## Database System Utilizing a Fillable Best Management Practice Spreadsheet to Follow and Upward Report Army Green and Sustainable Remediation

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**Background/Objectives.** Department of Defense (DoD) and Army Green and Sustainable Remediation (GSR) guidance state that the Army should consider and implement GSR opportunities whenever feasible and shall ensure the use of GSR remediation practices where practicable based on economic and social benefits as well as costs. The Army has developed a GSR Approach, hereafter referred to as the Army GSR Approach, which provides a simple and effective process for documenting the process of consideration and implementation of GSR Best Management Practices (BMPs) on Army environmental remediation projects. This process includes a fillable GSR BMP spreadsheet, the information from which can be loaded into an intermediate database that supplies optimized summary information for upward reporting GSR in the upcoming Headquarters Army Environmental Systems (HQAES) database. The objectives of this presentation are 1) to describe the BMP spreadsheet and use of the information from the completed spreadsheets in storing and upward reporting of Army GSR activities, and 2) to describe results of a pilot using the BMP spreadsheet on several Army installations.

Approach/Activities. The Army GSR Approach utilizes a fillable Excel-based spreadsheet version of the comprehensive list of GSR BMPs developed in the 2012 Army GSR Study Evaluation of Consideration and Incorporation of GSR Practices in Army Environmental Remediation. This BMP spreadsheet sequentially follows and documents the results of the steps of a GSR BMP evaluation, with the spreadsheet providing a Yes/No pick list to indicate if the BMP is applicable, selected, and/or implemented, with space to enter the project-specific GSR opportunity associated with the BMP or an explanation of why a BMP is not applicable, selected, or implemented. In addition, the spreadsheet allows designation of the cost impact for implemented BMPs and project-specific prioritization of the BMPs to allow for sorting and potential consideration for BMP quantification. The information from the BMP spreadsheet is then captured in to an intermediate database maintained by the USACE Environmental and Munitions Center of Expertise (EM CX) that can provide optimized information back to installations for input into GSR fields in the upcoming HQAES database, e.g. the number of GSR BMPs implemented that are cost decrease, cost neutral, and cost increase across individual or multiple projects. The BMP spreadsheet and associated Army databases have been piloted at several Army installations

**Results/Lessons Learned.** The utilization of the fillable GSR BMP spreadsheet as a single deliverable to effectively capture the GSR BMP consideration and implementation process will be described in the presentation along with the intermediate database that uses the BMP spreadsheet information to supply installations with the information necessary to complete GSR fields in the Army HQAES database. The results of an on-going pilot of the BMP spreadsheet and the associated upwards Army GSR reporting will also be described.