PBS Office of Facilities Management

PBS National CMMS Desk Guide

Revision 1

June 19, 2019

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Revision History

Version	Description	Date
Original	Original Version	**April 30, 2019**
Revision 1	Revised page 8 of 29, "GSA Facility Managers. FMs responsible for the following deliverables…." by replacing the second bullet ● Recording all GSA and building tenant calls/service requests. With ● Ensuring all service work performed at the facility/facilities is recorded in the NCMMS. The NCMMS is the system of record and repository for all service work conducted at GSA real property owned facilities.	**June 19, 2019**

Introduction

This desk guide is a companion document to the PBS Policy on NCMMS. It identifies the processes, roles, responsibilities, technical references and best practices to support execution and compliance with said Policy.

Definitions

Asset. Fixed and mobile building equipment. Examples include air handlers, boilers, cooling towers, generators, and scissor lifts. *Asset list* is equivalent to *equipment list.*

Corrective Maintenance Work Order (CM). Documents repair or replacement work done to correct a defective or failed asset or system. When any type of CM is carried out, the Asset must be identified in the NCMMS work order to ensure proper maintenance records.

Inspection Work Order: Operations and Maintenance Inspection (OMI) and GSA Inspection (GSAI). These work order types cover inspections carried out on completed work by the service contractor, type OMI; and by GSA, type GSAI. These work orders types are used in work orders that correct deficiencies discovered during inspections.

Planned and Preventive Maintenance Work Order (PM). Generated by the NCMMS for locations, assets or systems, this includes work performed by subcontractors. These are typically calendar-based, regularly recurring maintenance. These work orders are either generated manually, through scheduling, or by the NCMMS team, and have the Work Type of PM.

Work Order Management. The action of opening, completing, recording actual start and finish dates/times, and entering work orders within the NCMMS. Work orders are considered complete when repair work is finished and all pertinent information is input on the work order. If a work request deals with a building system, i.e. HVAC systems, Indoor Air Quality (IAQ), Fire Alarm Systems, etc, the asset(s) related to the work request must be identified by Asset Number.

Work Request (WR) Work Order. Includes all GSA and building tenant calls for services not requiring a repair of building systems or assets. Examples include, but are not limited to: spills, restroom supplies, hot/cold calls, lighting issues, requests for additional services, etc.

In the event that a work request requires additional repairs, a follow on child Corrective Maintenance (CM) work order must be opened.

Responsibilities

PBS, Office of Facilities Management (OFM). The OFM is responsible for development of the NCMMS Policy, Companion Guidance, and oversight of the facilities maintenance program. OFM will also coordinate training for PBS employees and support regions when addressing NCMMS concerns.

PBS, Office of Design and Construction (ODC). The ODC is responsible for ensuring that OFM receives data from construction projects in a format directly readable by NCMMS, either NCMMS-formatted COBie or NCMMS uploader compatible Excel, per

- PBS-P100 '*Facilities Standards for the Public Buildings Service*'
- ODC's '*GSA Division 1 Template Section GSA 013600 COBie FY15*', Update October 1, 2014.
- *BIM Guide 08 - Facility Management*, Section 3.3 – COBie Submittals, December 2011.

ODC requires BIM/COBie performance per P-100 in new construction, modernization, and large, tenant funded RWA projects. BA-54 repair and alteration projects and smaller RWA projects may be limited in BIM/COBie by available BIM models for the project. NCMMS-uploader compatible excel files will likely be the turnover document for smaller projects that do not have a BIM requirement.

- COBie data shall be provided as follows:
    a. Forecasted COBie data provided at the 100%-Construction Drawing stage in the 'As-Designed' submission by the A/E, for OFM planning and test load to NCMMS.
    b. Complete COBie data provided at the 'as built' submission at substantial completion of construction, by the General Contractor, for final upload into NCMMS by GSA.
    c. (ODC) Construction contractor provided data shall at minimum include contact, facility, floor, space, zone, type, component, system, document information as specified in the GSA COBie requirement. For specific requirements please see GSA COBie Requirements on the COBie page of the National CMMS web site.
    d. (OFM) NCMMS records will be created from the ODC-provided data using PBS COBie template. NCMMS point-of-contact will coordinate with facility manager regarding asset creation strategy including asset grouping, etc.

NCMMS point of contact (POC) will provide new NCMMS location and asset numbers to the construction manager via ODC POC.

***Note**: subsequent data sets from ODC must use NCMMS-generated asset and location numbers.*

e. (ODC) as built - Data will be updated in the same format as previous stage, and returned for upload into NCMMS. COBie templates indicate what information is required by OFM.

Regional Environmental, Health, Safety & Fire (EHSF) Program Staff. The EHSF program staff are responsible for providing technical support to identify the requirements of GSA EHSF Orders, federal laws, policies and regulations that must be executed throughout the region and using the NCMMS to verify performance of required EHSF tasks. The program staff supports Facility Managers, Project Managers and Lease Administration Managers. EHSF maintenance-related requirements for O&M contractors include but are not limited to ensuring and documenting that:

- **Fuel Storage Tanks (FST)** are operated, monitored, inspected and periodically tested, with actions, and test results entered as PM work orders in NCMMS and documentations linked to the asset inspected.
- **Fuel storage tank operators** are trained. Training certificates for O&M contractors are uploaded to the Resources > Qualifications section of NCMMS. Training expirations and retraining requirements shall also be scheduled reminders for the associated persons, sent to the EHSF staff. (It's optional to load a 3rd party personnel record with certification information).
- **Regulated waste** including but not limited to Hazardous and Universal Wastes are properly accumulated, shipped, and the shipment event entered as a work order and the characterization, bills of lading, manifest or other documentation is attached to the work order.
- **Assets that must meet EHSF requirements** (fire suppression & notification, FSTs, chillers, gas sensors, AHUs, etc.) are continuously updated with regard to

asset information either as part of routine PM tasks or during responses to service calls.

- **Spills and environmental releases** are reported and cleaned-up, and entered as a work order in NCMMS.
- **Stationary engines** are registered as assets in NCMMS. The registration process would be entered as a worker order. The registration documentation would be uploaded as an attachment to the asset in NCMMS.
- **NCMMS safety plans, hazards and precautions** accurately reflect EHSF requirements and are linked to their respective locations, assets or events (work orders/PMs) as appropriate in the NCMMS. For example, electrical safety plans would be linked either to electrical equipment assets, material handling, heavy equipment, and/or PM performed on electrical equipment, and/or work orders flagged as electrical equipment issues.
- **Confined spaces** will be captured in the hazards section of the Safety tab for the related location or asset.

GSA Facility Managers. FMs responsible for the following deliverables. In practice, GSA FMs often delegate many of these to their O&M and other service contractors, per their contracts:

- Ensuring building systems are maintained in accordance with the current National Operations & Maintenance (O&M) Specification, site specific Building Operating Plan (BOP), and preventive maintenance program.
- Ensuring all service work performed at the facility/facilities is recorded in the NCMMS. The NCMMS is the system of record and repository for all service work conducted at GSA real property owned facilities.
- Recording all accidents, injuries and entrapments in the NCMMS. Use Failure Class - SAFETY.
- Recording all Indoor Air Quality (IAQ) complaints in GSA owned and operated buildings and the corrective action in the NCMMS system.

- Ensuring the facilities/equipment operations and maintenance activities required for compliance with GSA Environmental, Health, Safety & Fire Orders and federal, state, and local regulations are executed throughout the region and properly captured in the NCMMS. GSA orders, federal laws, and regulations that contain maintenance and operations related compliance components include but are not limited to:
    - Indoor Air Quality Management Order and companion desk guide, PBS 1000.8
    - Drinking Water Quality Management Order, PBS 1000.7
    - Fuel Storage Tank Management Order, PBS 1095.2
    - Resource Conservation and Recovery Act, as amended
    - Clean Air Act, as amended
    - Safe Drinking Water Act, as amended
    - Toxic Substance Control Act, as amended
    - Department of Transportation materials and waste management requirements
    - Occupational Safety & Health Act, as amended

Contracting Officer's Representative. COR's are responsible for:

- **System access** - On/off boarding of government and contractor personnel to the NCMMS database for their respective building/s.
- **Data integrity** - Ensuring data accuracy and completeness in all work orders, asset inventories, location inventories, preventive maintenance schedules, and reports for their respective buildings, or facilities. Service contractors, including O&M contractors, are required to input data into NCMMS in accordance with their contracts, and COR's ensure the accuracy of the data through their Quality Assurance activities.

- **General oversight** - Conducting oversight activities to ensure contract requirements are met with respect to the use of NCMMS.

Contracting Officer and COR are responsible for ensuring proper use of NCMMS as system of record for facility assets and maintenance for their respective building/s including:

- **Quality assurance** - Contracting Officer and COR must use NCMMS data, where practical, to assess contractor performance. To perform QA, COR must have a working knowledge NCMMS process, reporting, etc.
- **Input and completion** - For all service call (work request) and repair (corrective maintenance) type work orders.
- **Management and tracking** - Buildings system inventory (assets), including review, update, and certification that the asset inventory is accurate.
- **Data accuracy** - Driving ongoing improvements in data accuracy and asset histories.
- **Preventive maintenance, inspections, and reporting** - Generation and completion of planned/preventive maintenance type work orders, Quality Assurance (QA)/Quality Control (QC) inspection work orders, and the preparation and running of contract required reports.

O&M Contractors and Custodial Contractors are required by contract to use the NCMMS to record their work and keep asset, safety, and operational data correct and current.

- Contractors must use the NCMMS to support and record daily building operations.
- Contractors record the work they perform in facilities, as service calls (both O&M and custodial tasks including the integrated pest control program), PM work orders, inspections, and repair work.

- The O&M contractor is required to review, validate, and update the building assets and building location descriptions within 90 days after the start of the contract. The contractor shall work with the COR, the Facility Manager, and the regional CMMS POCs to start this update process.
- The O&M contractor is required to perform an annual review and update on the building assets every year either on contract renewal, contract extension, or option years to keep the asset inventory up-to-date for the building. Contractors shall work with the COR, Facility Manager, and the regional CMMS point of contact to start this process.
- The O&M contractor is responsible to keep the building location (location description) up-to-date in NCMMS. Contractors shall review and make updates to the building location in NCMMS The contractor shall work with the COR, the Facility Manager, and the regional CMMS point of contact to start this process.
- The O&M and custodial contractors are required to follow the standard processes when using the NCMMS to ensure the data is entered accurately and correctly.

Delegated Buildings. Tenant agencies in delegated GSA buildings may request use of the NCMMS for their facility management teams.

- Request access from the Assistant Commissioner (AC), Office of Facilities Management.
- If the OFM AC approves, this standard operating procedure (SOP), the PBS Policy for NCMMS usage, and all applicable GSA facilities and IT directives will apply to tenant use of NCMMS.

PBS tenants from other federal agencies may request access to NCMMS for submitting work requests and tracking their status. Contact your regional CMMS POCs if you need help with this.

Report Generation

The NCMMS is capable of generating numerous reports for verifying effectiveness and efficiency of operations and maintenance activities. These reports are available as

'on-demand' and scheduled / emailed reports. Users may create, save, and run 'ad-hoc' (custom) reports with guidance from the regional CMMS coordinators. All users of the NCMMS can run reports in the applications where access is provided. Contracting Officers, CORs, and contractors are responsible for coordinating and establishing specific reports requirements.

Location Management Processes

There are a number of items to address regarding location management, including, but not limited to:

- Adherence to approved NCMMS naming conventions.
- Standardization of tracking criteria.
- Identifying locations by building, floor, and suite (or room).
- Going to the room level is helpful and recommended where feasible, but rooms within suites have a tendency to get renamed, added or removed a lot.
- Maintaining location descriptions/codes in NCMMS is a big task in some buildings and the more granular we get with tenant space the more resources it requires. Find the right balance for your facilities.
- Cubicles in service calls can be addressed in the description field.
- In large garages and warehouses there are no rooms, so you may identify locations using bays and columns.
- For some buildings, you may have to identify locations by a building quadrant or grid.
- Processes are evolving. Please consult Regional CMMS Coordinator for guidance.

Quality assurance is of utmost importance. Any updated locations must be quality checked and approved by GSA personnel, not just the O&M.

At the start of every contract for O&M services, and as (e.g. room) locations change within buildings, GSA will provide the service contractor an NCMMS-exported spreadsheet of building locations covered by the contract. The service contractor will visually inspect building locations, and update to NCMMS to bring the NCMMS location list current. Any changes must be coordinated with updates to affected assets, to keep the asset locations synchronized to the building locations list. Locations in NCMMS have “parent-child” relationships. For example, a building-level location has a number of floors as child locations. A floor-level location has a number of rooms as child locations. There are regional variations in naming and organizing locations. Ask your Regional CMMS Coordinator for region specific guidance.

After this location adjustment is loaded into the NCMMS, the locations are to be managed within the NCMMS. Updates to locations for large scale projects may, at COR discretion, use the NCMMS bulk upload process.

Required Location Information

The building location record is the skeletal framework of all data in NCMMS. It provides an anchor to which assets are properly placed within a space and identifies destinations for Service Calls.

There are three official, and one unofficial, levels built into the building location description structure. The Levels, with example entries, are as follows:

1. Building = MD1872ZZ-4700 RIVER ROAD
2. Floor = MD1872ZZ-Floor 02
3. Room = MD1872ZZ-Floor 02-Room 2C
4. Suite[1] = MD1872ZZ-Floor 02-Room 2C-09

Blanket entries must be created for the building in its entirety and for individual floors in their entirety. All rooms on a floor must have their own entries. Sub-divisions within a ‘Room’, such as a ‘Kitchenette’, ‘Conference Room’, ‘Office’, etc, will be identified in

[1] Suites would be tagged in NCMMS as a ‘Room,’ but are broken out here to show how to identify both larger rooms and their interior suites in NCMMS. See the beginning of this section regarding trade-offs for location granularity.

NCMMS as a ‘Room’, but will be entered in a similar fashion to the above example of a ‘Suite’.

The standard of 3 levels locations (building, floor, room) may not apply to all buildings. In some locations, there may be another level used in between floor and room hierarchy. There may be quadrant, section, or corridor between the floor and room levels. For buildings that have quadrants or sections, the quadrants will go right after the floor level and before the room.

Asset Management Processes

At the start of every contract for O&M services, GSA provides O&M contractors an NCMMS-exported spreadsheet of the asset inventory. The O&M contractor will visually inspect building assets, and perform updates to NCMMS to bring the NCMMS list current. The O&M contract specifies how long the contractor has to provide this deliverable. Once the COR approves any revisions the O&M will make the necessary inventory adjustment into the NCMMS; the O&M manages the inventory within the NCMMS while following naming conventions, with COR-review of changes. Updates to asset inventory for large scale projects or major systems upgrades may be granted opportunity to do updates through an uploader process, on a case-by-case basis.

Required Asset Information

The NCMMS serves as the system of record and only accepted means of asset tracking for GSA. This eliminates issues resulting from multiple copies of varying accuracy and age being used by different GSA business lines.

All Assets added to the Inventory must use NCMMS ‘Asset Type Templates’, follow NCMMS naming conventions, and have, at a minimum, the following information:

Item input by users	Items provided by NCMMS
Description	Asset Number
Equipment Owner	Asset Type *from Asset Template in NCMMS*
Asset Installation Date	Location Code
Manufacturer	

Manufacturer Year	
Model Number	
Serial Number	
Quantity	
ESPC Checkbox *Identifies ESPC assets*	

Though not required, it is a best practice to

- Attach a picture of the equipment and equipment nameplate to each Asset in NCMMS.
- Fill in the standard *Specifications* fields specific to each asset type. For example, a motor (MOT) asset, has fields for Phase, Amps, and nominal Volts.

Asset Reconciliation Process

The service contractor performs asset reconciliation in coordination with the GSA Facility Manager, to verify accurate and complete location and equipment information in NCMMS. Timing and frequency of asset reconciliations is specified in the O&M contract.

1. The GSA Facility Manager will request a current copy of the Building Locations List and Asset Inventories from the Regional CMMS Coordinator upon contract notice to proceed.
2. The Coordinator will export the spreadsheets in 'NCMMS Uploader' format and explain the update process.
3. The contractor will update the Locations List and Asset Inventories with all information required per the contract, without breaking NCMMS import capability for the sheets. Contractor will then route changes to the assigned point-of-contact-for example, Facility Manager, Equipment Specialist, or COR-for review and approval.
4. Once quality checked and approved by the GSA point-of-contact, the updated Locations List and Asset Inventories are sent to the Regional CMMS Coordinator

for a secondary NCMMS quality check and submission to the national data management team for upload into the NCMMS.

   a. The GSA point-of-contact, for example the Facility Manager, will quality check for Building Locations and Assets.

   b. the Regional CMMS Coordinator will quality check for formatting and cross check the existing NCMMS inventories to eliminate duplication.

5. As Locations List and Asset Inventories change during the course of the contract, the O&M contractor is to perform updates within the NCMMS by means of deactivating and adding assets and Building Locations. All changes shall be approved or denied by the GSA Facility Manager acting as the COR.

6. At a minimum, the contractor shall review, update, and provide certification to GSA personnel that the Locations List and Asset Inventories are current on an annual basis not later than the contract anniversary date.

Approval of Asset Changes in Status

COR approval is required prior to changing or updating Asset Status in the NCMMS.

Work Order Processes

Work orders can originate from various sources. Most often they are created by the service contractor, GSA personnel, or automatically by the NCMMS. The sources of work orders can be calls from building tenants, inspections and their findings, or regularly scheduled preventive/planned maintenance. Once a work order has been created, the contractor manages work orders in NCMMS per their contract. Work orders can be either completed in real-time by use of mobile website or application (preferred), or after work is completed. The information in a work order can be used to establish or track performance, tenant experiences, establish root cause, support GSA Measures and Goals, and utilize Key Performance Indicators (KPI) for managing the process of improvement in performance. In order for the data to be consistent in support of national business line goals; Completing a work order consists of documenting, at minimum:

1. **Description -** A brief description of the issue.

2. **Reported By -** The person who recorded the issue in NCMMS in the 'Reported By' field.

3. **On Behalf Of -** The 'On Behalf Of' refers to the person who requested the work. The On Behalf Of function is multi-purposed with a primary objective of real time tenant work order satisfaction survey. The work order On Behalf Of field allows the Work Order Status and Completion notice to go to the caller / requester of the issue and notifies the person of the effort and status of their complaint. The person creating the work order is responsible to create the 'People' record of the person calling in or emailing the problem. Minimum information needed for the people record is government email address, site ID (GSA region), first and last name. In addition, you should select / check 'Escalation' field in NCMMS people record, unless the tenant requests to not receive work order updates. Completion of these fields is part of the PBS National Measures.

    a. **Preferred**: Check the 'Escalation' field in NCMMS, so the 'On Behalf Of' tenant will receive email notifications for the work order. The final notification will include an invitation to take a brief survey for the completed work. If the work order is completed quickly, the tenant will only receive an email stating that the work is *Completed*.

    b. **Undesirable**: If tenant does not wish to receive email updates, record tenant's government email address in the people record, but leave the 'Escalation' field unchecked in NCMMS. Include "(No updates)" at the end of the 'Work Order Description'. This tenant will not receive survey invitations, since they are not part of the Escalation process.

4. **Tenant / Agency** - Agency reporting the issue. If the issue is self reported or a contractor proactive maintenance, the agency code should be *4762-PBS, Maintenance and Custodial Operations*. If the issue is discovered and reported by a GSA manager, the agency code should be *4700 - General Services Administration*. When a tenant calls for service it should be recorded in NCMMS as Type/Sub-Type: 'WR - SERVCALL' and user must record the four digit Tenant Agency Bureau Code.

5. **Reported Date/Time** - The time the issue was reported to GSA or the service contractor. This date/time is populated by Maximo with the system date/time when the work order is entered. However, it can be changed to reflect the actual date/time when the request came in if the work order is created some time after the request came in.

6. **Actual Time** - The amount of work time required to resolve the issue recorded in the Actuals Tab of the work order.

7. **Labor** - Who completed the work. Recorded in the 'Actuals Tab' of the work order.

8. **Service Type** - This is the type of contract associated to the assignment of the complaint, for example *Operations and Maintenance*, or *Janitorial/Custodial*, etc.

9. **Failure Reporting** - The 'Failure Class' and 'Problem Code' are essential for identifying the category of problem in Work Requests (WR) and Corrective Maintenance (CM) Work Types.

10. **Asset(s)** - Any equipment related to the work order. The asset should be populated (with 'Asset Number') at anytime before the completion of the work order for identification of the asset causing the symptom or issue.

11. **Work Type** - Use type '**WR**' and sub-type '**SERVCALL'** for tenant initiated work orders. Use type **'CM**' and subtype CORRECT for contractor initiated work orders.

12. **Subtype** - Use subtype 'SERVCALL' when a tenant calls; and ONLY use 'SERVCALL' when a tenant calls. When a tenant calls for service it should be recorded in NCMMS as Type/Sub-Type: 'WR - SERVCALL.'

13. **Work Logs** - All work order types shall include sufficiently detailed work log entries to provide an accounting of the work completed or current status.

14. **Actual Start Date/Time** - This is the time when the work orders is changed to *In Progress* status. This field can be changed to reflect the actual date/time when the work is started to be worked on.

15. **Actual Finish Date/Time** - This is the time when the work is completed and the status is changed to either *COMP* or *WINSP* status. This field can be changed to reflect the time when the work is completed by the contractor. Note: If a 'Labor Record' is entered in the 'Actuals Tab', the 'Actual Start/Finish' times will be populated once the work order's status is changed to Completed.

Backdating work orders (late entries). When entering a work order after resolving an issue, change the work order status to 'Complete' or any other status EXCEPT 'Waiting Approval' ('WAPPR') before saving the work order. If date-time stamps do not reflect actual times, this may incorrectly communicate a failure to perform. If you leave the status as 'WAPPR,' backdating will trigger escalation emails to all associated with the building notifying them the complaint has not been responded to.

Accurate date-time information is required in the following fields:

- Reported Date and Time
- Actuals Tab > Start Date and Time
- Actuals Tab > Regular Hours. Record decimal hours either like 1.25 (=1hr and 15 minutes), or hours:minutes (1:15).

Work orders are to be reviewed for completeness and accuracy at a minimum of a monthly basis by the GSA Facility Manager/COR prior to submitting the monthly contract receiving report.

Planned and Preventive Maintenance (PM)

The asset inventory changes as a result of major renovations, new construction, etc. When the asset inventory changes, COR will engage contractor to refresh the inventory and PM data. After the asset inventory has been refreshed in the NCMMS, the COR will provide the O&M contractor with an *uploader* sheet. The O&M contractor and the COR shall review this NCMMS-generated uploader sheet for accuracy of PM frequency and job plans and for compliance with the agreed upon maintenance plan. When completed, reviewed and agreed upon by both the O&M contractor and the COR, this sheet is sent

to the Regional CMMS Coordinator for NCMMS compliance check and upload by the national data team.

Once the upload is complete, the regionally-designated point of contact will inform the COR that they are set to begin NCMMS PM processing. The COR will notify the O&M contractor.

If training is required, GSA will provide it at this time.

If any additional adjustments to PM plan are needed after this initial upload, they are to be done within the NCMMS. Bulk data uploads for large scale projects or major systems upgrades may be made on a case-by-case basis as determined by the COR, regional CMMS coordinator, and NCMMS data team.

Reporting Processes

Report generation from the NCMMS may be done manually or via automated processes. Please schedule recurring reports in NCMMS so they run off hours and email to recipients from MAXIMO. This will remove your wait time for reports and improve NCMMS performance.

Facility Managers, CORS, and Service Contractors may run reports at the building level for contract specific activities. Strategic reports, for example national work order performance report, will be generated at the national and regional level to aid in reviewing and evaluating operational efficiency and quality. Typically these strategic reports are run on a monthly or weekly basis and sent to regional directors by the Director, Facilities Operations, Office of Facilities Management.

Roles and Responsibilities

Work Orders (WO)

Responsibility for entering work orders as they are received varies depending on contract setup and building operational preferences. Generally, service contractors, e.g. O&M, enter work orders for service calls/work requests in the NCMMS. Work orders for

preventive/planned maintenance are system generated from scheduled dates within the NCMMS.

Approval of Work Orders

All work, including work above the contract liability dollar threshold, must be processed within NCMMS. Work orders at or below the contract dollar threshold may be approved and completed by the service contractor per the Service Level Agreement.

For work orders above the contract dollar threshold, the contractor must provide relevant information in the designated fields and in accordance with the process and timeline provided in training. At a minimum, contractors must complete the Above Threshold Amount field, create a log entry describing work to be performed, upload a quote/estimate to the work order record using the attachment feature, and place the work order in Awaiting Funds status.

PBS needs this information for asset lifecycle management.

Impact Incident

Impact incidents are incidents resulting in building closure or disruption of primary tenant mission in excess of 6 hours.

Contractors are responsible for immediately notifying their COR of impact incidents.

CORs are responsible for assessing the situation and making a final determination, and then documenting as an impact incident within the work order, or instructing the contractor to do so.

Examples of impact incidents include

- Environmental or safety conditions that would require relocation of the tenant
- Loss of habitability (HVAC or Heating)
- Loss of utilities, etc.

Give careful consideration to work orders that report loss or degradation of equipment or systems where the capacity is greatly reduced, redundancy or backup does not exist,

or the system is on the backup or secondary operation and if lost would cause the building to have to be shut down and tenants relocated.

The work order short description cell shall be written with the impact described as the beginning condition statement. Examples:

- One of two chillers is out of service.
- Both boilers are out of service.

Impact Incident reporting allows for the prioritization and identification of incidents that may predict or forecast loss of operation.

Work Requests (WR)

The contractor is responsible for entering work requests into NCMMS in a timely manner when GSA or building tenants request services not requiring a repair of building systems or assets. Examples include, but are not limited to: spills, restroom supplies, hot/cold calls, lighting issues, requests for additional services, etc. A work request may result in a repair (corrective maintenance); however this is not always the case.

As mentioned above, when a tenant calls for service it shall be recorded in NCMMS as Type/ Sub-Type: ‘WR - SERVCALL’ and the user must record the Tenant Agency Bureau Code and populate the On Behalf Of field with the name of the tenant who requested service.

Planned and Preventive Maintenance (PM)

The initial update of PM schedule is completed by the O&M contractor in coordination with the COR at the start of the contract. The COR will review and approve the proposed schedule to ensure compliance with contractually agreed upon frequencies and maintenance service levels. As any new assets are added to/removed from the NCMMS asset inventory, COR will review the PM schedule prior to approving the asset into ‘operating’ or ‘inactive’ status. The O&M contractor may use NCMMS bulk upload process for preventive maintenance plans, at the discretion of the COR. The O&M contractor is to mark as ‘Complete’ all PM work orders after the actual work is completed. PM’s will be considered complete when all required data fields are filled out

in the NCMMS. Work orders that have no action for a continuous 90 days after being placed in COMP status will be moved to a ‘close’ status and archived by NCMMS.

Approval of Changes and Modifications in Annual Schedules

Any changes or updates to the annual schedules for periodic or preventive maintenance must be approved by the COR prior to being put into an active status in the NCMMS.

Periodic Predictive and Preventive Maintenance (PM) Supplemental Documents and Readings.

The O&M contractor is responsible for uploading supplemental information (reports, meters values, forms) for repairs and maintenance within asset records, including work performed by subcontractors. Examples are Water Treatment, Backflow Preventer Certifications and permits, Fire and Life and Safety (FLS) Testing Documents, Fuel Service Tank certification and monitoring systems testing documents, Permits for Tanks, Permits and license for equipment or systems operations, and inspection results for predictive maintenance, Air Quality Management Discharge Permits.

Vision for future is for meter readings to be recorded into NCMMS in lieu of any paper logs. These documents and readings be stored in NCMMS, linked to Work Order, Asset, Building, etc. Details will be covered in future versions of the GSA Job Plans and Desk Guide. This will be phased in over time.

Meter readings that can serve as control limits for critical operational parameters such as air pressure, indoor air quality devices, fuel tank leak detection, fire alarms devices, etc. will be assigned the appropriate measurement units and values in the readings section of the work order in NCMMS. Such units and parameters are considered necessary in general industry practice, as supported by American Society of Testing and Materials, and American Society of Heating, Refrigerating and Air-Conditioning Engineers, in order to trend, analyze and forecast conditions based on maintenance or failure. These may include but are not necessarily limited to: amperage, temperature, pressure, gpm, and cfm.

Quality Assurance (QA)

GSA is responsible for oversight and quality assurance. The periodic scheduling and timely accomplishment of QA Inspections and the documentation in NCMMS of the work order status that is affected by the process remains the responsibility of the GSA person inspecting and verifying the receipt of services performed within the contract. The work or activities inspected are to be reflected in the work order status. Scheduling and accomplishment of the quality assurance of the contract work performed may include but are not limited to the inspection of individual work orders, the periodic scheduling of a quality assurance oversight visit, meeting, GSA Inspection (GSAI) or the validation of the contractor quality control activities of the contractor.

Status of the work order(s) being inspected are to be changed to ‘QA Awaiting Inspection’. Once the work has been inspected, the work order status must be changed to ‘Passed Inspection’ or ‘Failed Inspection’. COR shall review the quality assurance report monthly at a minimum to memorialize and document inspections.

Until NCMMS supports Inspection Forms (expected in calendar 2019), regions may attach completed GSA Form 3423s to inspection work orders. Note: Attaching Form 3423s is optional, but works well. Use of standard QA inspection forms in NCMMS will become mandatory in 2019.

Quality Control (QC)

The service contractor is responsible for timely performance and accomplishment of the QC functions within the NCMMS. This includes the periodic scheduling and accomplishment of QC Inspections and documentation of the work order status. The amount or volume of inspections are to be in accordance with the contractor’s deliverable of the quality control plan that was submitted at contract start or is current as approved by the CO/COR.

The work or activities inspected are to be reflected in the work order status. Scheduling and accomplishment of the quality control activities for the contractor are the responsibility of the service contractor. Status of the work order(s) being inspected are to be changed to ‘QC Awaiting Inspection’. Once the work has been inspected, the work order status must be changed to ‘Passed Inspection’ or ‘Failed Inspection’. A quality

control report shall be pulled monthly at a minimum to memorialize and document inspections.

Note: Service Type for *O&M Inspections* is *OMI*, and for *Custodial Inspections* is *CUSTI*.

Use of standard QC inspection forms in NCMMS will become mandatory in 2019. COR shall pull the Quality Control report monthly to memorialize and document inspections.

Proactive Maintenance (PrM)

PrM includes routine scheduled walkthroughs, tours, and site visits by facility managers and contractors to seek out issues, observe building and environment conditions, and identify issues/deficiencies that require corrective action. Whether facility manager performs the inspection, and/or delegate to a contractor depends on the service contract for the facility. PrM can be a routine scheduled event performed via PM schedule and identified as O&M Inspection (OMI) work type. The deficiencies noted during the process require an individual work order and are documented as CM (Corrective Maintenance) work type and the tenant description would be 'PBS Custodial and Maintenance'.

"Failed Inspection" (FINSP) status

Work orders with a quality control (QC) or quality assurance (QA) status of 'Failed Inspection' are the responsibility of the service contractor to remedy timely. Failed Inspection work orders need to have clear documentation in the Work Log of the work order stating why an item failed and what needs to be done to get the condition or work order to pass inspection. The person that marked the work order as having failed the inspection is responsible to create communication from within the communication feature of NCMMS to an appropriate email distribution and again state clearly in the email what failed, why it failed, what must be done to correct the current condition, and request approximately up-to 10 business days to resolve the problem timely. Communication feature of NCMMS will be automatically documented in the Communication Log of the work order.

Report Generation

Reporting is the primary responsibility of the contractor per contract requirements. The service contractor is responsible for ensuring that all data is in the NCMMS to meet contractual requirements, including reporting requirements. The GSA Facility Manager is responsible for reviewing and accepting (or rejecting) reports submitted by the contractor. This is to ensure compliance with contract requirements, including documentation of work in NCMMS. Upon request the Regional CMMS Coordinator may provide additional analysis of data to ensure successful operations of the NCMMS program as a whole.

People Records

The service contractor is responsible for the proper creation and entry of People Records. No personally identifiable information (PII) is to be utilized in the records and should remain specific to the person's professional role within or outside of GSA.

Labor Records

The contractor shall create the 'Labor' and 'Craft' record entries, and enter the training and individual certifications and license data into the Labor records. Note: COR, Contractor and Data Entry roles may create or update labor records.

Training Records

The Facility Manager and service contractor shall ensure that all required facilities/equipment operations training is accomplished and documented. Document these in NCMMS, under Resources > Qualifications. Documentation must be sufficient to demonstrate currency (certifications, training certificates, licenses, etc.).

Access Account Maintenance

The contractors are required to maintain an active GSA email account for access to NCMMS. To do so, they must actively login and monitor their GSA email for system outages and maintenance notifications, agency communication, and mandatory GSA training requirements. GSA Facility Managers are listed as supervisory for all service

contractor personnel, and shall review and relate any notices regarding contractor account status. Failure to maintain an active account may also indicate that contractors are not adhering to contract requirements pertaining to NCMMS, which may warrant administrative action.

GSA Enterprise Network Account Employee, Onboarding and Offboarding

It is the responsibility of the Facility Manager or Contracting Officer Representative to perform or oversee the onboarding and offboarding of contractor employees for user account creations and deletions. The service contractor may create the onboarding or offboarding request in gsa.service-now.gov and enter the COR as the supervisor and approver. When creating GSA Enterprise Network Accounts, ask Regional CMMS Coordinator whom to use as 'person to mirror'. When offboarding, the user account should be deleted immediately upon the user leaving the contract.

GSA NCMMS Requests and Additions to Security Groups

The service contractor is responsible to notify the COR and Regional CMMS Coordinator of persons requiring an NCMMS account. The Regional CMMS Coordinator is responsible to submit the new user request via the IT Help Desk, Service Now. The Service-Now request must include the new user's roles and rights (NCMMS security Groups).

Coordination and Communications Requirements

The NCMMS program requires a high level of coordination between the service contractor, GSA property management, regional service centers, and the regional CMMS coordinator. Upon Notice-to-Proceed of a new maintenance contract, the GSA Facility Manager or COR shall inform the Regional CMMS Coordinator in order to prepare for contractor onboarding activities noted previously.

All roles associated with NCMMS are expected to communicate all controlled but unclassified information (CUI) through approved means. Per GSA policy the approved means is a GSA issued email address **(CIO 2100.1K, Chapter 4, 2, p, (7)) and is to be the primary means of communication within their contract**.

CMMS Training

If training on the use of NCMMS is needed for new personnel, the GSA Facility Manager will notify the Smart Building team or the Regional CMMS Coordinator and will coordinate training within the noted timeframe provided in the contract. The coordinator will then provide timeframes available for either remote (virtual) or in-person training as time and funding permit.

It is the service contractor's responsibility to ensure their employees receive the appropriate training, and they must request this training in a timely manner, through the GSA Facility Manager. Contractor's shall perform NCMMS usage quality checks to ensure their employees are using the system each day, and completing all required fields and following processes per GSA-provide training, manuals, etc.

Additional training can be requested from the Regional CMMS Coordinator and will be provided on an as-needed basis.

PBS provides many options to ensure you and your users receive the training and support they need. Please read the NCMMS Training Calendar or contact your regional point of contact for more training and support opportunities. Also see the Appendix below for more information.

User Support

The Regional CMMS Coordinator is responsible for supporting the NCMMS application, not for issues related to system failures, ENTerprise accounts, login issues / Secure Authentication, Gmail, etc. For those other ("IT") issues, please contact ITservicedesk@gsa.gov or (866) 450-5250.

Users requiring assistance on NCMMS navigation, search, query, report creation, work order creation, or any other "how to" function within the NCMMS application may refer to the GSA Online Help available from the Start Center for the current 'Process Flows and Procedures Manuals.' If further help is needed, users may submit a request for assistance to ITservicedesk@gsa.gov or (866) 450-5250.

For general discussion and help on performing basic or advanced functions, there is a *Roundtable* discussion held every two weeks and announced in the NCMMS Start Center, *Bulletin* portlet. Your region may also conduct regional support sessions. Please read the NCMMS Training Calendar or contact your regional point of contact for more training and support opportunities.

Appendix – Where do I go for NCMMS help?

There are many documents, videos, guides, job aids, etc. available on the National CMMS site to help you use the NCMMS. In addition, please check the NCMMS Training Calendar for monthly training opportunities. Finally, if you don't know whom to contact for help, please read the NCMMS Contacts web page.

National CMMS Online Help

The **National CMMS Online Help** page links to training videos, manuals, job aids, etc:

- **Get Started**
- **User Manuals**
- **Job Aids, Cheat Sheets, One-pagers**
- **GSAlink**
- **Mobile**
- **Set up New User Accounts**
- **PM Guide**
- **Live Training Videos**
- **Reports and Printing**
- **Troubleshooting Guides**
- **Uploader Templates and Instructions**

If the above links are out-of-date, please click: National CMMS, then search for what you need.

Training and Support Documents

You may also use the **Training and Support Documents** page on the National CMMS site, where the same topics are arranged by folders:

01 - User Manuals
02 - Job Aides, Cheat Sheets, One Pagers
03 - Get Started
04 - GSAlink Information
05 - Mobile
06 - NCMMS Codes
07 - Reports and Printing
08 - PM Desk Guide
09 - New User Account Set Up
10 - Uploader Templates and Instructions
11 - Troubleshooting Guides
12 - OLU Information
13 - Interactive Video Training
14 - Live Video Training