



Appendix H: Personnel Training

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H Personnel Training

H-1 Outline of the Training Program:

In accordance with 40 CFR 270.14(b)(12) and 40 CFR 264.16, GMP personnel that work in the hazardous waste treatment, storage and disposal facility ("TSDF") have completed 24 hours of initial training and complete eight hours of refresher training annually thereafter. As part of the 24 hours of initial training, workers are taught to respond to emergencies involving hazardous wastes.

Persons completing initial and refresher training have certificates on file attesting to their successful completion of training. Initial training certificates of current TSDF employees are provided in **Attachment H1**. An outline of topics reviewed during annual refresher training is provided in **Attachment H4**. Training files are saved electronically on GMP's intranet.

Because workers at the TSDF ship Department of Transportation ("DOT") hazardous materials, they must complete DOT Hazardous Materials training in accordance with 49 CFR 172 subpart H. This DOT training requires sustainment training every three years. An outline of topics reviewed during DOT Hazardous Materials Training is provided in **Attachment H2**.

Storage facility workers also generate hazardous waste as a function of their primary jobs as transformer repairmen and are required to annually complete hazardous waste generator training required by Vermont Hazardous Waste Regulations. An outline of topics reviewed as part of hazardous waste generator training is provided in **Attachment H3**.

H-1a Job Titles and Descriptions

Job titles and descriptions for persons working at the hazardous waste storage facility are provided in **Table H1**.

H-1b Training Content, Frequency, and Techniques

The two TSDF workers, the two Emergency Coordinators, and the TSDF Supervisors have completed 24-hour OSHA training as Site Workers as required by 29 CFR 1910.120(p)(7), the Hazardous Waste Operations and Emergency Response ("HAZWOPER") standard. Annually thereafter, the TSDF workers and the Emergency Coordinators complete an 8-hour annual refresher course, taught by the Hazardous Materials Coordinators or the Training Coordinator, also required by the HAZWOPER standard. An outline of topics reviewed during the 8-hour annual refresher training is provided in **Attachment H4**.

The training technique uses both classroom and practical methods. The classroom training includes time for a regulatory overview of pertinent EPA, DOT, and State regulations, a review of the facility's written operating procedures, inspection procedures, the facility's Contingency Plan, location of records, and a review of the tasks required of the TSDF workers' job descriptions and the Emergency Coordinators' job description.

H-1c Training Directors

VHB serves as GMP's training provider and is responsible for planning, implementing, and recording required training and for staying current on regulatory changes concerning training requirements. Training director resumes are provided in **Attachment H5**.

Table H1: TSD Facility Job Titles and Descriptions

Job Title	Name of Person(s) Holding Job	Education and Training Required for the Job	Job Description
TSD Supervisor	Tim Upton (VHB)	(a) B.S. in related field	(a) complete hazardous waste determinations for all wastes,
Training Directors'	Tim Upton (VHB)	(b) 24-hour HAZWOPER initial training	(b) profile wastes with vendors and schedules shipments,
	Beth Eliason (VHB)	(c) 8-hour HAZWOPER refresher training (annually)	(c) complete manifests, LDR forms, and TSCA continuation sheets,
Hazardous Materials Coordinator	Tim Upton (VHB)	(d) attendance at professional seminar for hazardous waste management (every two years)	(d) maintain records and complete annual reporting requirements,
			(e) read and stay current with OSHA, TSCA, RCRA, DOT, and State regulations
			(f) write operating procedures,
			(g) provide training to TSD workers,
			(h) provide direct supervision of TSD facility workers,
			(i) perform the duties of facility Training Director.
TSD Worker (part-time)	Roger Bathalon Malcolm Van Ardsdale	(a) 24 hour HAZWOPER initial training	(a) inspect and log containers of hazardous waste into the TSD facility daily,
		(b) 8 hour HAZWOPER refresher training (annually)	(b) label and mark containers according to Transformer Shop Operating Procedure 608 and 611,
		(c) DOT Hazardous Materials training (every 3rd year)	(c) process and complete hazardous waste manifests according to Transformer Shop Operating Procedure 609,
		(d) Hazardous Waste Generator training (annually)	(d) inspect the container storage area daily according to Transformer Shop Operating Procedure 605 and 610,
			(e) perform general housekeeping tasks,
			(f) load and unload hazardous waste from trucks
TSD Facility Emergency Coordinators	Mike Carlson (primary) Ryan Brown (primary)	(a) 24 hour HAZWOPER initial training	Be familiar with the duties of the Transformer repairmen, the facility's contingency plan, operations within the facility, location and characteristics of wastes stored, location of records in the facility, and physical layout of the facility
		(b) 8 hour HAZWOPER refresher training (annually)	

H-1d Relevance of Training to Job Position

The facility is very small, having only two part-time workers. The TSDf workers and the two Emergency Coordinators receive the same training; cross-training of such a small work force is essential for long term facility operations and therefore, all training provided is relevant to both job classifications.

H-1e Training for Emergency Response

The two TSDf workers, the TSDf Supervisor, and the two Emergency Coordinators are trained to respond to emergency situations using the Facility's Contingency Plan as a training outline. Training topics include: the location and use of emergency equipment and signals, identification of hazardous materials that may have been released, how to assess the situation, control procedures for released materials, incident reporting, spill cleanup, fire control procedures, prevention of recurrence or spread of fires and releases, storage of released materials, post-emergency equipment maintenance, and the evacuation plan.

H-2 Implementation of the Training Program

Training records for current personnel will be kept until closure of the facility. Training records for former employees will be kept for three years after the last date that the employees worked at the facility.

Employees will be required to sign an attendance sheet at all training sessions. The signed attendance sheet will serve as verification that the employee has received EPA, OSHA, DOT, or State required training to work at the facility.

For additional information related to TSDf training see **Attachment H6** which includes GMP's Written Safety and Health Plan for Hazardous Waste Operations (HAZWOPER).

Attachment H1. 24-hour HAZWOPER Initial Training Certifications



CERTIFICATE OF ACHIEVEMENT

This is to certify that

TIMOTHY O. UPTON

has achieved recognition for completing

**OSHA 40-HOUR HEALTH & SAFETY COURSE FOR HAZARDOUS
WASTE OPERATIONS AND EMERGENCY RESPONSE**
(29 CFR 1910.120)

Presented by:
INDUSTRIAL HYGIENICS CORPORATION
131 Dorset Lane
Williston, VT 05495

Certificate #8165 is granted this 22nd day of April, 2005



Hugh McBride, Director of Training



CERTIFICATE OF ACHIEVEMENT

This is to certify that

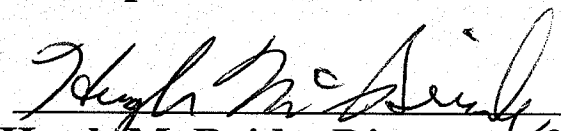
ELIZABETH ELIASON

has achieved recognition for completing

**OSHA 40-HOUR HEALTH & SAFETY COURSE FOR HAZARDOUS
WASTE OPERATIONS AND EMERGENCY RESPONSE**
(29 CFR 1910.120)

Presented by:
INDUSTRIAL HYGIENICS CORPORATION
131 Dorset Lane
Williston, VT 05495

Certificate #10351 is granted September 19, 2008


Hugh McBride, Director of Training

STATEMENT OF TRAINING

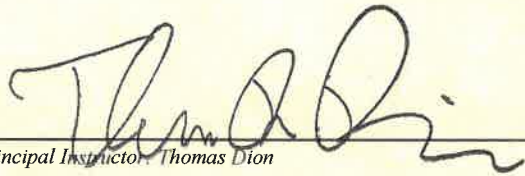
This certifies that

Roger P. Bathalon, II

has successfully completed the

**24 Hour Health & Safety Initial Training for
Hazardous Waste Site Activities
per 29 CFR 1910.120 (HAZWOPER)**

conducted by
ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070



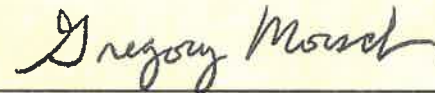
Principal Instructor: Thomas Dion

September 23-25, 2019

Date of Course

September 25, 2020

Expiration Date



Regional Training Director: Gregory Morsch

24HM-1238

Certificate Number

September 25, 2019

Examination Date

Certificate of Completion

This certifies that

Malcolm G. Van Arsdasle IV

has successfully completed

OSHA 24 Hour HAZWOPER Training

Annual Refresher Training Required

In Accordance With Federal OSHA Regulation 29 CFR 1910.120(e)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

This course is approved for 24 Contact Hours (2.4 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044)

Safety Unlimited, Inc., Provider #5660170-2, is accredited by the International Association for Continuing Education and Training (IACET) and is accredited to issue the IACET CEU. As an IACET Accredited Provider, Safety Unlimited, Inc. offers CEUs for its programs that qualify under the ANSI/IACET Standard. Safety Unlimited, Inc. is authorized by IACET to offer 2.4 CEUs for this program.

Julius P. Griggs

Julius P. Griggs
Instructor #892

2112162399108

Certificate Number

12/16/2021

Issue Date



Scan this code or visit [safetyunlimited.com/v](https://www.safetyunlimited.com/v) to verify certificate.

Annual Refresher Training Required



UNLIMITED, Inc.

OSHA Compliant Safety Training Since 1993

2139 Tapo St., Suite 228 Simi Valley, CA 93063
(855) 784-2677 or 805 306-8027
<https://www.safetyunlimited.com>

Carlson, Michael J. (MJC8149)

Gender	Male	Emp Type	Student
Birth Date	8-02-1971	Ethnicity	
Age	52	Education	
File Number		Email	michael.carlson@greenmountainpower.com
		Supervisor	
		Position #	

Photo

Home Address 25 Cramton Ave Rutland, VT 05701	Telephone Home: 802-775-2686 Mobile: 802 558 2706	Work: Mobile: (W) Pager:
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Employment Summary

Rutland City Fire Department	- Inactive	Total Service: 0 Years 0 Days
Hired:	Last Action: 12-31-2018	Removed by Administration

Assignment:	Pos/Rank:
Level:	Class:
Shift:	:

Rutland Town Fire Department	- Active	Total Service: 23 Years 196 Days
Hired: 1-01-2001	Last Action: 1-01-2001	Member

Assignment:	Pos/Rank: Assistant Chief
Level:	Class:
Shift:	:

Certification

Date	Status	Certified	Expires	Probation	Cert #
7-01-2023	Recertification Compliance / Firefighter I Certified		6-30-2024		
7-01-2022	Recertification Compliance / Firefighter I Current		6-30-2023		
7-01-2021	Recertification Compliance / Firefighter I Current		6-30-2022		
1-01-2020	Recertification Compliance / Firefighter I Current		12-31-2020		
1-01-2019	Recertification Compliance / Firefighter I Current		12-31-2019		
1-01-2018	Recertification Compliance / Firefighter I Current		12-31-2018		
1-01-2017	Recertification Compliance / Firefighter I Current		12-31-2017		
1-01-2016	Recertification Compliance / Firefighter I Current		12-31-2016		

Carlson, Michael J. (MJC8149)

Recertification Compliance / Firefighter I	1-01-2015	Current	12-31-2015
Recertification Compliance / Firefighter I	1-02-2014	Current	12-31-2014
Recertification Compliance / Firefighter I	1-02-2013	Current	12-31-2013
Recertification Compliance / Firefighter I	12-05-2011	Current	12-31-2012
Recertification Compliance / Firefighter I	12-20-2010	Current	12-31-2011
Recertification Compliance / Firefighter I	12-31-2009	Current	12-31-2010
Recertification Compliance / Firefighter I	12-30-2008	Current	12-31-2009
Recertification Compliance / Firefighter I	1-10-2008	Current	12-31-2008
Recertification Compliance / Firefighter I	1-18-2007	Current	12-31-2007
Recertification Compliance	3-25-2006	Current	12-31-2006
Firefighter I / Firefighter I	3-24-1996	Certified	3-24-1996
Haz Mat Operations / Haz Mat Operations	4-17-1994	Certified	4-17-1994
472-10 / Haz Mat Awareness	4-24-1993	Certified	4-24-1993

Initial HAZMAT certification. Certificate not available.

Employment History

Rutland City Fire Department

Date: 12-31-2018 **Action:** Removed by Administration **Status:** Inactive

Assignment: **Pos/Rank:**
Level: **Class:**
Shift: :

Rutland City Fire Department

Date: 1-21-2016 **Action:** Member **Status:** Active

Assignment: **Pos/Rank:**
Level: **Class:**
Shift: :

Rutland Town Fire Department

Date: 1-01-2001 **Action:** Member **Status:** Active

Assignment: **Pos/Rank:** Assistant Chief
Level: **Class:**
Shift: :

Carlson, Michael J. (MJC8149)

Rutland City Fire Department

Date: 1-01-2001 **Action:** Member inactive

Status: Inactive

Assignment:
Level:
Shift:

Pos/Rank:
Class:
:

Training

Course	Title	Date	Hours	Score	Status
CPR/AED	American Heart Heartsaver CPR/AED Adult & Child	6-23-2021	4.00	0.00	Passed
			2021 Pass/Complete:	4.00	
MFBFR15	Modern Fire Behavior & Flashover Recognition	10-19-2019	0.00	0.00	Classroom
TIMNAT13	Traffic Incident Mngmnt Resp Trng Prog, National	2-05-2019	4.00	0.00	Verified
			2019 Pass/Complete:	0.00	
FF1JB12	Forcible Entry	12-08-2018	0.00	0.00	Classroom
FIRSTAID	American Heart First Aid	1-17-2018	4.00	0.00	Passed
			2018 Pass/Complete:	4.00	
CPR/AED	American Heart Heartsaver CPR/AED Adult & Child	2-22-2017	0.00	0.00	No Show
			2017 Pass/Complete:	0.00	
FF1JB15	Ventilation	9-21-2016	0.00	0.00	Audit
PVFF16	Photovoltaic Safety for Firefighters	9-07-2016	4.00	0.00	Completed
			2016 Pass/Complete:	4.00	
MFBFR15	Modern Fire Behavior & Flashover Recognition	8-26-2015	8.00	0.00	Passed
			2015 Pass/Complete:	8.00	
AFBFT	Advanced Fire Behavior Flashover Training	5-15-2014	8.00	100.00	Passed
			2014 Pass/Complete:	8.00	
CPR/AED	American Heart Heartsaver CPR/AED Adult & Child	5-08-2013	4.00	0.00	Completed
			2013 Pass/Complete:	4.00	
CPR/AED	American Heart Heartsaver CPR/AED Adult & Child	3-14-2012	4.00	0.00	Passed
			2012 Pass/Complete:	4.00	
CPR/AED	American Heart Heartsaver CPR/AED Adult & Child	3-23-2011	4.00	0.00	Passed
IS00200	ICS 200 ICS for Sing. Resources & Initial Actions	3-16-2011	8.00	0.00	Passed
			2011 Pass/Complete:	12.00	
NIMS ICS	NIMS ICS for the Fire Service (= to 100/200)	2-28-2007	16.00	92.00	Passed
			2007 Pass/Complete:	16.00	
AFBFT	Advanced Fire Behavior Flashover Training	10-08-2005	8.00	0.00	Passed
FIT TEST	Mask Fit Testing	9-07-2005	0.00	0.00	Completed
			2005 Pass/Complete:	8.00	

Carlson, Michael J. (MJC8149)

FIT TEST	Mask Fit Testing	8-25-2004	0.00	0.00	Passed
		2004 Pass/Complete:	0.00		
1ST5MIN	First Five Minutes	4-28-2002	6.00	0.00	Completed
		2002 Pass/Complete:	6.00		
FFHEALTH	Firefighter Safety & Survival	4-30-2000	12.00	0.00	Completed
		2000 Pass/Complete:	12.00		
ERT:BC	Emergency Response to Terrorism: BC (16hrs)	11-21-1999	16.00	88.00	Passed
		1999 Pass/Complete:	16.00		
UNIT 5	Unit 5 / E Written Exam	4-15-1996	1.00	88.40	Passed
UNIT5PRA	Unit 5/ E Practical Exam	3-24-1996	2.00	0.00	Passed
PUMPSINT	Introduction to Pumps	3-08-1996	12.00	93.00	Passed
103	Building Construction	2-19-1996	4.00	91.70	Passed
		1996 Pass/Complete:	19.00		
EVO	Emergency Vehicle Operations	11-08-1995	12.00	85.00	Passed
UNIT 4	Unit 4 / D Written Exam	7-23-1995	1.00	90.00	Passed
UNIT4PRA	Unit 4 / D Practical Exam	7-15-1995	2.00	0.00	Passed
FIREALAR	Introduction to Fire Alarms	6-12-1995	4.00	100.00	Passed
BADESCUE	Introduction to Rescue	6-07-1995	12.00	94.50	Passed
120	Sprinkler Systems Fundamentals	5-11-1995	4.00	100.00	Passed
INCOMMU	Introduction to Communications	5-01-1995	4.00	90.00	Passed
		1995 Pass/Complete:	39.00		
001	Wildland Fire Control	5-01-1994	9.00	100.00	Passed
03	Hazardous Material Operations	4-17-1994	12.00	90.00	Passed
		1994 Pass/Complete:	21.00		
AWARENES	Hazardous Material Awareness	4-24-1993	6.00	84.00	Passed
		1993 Pass/Complete:	6.00		
BASICINT	Basic Interior Firefighting	5-02-1992	6.00	0.00	Completed
RES 2&3	Rescue with 2 & 3 Firefighters	4-05-1992	12.00	0.00	Completed
		1992 Pass/Complete:	18.00		
RURAL	Rural Water Supply	4-20-1991	12.00	0.00	Completed
INFOAM	Intro to Foam ~ Basic	4-14-1991	8.00	0.00	Completed
		1991 Pass/Complete:	20.00		
UNITPRAC	Units I, II, III Practical Exam	8-11-1990	6.00	0.00	Passed
UNITS123	Units I, II, III Written Exam	8-11-1990	2.00	83.00	Passed
		1990 Pass/Complete:	8.00		
105	Self Contained Breathing Apparatus (4B)	4-16-1989	12.00	0.00	Completed
		1989 Pass/Complete:	12.00		

Attachment H2. Department of Transportation Hazardous Materials Shipper Training Outline

1. Shipping papers:
 - (a) proper shipping names
 - (b) hazard classes
 - (c) identification numbers
 - (d) packing group
 - (e) communication requirements

2. DOT labels

3. DOT placards

4. DOT containers

5. The hazardous waste manifest used as a shipping paper

Attachment H3. Hazardous Waste Generator Training Outline

1. Satellite waste accumulation rules.
2. Marking and labeling drums of hazardous waste
3. Storing full drums of hazardous waste
4. Procedures specific to Transformer Shop satellite containers:
5. Operating Procedure 601 - Hazardous Waste container management for the Transformer Shop oil drain area
6. Operating Procedure 602 - Hazardous Waste container management for the Transformer Shop paint spray booth liquids drum
7. Operating Procedure 603 - Hazardous Waste container management for waste paint solids drum

Attachment H4. Annual 8-Hour HAZWOPER Refresher Training Outline

1. Regulatory Review:

Discussion concerning the Code of Federal Regulation titles 29, 40, and 49 and how each regulates activities of the Facility. Further discussion concerning how the State may adopt and enforce Federal regulations and perhaps make them more stringent.

2. TSCA - PCB Regulations:

Discussion of wastes received and how each is managed at the facility.

3. RCRA - Vermont Hazardous Waste Regulations:

Discussion of wastes received and how each is managed at the facility

4. Waste Analysis Plan:

Discussion concerning the purpose of the plan and how it is implemented.

5. Facility Contingency Plan:

Review of the plan and actions and responsibilities required of Emergency Coordinators and Hazardous Materials Technicians. Discussion of scenarios that would require the contingency plan to be implemented.

6. OSHA Incident Command System:

Discussion of OSHA's Incident Command System and how GMPs Emergency Coordinators fit into the system during emergency response at the facility.

7. Review the Facility Daily Inspection log.

Attachment H5. Training Directors' Resumes



Timothy Upton

Senior Environmental Scientist and Energy Market Leader

Education

M.S.E.L., Environmental Law,
Vermont Law School, South
Royalton, VT 1995

M.S., Natural Resources
Planning, University of
Vermont, Burlington, VT,
1993

B.S., Psychology, St.
Lawrence University, Canton,
NY, 1988

Tim is a Senior Project Manager and VHB Vermont Energy Market Leader with extensive experience interacting with local and state legislative and regulators, providing expert testimony on environmental and policy issues related to utility and renewable energy siting projects, and preparing application materials, responding to comments, and managing appeals of regulatory determinations and decisions.

Prior to joining VHB, Tim spent 19 years as the Manager of Environmental Affairs for Green Mountain Power (GMP) where he was responsible for environmental and land use permitting and compliance for GMP's 12,000 miles of distribution lines and 950 miles of transmission lines, as well as substations, power production facilities, buildings, and communications infrastructure.

Throughout his career, Tim has partnered with state and federal regulatory agencies in areas of water quality, wildlife habitat, endangered species, historic/archeological sites, and other natural resources, and performed field review of proposed construction projects to identify potential permitting issues and environmental impacts on projects ranging from a 2.5-MW solar facility in Rutland, Vermont, to hundreds of substation and utility line upgrades in every corner of the state. He was also responsible for operations and regulatory compliance related to the generation, handling, and disposal of hazardous wastes and PCB wastes for GMP, Vermont's largest electric utility.

26 years of professional experience

40-Hour HAZWOPER certification

Green Mountain Power

Manager, Environmental Affairs

Prior to joining VHB, Tim was responsible for environmental and land use permitting and compliance for Vermont's largest electric distribution utility, Green Mountain Power Corp. (GMP) with approximately 12,000 miles of distribution lines and 950 miles of transmission lines. Tim designed, managed, and administered compliance policies and practices for construction and maintenance of electrical generation, transmission, and distribution facilities; buildings; and radio and communication facilities. He also provided analysis and expertise related to environmental statutes and regulations affecting company operations and values.

While at GMP, Tim was responsible for compliance with state and federal regulations governing use, storage and disposal of toxic and hazardous wastes and materials, including PCB wastes. Some of his responsibilities included:

Timothy Upton

- Negotiating and administering agreements for transport, disposal, and recycling of treated wood waste, waste electrical equipment, waste dielectric and lubricating oils, hazardous wastes, Universal wastes, and electronic wastes
- Overseeing and managing hazardous waste operations at permitted Hazardous Waste Storage Facility and in eleven operating districts, as well as supervising Hazardous Waste Facility personnel
- Completing hazardous waste determinations, profiling wastes with vendors, and scheduling shipments for storage and disposal; completing manifests and continuation sheets for transported waste, applying relevant TSCA, EPCRA, RCRA, DOT, and state and federal regulations; overseeing reporting, response, and remediation related to releases of oil and other hazardous materials
- Designing and providing training for company personnel regarding the handling, storage, and clean-up of hazardous/toxic wastes.

Tim was also responsible for preparing environmental and land use permits when required, including Act 250 permits (state land use); Certificates of Public Good (state approval for electric generation and transmission facilities); Water Quality Certifications; local zoning permits; and state and federal stormwater and wetland permits. He designed and administer environmental compliance training for field personnel. Provide input and guidance on design considerations relative to environmental impacts and permits, and prepared applications, testimony, and supporting narratives for permits and permit appeals. He collaborated with all areas of the company on environmental, legal, and regulatory issues, including regular interactions with Legal, Operations, Engineering, and Facility Maintenance staff. Tim regularly coordinated and collaborated with staff of state and federal regulatory agencies in areas of water quality, wildlife habitat, endangered species, historic/archeological sites, and other natural resources as necessary, and performed field review of proposed construction where appropriate to identify potential permitting issues and environmental impacts.

Central Vermont Public Service Corporation

Manager, Environmental Affairs

Tim performed a similar role for CVPS prior to its merger with Green Mountain Power. He served on CVPS's Environmental Compliance Committee and Sustainability Committee, where he created policies and practices to promote sound environmental stewardship.

Southern Windsor County Regional Planning Commission

Land Use Planner

Tim co-authored regional land use planning documents used in local policymaking and statewide land use regulation, and participated in Act 250 hearings as a representative of regional planning commission. Tim assisted local planning commissions in writing municipal plans and land-use bylaws, and in securing state municipal planning grants. He coordinated implementation of Vermont's Enhanced 911 system for ten Vermont municipalities. Tim acted as a facilitator at the annual statewide forum on Vermont planning and land use regulation sponsored by Vermont League of Cities and Towns. He also was a presenter at New England conference of Land Use Planners sponsored by the Northern New England Chapter of the American Planning Association, providing guidance on local regulation of communications towers.

Other training and experience

- 2013 – Appointed by Vermont Public Service Board to working group convened to develop best management practices for the use of utility poles treated with pentachlorophenol (wood preservative). Final report and BMPs published by the Vermont Agency of Natural Resources, and accepted by the PSB for universal use by Vermont utilities in 2016.
- 2007 – Provided substantial expertise and analysis, and actively collaborated with internal and external legal counsel, on successful appeal of Vermont Environmental Board decision to Vermont Supreme Court.
- January 2006 – Appointed by Vermont Governor James Douglas as member of working group studying the impacts of 2004 statutory amendments to Act 250 (state land use and development statute).
- 2006 – Invited and active participant in working group convened by Vermont Water Resources Panel to study and re-write state rules regarding regulation of significant wetlands, and propose statutory amendments to Vermont Legislature. Proposed legislation enacted into law as Act No. 31, May 21, 2009. Consensus-based re-write of Vermont Wetland Rules adopted August 1, 2010.
- April 2005 - OSHA 40-hour Hazardous Waste Operations and Emergency Response training; annual 8-hour refresher course, last completed November 2017.
- January 2004 - On behalf of Central Vermont Public Service Corporation, authored initial draft of statutory amendment to Act 250 (House Bill 757, 2003-2004 session) relating to review of electric distribution facilities. Provided testimony to House Natural Resources and Energy Committee, and Senate Natural Resources Committee. Bill enacted into law as Act No. 133, May 26, 2004.
- 2001 - Continuing education seminar on wetlands law and regulation sponsored by the American Law Institute of the American Bar Association, Washington, D.C.
- 1999-2000 - Active participant in negotiated rulemaking for Act 250, Vermont's state land-use statute. Along with other utilities and the Vermont Department of Public Service, drafted major re-write of rules governing the construction of electric distribution facilities in Vermont. Adopted by the Vermont Environmental Board, effective January 2001.
- 1996 – Wetland Identification Training, U.S. Environmental Protection Agency and Vermont Agency of Natural Resources, Royalton, VT
- 1995 - As part of law school internship, worked with staff of the Vermont Wetlands Office to review all state permit applications for possible impacts under Vermont Wetland Rules. Conducted weekly review of all pending applications and referred those with potential for impact on regulated wetlands to district wetland ecologists.

Beth Eliason, PE

Environmental Engineer, Project Manager



Beth has two decades of civil and environmental engineering experience with a focus on water resources and environmental compliance. Prior to joining VHB Beth spent 8 years as an Environmental Engineer with Green Mountain Power where she was directly responsible for a variety of civil and environmental compliance functions to safeguard corporate compliance with Federal and State regulations including stormwater management, Act 250 and 248 permitting, Clean Air Act and Clean Water Act permitting, license compliance for GMP's hydroelectric and fuel generating facilities and management of TSCA regulated materials. Beth is a Vermont PE and received both her M.S. and B.S. in Civil/Environmental Engineering from the University of Vermont.

24 years of professional experience

Education

MS, Civil & Environmental Engineering, University of Vermont, 1999

BS, Civil & Environmental Engineering, University of Vermont, 1996

Registrations/Certifications

Professional Engineer (Civil), VT

RCRA Hazardous Waste Management Certification

OSHA 40-Hour HAZWOPER Certification and 8-Hour Supervisor Certification

OSHA 10- Hour Construction Safety Certification

Affiliations/Memberships

American Society of Civil Engineers, Vermont

VHB Office

South Burlington, VT

GMP, Electrical Maintenance Facility, Rutland, VT

Beth managed a project in which VHB is assisted Green Mountain Power (GMP) with the characterization and remediation of TSCA-regulated PCB-contaminated soil. The project also involved coordination with the City of Rutland and soil management activities during installation of a new City sewer force main through contaminated areas of the Site.

GMP, Bradford Substation, Bradford, VT

Beth managed a project in which VHB assisted Green Mountain Power (GMP) with the characterization and remediation of PAH and TSCA-regulated PCB-contaminated soil in advance of substation upgrades.

GMP, Websterville Substation, Barre, VT

Beth contributed to the replacement and reconstruction of the Websterville Substation. VHB was engaged by GMP to assess potential impacts related to natural resources, historic and cultural resources, aesthetics and noise in preparation for the filing of a petition for a Certificate of Public Good (CPG) with the Vermont Public Utility Commission (PUC). Project components included a plan for sampling, testing and remediation of contaminated soils at the existing facility, and removal of TSCA and State-regulated contaminated soil and concrete prior to construction.

GMP, On-Call Environmental Permitting Services, VT

VHB is working with GMP on a variety of permitting and compliance tasks including substation remediation projects for Section 248 certificates issued by the Vermont Public Utility Commission; TSCA/RCRA compliance; SPCC Plans; Clean Air Act permitting and compliance; management of hazardous and PCB wastes; employee hazard waste awareness, SPCC, and other compliance trainings.

Green Mountain Power (formerly Central Vermont Public Service), Rutland, VT

Prior to joining VHB, Beth was an Environmental Engineer for Vermont's largest electric distribution utility, Green Mountain Power Corporation (GMP). She was responsible for a variety of civil and environmental compliance functions to ensure corporate compliance with Federal and State regulations. Her responsibilities included:



- Management of contaminated sites: including monitoring, assessment and remediation of manufactured gas, substation and underground storage tank sites.
- Clean Air Act and Clean Water Act permitting and license compliance for the Company's hydroelectric and fuel generating facilities.
- Supporting facilities and transmission/distribution departments with permitting projects; including storm water operating permits, Act 250 and 248 permitting.
- Develop and maintain facility and district-wide spill prevention, control and countermeasure (SPCC) plans.
- Develop and coordinate annual employee trainings related to SPCC Plans, hazardous waste awareness, and spill response.
- Assist with operation of the Corporate Treatment, Storage and Disposal Facility and the proper storage, shipment and disposal of hazardous, non-hazardous, and universal waste.
- Spill response, reporting, and cleanup coordination for the western half of GMP's Vermont service territory.

Ridgeline Corporation, Ripton, VT

Prior to joining VHB Beth was Principal Engineer, providing an array of technical and compliance services, including FERC license compliance, storm water permitting, Clean Air Act permitting, spill prevention, control and countermeasure (SPCC) compliance, Act 250 permitting and site investigation and remediation.

Griffin International, Inc., Williston, VT

Prior to joining VHB, Beth was an Environmental Engineer/Project Manager where she managed water treatment and distribution systems, worked on pollution remediation projects including, hazardous waste site investigations and characterization, environmental sampling, and remedial feasibility investigations. Beth also performed Phase I and II environmental site assessments.

Middlebury College, Middlebury, VT

Prior to joining VHB, Beth was Laboratory Stores and Safety Manager for a private college. She was responsible for support of research and classroom science programs, and management of laboratory waste and hazardous waste disposal. She developed and provided laboratory safety trainings to faculty, staff, and students. Beth also served as Middlebury's Chemical Hygiene Officer and co-chair of the Laboratory Safety Committee.

Attachment H6. GMP's Written Safety and Health Plan for Hazardous Waste Operations

OP614 Transformer Shop	GREEN MOUNTAIN POWER	DATE: 6/24/92 REV: 7/17/12 Initials: TOU
SUBJECT: OPERATING PROCEDURE 614; GMP's written OSHA safety and health program for Hazardous Wastes Operations and Emergency Response		

HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE:

OSHA's Hazardous Waste Operations and Emergency Response Standard, 29 CFR 1910.120 (p), informally known as "HAZWOPER," requires employers to develop a written program that addresses safety and health issues for employees conducting operations in hazardous waste treatment, storage, and disposal facilities (TSD facilities.)

GMP's written program must specifically address: site workplans and personnel organizational structure, training, hazard communication, medical surveillance, decontamination, new technology, material handling, and emergency response.

1. Organizational Structure and Workplan: 1910.120 (p)(1)

The Company's Hazardous Materials Coordinators have supervisory and direct responsibility over operations conducted at GMP's TSD facility. GMP's Transformer Shop, which is attached to the TSD facility, provides the manpower necessary for unloading, storing, inventorying, housekeeping, and facility inspections.

The general workplan for the TSD facility is to receive wastes from GMP departments and service centers and provide for consolidation, storage, and shipment of wastes for disposal. The TSD facility also provides storage of waste mineral oil generated from decommissioning electrical equipment for disposal.

2. Hazard Communication Program: 1910.120(p)(2)

OSHA requires that TSD facilities have a Hazard Communication Program that meets the requirements found in section 1910.1200. (See GMP General Safety Workpractice 353, Hazard Communication Written Program.)

3. Medical Surveillance Program: 1910.120(p)(3)

OSHA requires employers to develop a medical surveillance program for employees working in TSD facilities. In accordance with section 1910.120(p)(3), GMP's written program must comply with requirements for a medical surveillance program found in section 1910.120(f).

Although GMP does have employees who work in TSD facility operations, none of GMP's TSD facility employees are required to have medical surveillance because their work does not trigger medical surveillance requirements as specified in 1910.120(f)(i)(ii) and (iii).

4. Decontamination Program: 1910.120(p)(4)

OSHA requires that employers develop and implement a decontamination program for employees working in TSD facility operations. In accordance with 1910.120(p)(4), GMP's written program must address decontamination requirements found in section 1910.120(k).

TSD facility operations are markedly different from hazardous waste cleanup site operations in that worker exposure to hazardous materials is routine at hazardous waste cleanup sites whereas routine worker exposure to hazardous waste is limited at TSD facilities unless a spill occurs.

Personal protective clothing and equipment is used for spill cleanup as appropriate. The protective clothing is disposable and no effort is made to decontaminate it for reuse. Equipment that is used for spill cleanup is decontaminated and reused and typically includes shovels, rakes, and garden hoes. (See Operating Procedure 002, Double Wipe Rinse for PCB Contamination.) TSD workers are provided uniforms and laundry service for the uniforms and the laundry facility has been notified of possible contamination on worker uniforms. The TSD facility is equipped with a locker room and shower so that workers who need to change clothing and shower because of contamination may do so.

5. New Technology: 1910.120(p)(5)

OSHA requires employers to develop and implement procedures for the introduction of effective new technology and equipment developed for the improved protection of employees working with hazardous waste. In accordance with section 1910.120(p)(5), GMP's written program must comply with requirements found in section 1910.120(o).

It is the responsibility of GMP's Hazardous Materials Coordinators to stay informed of new materials and methods that protect workers involved in hazardous waste operations. Through sources of information found in professional periodicals and journals, vendor catalogs, sales literature, salespersons, and attendance at training seminars it can be reasonably assured that GMP is aware of new technology as it is developed. As an application for new technology is identified, it is tested to confirm its effectiveness and applicability for our operation.

6. Material Handling: 1910.120(p)(6)

Improper material handling may be the most likely source of worker injury at the TSD facility. The sheer weight of hazardous waste containers represents a source of injury to workers and is potentially a greater source of injury to workers than exposure to the actual contents of the containers. To avoid injury, workers are provided with an array of tools to assist in drum handling, are provide time to work at a deliberate pace and accomplish task in a workmanlike manner, and are provided appropriate levels of personal protection to prevent exposure to hazardous wastes. In accordance with 1910.120(p), GMP's written material handling program must comply with requirements found in 1910.120(j)(1)(ii) thru (viii) and (xi) and (j)(3) and (j)(8).

(a) Appropriate containers: 1910.120(j)(1)(ii)

Because all generators that use GMP's TSD facility are GMP generators, we are able to ensure that only approved containers are used. By stocking only approved DOT containers we are able to ensure that containers that are being used for hazardous waste are of the approve type.

(b) Inspection of containers: 1910.120(j)(1)(iii)

As containers are received into the TSD facility they are inspected for signs of leakage. The TSD facility is also inspected daily and inspection of drum integrity is an inspection point. (see: Transformer Shop Operating Procedure 610, Inspection Procedure for the Container Storage Area.)

APPENDIX H7 (GMP's Written Safety and Health Plan for Hazardous Waste Operations (HAZWOPER) to SECTION H (PERSONNEL TRAINING) to GMP's Hazardous Waste Storage Facility Certification

- (c) Unlabeled containers: 1910.120(j)(1)(iv)

There are many procedures in place to prevent unlabeled containers from being received into the TSD facility; however, if an unlabeled container is received, TSD facility workers will immediately try to reconcile the container to the manifest to determine the unlabeled container's contents. Unlabeled containers will be considered to contain hazardous materials until such time that an accurate determination can be made.
- (d) Site Organization: 1910.120(j)(1)(v)

The TSD facility was designed to facilitate material handling. Unnecessary movement of containers has been eliminated through the design of the facility. Because the facility is equipped with a dock leveler and recessed containment, containers can be unloaded, stored, and loaded by using a forklift truck with drum-grabber attachment. Adequate space has been designed into the container storage area to provide maneuver space for a forklift truck.
- (e) Worker warning of hazards during movement of containers: 1910.120(j)(1)(vi)

Because of the excellent container handling characteristics of the TSD facility and the clearly identified materials being handled, employee exposure to containers that may rupture because of a loading and unloading accident is minimized. However, access to the transfer area is limited to essential persons during loading and unloading of hazardous waste to prevent unnecessary worker exposure. Workers essential to the transfer operation are trained to handle material spills by virtue of their OSHA HazComm training and TSD facility training. Entrances into the TSD facility are marked with signs that read: "CAUTION Watch Out for Lift Trucks."
- (f) Spill Cleanup materials: 1910.120(j)(1)(vii)

If a container leaks or spills, salvage drums are used to overpack the leaking 55-gallon drum to control the leak or spill. Also, a spill kit with absorbent materials is located in the container storage area. Additional spill kits are located in the transformer shop and the tank farm area.
- (g) Major spills: 1910.120(j)(1)(viii)

Containers are stored in an area that is designed to provide permanent containment. By recessing the containment into the floor, the containers are still accessible to forklift trucks.
- (h) Removing soil over containers: 1910.120 (j)(1)(xi)

This section does not apply to GMP's TSD facility operation.
- (i) Material handling equipment: 1910.120(j)(3)

Material handling equipment has been selected with reduced health and fire hazards as a consideration. The facility's forklift truck is propane fueled rather than gasoline fueled, the wrench used when opening drums is pneumatic rather than electric, and the wrench used for opening bungs is made of non-sparking bronze alloy.
- (j) Shipping and transport: 1910.120(j)(8)

Staging of containers for shipping was addressed in the design of the TSD facility. Maneuver space for a forklift truck has been provided and a dock leveler is used for leveling the facility floor with the truck bed to ensure easy and safe forklift traffic.

TSD worker are trained to properly classify and package material and have completed training as required by 49 CFR part 172, subpart H, DOT Hazardous Materials Training.

7. Training Program: 1910.120(p)(7)

Workers assigned duties in the TSD facility receive a minimum of 24-hours of classroom instruction upon initial assignment to the TSD facility and 8-hours of refresher training annually. Workers who have completed this training have a written certification on file attesting to their completion of the training. This certificate is filed with the program of instruction in the TSD facility permit, under Training Program.

8. Emergency response program: 1910.120(p)(8)

OSHA requires that TSD facilities develop and implement a written emergency response plan. Such plans, as required by 1910.120(p)(8), need not duplicate subjects addressed in the contingency plan required by EPA permits for TSD facilities provided that the contingency plan is a part of the OSHA required written emergency response plan. All subjects required by OSHA's written emergency response plans are incorporated into GMP's TSD facility contingency plan and employees are trained in accordance with 1910.120(p)(iii).