection Template (DCT)

Target Ready Data Collection Template will be created for Waste Materials data with exception of some fields which require transformation as mentioned in the transformation rule.

Material (Waste and Emissions) DCT Rules

Field Name	Field Description	Rule
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MC_CODE	Waste Management Method Code	<p>Required. Format rules: Length – 4. Data Type – CHAR.</p> <p>Allowed values/reference: Refer to EHEWAC_MC_CODE > Field = EHEWA_WASTE_MC_CODE.</p> <p>Conditional logic: NA.</p> <p>Multi-language: NA.</p> <p>Comments: Determines waste treatment or disposal type.</p>
MATNR	Product ID / Material Number linked to Compliance data	<p>Required. Format rules: As per Material Master configuration.</p> <p>Data Type – CHAR.</p> <p>Length - 40</p> <p>Allowed values/reference: Must exist in SAP Material Master (MARA-MATNR).</p> <p>Conditional logic: Only one primary compliance assignment allowed per material.</p> <p>Multi-language: Inherited from Material Master</p>
IS_PRIMARY	Name Representing the Product	<p>Conditional. Format rules: Boolean (X/Blank). Data Type – CHAR, Length - 1.</p> <p>Allowed values/reference: 'X' = Primary.</p> <p>Conditional logic: Only one record per material can be flagged as Primary.</p> <p>Multi-language: NA.</p> <p>Comments: Identifies primary compliance linkage.</p>
RESPONSIBLE_UNIT_DGR	Responsible Unit – Dangerous Goods	<p>Required if DG relevant. Format rules: As per Org Unit format.</p> <p>Data Type – CHAR. Length - 10</p> <p>Allowed values/reference: Must exist in approved DG organizational structure.</p> <p>Conditional logic: Mandatory when DG indicator is active.</p> <p>Multi-language: NA. Comments: Responsible unit for DG compliance.</p>
INTERNAL_NAME	Internal Name	<p>Required. Format rules:</p> <p>Data Type – CHAR. Length -132</p> <p>Allowed values/reference: NA</p> <p>Conditional logic: NA.</p> <p>Multi-language: NA</p> <p>Comments: Internal product name for compliance reporting.</p>
IS_TRANSPORTED	Transported Indicator	<p>Required. Format rules: Boolean (X/Blank).</p> <p>Data Type – CHAR, Length- 1.</p> <p>Allowed values/reference: 'X' = Transported.</p> <p>Conditional logic: If 'X', DG compliance data must exist.</p> <p>Multi-language: NA.</p> <p>Comments: Indicates transport relevance.</p>
IS_NOT_DG_RELEVANT	Not Dangerous Goods Relevant	<p>Conditional. Format rules: Boolean (X/Blank). Data Type – CHAR, Length - 1.</p> <p>Allowed values/reference: 'X' = Not DG Relevant.</p> <p>Conditional logic: Cannot conflict with transport indicator.</p> <p>Multi-language: NA.</p> <p>Comments: Identifies DG exclusion.</p>

IS_NOT_LR_RELEVANT	Not Legal/Regulatory Relevant	<p>Conditional. Format rules: Boolean (X/Blank). Data Type – CHAR, Length - 1.</p> <p>Allowed values/reference: 'X' = Not LR Relevant.</p> <p>Conditional logic: If flagged, legal reporting objects not generated.</p> <p>Multi-language: NA.</p> <p>Comments: Legal/regulatory relevance indicator.</p>
IS_EMISSION_RELEVANT	Emission Relevant	<p>Conditional. Format rules: Boolean (X/Blank).</p> <p>Data Type – CHAR, Length - 1. Allowed values/reference: 'X' = Emission Relevant.</p> <p>Conditional logic: Mandatory to be maintained</p> <p>Multi-language: NA.</p> <p>Comments: Emission reporting relevance.</p>
IS_DISPOSED	Disposed Indicator	<p>Conditional. Format rules: Boolean (X/Blank).</p> <p>Data Type – CHAR, Length - 1</p> <p>Allowed values/reference: 'X' = Disposed.</p> <p>Conditional logic: NA</p> <p>Multi-language: NA.</p> <p>Comments: Disposal relevance indicator.</p>
TEXT	Name	<p>Conditional. Format rules: Data Type – CHAR, Length - 60</p> <p>Allowed values/reference:</p> <p>Conditional logic: Must align with disposal indicator.</p> <p>Multi-language: NA. Comments: Disposal relevance indicator.</p>
VALUE	Property Value	<p>Required. Format rules: Numeric; precision per property type.</p> <p>Data Type – DEC/CHAR (config dependent).</p> <p>Length - 16</p> <p>Allowed values/reference: Must align with property definition.</p> <p>Conditional logic: To be provided only if required or available</p> <p>Multi-language: NA.</p> <p>Comments: Stores compliance property value.</p>
UNIT	Unit of Measure	<p>Required. Format rules: Valid Unit of Measure.</p> <p>Data Type – CHAR. Allowed values/reference: Refer to SAP UoM table (T006).</p> <p>Length - 3</p> <p>Conditional logic: Must correspond to property type.</p> <p>Multi-language: As per UoM settings.</p> <p>Comments: Unit for property value.</p>
COMMENT_TEXT	Comment / Description	<p>Optional. Format rules: .</p> <p>Data Type – STRING/CHAR. Allowed values/reference: System text length limit applies.</p> <p>Length - 60</p> <p>Conditional logic: NA. Multi-language: Supported.</p> <p>Comments: Regulatory explanation or remarks.</p>

TEXT	Listed Substance Name	Optional. Format rules: . Length - 1333 Data Type – CHAR Allowed values/reference: EHFNDD_LISU_NAME > TEXT Conditional logic: Required only if maintaining Analytical Composition Multi-language: NA Comments: NA
PROPORTION	Proportion	Optional. Format rules: Data Type – DF16_RAW. Allowed values/reference: 16 Length - 16 Conditional logic: NA. Multi-language: NA Comments: NA
UNIT	Unit	Optional. Format rules: Length - 3 Data Type –UNIT. Allowed values/reference: T006 Conditional logic: NA. Multi-language: NA Comments: NA
COMPLIANCE_PURPOSE_NAME	Compliance Purpose Name	Optional. Format rules: . Length - 120 Data Type –CHAR. Allowed values/reference: Values from EHFNDD_CP_TEXT >COMPLIANCE_PURPOSE_NAME Conditional logic: NA. Multi-language: NA Comments: NA
Waste_type	Waste type	Format rules: Data type: Char, Length: 30 Allowed values: Hazardous, Non-Hazardous, Universal Conditional logic: NA. Multi-language: NA Comments: NA

Extraction Dependencies

Item #	Step Description	Team Responsible
1	Source-to-Pay (S2P) team finalizes and freezes the target Product Master migration manifest.	S2P
2	S/4HANA EHS configuration for Waste Codes, Waste Types, and Compliance Purposes is finalized and provided to the Data Team for value mapping.	S2S Functional

Transformation

The Target fields are mapped to the applicable Legacy field that will be its source, this is a 3-way activity involving the Business, Functional team and Data team. This identifies the transformation activity required to allow Syniti Migrate to make the data Target ready:

1. Perform value mapping and data transformation rules.
 - a. Legacy values are mapped to the to-be values (this could include a default value)
 - b. Values are transformed according to the rules defined in Syniti Migrate.

2. Prepare target-ready data in the structure and format that is required for loading via prescribed Load Tool. This step also produces the load data ready for business to perform Pre-load Data Validation

Transformation Run Sheet

Item #	Step Description	Team Responsible
1	Ingest baseline legacy extract into migration tool/staging environment.	Data Team
2	Ingest fully enriched DCT from the EHS Business Data Owners.	Data Team
3	Execute Transformation Logic (Joins, Value Mapping, Defaulting).	Data Team
4	Generate Target-Ready Load File for Pre-Load Validation.	Data Team

Transformation Rules

Rule #	Source system	Source Table	Source Field	Source Description	Target System	Target Table	Target Field	Target Description	Transformation Logic
1	DCT/ECC	MAKT	INTERNAL_NAME	INTERNAL NAME	S/4 HANA	EHFNDD_CCI	INTERNAL_NAME	INTERNAL NAME	Direct Map. Pass value exactly as enriched in DCT.
2	DCT/ECC	MARA	MATNR	Product ID / Material Number linked to Compliance data	S/4 HANA	EHFNDD_CCI_MAT	MATNR	Product ID	Direct mapping
3	DCT		IS_TRANSPORTED	TRANSPORT Indicator	S/4 HANA	EHFNDD_CCI	IS_TRANSPORTED	TRANSPORT Indicator	If DCT = 'Y', pass 'X' (True). Else pass '' (False).
4	DCT		IS_EMISSION_RELEVANT	EMISSION_RELEVANT indicator	S/4 HANA	EHFNDD_CCI	IS_EMISSION_RELEVANT	EMISSION_RELEVANT indicator	If DCT = 'Y', pass 'X' (True). Else pass '' (False).
5	DCT		IS_DISPOSED	DISPOSAL indicator	S/4 HANA	EHFNDD_CCI	IS_DISPOSED	DISPOSAL indicator	If DCT = 'Y', pass 'X' (True). Else pass '' (False).
6	DCT		RESPONSIBLE_UNIT_DGR	Responsible unit for DG	S/4 HANA	EHFNDD_CCI	RESPONSIBLE_UNIT_DGR	Responsible unit for DG	Direct mapping
7	DCT		MC_CODE	Waste code	S/4 HANA	EHEWAD_WA_MAT	MC_CODE	Waste code	Direct mapping
8	DCT		WASTE_TYPE	WASTE TYPE	S/4 HANA	EHFNDD_WA_MAT	WASTE_TYPE	WASTE TYPE	Direct mapping
9	DCT		COMPLIANCE_PURPOSE_NAME	Compliance Purpose Name	S/4 HANA	EHFNDD_CP_TEXT	COMPLIANCE_PURPOSE_NAME	Compliance Purpose name	Direct mapping
10	DCT		IS_PRIMARY	Name Representing the Product(Indicator)	S/4 HANA	EHFNDD_CCI_MAT	IS_PRIMARY	Name Representing the Product (Indicator)	Direct mapping
11	DCT		IS_NOT_DG_RELEVANT	Not Dangerous	S/4 HANA	EHFNDD_CCI	IS_NOT_DG_RELEVANT	Not Dangerous	Direct mapping
12	DCT		IS_NOT_LR_RELEVANT	Not Legal/Regulatory Relevant	S/4 HANA	EHFNDD_CCI	IS_NOT_LR_RELEVANT	Not Legal /Regulatory Relevant	Direct mapping
13	DCT		TEXT	Property Name	S/4 HANA	EHFNDD_PHPR_NM	TEXT	Name	Direct mapping
14	DCT		VALUE	Property Value	S/4 HANA	EHFNDD_CCA_PRPTY	VALUE	Property Value	Direct mapping
15	DCT		UNIT	Unit of Measure	S/4 HANA	EHFNDD_CCA_PRPTY	UNIT	Unit of Measure	Direct mapping
16	DCT		COMMENT_TEXT	Comment / Description	S/4 HANA	EHFNDD_CCA_PRPTY	COMMENT_TEXT	Comment / Description	Direct mapping
17	DCT		TEXT	Listed Substance Name	S/4 HANA	EHFNDD_LISU_NAME	TEXT	Listed Substance Name	Direct mapping
18	DCT		PROPORTION	Proportion	S/4 HANA	EHFNDD_CHM_COMP	PROPORTION	Proportion	Direct mapping
19	DCT		UNIT	Unit	S/4 HANA	EHFNDD_CHM_COMP	UNIT	Unit	Direct mapping

Transformation Mapping

Mapping Table Name	Mapping Table Description

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Business completely fills out and signs off on the Enriched DCT.	Business
2	S2P team provides the final Vendor-to-Business Partner cross-reference mapping file.	Data Team

Pre-Load Validation

Project Team

Completeness

Task	Action
Identify duplicate	Check for material ID field to check for duplicates. If found, remove the rows
Identify blanks	Check for material ID field to check for any blank fields. If found, remove the rows
Load File Record Count Verification	Compare the total number of records in the Target-Ready load file against the approved DCT to ensure no record drops occurred during transformation.

Accuracy

Task	Action
S2P Dependency Referential Integrity	Compare the Product ID in the load file against the S/4HANA MARA table to check for any discrepancies
BP Dependency Referential Integrity	Compare the mapped WASTE_PARTNER against the S/4HANA BUT000 table to ensure the Business Partner exists.

Business

Completeness

Task	Action
Validate the total count	Compare the count of materials in the load file vs MARA extract with materials containing waste in the description
DCT Sign-off	Business Data Owner confirms all applicable active legacy environmental materials are accounted for in the final DCT.

Accuracy

Task	Action
Transformation Data Verification	Business to review random sample of the transformed data file to ensure critical EHS attributes, such as Logistics Roles and Waste Codes, have been accurately mapped according to the agreed business rules.

Load

The load process includes:

1. Execute the automated data load into target system using load tool or product the load file if the load must be done manually
2. Once the data is loaded to the target system, it will be extracted and prepared for Post Load Data Validation

Load Run Sheet

Item #	Step Description	Team Responsible
1	Validate S2P Material/Product Master and BP loads are 100% complete and active in target system.	Data Team
2	Execute data load	Data Team
3	Download load error logs and resolve any immediate technical failures.	Data Team

Load Phase and Dependencies

Configuration

Item #	Configuration Item
1	Waste Codes
2	Compliance Purposes and Dangerous Goods regulations activated in target system.

Conversion Objects

Object #	Preceding Object Conversion Approach
	list the exact title of the conversion object of only the immediate predecessor – this will then confirm the DDD (Data Dependency Diagram)
1	Product Master
2	Business Partner (Vendor)

Error Handling

Error Type	Error Description	Action Taken
Dependency Error	"Base S2P Product ID does not exist in target system"	Data Team must pause load for that record and verify Product Master status with the Supply Chain track.
Validation Error	"Product is not flagged as Compliance Relevant"	Data Team must request S2P to update the Product Master Basic Data view for the linked Material ID.
Validation Error	"Waste Code XXXXX is not recognized"	Data Team to verify with EHS Functional if configuration is missing, or send back to Business for DCT correction.
Dependency Error	"Waste Partner (BP) does not exist"	Verify S2P/Finance Business Partner load logs. Hold EHS record until BP is successfully loaded.

Post-Load Validation

Project Team

Completeness

Task	Action
Table Record Count	Extract records from EHEWAD_WA_MAT and compare against the total successful records in the migration load file.

Accuracy

Task	Action
Linkage Validation	Extract table records and validate if S2P product link is correctly populated and verify the Compliance Purposes in EHFND_CHM_COMP.

Business

Completeness

Task	Action
Fiori App Verification	Log into the Fiori Launchpad. Open the <i>Manage Material Data</i> app. Validate that the expected volume of Waste and Emission materials appear in the active list view.

Accuracy

Task	Action
Fiori UI Spot Check	Open a 10% sample of materials. Navigate through the tabs to visually verify that Logistics Roles (Transport, Emission, Disposal checkboxes), Waste Codes, and Dangerous Goods compliance purposes accurately reflect the original enriched DCT.

Key Assumptions

- Master Data Standard is up to date as on the date of documenting this conversion approach and data load.
- Materials (Waste & Emissions) is in scope based on data design and any exception requested by business.
- All predecessor objects (Product Master, Business Partner) will be fully loaded, validated, and active in the S/4HANA production client prior to the EHS cutover window.

See also

Change log




Version	Published	Changed By	Comment
CURRENT (v. 18)	Mar 11, 2026 05:32	AMBAVARAM-ext, Supriya	
v. 17	Mar 11, 2026 05:09	AMBAVARAM-ext, Supriya	

v. 16	Mar 09, 2026 09:13	AMBAVARAM-ext, Supriya
v. 15	Mar 09, 2026 06:37	AMBAVARAM-ext, Supriya
v. 14	Mar 09, 2026 06:12	AMBAVARAM-ext, Supriya
v. 13	Mar 09, 2026 06:06	AMBAVARAM-ext, Supriya
v. 12	Mar 09, 2026 04:38	THAPETA-ext, Ram
v. 11	Mar 07, 2026 21:07	AMBAVARAM-ext, Supriya
v. 10	Mar 03, 2026 03:18	THAPETA-ext, Ram
v. 9	Mar 03, 2026 03:18	THAPETA-ext, Ram

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Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

From Aug 06, 2025 to Mar 11, 2026	Actor	Type	Activity	Version
	THAPETA-ext, Ram and AMBAVARAM-ext, Supriya	Edit	multiple updates from  THAPETA-ext, Ram and  AMBAVARAM-ext, Supriya	
Jul 10, 2025	 THAPETA-ext, Ram	Edit	created the page at 9:38 am	