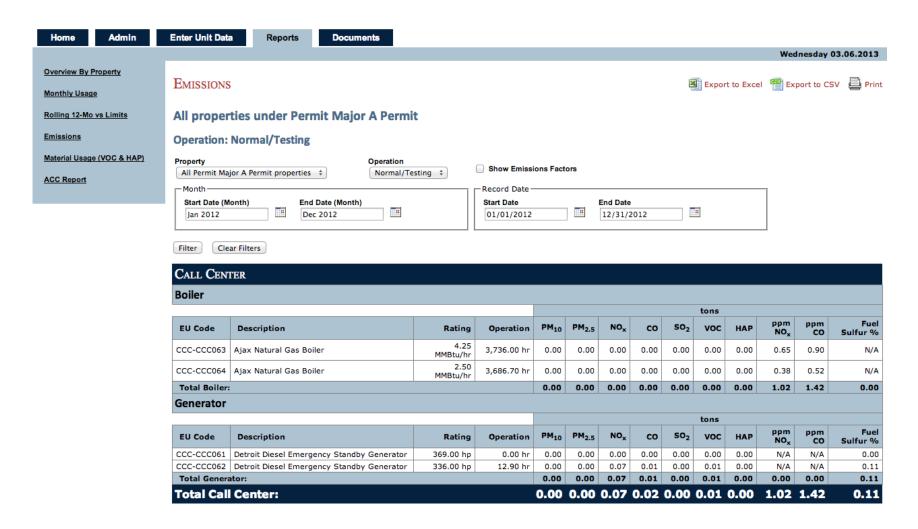# E2DR®
Energy Efficiency DSM Renewable

EnvCTR™

V-TECH has enabled energy industry companies with our E2DR® platform to rapidly launch, track, and manage complex portfolios of energy efficiency, DSM, and RE programs. By providing a scalable and customizable data management solution that fully meets the needs of clients with sophisticated program tracking, analytics, and reporting functions, we have enabled *our clients to manage over $500 Million of DSM programs resulting in over 3 Billion kWh savings*.

Based on the same versatile design approach, we have developed **EnvCTR**™: a unique product specifically architected as an 1-stop solution for meeting their environmental compliance tracking and reporting requirements:

- ➤ Enables client to meet environmental and air quality permit-compliance regulations, such as Part 70 – Title V permit requirements for stationary sources.
- ➤ Track and report on equipment located in multiple facilities via this integrated platform eliminating issues caused by scattered data in inconsistent formats.
- ➤ Out-of-the-box support for a wide variety of emission units: boilers, cooling towers, generators, fire pumps, paint booths, dust collectors, storage tanks, dry cleaning units, blast cabinets, gas nozzles, printing presses, etc. Additional equipment types can be readily added at any time.
- ➤ Easily track consumption of multiple fuel types: electricity, natural gas, gasoline, low sulfur diesel fuel, petroleum solvent and additional user-defined fuel types.
- ➤ Built-in capability to handle a comprehensive list of materials, emission factors, emission types, operation types, operation units, rating units, and permit types.
- ➤ Enables reporting accurate emissions by supporting multiple emissions calculations and separate emission factors down to each piece of equipment and emission type (CO_2, SOX, etc).
- ➤ Track all expended work materials (paints, inks, etc) and their corresponding MSDS for that particular equipment/facility.
- ➤ Easily group data by facilities, emission types, etc to match units with reporting responsibilities.
- ➤ Built-in robust data audit trail and assured reproducibility of reports to ensure compliance
- ➤ Readily customizable reports covering energy consumption, equipment run-times, monthly usage, and emissions to meet targeted compliance reporting requirements.
- ➤ Provides customizable 12-month usage vs. limits reporting to avoid non-compliance penalties for exceeding permit allowances.
- ➤ Customizable *role-based access* to data, approvals, and reports.
- ➤ Customizable reminders for compliance tasks: equipment tests, reporting, data entries, etc.
- ➤ Export data extracts and print pre-formatted screen views for use in other reports or applications.
- ➤ Library feature for storage and ready access to all invoices, permit documents, regulatory documents, reports, test results, and other compliance documents.
- ➤ *No* hardware or software investment: *just* Web access.
- ➤ Cloud-based solution that is secure, reliable, and available 24/7.
- ➤ Simple pricing: no additional fees based on number of users, facilities, or emission equipment.
- ➤ Hosted in a SAS 70 Type II certified facility, with multiple direct carrier connections to the Internet, a managed firewall and backup service, and compliance with HIPPA, SOX, FISMA, and GLBA.
- ➤ **Using EnvCTR, our clients have handled reporting for over 30 sites in 3 states covering over 800 emission units and over 20 types of emission units.**
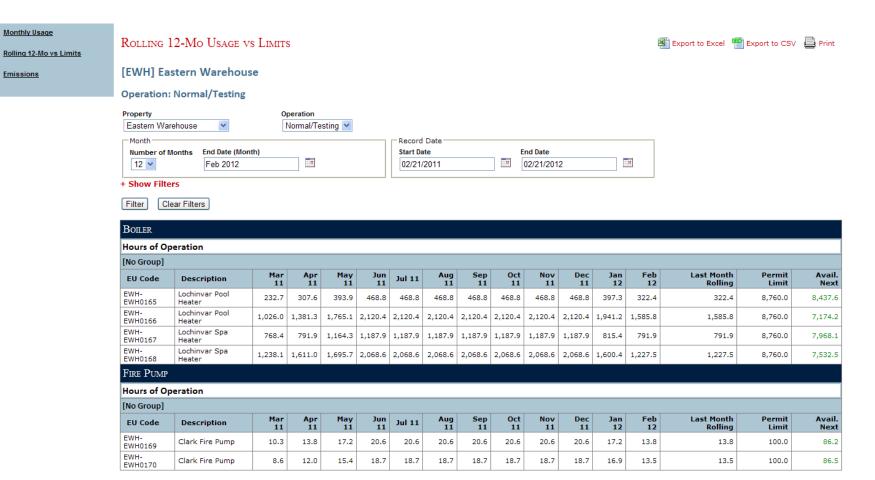
(Over)

Overview By Property

Monthly Usage

Rolling 12-Mo vs Limits

Emissions

Material Usage (VOC & HAP)

ACC Report

EMISSIONS

🟩 Export to Excel 🟩 Export to CSV 🖨 Print

All properties under Permit Major A Permit

Operation: Normal/Testing

Property
All Permit Major A Permit properties ⬍

Operation
Normal/Testing ⬍

☐ Show Emissions Factors

Month

Start Date (Month)	End Date (Month)
Jan 2012	Dec 2012

Record Date

Start Date	End Date
01/01/2012	12/31/2012

[Filter] [Clear Filters]

CALL CENTER

Boiler

				tons									
EU Code	Description	Rating	Operation	PM$_{10}$	PM$_{2.5}$	NO$_x$	CO	SO$_2$	VOC	HAP	ppm NO$_x$	ppm CO	Fuel Sulfur %
CCC-CCC063	Ajax Natural Gas Boiler	4.25 MMBtu/hr	3,736.00 hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.90	N/A
CCC-CCC064	Ajax Natural Gas Boiler	2.50 MMBtu/hr	3,686.70 hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.52	N/A
Total Boiler:				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.02**	**1.42**	**0.00**

Generator

				tons									
EU Code	Description	Rating	Operation	PM$_{10}$	PM$_{2.5}$	NO$_x$	CO	SO$_2$	VOC	HAP	ppm NO$_x$	ppm CO	Fuel Sulfur %
CCC-CCC061	Detroit Diesel Emergency Standby Generator	369.00 hp	0.00 hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A	0.00
CCC-CCC062	Detroit Diesel Emergency Standby Generator	336.00 hp	12.90 hr	0.00	0.00	0.07	0.01	0.00	0.01	0.00	N/A	N/A	0.11
Total Generator:				**0.00**	**0.00**	**0.07**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.11**
Total Call Center:				**0.00**	**0.00**	**0.07**	**0.02**	**0.00**	**0.01**	**0.00**	**1.02**	**1.42**	**0.11**

Sample Screen View of Emissions Reports
Provides a clear view of emissions from each unit –
this one shows units grouped by each property; filters can be used to zero in on specific time periods.

ROLLING 12-MO USAGE VS LIMITS

📊 Export to Excel   📄 Export to CSV   🖨 Print

[EWH] Eastern Warehouse

Operation: Normal/Testing

Property
Eastern Warehouse ▼

Operation
Normal/Testing ▼

Month

Number of Months
12 ▼

End Date (Month)
Feb 2012 📅

Record Date

Start Date
02/21/2011 📅

End Date
02/21/2012 📅

+ Show Filters

[Filter] [Clear Filters]

BOILER

Hours of Operation

[No Group]

EU Code	Description	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Last Month Rolling	Permit Limit	Avail. Next
EWH-EWH0165	Lochinvar Pool Heater	232.7	307.6	393.9	468.8	468.8	468.8	468.8	468.8	468.8	468.8	397.3	322.4	322.4	8,760.0	8,437.6
EWH-EWH0166	Lochinvar Pool Heater	1,026.0	1,381.3	1,765.1	2,120.4	2,120.4	2,120.4	2,120.4	2,120.4	2,120.4	2,120.4	1,941.2	1,585.8	1,585.8	8,760.0	7,174.2
EWH-EWH0167	Lochinvar Spa Heater	768.4	791.9	1,164.3	1,187.9	1,187.9	1,187.9	1,187.9	1,187.9	1,187.9	1,187.9	815.4	791.9	791.9	8,760.0	7,968.1
EWH-EWH0168	Lochinvar Spa Heater	1,238.1	1,611.0	1,695.7	2,068.6	2,068.6	2,068.6	2,068.6	2,068.6	2,068.6	2,068.6	1,600.4	1,227.5	1,227.5	8,760.0	7,532.5

FIRE PUMP

Hours of Operation

[No Group]

EU Code	Description	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Last Month Rolling	Permit Limit	Avail. Next
EWH-EWH0169	Clark Fire Pump	10.3	13.8	17.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	17.2	13.8	13.8	100.0	86.2
EWH-EWH0170	Clark Fire Pump	8.6	12.0	15.4	18.7	18.7	18.7	18.7	18.7	18.7	18.7	16.9	13.5	13.5	100.0	86.5

Sample Screen View of Rolling 12-month Usage Vs. Limits Report
Provides dynamic view to ensure each emission unit is being utilized in compliance with its permitting limits.
Report links on the top can be used to export data in Excel or .csv formats or readily printed.

V-TECH, inc.

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2012 Annual Compliance Certification (ACC) Report

COLUMN 1 Emission Unit or Condition Number	COLUMN 2 Permit Condition	COLUMN 3 Compliance Status During Period: "CONTINUOUS", "INTERMITTENT",	COLUMN 4 Method for Determining Compliance Status	COLUMN 5 Additional Information: Identify each deviation, each possible exception to Compliance and each excursion or exceedance.
III	**Emission Units and Applicable Requirements**			
III.D	**Site TBD at MyState**			
III.D.1	**Emission Units**			
III.D.1.a	The stationary source covered by the Part 70 OP consists of the emission units and associated appurtenances summarized in Table III.D.1.a following table summarizes the emission units emitted for this facility.	CC	RR	
III.D.2	**Emission Limitations and Standards**			
III.D.2.a	The Permittee shall allow neither the actual nor the allowable emissions from each emission unit to exceed the calculated PTE listed below in Table III.D.2.a on a 12-month rolling basis. [AQR 12.5.2.3/AQR 19.2.1]	IC	RR	SIG-TBA01 [PM10] 02-12/2012
III.D.3	**Production Limitations**			
III.D.3.a	The Permittee shall limit the operation of each boiler to 7,000 hours per rolling 12-months (EUs: TBA01 through TBA014, TBB01 through TBB14, and TBC01 through TBC14).	CC	RK	
III.D.3.b	The Permittee shall limit the operation of each of the diesel emergency generators to 26 hours per rolling 12-months for testing and maintenance purposes (EUs: TBA15 and TBB15).	CC	RK	
III.D.4	**Emission Controls**			
	Boilers/Water Heaters			
III.D.4.a	The Permittee shall combust only natural gas in all boilers/water heaters.	IC	WP	
III.D.4.b	The Permittee shall operate and maintain all boilers/water heaters in accordance with the manufacturer's specifications.	NC	WP	
III.D.4.c	The Permittee shall operate each boilers with burners rated for an emission rate of 30 ppm NOx and 100 ppm CO (EUs: TBA01 through TBA14, TBB01 through TBB14, and TBC01 through TBC14).	CC	WP	

III.D.2.a

EU	EU Description	Month	Emission	Rolling 12-Month Emission (tons)	Limit (tons)
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Feb-12	PM10	0.0346	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Mar-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Apr-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	May-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Jun-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Jul-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Aug-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Sep-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Oct-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Nov-12	PM10	0.0614	0.03
SIG-TBA01	Lochinvar Boiler, M/N: PBN-1000, S/N: K04H00170956, 1.0 MMBtu/hr	Dec-12	PM10	0.0614	0.03