

75th Air Base Wing

Maintaining GHG Inventory Compliance at Hill AFB in the Midst of Regulatory Uncertainty



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Introduction

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- **In preparation for imminent GHG legislation...**
 - **Baseline inventories were completed from all activities based on 2008 data**
 - Hill AFB MB
 - Hill AFB UTTR
- **Despite the short time period; there is a significant amount of GHG-related regulatory requirements:**
 - **Mandatory Reporting Rule**
 - **EO13514**



Introduction

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- Utilizing lessons learned during the baseline inventory, lets discuss:
 - Challenges associated with the rules
 - Strategies used
 - to differentiate between submittal requirements
 - maintain data records
 - organize calculation methodologies



Challenges associated with the MRR



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- **Applicability not easily determined based on the information presented in the federal register**
- **Many emission calculation methodologies were unclear or contained inaccurate references**
- **How does one estimate the applicability of the rule based on the assessment of future emissions?**
- **Utilization of the EPAs reporting tool**
 - **User access did not become available prior to the required submittal date**
 - **The level of detail required for the data entry process was unclear**



Hill AFB Response to MRR Challenges



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- **Having a baseline assessment of GHG emission sources enabled:**
 - **Faster identification of GHG-specific info**
 - **Familiarity with various calculation methodologies**
- **Guidance became available from AFMC**
 - **Helped assess emissions from less ambiguous source categories and determine applicability**
 - **Hill AFB was subject to the MRR:**
 - **Stationary combustion emissions will exceed 25,000 mTons CO₂e**



Hill AFB Response to MRR Challenges



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- **Stationary combustion sources were identified**
 - Does not include portable equipment, or emergency equipment
 - Examples at Hill AFB include:
 - primary-power boilers, generators
 - building heaters, process heaters, furnaces
 - off-wing jet engine test stands
- **GHG monitoring plan developed**
 - Identifies applicable emission sources, methods of data collection and emission calculations, and responsible parties
 - Routed through applicable tenant orgs
 - Updated annually, or more frequently as needed



Challenges Associated with EO13514



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- **October 8, 2009, EO13514 (Federal Leadership in Environmental, Energy, and Economic Performance) published**
 - **Establishes GHG emission reductions for Federal agencies and provides timelines for the fulfillment of these goals**
 - **Applies to Scope 1, Scope 2, and Scope 3 emissions**
 - **Based on fiscal year**



Challenges Associated with Greenhouse Gases



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- Integrating the requirements of the MRR and EO13514 with AEI data meant overcoming several challenges
 - AEI usage may have variable reporting periods depending upon record-keeping requirements (monthly, annually)
 - Emission calculations require additional inputs:



Challenges Associated with Greenhouse Gases



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Variation on the following equation:

$$E_{CO_2e} = F * HHV * EF / 1,000 * GWP$$

- Incorporate **E** (GHGs) along with CPs and HAPs
- **EFs** for GHGs added to the database
- Emissions reporting in metric tons
- Re-evaluate fuel characteristics (**HHV**)



Solutions

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- Obtain additional data thru field visits and calls to manufacturers
- Calculations used for the AEI were modified so they could also be used for MRR
- Higher resolution data to accommodate both reporting periods
- Database engineers add GWP values into system
- References to baseline inventories...KEY



Questions?



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