

# Green SnowPro

## *The New Hampshire Experience*

Ted Diers, Aubrey Voelker, and Steve Landry



# New Hampshire's Salty History – Ted Diers



- First in the nation to use salt for regular winter road maintenance (1938)
- Salt use has doubled in past 40 years
- Chloride impairment trend is not good (18 in 2008, 40 in 2010, over 50 in 2023)
- Chloride contamination of water supply wells has increased by 150 percent over last 30 years



# I-93 Expansion

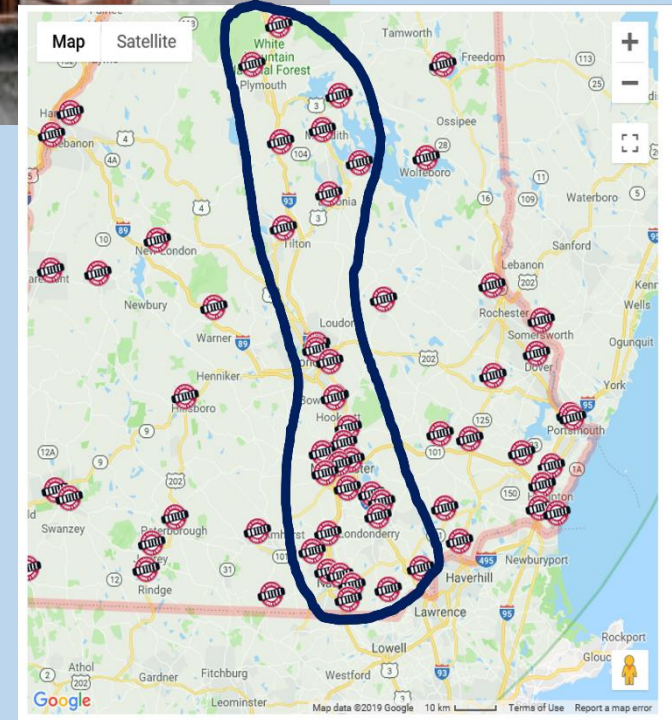
Double the size of the highway

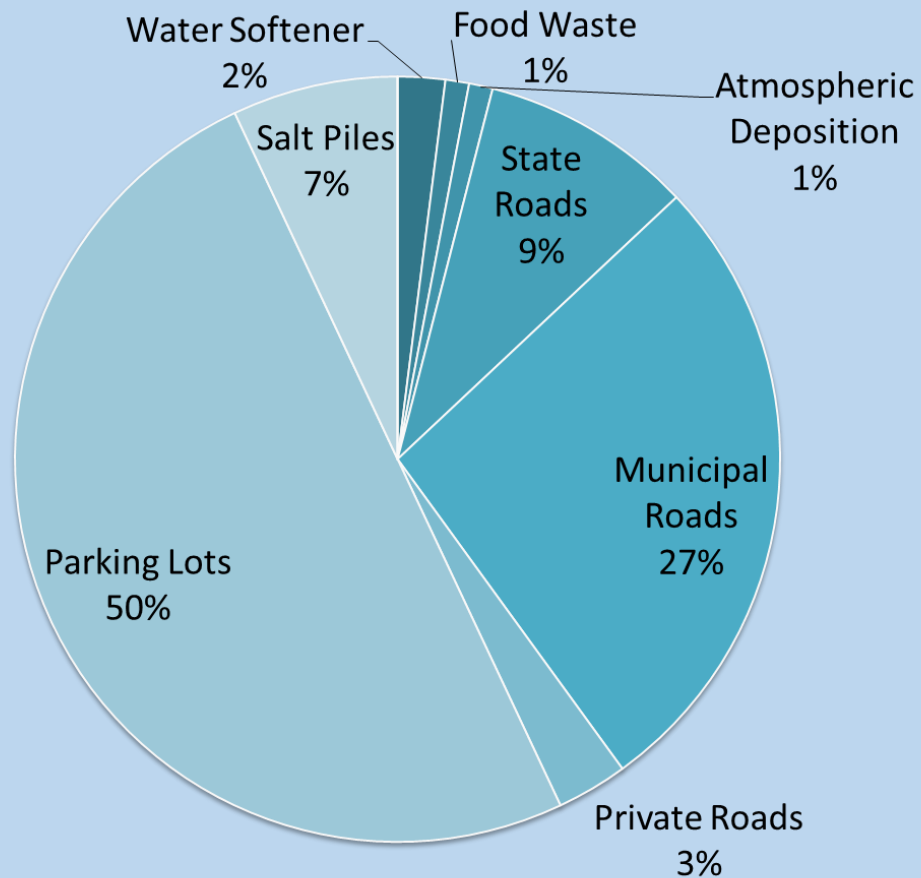
Bigger off and on-ramps.

Park-n-rides.

Drainage -- open to closed system.

More plowing = more salt.





Policy Brook Sectors	Reduction needed
DOT – 2 Lanes	0
Municipal roads	41%
Private	50%
<b>TOTAL *</b>	<b>35%</b>
DOT - 4 lanes	12%



In 2013, House Bill 523 created Voluntary Commercial Salt Applicator Certification Program: Green SnowPro.



**NHDES Green SnowPro certified Commercial Salt Applicators and property owners who hire them, are granted limited liability protection against damages arising from snow and ice conditions.**

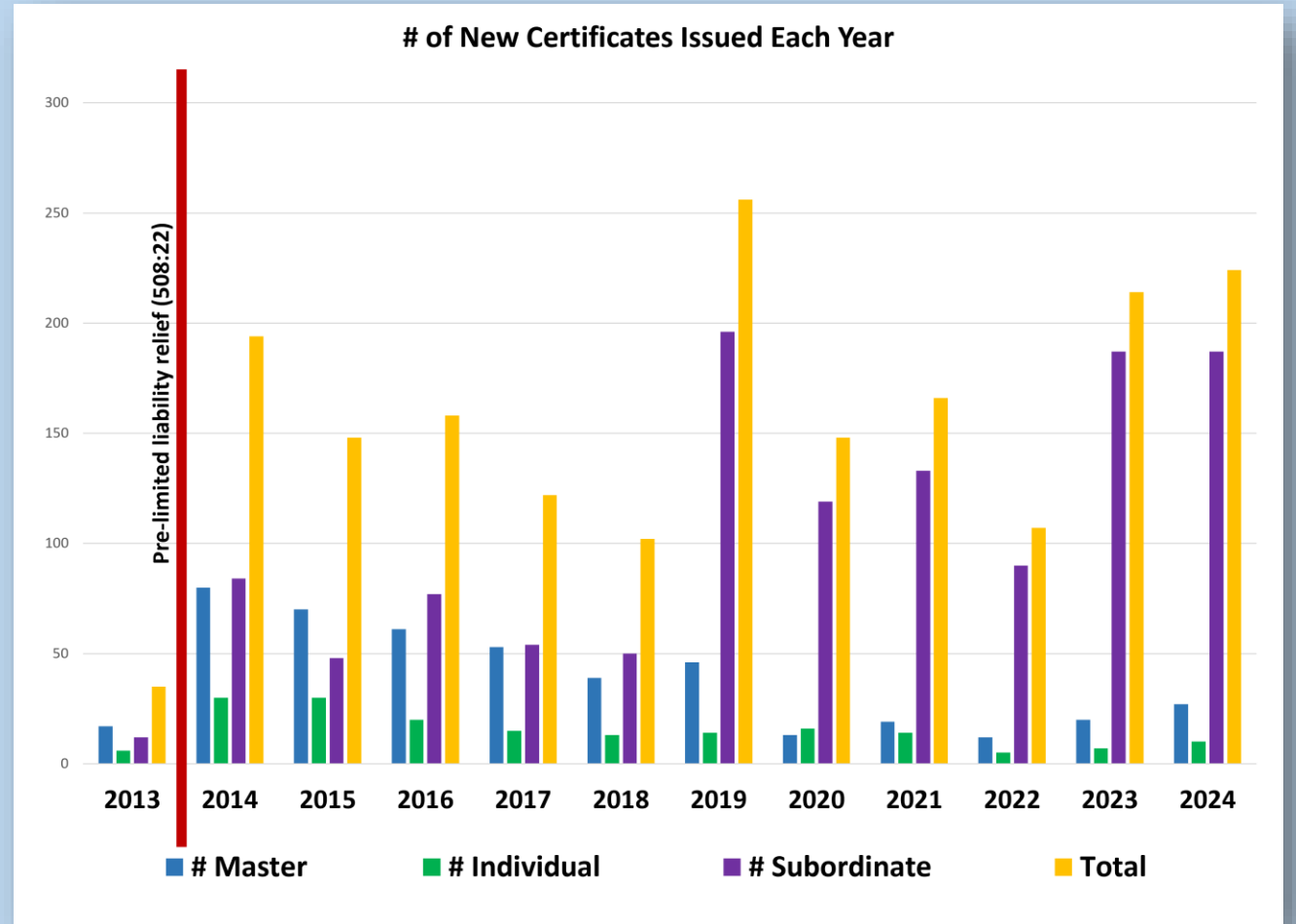
# 508:22 Liability Limited for Winter Maintenance. –

II. In order to receive the liability protection provided in paragraph I, a commercial applicator as defined in RSA 489-C:1, II, or an owner, occupant, or lessee of land shall keep a **written record describing its winter road, parking lot and property maintenance practices. The written record shall include the type of de-icing materials used, the rate or quantity of deicing materials used, the dates of treatment, and the weather conditions for each event requiring de-icing.** Such records shall be kept for a period of 3 years (soon to be 6 years).



# Green SnowPro Program

- Reduce the hurdles to salt reduction
- Incentivize training
- Build in accountability
- Normalize behavior
  - Track salt use
  - Better documentation



# Green SnowPro Today

Aubrey Voelker



NH Salt Symposium

**SnowPro Tip:**  
Hire a Green SnowPro  
certified professional.

#GoGreenSnowPro



NH Salt Symposium



# 1. Coursework



Snowfighters' Seminar

# 2. Apply & Certify



**Commercial Salt Applicator Certification**  
Application for Initial or Renewal Certification  
Watershed Management Bureau

RSA 489-C; Env-Wq 2200

**NHDES Use Only**  
Cert #: \_\_\_\_\_  
Processed Date: \_\_\_\_\_

**I. Applicant Information**

FIRST NAME: _____	MIDDLE: _____	LAST: _____
DAYTIME PHONE NO. (include area code): _____		EMAIL: _____

**Address**

STREET: _____	TOWN/CITY: _____	STATE: _____	ZIP CODE: _____
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**Mailing Address (if different)**

STREET: _____	TOWN/CITY: _____	STATE: _____	ZIP CODE: _____
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**II. Information for Affiliated Business (if none, enter "none" after Business Name.)**

BUSINESS NAME: _____	
DAYTIME PHONE NO. (include area code): _____	EMAIL: _____

**Address**

STREET: _____	TOWN/CITY: _____	STATE: _____	ZIP CODE: _____
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**Mailing Address (if different)**

STREET: _____	TOWN/CITY: _____	STATE: _____	ZIP CODE: _____
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If the applicant or affiliated business address is not located in New Hampshire, provide the name and mailing address of a person whose domicile is in the state and who is authorized to receive and accept service of summons and legal notices of all kinds for the applicant as required by RSA 489-C:4, II.

FIRST NAME: _____	LAST NAME: _____		
STREET: _____	TOWN/CITY: _____	STATE: _____	ZIP CODE: _____



# Annual Renewal

Certification must be renewed annually

- Renewal Application
- Annual Salt Use Report
- Continuing Education

Pumpkin spice is here today,  
but snow and ice are on the way.

It's time to start the preparations,  
and ease the winter trepidations.

Reduce your winter salt application,  
by performing salt spreader calibration.


Prewet the salt and mix the brine,  
reducing chlorides is divine.


Be prepared for the winter snow,  
and make sure you're a certified Green SnowPro.






NHDES-W-07-071

 ANNUAL SALT ACCOUNTING REPORT  
Voluntary Certified Salt Applicator Program  
Watershed Management Bureau  
Watershed Assistance Section



RSA/Rule: RSA 489-C, Env-Wq 2204

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Certificate Number: \_\_\_\_\_ Type of Certificate:   
Affiliated Business Name: (if none, enter "none")  
\_\_\_\_\_

Below are the three reporting elements necessary for recertification under the Voluntary Certified Salt Applicator Program (aka. Green SnowPro) per Env-Wq 2200.

1) Deicer type and amount.  
Complete the table below for each type of deicer used last winter including the unit reported. If you do not know the amount of deicer used by type please report the total amount of all deicers used in the TOTAL row at the end of the table.

TYPE OF DEICER USED	SOLID MATERIAL AMOUNT: (indicate tons, pounds or yards)	LIQUID VOLUME: (in gallons)
SALT, DRY		
SALT, PREWETTED IN THE SPREADER		
SALT, PREWETTED IN THE PILE		
CALCIUM CHLORIDE, DRY		
CALCIUM CHLORIDE, LIQUID		
CALCIUM MAGNESIUM ACETATE, DRY		
CALCIUM MAGNESIUM ACETATE, LIQUID		
POTASSIUM ACETATE, DRY		
POTASSIUM ACETATE, LIQUID		
SAND		
SAND/SALT MIX		
LIQUID BRINE		
OTHER:		
TOTAL DEICER USED LAST WINTER		

Form Continued on Next Page →



UNH T2 Liquids Field Day

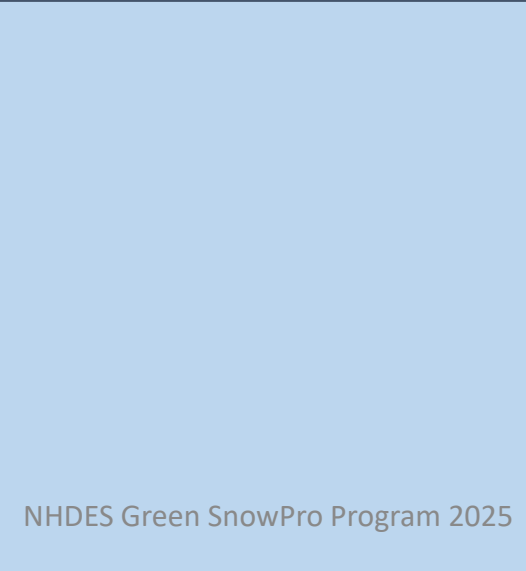


UNH T2 Liquids Field Day

# Continuing Education



NH Salt Symposium



NHDES Green SnowPro Program 2025



NH Salt Symposium

# Annual Certification Fees - Commercial

- Master Certificate - \$250
- Subordinate Certificate - \$25 (max \$100 Subordinate fee)
  - Subordinate certificate holders are not required to submit an annual Salt Use Report. Their salt use is included under the Master Certificate holder.
- Individual Certificate - \$150
- Most companies with multiple snow and ice management employees will have an annual certificate fee of \$350
- Training/Course fee are separate from the annual certification fees
  - Training fees will vary depending on type or training (Full vs Refresher) and training provider.
  - Training fees are set by the training provider; NHDES does not receive training fees.



The State of New Hampshire  
Department of Environmental Services

*certifies that*

**Shawn O'Keefe**

having submitted satisfactory evidence of knowledge and  
training in accordance with the provisions of RSA 489-C  
has been awarded this certificate as a

**Certified Salt Applicator -- Master**

Certificate Number: 358

Date of issue: 07/01/2024

Date of Expiration: 06/30/2025

*Erin L. Holmes*

Administrator, Watershed Management Bureau

## 2013/2014 Winter Season

- 35 Green SnowPro certificates issued
- 22 companies



10 years later

## 2023/2024 Winter Season

- 712 Green SnowPro certificates issued
- 177 companies

# Voluntary Municipal Green SnowPro

**Administrative rules were adopted by NHDES on May 23, 2024.**

Three tiers of certification: Standard, Advanced, Expert

- Annual certification fee of \$450 per municipality
  - The fee covers all snow and ice management employees who have completed required coursework
- Training/Education
- Salt reduction plan
- Storage requirements for all de-icing and anti-icing materials
- Required documentation on equipment calibration
- Advanced and Expert require implementation of additional BMPs

# Green SnowPro Limited Liability Protection Case Study

Steve Landry




# Until 2022, slip and fall claims involving Green SnowPro contractors were withdrawn or settled without trials for two reasons:


1. Avoiding lengthy, expensive trials
2. Lapses in contractor training, record-keeping, or maintaining Green SnowPro certification in line with RSA 508:22

Defendants appear to argue that they are entitled to immunity solely due to the fact that they hired a certified salt applicator, regardless of whether the applicator's records meet the statutory requirements. The Court disagrees. RSA 508:22, II explicitly states that "[i]n order to receive the liability protection provided in paragraph I, a commercial applicator as defined in RSA 489-C:1, II, or an owner, occupant, or lessee of land shall keep a written record describing its winter road, parking lot and property maintenance practices." (emphasis added). Because Alliance has failed to meet this requirement, the burden is on defendants to produce such records in order to preserve their claim of immunity. As they have failed to do so, defendants are not entitled to immunity under the statute.

NHDES-W-07-071



**ANNUAL SALT ACCOUNTING REPORT**  
 Voluntary Certified Salt Applicator Program  
 Watershed Management Bureau  
 Watershed Assistance Section



RSA/Rule: RSA 489-C, Env-Wq 2204

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Certificate Number: \_\_\_\_\_ Type of Certificate: Master / Individual  
 Affiliated Business Name: (if none, enter "none") \_\_\_\_\_

Below are the three reporting elements necessary for recertification under the Voluntary Certified Salt Applicator Program (aka. Green SnowPro) per Env-Wq 2200.

**1) Deicer type and amount.**  
 Complete the table below for each type of deicer used last winter including the unit reported. If you do not know the amount of deicer used by type please report the total amount of all deicers used in the TOTAL row at the end of the table.

TYPE OF DEICER USED	SOLID MATERIAL AMOUNT: (indicate tons, pounds or yards)	LIQUID VOLUME: (in gallons)
SALT, DRY		
SALT, PREWETTED IN THE SPREADER		
SALT, PREWETTED IN THE PILE		
CALCIUM CHLORIDE, DRY		
CALCIUM CHLORIDE, LIQUID		
CALCIUM MAGNESIUM ACETATE, DRY		
TOTAL		

## SNOW AND ICE REMOVAL LOG

For the week of: \_\_\_\_\_  
 Property Location: \_\_\_\_\_

Weather Conditions		
<input type="checkbox"/> Clear	<input type="checkbox"/> Drifting Snow	<input type="checkbox"/> Light Snow
<input type="checkbox"/> Heavy Snow	<input type="checkbox"/> Freezing Rain	

Date	Time Started	Time Completed	Weather Conditions	Ice Removal Activities	Person(s) Performing the Snow - Ice Removal	Supervisor Comments
				Sand, Salt, Shovel, Snow Blower		



# New Hampshire Green SnowPro Limited Liability Case 2022

This is a premises liability action stemming from an incident that occurred on February 21, 2019, in which the plaintiff, Amy Rogers, was severely injured after slipping and falling on unmaintained snow and ice in a parking space at the Fairways Apartment complex in Derry, New Hampshire. The plaintiff's claims were based on theories of negligence against the plaintiff's landlord, Chartwell New Hampshire Associates, LLC ("Chartwell"), and the winter maintenance contractor hired to remove snow and ice from the paved areas of the Fairways, North Point Holdings, Inc. D/B/A North Point Outdoors ("North Point").

The trial for the above-captioned matter was held from October 31, 2022 until November 7, 2022. During the trial, the defendants asserted a statutory defense pursuant to R.S.A. 508:22,



# New Hampshire Green SnowPro Limited Liability Case 2022

- **Defendant:** North Point Outdoors
- **Size:** 140 employees during peak winter operations
- **Fleet:**
  - 80 trucks and heavy equipment
  - 40 sidewalk machines
- **Ten-year contract** with Chartwell Management
- **Ten years** as New Hampshire Green SnowPro
- **Zero** prior claims at The Fairways



# New Hampshire Green SnowPro Limited Liability Case 2022

- **Defendant:** North Point Outdoors
- Northpoint Outdoors Three-tier Training
  - **Pre-season**
    - Full-day sessions before winter arrives
    - Green SnowPro trainings and exams
    - Hands-on training at NPO HQ and off-site
  - **In-season**
    - Continuous on application rates, plowing techniques, and site map reviews
    - Regular updates and adaptations for site-specific challenges
  - **Post-season**
    - Evaluate contract performance, successes and areas needing improvement



# New Hampshire Green SnowPro Limited Liability Case 2022

- **Defendant:** North Point Outdoors
- **Northpoint Outdoors commitment to excellence**
  - Hands-on and technical training
  - Fleet maintenance training and support
  - Multiple on-road technicians for real-time support
  - **Meticulous record keeping and retention**



NHDES-W-07-071

**ANNUAL SALT ACCOUNTING REPORT**  
 Voluntary Certified Salt Applicator Program  
 Watershed Management Bureau  
 Watershed Assistance Section

RSA/Rule: RSA 489-C, Env-Wq 2204

Name: Robert Fairham Date: 12/30/2024  
 Certificate Number: 410 Type of Certificate:  Master  
 Affiliated Business Name: (if none, enter "none")  
 North Point Outdoors

Below are the three reporting elements necessary for recertification under the Voluntary Certified Salt Applicator Program (aka. Green SnowPro) per Env-Wq 2200.

1) Deicer type and amount.  
 Complete the table below for each type of deicer used last winter including the unit reported. If you do not know the amount of deicer used by type please report the total amount of all deicers used in the TOTAL row at the end of the table.

TYPE OF DEICER USED	SOLID MATERIAL AMOUNT: (Indicate tons, pounds or yards)	LIQUID VOLUME: (in gallons)
SALT, DRY	1941.10 Tons	
SALT, PREWETTED IN THE SPREADER		
SALT, PREWETTED IN THE PILE		
CALCIUM CHLORIDE, DRY	572.45 Tons	
CALCIUM CHLORIDE, LIQUID		
CALCIUM MAGNESIUM ACETATE, DRY		
CALCIUM MAGNESIUM ACETATE, LIQUID		
POTASSIUM ACETATE, DRY		
POTASSIUM ACETATE, LIQUID		
SAND		
SAND/SALT MIX		
LIQUID BRINE		
OTHER:		
TOTAL DEICER USED LAST WINTER		



# New Hampshire Green SnowPro Limited Liability Case 2022

## Plaintiff Claim to Expose Negligence

## North Point Outdoors Defense

Find **holes in scope of contract** compared to services rendered.

**Contract represents best practices which are strictly followed.** GPS and ASPIRE **software tracking proved** that North Point crew time on site for each snow event were appropriate.

**Failure to use best practices** for snow removal.

North Point **site management processes were thorough and supported by evidence** by multiple parties.

Failure to follow **ALL** Green SnowPro Guidance Manual practices.

Green SnowPro is **guidance** and snow events present thousands of variables that require adaptive decision-making. **No one-size-fits-all game plan for any property.**

Training Materials for Best Management Practices  
for  
Winter Road, Parking Lot, and Sidewalk Maintenance



Date of Publication: January 31, 2014



NHDES Green SnowPro Program 2025

# New Hampshire Green SnowPro Limited Liability Case 2022

Plaintiff Claim to Expose Negligence	North Point Outdoors Defense
Alleged <b>failure to clear pathways</b> between parked cars.	Logistically impossible during active snow event due to plow widths and resident behaviors (or lack thereof). <b>Some vehicles had not been moved for months.</b>
Counsel presented <b>photos of uncleared areas.</b>	Timing of <b>photos</b> was crucial to consider as they <b>were taken before cleanups occurred.</b>
Alleged slip and fall occurred <b>on parking lot</b> where snow had not been removed.	A witness testified that they saw <b>the plaintiff fall off a grass island curb</b> as she was getting into her car.



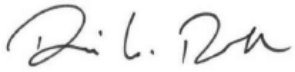
***“After thorough questioning, it became evident that our focus on best practices and our highly trained team executed the storm response to perfection, eliminating any allegations against us”.*** – Robert Fairburn, North Point Outdoors



# New Hampshire Green SnowPro Limited Liability Case 2022

## ORDER ON VERDICT

The jury having found the defendants not liable in this case, judgment is entered in favor of the defendants. The plaintiff is granted 10 days to file any post-verdict pleadings.



Date: November 8, 2022

Hon. David W. Ruoff

3. On November 16, 2022, Plaintiff filed her Motion for Judgment Notwithstanding the Verdict. On December 9, 2022, the Plaintiff's Motion for Judgment Notwithstanding the Verdict was denied.

Motion Denied. The jury's verdict is soundly supported by the evidence concerning the defendant's defense under RSA 508:22. There were factual disputes concerning whether the defendants complied with RSA 508:22, and the jury was free to credit the evidence in favor of that defense. This is not a case in which the evidence was overwhelmingly in favor of the Plaintiff with respect to that particular defense. Thus, judgment as a matter of law, notwithstanding the verdict, is not appropriate in this case.

The verdict was reasonable in light the evidence produced at the trial.



Honorable David W. Ruoff

December 9, 2022

4. On January 9, 2023, Ms. Rogers filed a Rule 7 Notice of Mandatory Appeal. This appeal is currently pending.



# New Hampshire Green SnowPro Limited Liability Case 2022

13. Given the fundamental disagreement between Amy Rogers and her current counsel regarding the merits of the pending appeal, representation of Ms. Rogers by her current counsel has been rendered unreasonably difficult. Therefore, counsel requests to withdraw from representation of Ms. Rogers. Counsel further requests that Ms. Rogers be afforded additional time to retain new counsel prior to incurring the costs associated the compilation of the trial court transcript, or the issuance of a scheduling order for this appeal.



## THE STATE OF NEW HAMPSHIRE

### SUPREME COURT

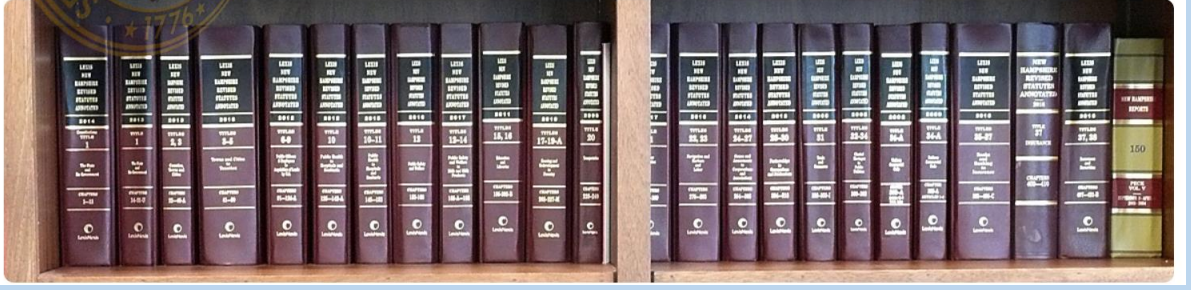
**In Case No. 2023-0016, Amy Rogers v. Chartwell Management, LLC & a., the court on May 17, 2023, issued the following order:**

Amy Rogers has not responded to the March 22, 2023 and May 2, 2023 orders concerning her (or her new counsel's) need to register in the court's electronic filing (e-filing) system, nor has she filed a motion to be exempt from e-filing. Accordingly, the appeal is dismissed.

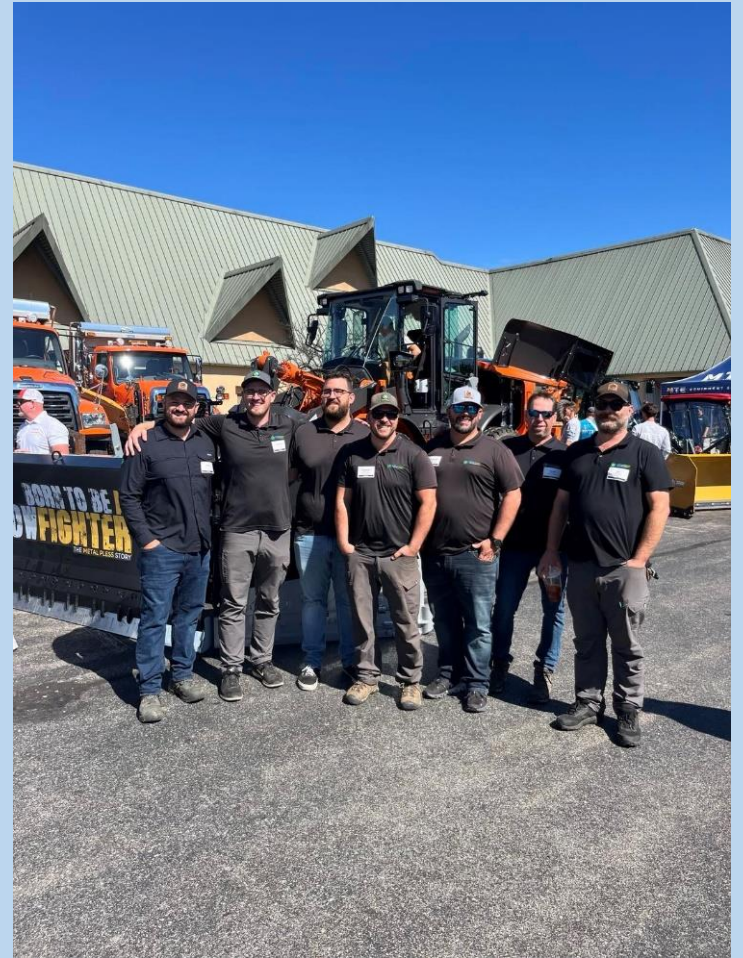
Appeal dismissed.

This order is entered by a single justice (Donovan, J.). See Rule 21(7).





NHDES Green SnowPro Program 2025



# Green SnowPro Program Plows Ahead!

- State of the science and industry BMP manual, curriculum, and exams
- Outreach to the legal and insurance communities
- Improve salt accounting system and online certification system
- Education on how to handle slip and fall claims, and contracts
- Add accountability procedures for all Green SnowPros and implement
- Provide marketing materials to existing Green SnowPros
- Loan and grant opportunities for brine and other equipment
- Funding for agency staffing



# Questions?

Ted Diers

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