

Joint Base Lewis-McChord (JBLM)		
Procedure: Maintenance and Calibration of Monitoring and Measuring Equipment		
Document ID: EMS-245		
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EMS Technical Support	Environmental Division Chief	Original Date: 11 July 2003

PURPOSE

To define the activity necessary to maintain and calibrate monitoring and measuring equipment used in JBLM to assure that measurements and results conform to specified requirements.

APPLICABILITY

This procedure applies to monitoring and measuring equipment used at JBLM that requires calibration at periodic intervals.

Note: This procedure does not apply to equipment that is calibrated or self-tested before each use, nor to equipment that is calibrated more frequently than once a month. Calibration of this frequency is considered a part of the operating procedures for the equipment. Calibration records for this equipment will be maintained as part of the equipment operating logs or other records established by the equipment owner.

DEFINITIONS

Calibration — A comparison of monitoring and measuring equipment under specified conditions to a standard of higher accuracy to detect, correlate, and/or adjust the accuracy of the equipment being compared.

Calibration Interval — The period of time between calibrations. Intervals are specified depending upon measuring and test equipment stability, purpose, and frequency of usage.

Calibration Database — Centralized body of information which indicates the calibration status of organizational monitoring and measuring equipment.

Calibration Technician — Person who performs the identification, calibration, repair, and calibration record keeping of monitoring and measuring equipment devices and measurement standards.

Equipment Owner — Supervisor accountable for the monitoring and measuring equipment and responsible for its use, maintenance (including calibration), and storage.

SUPPORTING DOCUMENTS

<u>Document ID</u>	<u>Title</u>
EMS-100	Environmental Management Manual
EMS-230	Environmental Communication
EMS-240	Document Control
EMS-250	Monitoring and Measurement
EMS-265	Environmental Records

PROCESS

Responsible		Action
Organization Section Chief who have equipment in the Section that requires periodic calibration	1	Identify Section equipment requiring calibration.
	2	Appoint one or more Calibration Technicians for the Section.
<u>The following steps apply to monitoring and measuring equipment not yet, but to be entered in a calibration database, as appropriate.</u>		
Receiving/Any Employee	1	Forward newly acquired or otherwise identified monitoring and measuring equipment requiring periodic calibration that is not in the calibration system to the Calibration Technician. If equipment must remain at its primary location, notify the Calibration Technician of this fact.
Calibration Technician	1	Schedule calibration intervals for the monitoring and measuring equipment as called for by the equipment operating instructions or the pertinent industry standard.
	2	Establish the calibration criteria for the monitoring and measuring equipment as called for by equipment operating instructions, the pertinent industry standard, or the requirements of the process.

Responsible		Action
	3	Provide pertinent equipment and calibration data to the supporting data entry clerk for entering into the organizational calibration database, if applicable.
	4	Evaluate the present calibration status of the measuring and test equipment. <i>If fit to use as received until the next scheduled calibration interval, use until the next interval.</i> <i>If not fit to use as received, go to the out-of-calibration condition steps below.</i>
Data Entry Clerk	1	Enter the appropriate monitoring and measuring equipment data, with pertinent calibration schedule, into the organizational calibration database, if applicable.
<p><u>The following steps apply to measuring and test equipment already in a calibration database, as appropriate.</u></p>		
Calibration Technician	1	Schedule with the equipment owner for date(s) of calibration during the period when calibration is due.
	2	Calibrate the monitoring and measuring equipment to the pertinent equipment calibration standards, or arrange PW or subcontracted calibration services in accordance with pertinent work instructions. <i>If an out-of-calibration condition exists, go to step #3, otherwise go to step #5.</i>
	3	If the equipment is out of calibration and cannot be returned to the required level of calibration, notify the equipment owner. The equipment owner will decide whether the equipment should be repaired, replaced, or removed from service. <i>Note: Some installed monitoring equipment, as part of a permitted process may not be possible to remove from service without violating a permit condition.</i>
	4	Take actions necessary to restore out-of-calibration equipment to a usable condition.

Responsible		Action
	5	When the equipment has been calibrated to specifications: <ol style="list-style-type: none"> a. Insure that the calibration label (if used) or the calibration record is updated with the calibration date and the next scheduled calibration due date. b. Notify the data entry clerk for updating the calibration database.
	6	Maintain calibration and certification records in accordance with JBLM Procedure EMS-265 , Environmental Records.
Equipment Owner	1	Maintain the equipment in accordance with manufacturer's specifications or established work procedures.
	2	Arrange with the Calibration Technician any special calibration requests for monitoring and measuring equipment requirements that fall outside the current calibration interval, as necessary.
	3	If an item of monitoring and measuring equipment is found to be out of calibration: <ol style="list-style-type: none"> a. Determine if the equipment should be removed from service and notify the Calibration Technician. b. Review the previous measurements or readings taken with the equipment for potential operational or environmental impacts.
	4	Ensure that monitoring and measuring equipment kept at the workstation is stored in a manner as to prevent damage and is safeguarded to prevent premature wear or loss of calibration.
Employees Using Monitoring and Measuring Equipment	1	Immediately notify the equipment owner or calibration technician if an item of monitoring and measuring equipment has passed its scheduled calibration date.
		<i>End of activity</i>

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DOCUMENT REVISION HISTORY

Original Document Issue Date: 11 July 2003		
REVISION NUMBER	DATE OF REVISION	REVISION SUMMARY
1	8 February 2005	Added entries to Supporting Documents
2	22 June 2007	Updated Owner, Approval Authority and Current Copy location.
3	18 April 2012	Updated Owner, Approval Authority and reference to JBLM.
4	28 May 2013	Changed less than monthly intervals to periodic.