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| Joint Base Lewis-McChord (JBLM) | | |
| Procedure: Preventative and Corrective Action | | |
| Document ID: EMS-255 | | |
| Document Owner: <i>John Radzyminski</i> | Approval: <i>Paul Steucke Jr.</i> | Revision: 4 Revision Date: 12 June 2013 |
| EMS Technical Support | Environmental Division Chief | Original Date: 11 July 2003 |

PURPOSE

To provide a system for initiating, requesting, implementing, and checking the effectiveness of corrective or preventive action.

APPLICABILITY

This procedure applies to the activities related to initiating, documenting, and implementing corrective or preventive action associated with JBLM processes, procedures, services, or elements of the Environmental Management System (EMS).

Note: This procedure does not cover the handling of complaints from neighbors adjacent to JBLM. Complaints or issues from neighbors are investigated and responded to individually as they arise using JBLM systems in place for investigating and resolving the complaint, depending on the type of complaint. See the Environmental Management Manual (EMS-100); paragraph 4.5.2, for a brief description.

These procedures also do not include the response to environmental non-compliance findings, which are reported and tracked through existing Army or PW systems. These findings include those tracked through the Environmental Performance Assessment System (EPAS), the Installation Status Report (ISR), findings resulting from compliance inspections by regulatory agencies, and findings from environmental compliance assessments performed by the PW Environmental Compliance Assessment Team (ECAT)).

DEFINITIONS

Corrective Action — Action taken to eliminate the cause(s) of an existing nonconformity, defect or other undesirable situation to prevent recurrence.

EMS Management Director — An individual appointed by the Garrison Commander who, irrespective of other duties, has authority and responsibility for the operation of the JBLM Environmental Management System (EMS).

EMS Management Representative — An individual appointed by a JBLM Organization Chief who, irrespective of other duties, has authority and responsibility for the operation of the organizations Environmental Management System.

Originator — Any employee who initiates some desired action relevant to corrective or preventive action, process revision, document change, or other related activities.

Preventive/Corrective Action Request (PCAR) — a request submitted using the procedures described in this document to initiate action for addressing an EMS nonconformity, an undesirable situation, or other unsatisfactory condition. Where appropriate, an individual who identifies an undesirable or unsatisfactory condition would use normal supervisory channels to address the condition, and submit a PCAR if needed. A PCAR is normally submitted electronically from the organizational Intranet but may also be submitted in hard copy.

A PCAR may be submitted for any of the following:

- a. Recurring problems with a particular operation or process*
- b. Internal or surveillance EMS audit findings*
- c. Feedback from organizational customers*
- d. Management Review actions*
- e. Changes in regulations or organizational requirements*
- f. Waste management discrepancy issues*
- g. Emergency preparedness and response after-action reviews following exercises or actual responses*
- h. Safety issues*

Preventive Action — Action taken to eliminate the cause(s) of a potential nonconformity, defect or other undesirable situation in order to prevent occurrence.

Problem — Any condition that has the potential to cause a non-conformance or defect.

Process Owner — The person responsible and accountable for improving the process in his/her charge and for implementing applicable corrective and/or preventive actions when necessary.

Quality Assurance (QA) Representative — An individual who independently verifies that the corrective and/or preventive action was completed. The QA Representative may be one of the following: A member of the PW Environmental Compliance Assessment Team, an internal auditor, the EMS Management Representative, or a qualified technical support person assisting the EMS Management Representative.

Root Cause Analysis — Efforts taken to determine circumstances/events leading to an incident or other reason for a non-conformity. Analysis should be conducted by individuals familiar with requirements and correct procedures applicable to the non-conformity. Examples in Appendix 1.

SUPPORTING DOCUMENTS

| <u>Document ID</u> | <u>Title</u> |
|--------------------|---------------------------------|
| EMS-100 | Environmental Management Manual |

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|---------|--------------------------------|
| EMS-240 | Document Control |
| EMS-260 | Internal Audit |
| EMS-265 | Environmental Records |

Note: The preferred method of submitting PCARs is electronically via email. If the PCAR must be submitted in hard copy, hard copies can be obtained from the organization EMS Management Representative or Designated Assistant. Information from the hard copy is then used by the organization EMS Management Representative or Designated Assistant to submit the PCAR electronically.

Note: Organizations with an established EMS or other management system incorporating a similar procedure may use that process for addressing environmental concerns. Coordination with the JBLM EMS Coordinator is required.

PROCESS

Note: See PCAR flow chart at Appendix 2

| Responsible | | Action |
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| Originator | 1 | <p>Access the JBLM EMS/PCAR site http://www.lewis-mcchord.army.mil/publicworks/sustainability/EMS/pcar.aspx</p> <p>. Click on PCAR System. Copy and save the form to your computer. Complete Originator Completes section.</p> <p>Email or deliver your PCAR to your organizational EMS Representative or contact the JBLM EMS Coordinator via http://www.lewis-mcchord.army.mil/publicworks/sustainability/EMS/Default.aspx or calling 966-6470 for instructions.</p> |
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| Responsible | | Action |
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| <p>Organization EMS Management Representative or Designated Assistant</p> | 1 | <p>When a PCAR is submitted, review the PCAR to determine its origin (JBLM EMS Coordinator, EMS audit or individual).</p> <ul style="list-style-type: none"> a. If assigned by the JBLM EMS or the result of an EMS audit proceed to Action 2. b. If the PCAR is inappropriate for further processing, delete the PCAR and notify the originator as to the reason. c. If the PCAR is appropriate for further processing, proceed to Action 2. d. If the PCAR may be applicable to other JBLM Organizations notify the JBLM EMS Management Director. |
| | 2 | <p>Identify the process owner, complete the “EMS Representative Completes” section, establish a reasonable suspense date based on the deficiency identified and submit for process owner response.</p> |
| | 3 | <p>When notified that the process owner has responded to the PCAR, review the root cause description, corrective or preventive action, and proposed implementation date in the “Process Owner Completes” section. If adequate go to Action 5.</p> |
| | 4 | <p>When the process owner response is not adequate, request additional analysis, preventive/corrective action or clarification by completing the text box to the process owner, and submit for additional process owner response.</p> |
| | 5 | <p>When the root cause analysis, corrective/preventive action, and proposed implementation date are adequate, complete the “EMS Rep Review” line and log the action for follow-up.</p> |

| Responsible | | Action |
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| | 6 | When the process owner has submitted the actual completion date, coordinate for verification of the implementing action by a QA Representative at the next internal audit or as a one-time audit. |
| | 7 | <p>a. If the QA Representative verifies that the implementing action is complete or effective, the PCAR is closed.</p> <p>b. If the QA Representative is unable to verify that the implementation is complete and effective, coordinate with the process owner concerning the additional implementing action required and jointly establish a new implementation date.</p> <p><i>Note: the process owner may, in coordination with the EMS Management Representative or designated assistant, establish a new implementation date <u>once</u>. Additional future implementation dates will require the approval of the Organization Chief.</i></p> |
| | 8 | Provide PCAR status, preventive or corrective action effectiveness, and other pertinent information for EMS Management Reviews as needed. |
| | 9 | Annually, identify PCARs that require additional analysis to determine the root cause and provide them to the Root Cause Analysis Team. |
| JBLM EMS Coordinator | 1 | Review PCARs received from an organization EMS Management Representative that may be applicable to other JBLM Organizations. |
| | 2 | If applicable, pass PCAR to other JBLM Organization(s) for action. |
| | 3 | Log and track PCAR to completion. |
| Process Owner | 1 | When notified of a PCAR requiring response, access the PCAR on the Intranet, if applicable or hard copy and review the originator's description of the problem or non-conformance and provide a response within the suspense date established by the EMS Management Representative. |

| Responsible | | Action |
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| | 2 | Investigate the problem or non-conformance and identify the root cause. <u>Guidance for root cause analysis is at Appendix 1.</u> |
| | 3 | Identify the appropriate preventive or corrective action, including the proposed implementation date. |
| | 4 | Complete the “Process Owner Completes” section of the PCAR, and submit for review by the organizational EMS Management Representative. |
| | 5 | If notified that the PCAR response requires additional action (additional root cause analysis or corrective/preventive action, etc.), or the proposed implementation date is not timely, repeat Action 2 through 4 as applicable. If no additional action is required, go to Action 6. |
| | 6 | <p>When notified of acceptance by the organization EMS Management Representative of the response to the PCAR, implement the preventive/corrective action, including the revision of applicable controlled documentation.</p> <p><i>Note: <u>If the preventive/corrective action will not be completed by the stated implementation date, notify the EMS Management Representative or designated assistant. The process owner may, in coordination with the EMS Management Representative or designated assistant, establish a new implementation date. Additional future implementation dates will require the approval of the Organization Chief.</u></i></p> |
| | 7 | When the corrective/preventive action is completed notify the EMS representative of the actual implementation date. |
| | 8 | If the QA Representative verifies that the implementing action is complete or effective, the PCAR is closed. If the PCAR could not be verified, go to Action 9. |

| Responsible | | Action |
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| | 9 | <p>If the QA Representative is unable to verify that the implementation is complete and effective, coordinate with the organization EMS Management Representative concerning the additional implementing action required and jointly establish a new implementation date.</p> <p><i>Note: the process owner may, in coordination with the EMS Management Representative or designated assistant, establish a new implementation date. Additional future implementation dates will require the approval of the Organization Chief.</i></p> |
| | 10 | <p>Complete the additional implementing action and return to Action 7.</p> |
| Root Cause Analysis | 1 | <p>When the organizational EMS Management Representative provides the list of PCARs requiring further analysis, appoint qualified personnel to conduct a Root Cause Analysis..</p> |
| | 2 | <p>Analyze the PCARs and coordinate with the pertinent process owners, as required, to determine the root cause of the problem.</p> |
| | 3 | <p>Once the analysis is complete, provide recommended corrective actions to the organization EMS Management Representative.</p> |
| Quality Assurance (QA) Representative | 1 | <p>Audit the identified activities to verify the effectiveness of the preventive/corrective action implementation reported.</p> |
| | 2 | <p>If the preventive/corrective action is assessed as adequate, close out the PCAR:</p> <ol style="list-style-type: none"> a. Access the PCAR on the organizational Intranet, if applicable or hard copy b. Complete the “Action verified by” and “Date verified” in the “QA Rep Completes” section, enter remarks if any (optional) and submit.. |

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| | 3 | <p>If the preventive/corrective action is assessed as incomplete or inadequate:</p> <ol style="list-style-type: none"> a. Access the PCAR on the PW Intranet, if applicable, or hard copy. b. Leave the “Action verified by” and “Date verified” in the “QA Rep Completes” section blank. c. In the remark's section, explain why the implementing action could not be verified. State your name and the date for reference, and submit. |
| | | <i>End of activity</i> |

DOCUMENT REVISION HISTORY

| Original Document Issue Date: 11 July 2003 | | |
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| REVISION NUMBER | DATE OF REVISION | REVISION SUMMARY |
| 1 | 17 February 2005 | Added entries to Supporting Documents. Incorporated a copy of the manual PCAR format, Appendix 3, so personnel unable to submit an electronic version of a PCAR have easier access to a manual copy of the PCAR format. |
| 2 | 22 June 2007 | Changed approving authority. |
| 3 | 5 July 2012 | Changed approving authority. Updated name to JBLM. Made changes to organizations responsibilities related to PCARS on the intranet. |
| 4 | 12 June 2013 | Modified header. Defined Root Cause Analysis. Updated links and instructions for submission of a PCAR. |

Root Cause Analysis

Adequate root cause analysis is essential to determining the appropriate corrective or preventive action for identified non-conformances. Often, Preventive and Corrective Action Request (PCAR) root cause descriptions are simply a reworded non-conformance or are stated in too narrow a scope to adequately address the prevention of a recurrence. Limited root cause descriptions can result in only addressing the symptoms of the problem and not the probable systemic causes.

The root cause description should help define the proposed actions with the goal of preventing problems in the future. One technique in developing a root cause description is to ask a series of “why” questions concerning the occurrence of the non-conformance. The following examples illustrate the technique.

Example Problem 1:

A piece of shop equipment has broken and the foreman has determined a replacement is needed.

Why did the equipment break? The equipment just wore out.

Why did the equipment wear out? The equipment overheated.

Why did the equipment overheat? The coolant level was too low.

Why was the coolant level too low? The coolant level was not checked.

Why wasn't the coolant level checked? The equipment was not on the preventive maintenance schedule.

Why wasn't the equipment on the preventive maintenance schedule? There was not a system for tracking new equipment or changes to existing equipment to update the preventive maintenance schedule.

Root Cause Description:

There is no system to track new equipment installations or changes to existing equipment requiring routine or special maintenance.

Action Proposed:

Develop a system for tracking equipment changes and maintaining the preventive maintenance schedule for routine and special servicing requirements.

Example Problem 2:

Media-specific environmental requirements applicable to organizational projects were not always incorporated in the design specifications.

Why weren't the environmental requirements incorporated? The requirements were not identified during review of the project by the environmental office.

Why weren't the environmental requirements identified? The appropriate media managers were not always on the checklist of environmental reviewers that accompanied the project documentation.

Why weren't the media managers not always on the checklist? The checklists were prepared outside of the environmental office by the project managers, who were sometimes unaware of specific media requirements.

Why weren't the checklists revised to include the pertinent media managers? The projects and checklists when received in the environmental office were routed directly to the reviewers identified only by the project managers.

Why were the projects and checklists routed directly to reviewers identified only by the project managers? There was no procedure for reviewing of the project and checklist when first received at the environmental office before being routed for environmental review, and follow-up to confirm that the environmental review was done.

Root Cause Description:

There is no system in the environmental office for reviewing the project documentation and checklist of reviewers to ensure that all media managers who need to review work projects are identified on the checklist, and tracking to ensure that the review was performed.

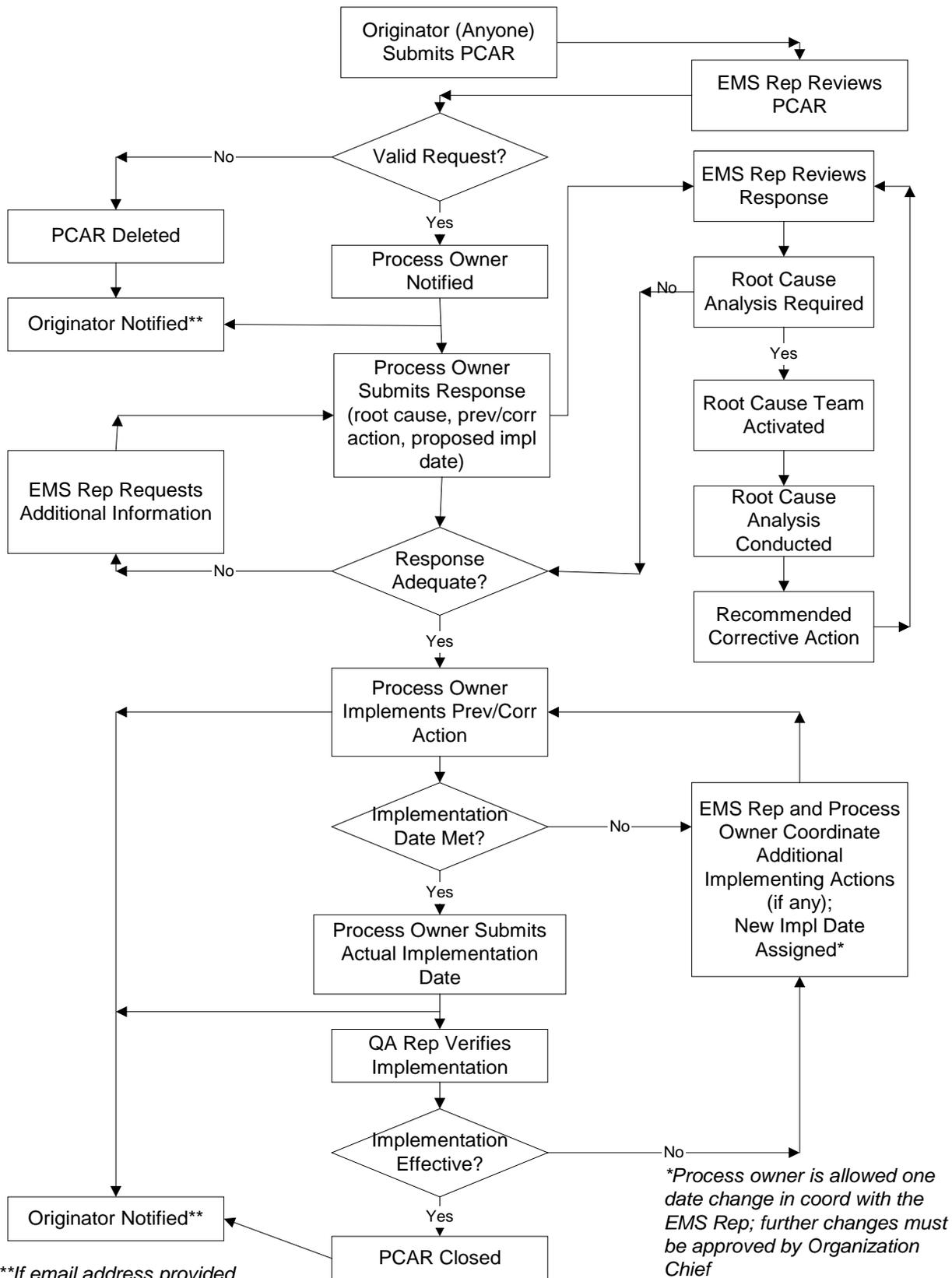
Action Proposed:

Develop procedures for reviewing project documentation and checklist of reviewers to ensure that all media managers who need to review work projects are identified on the checklist, and tracking to ensure that the environmental review is performed.

Simply replacing the equipment in the first example or incorporating the environmental requirements into the design specifications in the second example would have solved the immediate problem but would not have addressed the larger issue of preventing the problem from recurring. Following the analysis process leads to the “root cause” and appropriate action to fix the cause.

The specific technique you use to develop your root cause description is up to you. However, **when responses to PCARs are submitted with incomplete root cause analysis, the process owner will be contacted by the EMS Management Representative for additional analysis.**

PCAR PROCESS



PREVENTIVE/CORRECTIVE ACTION REQUEST

1. PCAR Number: _____

2. Description of Problem or Nonconformance:

Originator: _____ Date: _____
Phone/Email: _____

3. Preventative Action Required: Yes

No

Corrective Action Required: Yes

No

If no action required; reason:

If Yes: Date response requested: _____ QA Representative: _____

4. Process Owner (Manager): _____

5. Root Cause Description

6. Action proposed or taken to prevent recurrence

Proposed Implementation Date: _____

7. Process Owner (Manager) Responsible: _____ Date: _____

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| 8. Actual Implementation Date: |
| 9. Date Corrective Action Verified and Closed: _____ Remarks: QA Representative: |
| <u>Process Owner (Manager)</u> |

PREVENTIVE/CORRECTIVE ACTION REQUEST

PROCESS TO FOLLOW TO SUBMIT A HARD COPY PCAR:

1. Fill in boxes 2 above, sign and date and send to the EMS Representative or designated representative. Include contact information where you can be reached during working hours for either clarification of your concern or to keep you apprised of progress.
2. EMS Representative or designated representative will enter into the system electronically and the process followed per EMS-255.
3. If desired, originator will be notified by phone or e-mail of results.