



Work Instruction (WI)

DIRECTIVE NO. 250-WI-8500.3.2C
EFFECTIVE DATE: 8/31/2016
EXPIRATION DATE: 8/31/2021

APPROVED BY Signature: Original signed by
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COMPLIANCE IS MANDATORY

Responsible Office: 250/ Medical and Environmental Management Division

Title: Hazardous Waste Data Entry and Validation

PREFACE

P.1 PURPOSE

The purpose of this Work Instruction is to detail procedures for how the Medical and Environmental Management Division (MEMD) will validate hazardous waste data collected at GSFC.

P.2 APPLICABILITY

- a. This work instruction applies to any member of MEMD entering data into the hazardous waste database at Greenbelt only.
- b. In this directive, all document citations are assumed to be the latest version unless otherwise noted.
- c. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms “may” or “can” denote discretionary privilege or permission; “should” denotes a good practice and is recommended but not required; “will” denotes expected outcome; and “are/is” denotes descriptive material.

P.3 APPLICABLE DOCUMENTS AND FORMS

- a. Goddard Procedural Requirements GPR 8500.3, Waste Management.
- b. 40 Code of Federal Regulations Parts 260-282, Resource, Conservation, and Recovery Act (RCRA) regulations.
- c. Current version of the Hazardous Material Management System (HMMS) user’s manual
- d. NASA Enterprise Directory (NED)
- e. GSFC 23-54 Hazardous Waste Disposal Inventory.
- f. 250-PG 1410.2.1 Configuration Management Procedure
- g. 250-PG-8500.3.3 Less-than 90-Day Waste Accumulation Facility and Program Procedures
- h. 250-WI-8500.3.4 Waste Analysis Plan

P.4 CANCELLATION

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250-WI-8500.3.2B Hazardous Waste Data Entry and Validation

P.5 TOOLS, EQUIPMENT, AND MATERIALS

Access to the NASA GSFC network and the hazardous waste database with the rights to modify records will be needed to successfully enter data into the database.

P.6 SAFETY PRECAUTIONS AND WARNINGS

Ergonomics should be considered when entering data for long periods of time.

P.7 TRAINING

There are no specific training requirements associated with this activity.

P.8 RECORDS

Record Title	Record Custodian	Retention
Waste Profiles	MEMD	*NRRS 8500.23.5.A.3.a Destroy 3 years after superseded or when no longer needed, whichever is later.

* NRRS – NASA Records Retention Schedule ([NPR 1441.1](#))

P.9 MEASUREMENT/VERIFICATION

Data gathered from GSFC waste activities at any Less-than 90-Day Facility are required by environmental regulatory agencies. This data is used for a variety of required regulatory reports as well as MEMD reports to track metrics, chemical reuse, recycling, trending, and other waste activities on center.

Instructions

1. RECEIVING REQUESTS

Waste pickup requests are received by MEMD through the submittal of a completed ticket via the Electronic Management Operations Directorate (eMOD). The completed eMOD ticket will contain the following generator information: name, building and room number, phone number, organizational code, and verification that the generator has received RCRA Hazardous Waste Generator Training within the last twelve months. There are four types of eMOD tickets that pertain to the hazardous waste program. The “Hazardous waste pick up with a container number or waste ID number” ticket means that the waste has been characterized by MEMD who has issued a container with a label or profile number to the generator for that specific waste. The “Request for Material Characterization” is used for a new/potential waste stream that the generator would like characterized prior to generation of said waste. It is also used for coordinating a pickup of material that is either unused, no longer needed, or expired. The “Universal Waste Pick Up” ticket is used to have batteries, fluorescent light bulbs, used oil, PCB ballasts, or mercury containing articles picked up. The “Waste generated during construction activities” ticket is for waste from construction projects like building demolition or building construction and requires funding from the organization responsible for the project. Waste profile information shall contain the following data: Environmental Protection Agency (EPA) waste codes, waste stream type, waste composition, organization that is generating the waste, analytical data, biennial data and any other notations required by various GSFC permits and reporting requirements (assigned by MEMD). All of the above listed information will be validated using the data contained in the database at the time MEMD receives the eMOD request. The GSFC 23-54 form may be submitted for waste pickups or characterizations in place of an eMOD ticket.

If no waste profile identification number is available, the generator will be contacted immediately and will be assisted in meeting the requirements of GPR 8500.3, Waste Management, for the process of properly identifying, characterizing, and managing the waste. This will also be entered into eMOD for proper tracking of program workload. At the discretion of the MEMD civil servant program manager, a finding may be documented in a corrective actions database.

2. GENERATOR DATA

The following generator data will be reviewed and validated by MEMD with a Satellite Accumulation Area (SAA) manager or other point of contact each time waste is scheduled to be picked up:

- Waste generator’s first and last name;
- Phone number;
- Generator’s organizational code;
- Lab or SAA building and room number;
- Special restrictions or accessibility issues;
- Date of last RCRA Generators training;

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- E-Mail address; and
- Name of the civil servant supervisor responsible for process generating waste.

All of the above information shall be validated using the NASA Enterprise Directory (NED) and the current version of the organizational chart for that Branch or Division. Any new generator information or changes to the current data will be entered into the hazardous waste database as needed.

3. WASTE PROFILE DATA

Waste profile data will be reviewed and validated by MEMD with an SAA point of contact or lab manager each time waste is scheduled to be picked up. All necessary data fields in the waste profile screens in the hazardous waste database shall be populated unless otherwise approved by configuration management process defined in 250-PG 1410.2.1 Configuration Management Procedure.

Any new waste profile information or changes to the current data will be entered into the hazardous waste database. For instruction on creating a Waste Profile in HMMS see Appendix G.

Each eMOD ticket submitted to MEMD is reviewed for accuracy prior to any waste pickup. Any discrepancies related to the database records will be addressed to the generator at that time.

4. INVENTORY DATA

All generator and waste profile data discussed in this Work Instruction is entered into the hazardous waste database using the waste profile identification number or serial number. Whenever possible, the serial number shall be entered into the database by scanning the barcode on the hazardous waste or hazardous material label. When it is not possible to scan the barcode, the data shall be entered manually. The member of MEMD entering the data shall be responsible for ensuring the container information (i.e., quantity, size, and type) is accurate. All items received will be weighed by a member of MEMD at the Less Than 90-day Waste Accumulation Facility and the weight will be entered into the database. When entering data manually, a second member of MEMD will validate the data for accuracy.

The database will assign each item in the pickup with a unique container number when the item is entered into the database. That number will then be printed onto a label generated by the database. See Appendix E for step by step instructions on how to label containers for storage in Less-than 90-day Waste Accumulation Facility. Each waste label shall contain the following information:

- Regulatory class (hazardous or non-hazardous);
- Unique identification number;
- Waste profile number;
- Waste category (corrosive, flammable, etc.);
- Accumulation start date (see Appendix D); and

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- Storage location.

The Less-than 90-Day Waste Accumulation Facility inventory is validated, in accordance with 250-PG-8500.3.3 Section 2.12 Weekly Inspections. Any discrepancies related to the inventory will be addressed at that time and corrected once the error has been identified.

4.1. OFFLINE DATA TRACKING

In the event that the hazardous waste database is offline, all containers that are issued and collected shall be documented (Environment\E-4 RCRA TSCA - Hazwaste) and must contain the following information:

- Waste profile number;
- Waste collection site;
- Accumulation start date (if applicable);
- HMMS serial number;
- Weight;
- Container type; and
- Container serial number the waste was consolidated into (if applicable).

Waste containers stored in the Less than 90-day Waste Accumulation Facility shall receive a hand-written, hazardous waste label that indicates the waste profile, and accumulation start date. Waste containers that are distributed to generators will receive a hand-written, hazardous waste label that indicates the waste profile.

Once the database resumes functionality all documented information must be entered so that data from waste activity is accurate.

In the event that the hazardous waste database is online but does not have the ability to print waste labels, waste containers will receive a hand-written hazardous waste label. Waste containers that are stored in the Less-than 90-day Waste Accumulation Facility will receive a hand-written, hazardous waste label that indicates the associated HMMS serial number as well as the accumulation start date. Waste containers that are distributed to generators will receive a hand-written, hazardous waste label that indicates the waste profile number as well as the associated HMMS serial number. Once the hazardous waste database resumes the ability to print, containers that have received hand-written labels, in the field and in the Less-than 90-day Waste Accumulation Facility, should be relabeled with the standard HMMS hazardous waste label.

5. MANIFEST DATA

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Information on the manifest will be compared with that in the database. In particular the database will be used to validate the following information on the Hazardous Waste Manifests:

- Container weight;
- Profile numbers;
- Container type;
- Container quantity, where applicable;
- EPA waste codes; and
- Management Method Code.

6. LAND DISPOSAL RESTRICTIONS

The land disposal restrictions will be validated using the hazardous waste database to identify Underlying Hazardous Constituents.

7. DATA PROTECTION

At a minimum, daily backups to the server where the database resides will occur. The backup shall only be used in the event of an emergency.

8. RECORDS

MEMD shall retain all records as described in P.8, Records.

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Appendix A – Definitions

- A.1** Hazardous Waste Generator –any person whose action or process produces hazardous waste identified or listed in 40 C.F.R. 261, or in COMAR 26.13.02.
- A.2** Satellite Accumulation Area (SAA) – An area designated by MEMD and the generator to be a staging area for hazardous waste until proper disposal is arranged with MEMD. Each SAA is located near the point where the hazardous waste is initially generated and must meet the requirements set for an SAA as defined in GPR 8500.3.

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Appendix B – Acronyms

eMOD	Electronic Management Operations Directorate
EPA	Environmental Protection Agency
GPR	Goddard Procedural Requirements
GSFC	Goddard Space Flight Center
HMMS	Hazardous Material Management System
MEMD	Medical and Environmental Management Division
NED	NASA Enterprise Directory
RCRA	Resource Conservation and Recovery Act
SAA	Satellite Accumulation Area
SHetrak	Safety, Health, and Environmental Tracking
TSDf	Transfer, Storage and Disposal Facility

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Appendix C – Creating a Waste Container in HMMS

Issuing Containers to Generators

- C.1** Start at the “Home” screen in HMMS.
- C.2** Navigate to *Waste Functions > Generators > Create Containers*.
- C.3** Click on the “New Record” icon in order to create a new container.
 - a. Note: If you are entering a record for a container of unused material without a hazardous material inventory label, the profile you select will be different. The profile number for all unused and expired material will always end in the 90’s. For unused material with a hazardous material inventory label, do not create a container. See Appendix H.
- C.4** Enter Collection Site Code.
- C.5** Enter Profile Number.
- C.6** Enter quantity, size, unit of measurement, and waste container type.
 - a. Note: If HMMS prompts you to enter a container number, there is vital information missing from the input record that was linked to one of the data fields. Do not proceed until the record(s) have been fixed. DO NOT ENTER A CONTAINER NUMBER THAT HAS NOT BEEN GENERATED BY HMMS.
 - b. The container number field will disappear when you have entered data into the proper fields. When the correct information is entered, click “Save” and the container will be created and the label can be printed.
- C.7** A message will appear once the container has been created. Click “OK” and you will be brought back to the “Create Container” screen. From there, you can either create another container or navigate back to the “Home” screen.
- C.8** When you are issuing a container to a generator, the label should have a container number and a barcode. There is no accumulation start date on hazardous/non-hazardous waste containers issued to generators. Universal waste containers must have an accumulation start date on the label before they are issued to a generator. See Appendix D.

Appendix D – Assigning an Accumulation Start Date to Universal Waste Containers

- D.1** After the Universal Waste container is created and before a Universal Waste container is issued to a generator, an accumulation start date must be assigned to the container. Start with the container record screen. The container status should read “Open Container-In Use”. Select “Container History.”
- D.2** Enter the “Accumulation Start Date” to match the “Delivery/Start Date” when you are issuing a universal waste container to a generator. Do not enter any other data. The remaining data will be entered when the container is brought back to the Less-than 90-Day Waste Accumulation Facility to await disposal.
- a. When you assign a Universal Waste container to a generator, the label should have the date and a barcode. Remember that Hazardous and Non-Hazardous containers do not need an Accumulation Start Date, only Universal Waste.

Appendix E – Labeling Containers for Storage in the Less-than 90-Day Waste Accumulation Facility

- E.1** To access the container data, select the record of choice in the container management screen.
- E.2** Now that the container is created, the status will be “Open Container.” When being issued to a generator, the container must remain open. Only after the container is brought back to the Less-than 90-day Waste Accumulation Facility should the container status be updated to “closed” and logged in.
- E.3** Select “Close” container when the waste is brought back to the Less-than 90-Day Waste Accumulation Facility.
- E.4** Click “Save” and the container will be closed.
 - a. The record will now display the container as “Closed-Waiting Pickup.”
- E.5** After the record is “Closed”, select “Log-In”.
- E.6** Enter the weight of the container into the “Total lbs.”
- E.7** When logging in a container you must enter a “Decision Code,” which denotes where the waste is going for disposal.
 - a. An example for a “Decision Code” would be HES-WTI. Most lab packs go to HES-WTI, so if you’re dealing with a lab pack acid, HES-WTI would be the appropriate Decision Code to use.
- E.8** After Decision code is selected, select a “Waste Management Type.”
 - a. The Waste Management Type to use for a lab pack going to HES-WTI would be incineration/insignificant fuel value. It is known that all lab packs going to HES-WTI will be incinerated.
- E.9** Enter the room number in the Less-than 90-Day Waste Accumulation Facility where the waste will be stored and the date when it was brought into the Less-than 90-Day Waste Accumulation Facility.
- E.10** Click “Save” and the container will have the status of “Storage Waiting Disposal.”

Appendix F – Consolidation of Containers at the Less-than 90-Day Waste Accumulation Facility

- F.1** When a bulk container is created, number the container in the “Comment” section of the “Container Management” record. For example, if there was a full drum of SNC-MIX-001 in storage, that would be denoted as “Bulk 1.” The next bulk drum that would be created would be denoted as “Bulk 2,” and so on. The same would apply to CAU-BCW-001, WIP-NCW-001, and any other bulks that may produce multiple containers within a 90 day period.
- F.2** Consolidation must occur within the bulk container. The container you are consolidating into must have the status of “Open Container.” Open the bulk container record and click the consolidate button.
- F.3** Click “Add Container” and you will be prompted with the “Available Containers” window.
- F.4** Select the container that will be added to the bulk container. The container must have the status of “Storage Waiting Disposal” in order to be consolidated. If not, the weight will not be added to the bulk container. If there is an accumulation start date attached to the container, the container is in “Storage Waiting Disposal.”
- a. The container number can also be typed into the “Add Container” field. Press ENTER and the container will be added.
 - b. The weight of the bulk container will be updated each time a smaller container is added.

Appendix G – Creating a Waste Profile in HMMS

- G.1** Start at the “Home” screen in HMMS.
- G.2** Navigate to *Waste Functions > Characterization > Waste Profile*.
- G.3** Click on the “New Record” icon.
- G.4** Fill in the field “Profile Number.” Refer to the “250-WI-8500.3.4 Waste Analysis Plan” Work Instruction for waste profile number nomenclature.
- G.5** Select from the “Waste Type” drop down menu, the description which best fits the waste.
- G.6** Select from the “Physical State” drop down menu, the description which best fits the waste.
- G.7** Populate the “Waste Stream Cd” list of values and choose the most applicable waste stream ID for the waste.
- G.8** Fill in the field “Name of Waste.” Refer to the “Waste Sample Analysis Plan” Work Instruction for waste name nomenclature.
- G.9** Populate the “Proper Shipping Name” list of values and choose the most applicable shipping description for the waste. Refer to 49 CFR for proper shipping descriptions.
- G.10** Fill in the field “ERG Guide NR.” Refer to the 2012 Emergency Response Guide for appropriate ERG Numbers.
- G.11** Fill in the “Hazardous Material” check box if the waste is considered a DOT hazardous material.
- G.12** Select from the “Method of Shipment” drop down menu, the appropriate method of shipment for the waste.
- G.13** Click the “Save” button and the new profile will be created.
- G.14** The “Start Date” of the profile will automatically be populated with the date the profile was created in HMMS.
- G.15** Fill in the field “End Date.” If the waste is a bulk, meaning that it has an approval code from a disposal facility, an “End Date” is very significant. The “End Date” is the date that the disposal approval for the profile will expire.
- G.16** Populate the “Process Type” list of values and choose the most applicable process code for the waste.
- G.17** Fill in the “Projected Annual Volume” Field with the appropriate data.
- G.18** Select from the “Unit” drop down menu, the applicable unit of measurement for the waste.
- G.19** If sample data is available, enter it in steps 20-25. Lab pack profiles will not need sample data entered.
- G.20** Fill in the “Mode of Collection” field with the sample collection method.
- G.21** Select from the “Basis of Knowledge” drop down menu, one of the two choices. Chemical Analysis would be applicable when there is sample data to enter. When generator knowledge is used to generate a profile, select “Generator Knowledge.”

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- G.22** Fill in the “Ref. Sample ID” field with the appropriate sample ID. The sample ID should match the sample log ID.
- G.23** Fill in the “Sample Collect Date” field. This will be the date that the sample was taken for the waste, or the date of the generator interview.
- G.24** Fill in the “Collector Initials” field with the initials of whoever performed the sampling of the waste or the generator interview.
- G.25** Fill out the following check boxes, if applicable: “Dioxin Listed Waste,” “Waste restricted from land disposal,” “Exemption has been granted,” “Waste meets applicable treatment standards,” and “Recurring.”
- G.26** Click the “Save” button.
- G.27** Complete the “Default Contract Line Items” section of the “Waste Profile.”
- G.28** Click on the “New Record” icon.
- G.29** Populate the list of values for the “Default Contract Line Items” field and select the appropriate “CLIN” code for the waste.
- G.30** Click the “Save” button and the “CLIN” code will be assigned to the waste.
- G.31** Complete the “Default Handling Costs” section of the “Waste Profile.”
- G.32** Click on the “New Record” icon.
- G.33** Populate the list of values for the “Default Handling Costs” field and select the appropriate “Handling Cost Code” code for the waste.
- G.34** Click the “Save” button and the “Handling Cost Code” will be assigned to the waste.
- G.35** Complete the “EPA Waste Codes” section of the “Waste Profile.”
- G.36** Click on the “New Record” icon.
- G.37** Populate the list of values for the “EPA Code” field and select the appropriate waste codes for the waste. If the applicable EPA codes are not available, refer to the appendix K of the “Data Entry Work Instruction” for instructions on how to add EPA codes to the “Waste Stream.”
- G.38** Click the “Save” button and the “EPA Code” will be assigned to the waste.
- G.39** The “Waste Profile State Waste Codes” section of the “Waste Profile” does not apply because IHS does not have Maryland State Waste codes loaded into HMMS.
- G.40** Complete the “Material Composition” section of the “Waste Profile.”
- G.41** Click on the “New Record” icon.
- G.42** Populate the list of values for the “Component” field and select the appropriate “CAS Number/ Chemical Name” for the waste.
- G.43** The “Material Composition” section is also where the results of the waste sample can be entered.
- G.44** Use the “Concentration (if<1%)” field to enter quantities from the waste sample lab report.
- G.45** Select from the “UOM” drop down menu, the appropriate unit of measurement for the component of the waste.

- G.46** If entering the chemical makeup of the waste, based on the MSDS/SDS or spent chemical mixture from generator knowledge, use the “Lower Range (%)” and “Upper Range (%)”.
- G.47** Complete the “Authorized Waste Collection Sites” section of the “Waste Profile.”
- G.48** Click on the “New Record” icon.
- G.49** Populate the list of values for the “WCS Code” field and select the appropriate waste collection site for the waste.
- G.50** The “DOT Shipping Description” information should have been filled out when the profile was created.
- G.51** If the shipping description of the waste needs to be changed, this will take place in the “DOT Shipping Description-Update” section of the “Waste Profile.”
- G.52** Complete the “Material Constituent” section of the “Waste Profile” (if applicable).
- G.53** This section is designed for any non-chemical constituents of the waste. For example, if the waste profile is for some kind of wipes then the “Constituent Name” would be “Wipes,” the “Concentration” would be “100” and the “Range Percent” would be “99-100” depending on how much free liquid was contained in the wipes.
- G.54** Click on the “New Record” icon.
- G.55** Add the appropriate “Constituent Name,” “Concentration,” and “Range Percent.”
- G.56** Complete the “Product/MSDS Information” section of the “Waste Profile” (if applicable).
- G.57** Click on the “New Record” icon.
- G.58** Populate the list of values for the “Product/MSDS Nr.”
- G.59** Select the appropriate MSDS that is related to the waste. Note: You will not be able to print the manufacturer MSDS from this section. You will only be able to print the HMMS version of the MSDS, which may or may not be accurate.
- G.60** Complete the “File Attachments” section of the “Waste Profile.” This section can be used to attach files to the waste profile. Examples of appropriate attachments are: Waste sample analytical reports, Manufacturer MSDS’s, emails regarding waste generating processes, documents pertaining to the waste, etc.
- G.61** Click the “New Record” icon.
- G.62** Click the “Browse” button.
- G.63** Select the appropriate file to attach.
- G.64** Click the “Save” button.
- G.65** Repeat as needed.
- G.66** On the right of the “Waste Profile” page there is a column named “Pages.”
- G.67** Select the “RCRA Characteristics” page and complete the following steps (if applicable).
- G.68** Select from the “Physical State” drop down menu, the appropriate physical state of the waste.
- G.69** Select from the “Treatment Group” drop down menu, the appropriate treatment group for the waste.

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- G.70** Fill in the remaining fields with any applicable information. Some fields may not apply to the waste.
- G.71** The “RCRA Requirement” is filled out with the Approval code from the Transfer, Storage Disposal Facility (TSDF).
- G.72** Select the “Material Characterization” page from the right side of the “Waste Profile” page.
- G.73** Complete the “Material Characterization” section by filling in all applicable fields.
- G.74** If the waste is hazardous, select the “Default Biennial Information” page from the right side of the “Waste Profile” page. If the waste is not hazardous, it does not require any biennial information.
- G.75** Populate the list of values for the “Source Cd 2001” field and select the correct code for the waste.
- G.76** If needed, provide information in the “Source Code 2001 Comment” Field.
- G.77** Populate the list of values for the “Mngmt Method Ship Cd 2001” field and select the correct code for the waste.
- G.78** Populate the list of values for the “Form Cd 2001” field and select the correct code for the waste.
- G.79** Populate the list of values for the “Minimization CD” field and select the correct code for the waste.
- G.80** Select “No” for “Is this waste mixed with nuclear source, special nuclear, or by-product material?” MEMD does not manage radioactive material.

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Appendix H- How to “Fill” a Hazardous Waste Container

Preface of function: The “Fill” function in HMMS is a way to change the status of an unused hazardous materials container to a “waste” and consolidate into a waste container. This step will avoid the need to create a waste container. The “fill” function is only to be used for a hazardous materials container that has not been used. The material must be characterized according to the waste profile of the container that is being “Filled”. Make sure all applicable EPA waste codes are captured on the respective profile. This function can only be utilized if the container has a hazardous materials inventory label assigned to it.

- H.1** Start at the “Home” screen in HMMS.
- H.2** Navigate to *Waste>Environmental> Container Management*.
- H.3** Enter the desired waste container ID into the “Search Criteria” field.
- H.4** Navigate to the right hand side of the screen to the “Functions” menu and select the “Fill” function.
- H.5** Toward the top right of the screen, you will see a button that will either say “Internal” or “External”. If it says “Internal”, left click the button and the options on the screen will change. You will see two data entry fields. “Add Serial Number” and “Remove Serial Number”.
- H.6** Utilize the “Add Serial Number” field to enter the correct serial number from the hazardous materials inventory sticker.
- H.7** Left click on the “Save” icon and the record will populate.
- H.8** Verify the correct data has been entered by viewing the “Internal Contents” tab.

Appendix I- Turning in a Partially Used Hazardous Materials Container

Preface of function: The “turn in” function for a hazardous material can be utilized to accurately track usage of that material while eliminating the need to create a waste container in HMMS. This function will result in the material being consolidated into a waste container. The material must be characterized according to the waste profile of the container it is being “turned in” to. Make sure all applicable EPA waste codes are captured on the respective profile. The usage must be captured in order to ensure accurate reporting from the database. This function can only be utilized if the container has a hazardous materials inventory label assigned to it. You will need to know the waste container ID number before you start.

- I.1** Start at the “Home” screen in HMMS
- I.2** Navigate to *Material Functions > Transactions > Turn In*.
- I.3** Enter the hazardous material serial number into the search criteria and left click on the “Go” button.
- I.4** Left click the “Edit selected record” button for the specific serial number.
- I.5** Update the “Issue Point” field with the correct issue point code (wherever the material was picked up)
- I.6** Enter the quantity of material in the container in the field “Qty In”.
- I.7** Enter the desired waste container number into the field “Container Number”.
- I.8** Left click the “Save” icon or hit “Enter” on the keyboard.
- I.9** The record will update as turned in.
- I.10** The transaction can be validated in the respective waste container screen under the “Fill” function.
- I.11** Select “Internal Fill” and the hazardous material inventory serial number should be listed under the “Internal Contents” tab.

Appendix J -Creating a Waste Collection Site in HMMS

- J.1** Start at the “Home” screen in HMMS.
- J.2** Navigate to *Administration>Waste> Collection Sites*.
- J.3** Click on the “New Record” Icon.
- J.4** Fill in the field “WCS Code”. The code must start with the building number, followed by a hyphen, followed by the room number. The building number must be 3 digits. There MUST be a room number affiliated with the WCS Code. For example, a WCS Code for Building 5, East Storage would be input as, 005-E018. An example of an incorrect entry would be 005-ESTORAGE.
- J.5** Fill in the field “EPA ID”. Click on the “List of Values” icon to the right of the field and select the EPA ID named “NASA GSFC”.
- J.6** Fill in the field “SEQ NAME”. You will have two options (NORAD and DEFAULT). Select “DEFAULT”. This field must be populated with DEFAULT if the WCS is going to be assigned to a profile. Otherwise, the WCS Code will not appear under the options for “AUTHORIZED WASTE COLLECTION SITES” field under the WASTE PROFILE.
- J.7** Fill in the field “LOCATION”. This will be identical to the “WCS CODE” entry except the building number and room number will be separated by a comma and not a hyphen.
- J.8** Fill in the field “BUILDING”. The building number will always read “BG####”. For example, a WCS Code for a site in building 5 would be entered as “BG005”.
- J.9** Fill in the “ORGANIZATION” field. Select the organizational code that is generating the waste at the Waste Collection Site.
- J.10** Fill in the “Description” Field. Describe the waste collection site. For example, the WCS code 005-E018, would be described as “B.5 East Storage”.
- J.11** Fill in the “Supervisor” field. The supervisor is the civil servant who is in charge of the waste collection site. The supervisor usually the organizational branch head or associate branch head. The supervisor is not the employee who handles the day to day operations for the waste collection site.
- J.12** In order for the user to assign a profile to the waste collection site, the box labeled “Active” must be checked.
- J.13** The start date will be populated automatically when the WCS Code has been created. The end date will be populated automatically when the “Active” box is unchecked.
- J.14** Select the “Site Type”. Collection sites that are generating hazardous waste and are an established SAA would be classified as a “No Limit Area”. A “Day Limit Area” would apply to a location in the Hazardous Waste Storage Facility (BG027A). This would be designated as a “90 Day Limit” site. “Day Limit Area” would also apply to universal waste collection sites. Universal waste collection sites (i.e. Battery Collection Sites) would be designated as a “1 Year” day limit site.
- J.15** Click the “Save” icon
- J.16** After the “Save” icon is selected, more fields will be available for data entry.

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- J.17** Navigate to the drop down tab labeled “Contact Information”.
- J.18** Click on the “Add New Record” icon.
- J.19** Fill in the “Name” field. Click the “List of Values” icon to the right of the “Name” field. Select the employee that handles the day to day operations of the waste collection site. This is different than the civil servant that was entered into the “Supervisor” field.
- J.20** Fill in the “Position Desc.”. Click the “List of Values” icon to the right of the “Position Desc.” field. Select the position description of the employee that was entered for “Contact Information”. Be as accurate as possible. The “Phone” field will automatically populate when the “Name” field is populated.
- J.21** Click the “Save” icon.
- J.22** Navigate to the drop down tab labeled “Authorized Users” and add all users who need to access this waste collection site in HMMS. Do not enter anyone outside of people with waste relations (Code 250). They have no reason to access a waste collection site.
- J.23** Click the “Save” icon.
- J.24** The remaining fields are not to be filled out. They will be filled out at a later time when they are relevant.
- J.25** Authorized Waste Profiles will be automatically populated when waste profiles are assigned to the specified waste collection site.
- J.26** The “Waste Collection Site” is ready to operate.

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Appendix K -Creating a Waste Stream in HMMS

Preface of function: The waste stream does not contain a lot of information. However, the information that it does contain is vital to the regulatory reporting in HMMS. Waste profiles are assigned to waste streams. The waste stream contains the applicable regulatory codes that can be assigned to a profile. At GSFC, the description of the waste stream references the process, organization or source generating the waste. The waste profile cannot add EPA waste codes unless it is assigned to its respective waste stream.

- K.1** Start at the “Home” screen in HMMS.
- K.2** Navigate to *Waste>Characterization> Waste Streams*.
- K.3** Click on the “New Record” Icon.
- K.4** Enter an identification nomenclature for the desired waste stream. The ID should not be more than 5 letters and contain no numbers.
- K.5** Enter a description of the waste stream. The description should fall in line with the source of the waste. For example, the waste stream for Parts Cleaning Aerospace (PCLAR) is waste generated from cleaning parts for space flight hardware.
- K.6** Left click on the “Save” icon
- K.7** The screen will then refresh and the “EPA waste codes” tab will become available
- K.8** Expand the tab and left click on the “New Record” icon
- K.9** Add the required waste codes for the waste stream
- K.10** Left click on the "Save" icon
- K.11** The waste stream is ready to be assigned to a waste profile.

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Appendix L– GSFC Decision Codes

Decision Code	Description	Associated Wastes
AERC	ALLENTOWN, PA	Universal waste (mercury containing articles, light tubes/bulbs, PCB-ballasts, lithium batteries, NiCad batteries)
CAMBRIDGE	CAMBRIDGE METAL	Scrap Metal
CH BALT	CLEAN HARBORS OF BALTIMORE	Transfer facility
CHATT	CLEAN HARBORS CHATTANOOGA	Non-hazardous sludge
CHEMTRON	CHEMTRON CORPORATION	Propellant Rinse water
CLEAN HARBORS ED	EL DORADO, AR	Lab packs and waste for incineration
CLEAN HARBORS LP	LAPORTE, TX	Compressed gas cylinders
CLEAN HARBORS OHIO	CLEAN HARBORS OHIO	Bulk wastes
COLFAX	CLEAN HARBORS COLFAX	Explosives
COM FORK	COMMUNITY FORKLIFT PAINT DONATION	Paint donation
DEER TRAIL	CLEAN HARBORS DEER TRAIL	Acid and base wipes
DRMO	DEFENSE REUTILIZATION AND MARKETING OFFICE	Do not use
EAGLE PICHER	FLIGHT BATTERY MANUFACTURER	Flight battery return to manufacturer
ECO BATTERY	GLEN BURNIE, MD	Lead acid battery recycler
EQ DETROIT	DETROIT, MI	Bulk wastes/ Non-lab packs
EQ OF PA	EQ PENNSYLVANIA	Large quantity liquids for waste water treatment
EQ TP	EQ TRANSFER AND PROCESSING	Transfer facility
ERC	LANCASTER, PA	Oil from Motor pool and Auto club
EWMI	WASTE BROKER	Waste broker

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FCC	FCC ENVIRONMENTAL	Oil removal contractor
HES WTI	EAST LIVERPOOL, OH	Lab pack incinerator
MDWTP	MICHIGAN DISPOSAL WASTE TREATMENT PLANT	Hazardous liquids for waste water treatment
MILLER	MILLER ENVIRONMENTAL GROUP	Spill clean-up contractor/ Waste transporter
NATREF	NATIONAL REFRIGERANTS, INC	Refrigerant recycling facility
SAFETY KLEEN	SAFETY KLEEN SYSTEMS	Oil removal contractor
SIEMENS	SIEMENS INDUSTRY	Plating shop anionic and cationic exchange resins
SPIRIT	SPIRIT SERVICES	Non-hazardous waste water treatment (non-hazardous sludge)
SPR GROVE	SPRING GROVE RESOURCE RECOVERY	Bulk wastes
TECHNIC	TECHNIC INC	Precious metal reclamation
VEOLIA ILLINOIS	VEOLIA SAUGET, ILLINOIS	Explosives
WAYNE	WAYNE DISPOSAL INC	Non PCB ballasts
WSSC	DISCHARGE WASTE TO SANITARY SEWER	Waste that is discharged to sanitary sewer (prior clearance with water program)

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Appendix M – Less-than 90-Day Waste Accumulation Facility Rooms and Storage Bays

<90-day Facility Rooms and Storage Bays	
Room No.	Associated Wastes
101	Flammable labpack items and non-chlorinated solvent wipes
102	Caustic wastes
103	Acid wastes
104	Toxic wastes
105A	Non-regulated wastes and batteries
105B	Used oil and oily wipes
105C	Bulk solvents
105E	PCB and non-PCB ballasts
111B	Bulk acid wastes and other over flow
111C	Universal wastes and light tubes
194	Lead acid batteries
198	Compressed gas

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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline		Initial Release
A	1/20/2010	Changed all references to Safety and Environmental Division (S&E) to Medical and Environmental Management Division (MEMD) due to division reorganization. Updated signature block.
B	8/31/2011	Updated to the current WI template 1.0 Receiving Data – Made changes to reflect the migration to the new hazardous waste database and documenting waste profiles. Track all undocumented waste in eMOD. 2.0 Generator Data – Validate data all data using NED. 3.0 Waste Profile – Document biennial reporting information. 4.0 Inventory – Updated to use hazardous waste database serial number or waste profile number. 5.0 Manifest – Added container type. 7.0 Data Protection – Documents backups are performed nightly.
C	8/31/2016	All text referring to ‘27A’ was changed to ‘Less-than 90-day Waste Accumulation Facility’ to encompass the current facility and any temporary facilities that may be created at GSFC and to match the nomenclature used in 250-PG-8500.3.3. Format adjustments were made throughout the document and document was transferred to the new WI template. P.3 Added 250-PG 1410.2.1 Configuration Management Procedure, 250-PG-8500.3.3 Less-than 90-Day Waste Accumulation Facility and Program Procedures, 250-WI-8500.3.4 Waste Analysis Plan P.7 Changed training from not applicable to no specific training requirements. P8 Added records and retention schedule. 1.0 Receiving Requests – Made changes to the text to reflect the use of eMOD to request waste pickups and characterizations rather than the GSFC 23-54 form 2.0 Generator Data – Added ‘Special restrictions or accessibility issues’ to the list of generator data that is evaluated by MEMD after a request for waste pickup or characterization is submitted through eMOD.

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		<p>3.0 Waste Profile Data – Deleted list of waste profile data and added reference to hazardous waste database.</p> <p>4.0 Inventory – Added text describing container management procedures. A hyperlink was also provided for the ‘Manual Container Log’.</p> <p>Changed the Appendix format to reflect current version of HMMS.</p> <p>Added Appendix H- How to Fill a Waste Container</p> <p>Added Appendix I- Turning in a Partially Used Hazardous Materials Container</p> <p>Added Appendix J -Creating a Waste Collection Site in HMMS</p> <p>Added Appendix K -Creating a Waste Stream in HMMS</p> <p>Changed Appendix H to Appendix L</p> <p>Changed Appendix I to Appendix M</p>
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For Best Practices refer to:

<https://gs279gdmsias.gsfc.nasa.gov/GDMSv2/downloadFile.htm?docId=28819>

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