



**Combining ISO 14001 and ISO 50001/
MSE 50021 (SEP)**

Chadwick Porter / Michele Lawton

Volvo Group Truck Operations

New River Valley Plant, Dublin, VA

Do We Need Another ISO Standard?

- Benefits
 - EnMS creates stability where there are frequent management changes
 - Future general managers will already have systems in place
 - Part of creating a “World Class” manufacturing facility with minimal energy footprint
 - Improves financials for tough manufacturing environment
 - ISO 14001 system already exists and framework can be shared
- Challenges
 - Resources available, cost considerations
 - Toughest certification of all standards
 - MSE 50021 (SEP) adds to the challenge of certification

Combining Systems

Logged on as: EHS User (Read-Only)

ENVIRONMENTAL, HEALTH & SAFETY
VOLVO NRV, DUBLIN VERSION 2.0

Environmental, Safety and Energy Together — Make a Difference

Welcome to the Environmental, Health & Safety System. Click on one of the icons below to access the database.

- 
Environmental
- 
Health & Safety
- 
Quality
- 
Energy

**IN PLANT EMERGENCIES:
(Security)**
540-674-7777

ENVIRONMENTAL
GENERAL CONTACT #s
(non-emergency)


Stephen Pierett
Environmental Manager
540-674-7730
Michele Lawton
Environmental Coordinator
540-674-7382
Tom Ierardi
Environmental Coordinator
540-674-7185

HEALTH & SAFETY
GENERAL CONTACT #s
(non-emergency)

Robert Kelly
Health & Safety Manager
540-674-7465

ENERGY
GENERAL CONTACT #s
(non-emergency)


Michael Kijak
Facilities Manager
540-674-2230
Chadwick Porter
Energy Advisor
540-674-7106

EMS Landing Page

Logged on as: EHS User (Read-Only)

 **ENVIRONMENTAL MANAGEMENT SYSTEM**
VOLVO NRV, DUBLIN VERSION 2.0

[Home](#) » [ISO 14001](#)

Policies and Resources

- [NRV Statement on Energy & the Environment](#)
- [ISO 14001 Certificate](#)
- [EMS & EnMS Document Matrix](#)
- [Roles and Responsibilities](#)
- [Definitions](#)
- [Corporate Environmental Policy](#)

Environmental

- [Aspects and WI's by Area](#)
- [System Procedures](#)
- [Operational Procedures](#)
- [Work Instructions - Air](#)
- [Work Instructions - Asbestos](#)
- [Work Instructions - Energy](#)
- [Work Instructions - Materials](#)
- [Work Instructions - Paint Dept.](#)
- [Work Instructions - Refrigerants](#)
- [Work Instructions - Waste](#)
- [Work Instructions - Wastewater](#)
- [Forms](#)

Emergency Response

- [Emergency Call List & Agency](#)
- [Notification Requirements](#)
- [Emergency Response Procedure](#)
- [Emergency Response Documents](#)
- [Emergency Response Forms](#)
- [Contingency Plans & Forms](#)

Training

- [Technical Training](#)
- [Training Requirements Matrix](#)
- [Training Information](#)
- [Custom Training Checklist](#)

Communication

- [Truck Talk Newsletters](#)
- [Presentations, E-mails & Memos](#)
- [Communication Boards](#)

Improvement Plans

- [A3 Objectives and Targets](#)

Contractor Management

- [Contractor Portal \(Login\)](#)
- [Visitor Guidelines](#)

Approval of Products

- [Approval forms for Chemicals](#)

Project Review Database

- [Project Review Database \(Login\)](#)

Document and Records

- [Master Documents List](#)
- [Master Records List](#)
- [Forms](#)

Legal and Other

- [Legal and Other Requirements](#)
- [Environmental Compliance Manual](#)
- [Environmental Calendar](#)

Internal Audit Tools

- [Custom Audit Checklist](#)
- [Corrective Actions & Audits \(Login\)](#)
- [Internal Audit Schedule](#)
- [Audit Team Minutes](#)

[Home](#)



[Health & Safety](#)



[Quality](#)



[Energy](#)

EnMS Landing Page

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ENERGY MANAGEMENT SYSTEM

VOLVO NRV, DUBLIN

[Home](#) » [ISO 50001](#)

Policies and Resources

- [Statement on Energy & the Environment](#)
- [ISO 50001:2011 Certificate](#)
- [Superior Energy Performance Certificate](#)
- [EMS & EnMS Document Matrix](#)
- [Roles and Responsibilities](#)
- [Definitions](#)

Energy

- [Significant Energy Uses by Area](#)
- [Energy Review](#)
- [System Procedures](#)
- [Operational Procedures](#)
- [Work Instructions - Ovens](#)
- [Work Instructions - Energy](#)

EnPIs

- [EnPI Tool](#)
- [EnPI Manual](#)
- [Save Energy Now Rpt Info](#)

Training

- [Technical Training](#)
- [Training Requirements Matrix](#)
- [Training Information](#)
- [Custom Training Checklist](#)

Communication

- [Truck Talk Newsletters](#)
- [Energy Team Minutes](#)
- [Presentations, E-mails & Memos](#)
- [Communication Boards](#)
- [Save Energy Now Newsletter](#)

Improvement Plans

- [A3 Objectives and Targets](#)

Management Review

- [Management Review Presentations](#)

Contractor Management

- [Contractor Portal \(Login\)](#)
- [Visitor Guidelines](#)

Project Review Database

- [Project Review Database \(Login\)](#)

Document and Records

- [Master Documents List](#)
- [Master Records List](#)
- [Forms](#)
- [Visual Aids](#)

Legal and Other

- [Legal and Other Requirements](#)
- [Energy Compliance Manual](#)

Internal Audit Tools

- [Custom Audit Checklist](#)
- [Corrective Actions & Audits \(Login\)](#)
- [Internal Audit Schedule](#)
- [Audit Team Minutes](#)

[Home](#)



[Environmental](#)



[Health & Safety](#)



[Quality](#)

EMS/EnMS Level 1 Procedures

System Procedures last revised: 12/05/2012 Document Count: 13 - PRINTED DOCUMENTS ARE UNCONTROLLED -				
ID	TITLE	REVISION DATE	LOCATION	AUTHORIZED
System Procedures				
SP-01 »	Resources, Roles, Responsibilities and Authorities	Online	Online	System Procedure
SP-02 »	Policy Implementation	Online	Online	System Procedure
SP-05 »	Objectives, Targets & Action Plans	Online	Online	System Procedure
SP-06 »	Competence, Training & Awareness	Online	Online	System Procedure
SP-07 »	Control of Documents and Records	Online	Online	System Procedure
SP-08 »	Operational Control	Online	Online	System Procedure
SP-09 »	Communication	Online	Online	System Procedure
SP-11 »	Monitoring, Measurement and Analysis	Online	Online	System Procedure
SP-12 »	Legal & Other Requirements and Evaluation of Compliance	Online	Online	System Procedure
SP-13 »	Internal Auditing	Online	Online	System Procedure
SP-14 »	Nonconformance, Corrective & Preventive Action	Online	Online	System Procedure
SP-15 »	Management Review	Online	Online	System Procedure

EMS/EnMS Legal & Other Requirements

System Procedures: **SP-12 – Legal & Other Requirements and Evaluation of Compliance**
 There are **30** tasks related to this operational control

Checklist last revised: **12/05/2012**

Items added since **02/06/2014** appear in red and are labeled as **NEW!**
 Items updated since **02/06/2014** appear in green and are labeled as **UPDATED!**

- PRINTED DOCUMENTS ARE UNCONTROLLED -

(Hiding) Responsibilities
 (Showing) Records
 (Hiding) Energyuses

TASK	RECORDS
<p>1.01 This procedure defines the mechanism for identifying and maintaining current environmental and energy legal and other requirements applicable to the NRV Plant and for maintaining access to current editions of those requirements.</p>	
<p>1.02 This procedure also provides a mechanism for determining compliance with the environmental and energy legal and other requirements applicable to the NRV Plant.</p>	
<p>1.03 This procedure conforms to Element 4.3.2 Legal and Other Requirements and 4.5.2 Evaluation of Compliance of the ISO 14001-2004 standard and Elements 4.4.2 and 4.6.2 of the ISO 50001-2011/ MSE 50021:5013 standards and SEP M&V Protocol.</p>	
<p>2.01 A current Matrix of Legal and Other requirements is maintained on the Environmental and Energy System Databases. The matrix is reviewed and updated, as needed, at least annually. An Environmental Compliance Manual and an Energy Compliance Manual provide a summary of Legal and Other Requirements pertinent to the NRV environmental aspects, energy uses, consumption and efficiency.</p>	Environmental and Energy System Databases  » SPD-12.01 Environmental Compliance Manual  » SPD-12.02 Compliance Calendar SPD-12.03 Energy Compliance Manual
<p>2.01.01 This matrix shall include, but is not limited to, legal requirements from Municipal Ordinances, Utility Easements, when applicable, County rules, State laws and regulations, Federal laws and regulations, conditions specified in permits and licenses; and other Volvo corporate, NRV and customer driven requirements.</p>	Environmental and Energy System Databases  » SPD-12.01 Environmental Compliance Manual  » SPD-12.02 Compliance Calendar SPD-12.03 Energy Compliance Manual

EMS/EnMS Contractor Portal

Volvo Trucks North America
New River Valley (NRV) plant
4881 Cougar Trail Road
Dublin, VA 24084



Dear Valued Supplier:

Welcome!

The purpose of this web portal is to manage the health, safety, environmental and energy requirements of the New River Valley (NRV) Plant Contractor Program. The NRV plant adheres to OSHA; ISO 14001:2004 Environmental Management System (EMS); and ISO 50001:2011/MSE 50021:2012 Energy Management System (EnMS) standards. To make our health, safety, environmental (HSE) and energy programs a success, it is necessary for everyone to be responsible for complying with NRV's policies and procedures.

The procurement process at the NRV plant for selecting suppliers is, in part, based on HSE and energy system performance. This web portal has been established to ensure safe, environmentally friendly and energy efficient performance from all contractors performing work at the NRV plant. It is one reference source for many of the NRV plant's rules and procedures and is not a complete set of requirements. Suppliers unable to secure personnel who will act in accordance with these rules will be removed from the job site.

Contractors working for or on behalf of the NRV plant must do the following three things to maintain their status as APPROVED SUPPLIERS **within 10 days of request**:

1. **TRAINING:** Suppliers working on site must have been trained to the "CONTRACTOR BRIEFING PACKAGE". Please download this file from the following link. It is your responsibility to use this briefing package to train your staff and subcontractors working on site. Trained staff and subcontractors must sign in using the attached "CONTRACTOR BRIEFING PACKAGE SIGN IN SHEETS". Completed sign in sheets must be uploaded into this supplier portal using the following "SUPPORTING DOCUMENTS" link.

[CONTRACTOR BRIEFING PACKAGE](#) ➔
[CONTRACTOR BRIEFING PACKAGE SIGN IN SHEET](#) ➔

2. **METHOD STATEMENT and INJURY LOGS:** The following "METHOD STATEMENT" must be completed and approved for all work conducted on site. METHOD STATEMENTS must be UPDATED EVERY THREE YEARS or each time the type of work you are doing on site changes. The following "INJURY LOGS" must be completed and updated ANNUALLY.
3. **SIGNED ACKNOWLEDGEMENT RECEIPT:** A signed copy of following "ACKNOWLEDGEMENT RECEIPT" must be uploaded using the following "SUPPORTING DOCUMENTS" link.

[ACKNOWLEDGEMENT RECEIPT](#) ➔

Semi-annually each contractor shall complete the "Energy and Environmental - Continuous Improvement Monitoring Form." Upload using the "SUPPORTING DOCUMENTS" link.
[Energy and Environmental - Continuous Improvement Monitoring Form](#) ➔

See the attached directions for completing your FIRST CONTRACTOR APPROVAL SUBMITTAL (Method Statement, Acknowledgement Receipt, Injury Log and Support Documentation): [DOWNLOAD DIRECTIONS](#) ➔

For more information, contact Chad Porter (540-674-7730 / chadwick.porter@volvo.com) or Michele Lawton (540-674-7382 / michele.lawton@volvo.com).

EMS/EnMS Objectives, Targets, and Action Plans

System Procedures: **SP-05 – Objectives, Targets & Action Plans**
 There are 13 tasks related to this operational control

Checklist last revised: 12/03/2012

Items added since 02/06/2014 appear in red and are labeled as **NEW!**
 Items updated since 02/06/2014 appear in green and are labeled as **UPDATED!**

- PRINTED DOCUMENTS ARE UNCONTROLLED -

(Hiding) Responsibilities
 (Showing) Records
 (Hiding) Energyuses

TASK	RECORDS
1.01 This procedure defines the mechanism for the establishment, implementation and maintenance of documented environmental and energy objectives, targets and action plans at the relevant functions, levels, processes or facilities within the New River Valley Plant (the NRV Plant).	
1.02 The Objectives, Targets and Action Plans procedure is responsive to Element 4.3.3 Objectives and Targets of the ISO 14001-2004 standard and 4.4.6 of the ISO 50001-2011/ MSE 50021:5013 standards and SEP M&V Protocol.	 » SPFRM-18.04 Opportunities for Improvement Worksheet
2.01 The energy and environmental objectives and targets shall be defined, maintained and documented by the EMS EMS/EnMS Team (EMS) and the Energy Team (EnMS) or designee(s). The environmental objectives and targets shall be measurable, where practicable. Targets will be consistent with the objectives. Time frames shall be established for the achievement of the objectives and targets.	Agendas, Meeting Minutes, And Attendance Sheets  » SPD-05.01-A3 Environmental Plan  » SPD-05.02 A3 Energy Action Plan  » SPFRM-18.04 Opportunities for Improvement Worksheet
2.01.01 The energy and environmental objectives and targets will be consistent with the relative energy and environmental policy.	Agendas, Meeting Minutes, And Attendance Sheets  » SPD-02.01 - NRV Plant Statement on Energy and the Environment  » SPD-05.01-A3 Environmental Plan  » SPD-05.02 A3 Energy Action Plan  » SPFRM-18.04 Opportunities for Improvement Worksheet
2.01.02 Environmental objectives that address the commitment to the prevention of pollution must be included.	Agendas, Meeting Minutes, And Attendance Sheets  » SPD-05.01-A3 Environmental Plan  » SPFRM-18.04 Opportunities for Improvement Worksheet
2.01.03 When establishing objectives and targets, the following must be considered: Legal and other requirements, significant energy uses and opportunities to improve energy performance as identified in the energy review (EnMS) and its significant Environmental aspects (EMS). It shall also consider its financial, operational and business conditions, technological options, and the views of interested parties.	Agendas, Meeting Minutes, And Attendance Sheets EMS/EnMS Team and Management Review Meeting Minutes Environmental and Energy System Databases  » SPD-05.01-A3 Environmental Plan  » SPD-05.02 A3 Energy Action Plan  » SPFRM-18.04 Opportunities for Improvement Worksheet

Volvo Group Trucks Operations

New River Valley plant, EMS & EnMS Teams

10 March 12, 2014



Project Review / Management of Change

Logged on as: Chadwick Porter (Lead Administrator)

PROJECT REVIEW / MANAGEMENT OF CHANGE
VOLVO VERSION 1.0

Welcome to the Project Review / Management of Change web application

[Project Review](#) →

[Management of Change](#) (e.g., Equipment/Personnel/Traffic Pattern Changes) →

[Action Items](#) →

[Volvo Truck, New River Valley Environmental Management System](#) ›

[Volvo Truck, New River Valley Health And Safety System](#) ›

Administration

[User Management](#)

[Energy Uses](#)

[Project Types](#)

Project Review / Management of Change

[+ Add a New Project Review](#)

Facility: Project Manager: On or After:

 Project Phase: Energy Source: On or Before:

 Project Type:

Projects Under Review						
PROJECT NAME (NUMBER)	FACILITY	AREA/DEPARTMENT	MANAGER	DESCRIPTION	DATE OF CHANGE	PHASE
Lighting replacement Assy D12	Volvo Truck, New River Valley	Facility Wide, Facility Wide	Chadwick Porter	Replace (3) 175w fixtures with (1) led.	2/15/2014	Needs Pre-funding Approval submit review ➔
NRV Paint - Door Cavity Waxing Implementation (5290)	Volvo Truck, New River Valley	Paint Building, Prep, Paint Booths, Ovens (Paint Dept)	Kirk Shelhamer	The installation of equipment to spray cavity wax into doors in the current "Audit Booth" in the NRV Paint Shop.	2/13/2014	Needs Pre-funding Approval submit review ➔
Battery Box Sub-assembly lift	Volvo Truck, New River Valley	Assembly, Frame Assembly, Chassis Assembly, Engine Grooming Line, Cab Assembly	Eddie Kinser	Battery Box Sub-assembly lift	2/10/2014	Needs Pre-funding Approval submit review ➔
Air Curtain For Frame Rail Wash Room	Volvo Truck, New River Valley	Facility Wide, Facility Wide	Chadwick Porter	Install Air curtains to keep cold air from infiltrating the frame rail wash room and ultimately the production area.	2/6/2014	Needs Pre-funding Approval submit review ➔
Replace lights in G8 restroom	Volvo Truck, New River Valley	Facility Wide, Facility Wide	Chadwick Porter	Replace (10) t12 fixtures with (8) LED fixtures	1/29/2014	Needs Pre-funding Approval submit review ➔
Lighting replacement in BIW maintenance shop	Volvo Truck, New River Valley	Facility Wide, Maintenance	Chadwick Porter	Replace existing lights with LED	1/21/2014	Needs Pre-funding Approval submit review ➔

Volvo Group Trucks Operations

New River Valley plant, EMS & EnMS Teams

12 March 12, 2014

VOLVO

Project Review / Management of Change

Personnel Changes						
NAME	TITLE	SUPERVISOR	FACILITY	SECTION	DEPARTMENT	DATE OF CHANGE
<i>New Hire</i>						
Assembly Department - added second shift ⇒	Asssembly Department Employees	Bill Moore	Volvo Truck, New River Valley	Assembly	Prep, Paint Booths, Ovens (Assembly)	2012-05-11
Lars Blomberg ⇒	VP and General Manager	self	Volvo Truck, New River Valley	Facility Wide	Facility Wide	2011-09-01
Paint Department - Added second Shift ⇒	Paint Shop Employees - added second shift	Dean Durham	Volvo Truck, New River Valley	Paint Building	Prep, Paint Booths, Ovens (Paint Dept)	2010-09-01

Traffic / Operational Changes				
DEPARTMENT	DESCRIPTION	TRAFFIC AFFECTED LOCATION	TRAFFIC EMPLOYEE NAME	DATE OF CHANGE
<i>Traffic Pattern Changes</i>				
Prep, Paint Booths, Ovens (Paint Dept) ⇒	Holiday Production 2nd Shift, Paint	Paint	Dean Durham	2013-11-18
Prep, Paint Booths, Ovens (Paint Dept) ⇒	Production Sunday, both shifts Paint	Paint and BIW	Dean Durham	2013-11-03
Facility Wide ⇒	Production Saturday, Entire Plant both shifts	Entire Plant	Joel Fenstermaker	2013-11-02
Prep, Paint Booths, Ovens (Paint Dept) ⇒	Production Sunday, 1st shift Paint	Paint 1st shift	Dean Durham	2013-10-06
Facility Wide ⇒	Production Saturday, Entire plant, both shifts	Entire Plant	Joel Fenstermaker	2013-10-05
Prep, Paint Booths, Ovens (Paint Dept) ⇒	Saturday Production, 1st shift Paint	Paint and BIW	Dean Durham	2013-09-28
Prep, Paint Booths, Ovens (Paint Dept) ⇒	Saturday Production, 2nd shift Paint	Paint and BIW	Dean Durham	2013-09-21
Facility Wide ⇒	Production Saturday, Entire plant, both shifts	Entire Plant	Joel Fenstermaker	2013-08-24
Prep, Paint Booths, Ovens (Paint Dept) ⇒	Saturday Production both shifts Paint	Paint and BIW	Dean Durham	2013-08-17
Facility Wide ⇒	Production Saturday, Entire Plant, Both shifts	Entire plant	Joel Fenstermaker	2013-07-20
Facility Wide ⇒	Production Saturday, Entire plant, Both Shifts	Entire plant	Joel Fenstermaker	2013-07-13

Volvo Group Trucks Operations

New River Valley plant, EMS & EnMS Teams

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Project Review / Management of Change

PROJECT REVIEW / MANAGEMENT OF CHANGE

VOLVO

Lighting replacement in BIW maintenance shop (Project No.)

Electricity Use (1)

Type of Equipment Removed	400w HID
Wattage	465
Quantity of Equipment Removed	15
Type of Equipment Installed	215w Digital Lumens LED
Wattage	215
Quantity of Equipment Installed	10
Equipment Cost / Unit	\$1,038.00
Hours of Operation / Day	24
Work Days / Year	365
Total Annual Hours	8,760.00
Total Wattage Removed	6,975
Total Wattage Installed	2,150
Savings Installed Watts	4,825
Last Year's Average \$/KWH	\$0.0760
Annual KWH Savings	42,267.00
Annual BTU Savings	144,221,005.91
Annual CO2 Savings (Tons)	32.50
Annual Energy Savings	\$3,212.29
Total Cost of Equipment	\$10,380.00
New Equipment Life (Hours)	80,000
Annual Maintenance Cost	\$0.00
ROI (Years)	3.23
Comments	

Corrective Action Database

Logged on as: Chadwick Porter (EMR)

[User Administration](#) [Change Password](#) [Logout](#)

CORRECTIVE ACTION REQUEST APPLICATION

VOLVO NRV, DUBLIN

VERSION 2.0



[Home](#) » [View CARs](#)

[Print this Page](#)

Search for Corrective Action Requests

Initiator:	<input type="text"/>	Responsible Person:	<input type="text"/>
Form Type:	<input type="text"/>	Opened on or After:	<input type="text"/>
Department:	<input type="text"/>	Opened on or Before:	<input type="text"/>
Status:	<input type="text" value="Closed"/>	Prioritization:	<input type="text"/>
	<input type="text"/>	Standard:	<input type="text"/>
	<input type="text"/>	Source:	<input type="text"/>
<input type="button" value="Filter Results »"/>		<input type="button" value="Clear »"/>	

[Create a New CAR](#)

[Print Aging Chart](#)

Displaying (138) CARs:

CAR	Department	Form Type	Problem Definition	Prioritization	Responsible Person	Deadline	Status	User Response
EHS20110315-01	Facilities	Level I - Observation	Wastewater Treatment Plant Tanker Off-loading process does not protect the stormwater in the event of a chemical release. (See attached..)	Medium	Michael Kijak	n/a	Corrective action completed, CAR closed	n/a
EHS20110317-01	Maintenance	Level I - Observation	Condensate lines from compressors and receiver tank are plumbed into the sanitary drain. Samples from the condensate show considerable..	Medium	Michael Kijak	n/a	Corrective action completed, CAR closed	n/a
EHS20110328-01	Prep & Paint Booths	Level I - Observation	Purge losses for 2009 were 9.5 lbs VOC/job and for 2010 were 9.9 lbs VOC. This amount is approximately two..	High	Daniel Mcrorie	n/a	Corrective action completed, CAR closed	n/a

Volvo Group Trucks Operations

New River Valley plant, EMS & EnMS Teams

15 March 12, 2014

VOLVO

Internal Auditing

ISO-50001, Energy	ISO-14001, Environmental		Internal	Internal	Internal
			EMS EnMS 1st qtr	EMS EnMS 2nd qtr	EMS EnMS 3rd qtr
		Contractor Management	X		
		Contractor: Wastewater Treatment	X		
		Contractor: Transport Company	X		
		Contractor: Cafeteria	X		
		Contractor: DuPont		X	
		Contractor: IT			X
		Contractor: Security	X		
		Safety/ Medical			X
		Storm water Management		X	
		Air Emissions Management	X		
		Chemical Approval			X
		NAP Purchasing	X		
		Warehouse/Shipping/Receiving/ Kitting		X	
		Body-In-White (BIW)	X		
		Customer Care Center Building		X	
		Methods Lab		X	
		Cab Assembly		X	

ISO-50001, Energy	ISO-14001, Environmental		Internal	Internal	Internal
			EMS EnMS 1st qtr	EMS EnMS 2nd qtr	EMS EnMS 3rd qtr
		Chassis Assembly			X
		Paint		X	
		Facilities	X		
		Maintenance		X	
		Tank Farm			X
		Frame Assembly			X
		Chassis Paint		X	
		VHD			X
		Engine Grooming Line		X	
		Central Stores		X	
		Waste Management		X	
		Communication		X	
		Training		X	
		Emergency Preparedness & Resp.			X
		Records			X
		ISO-14001 Full System Audit (Annual)			X
		ISO-50001 Full System Audit / MES 50021 (Annual)			X
		Compliance Audit (Biannual 1st QTR 2014)			

Volvo Group Trucks Operations

New River Valley plant, EMS & EnMS Teams

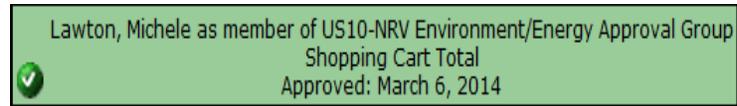
16 March 12, 2014



Summary for Combining Systems

Advantages

- Added synergies between the Objectives & Targets and the EMS KPIs for continual improvement.
- ISO 50001 Employee involvement, for example in the area of Communications, increases the environmental awareness, involvement and empowerment
- Strengthens the environmental design and procurement process
 - Team part of approval process
- Strengthens the Contractor Management Portal
- 50001 Measurement Plan strengthens the Environmental Monitoring and Measuring
- Integrating systems streamlines the energy management system identification of related environmental regulation and other requirements.
- Combined Internal Audit teams strengthens both ISO systems



ISO 50001/MSE 50021 SEP Certification Audit

- Two audits being performed at the same time
 - Energy Management System & Energy Performance, M&V
- Audit team must be sized accordingly to deal with concurrent audits
- Scheduling audit of elements should be well organized to minimize stress with the Audit team

ISO 50001 vs. MSE 50021 (SEP)

- ISO 50001 can be rigorous based on:
 - 4.4.3 Energy Review
 - Must include all energy use's and account for 95% of current years energy consumption
 - 4.6.1 Monitoring, measurement, and analysis
 - Can be costly depending on SEU (significant energy use) selection. In our case, we chose all Paint Ovens
- MSE 50021 (SEP) adds a target for overall energy reductions
 - SEnPI tool is used to verify if targets are met
 - Tracking of all energy reductions are crucial, whether they are project or operational driven

MSE 50021 (SEP) Certification

- Demonstrate the details of energy reductions:
 - Add all items to the Project Review/Management of Change database
 - Estimate and then confirm the energy savings
 - Performance levels are 5%, 10% & 15%

Next Challenge?

- Combining External Audits
- In 2014 we are preparing to have a re-certification for ISO 50001 / MSE 50021
- We are also weighing the option of re-certifying our ISO 14001 a year early so that we can finally have a fully combined system.
- This will ease the stress of having multiple external audits each year
- We will continue to have separate Management Reviews to showcase the improvements and concerns of each system

VOLVO

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