

# MEMS

## Mandatory Reporting Rule Emissions Management System - Data and Reporting Tool for the Oil & Gas Industry

### Overview

MEMS is a web application that manages data required by Subpart W under the EPA Mandatory Greenhouse Gas Reporting Rule (40 CFR Part 98). It allows data entry during or immediately following data collection. Since data is directly entered into a central database, it is managed consistently and available immediately for review and reporting purposes. A computer, tablet computer or even mobile phone with an internet or cellular connection may be used to enter or extract the data in electronic (spreadsheet) format. The use of this tool is a standard feature of Heath's services.

In addition to capturing measurement data, MEMS also includes the capability of performing GHG release calculations as required by Subpart W for all industry segments. Source types included cover all relevant equipment as defined by industry segment and include sources beyond Heath's measurement campaign, e.g.; amine units, blow down vents, glycol dehydrators, flares, etc. The ability for the software to perform these calculations and subsequent reporting are additional features that are priced separately.

### How Does It Work

During the measurement campaign, team members of Heath Consultants enter data in MEMS for the source (types) where measurements, leak or population counts are made. They capture all required data as part of their monitoring activities including equipment reference, component (type) monitored, date of measurement, measurement and associated information, e.g.; operating mode, equipment ID and/or tag (if preferred), pertinent comments, etc. The system also captures who entered the data, when data was entered and any changes that may have been made. Information specific to leak ID tag and leak location may also be included for directing future maintenance efforts.

Once all measurements have been made and associated data has been entered, this information is available for calculations and/or reporting. For reporting or further processing, the data is exported through reports that provide the data in Excel format by facility. The reports can be generated for a single facility or all subscribed facilities.



Feature	MEMS Light (Standard Offering)	MEMS Full (Priced Separately)
Facilitates onsite and online data collections for Subpart W sources with measurements or leak detection/population counts.	✓	✓
Facilitates onsite and online data collection for all Subpart W sources in a central repository.		✓
Multiple facilities (all industry segments)	✓	✓
Spreadsheet import of collected data (in standard format)		✓
Exporting in electronic (spreadsheet) format	✓	✓
Subpart W calculations		✓
Subpart W reporting (ready for eGRRT upload)		✓
Secure	✓	✓
Multiple users	✓	✓

# MEMS

## MRR Data and Reporting Tool for the Oil & Gas Industry

### Our Experience

Our clients are leading Oil & Gas companies across all Subpart W industry segments and include: BP, Eagle Rock, Kinder Morgan, NiSource, etc.

We have been helping these clients with MRR compliance since the inception of the rule. Our experience of providing measurement and data management system solutions exceeds more than 15 years.

MEMS Light

Home Edit Entries Admin

Measurement Summary Search & Report

Company: Test Company 1

Facility: All

Search

### Sample information/reports

#### Measurements in System

Equip Name	Equip Type	Num Comp	Comp Type	Component Identifier	Meas Date	Meas (cfm)	Loc. Type	Op Mode	Detection Device	Meas Device	Meas Status	Comments
Comp 1	Compressor		Blowdown Vent	unit4	6/5/2012	3	Inlet	Operating (i.e. Pressurized and Running)	GMI	Calibrated Bag	Measured	zxc
Comp 1	Compressor		Unit Isolation Valve	unit 2 Disc Vlv	6/18/2012		Inlet	Maintenance (Depressurized and Not Running)	Acoustical Device	Calibrated Bag	Measured	
Comp 1	Compressor		Blowdown Vent	unit4	6/11/2012							
Comp 1	Compressor		Blowdown Vent	unit4	6/15/2012							
Comp 1	Compressor		Blowdown Vent	unit4	6/4/2012	55						
Comp 1	Compressor		Blowdown Vent	unit4	5/23/2012	11						
Comp 1	Compressor		Unit Isolation Valve	unit 2 Disc Vlv		44		Maintenance (Depressurized and Not Running)				
Comp 1	Compressor		Unit Isolation Valve	unit 2 Disc Vlv	5/3/2012	45		Maintenance (Depressurized and Not Running)	Acoustical Device	Acoustical Device	Inaccessible	
Comp 1	Compressor		Unit Isolation Valve	RPS 1 SW - Loading Vlv		5						
Comp 1	Compressor		Unit Isolation Valve	RPS 1 SW - Loading Vlv		7.29		Operating (i.e. Pressurized and Running)		Hi Flow Sampler	Measured	

MEMS Light

Home Edit Entries Admin

Facility > Equipment > Component Selection and Measurement Entry

Test Company 1 > Fac 1 Test  
Compressor: Comp 1

Component Type: Blowdown Vent  
Rod Packing Seal  
Unit Isolation Valve

ComponentID\*: Manual unit4 Add Component

Edit/Delete Component

Meas Date\*

Enter TOTAL rate measured, do not split across components.  
Enter comments for unique scenarios and discuss with team case-by-case.

Leak Rate (cfm)

LocationType: Inlet Outlet

Equip Operating Mode: Any  
Maintenance (Depressurized and Not Running)  
Operating (i.e. Pressurized and Running)  
Standby (Pressurized and Idle)

Meas Device: Any  
Acoustical Device  
Calibrated Bag  
Flow Meter  
Hi Flow Sampler

Meas Status: Any  
Inaccessible  
Measured  
Not in Inventory

Detect Device: Any  
Acoustical Device  
GMI  
IR Camera  
RMID

Comments

Submit

### Pricing/Contact

MEMS is made available on a subscription basis by reporting year. Pricing depends on number of facilities, industry segment and desired functionality.

For more information contact:



**1-800-HEATH-US**  
**www.heathus.com**

**Corporate Office:**  
**9030 Monroe Road, Houston, TX 77061**