DIVISION OF INDUSTRY SERVICES QUARTERLY NEWSLETTER

WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES | FALL 2025

Commercial Building Code Updates

With enforcement of the updated Commercial Building Code on the horizon, our staff is working hard to deliver technical information and resources on code changes as well as respond to industry questions.

> **What:** The Wisconsin Commercial Building Code now adopts the 2021 International Building Code (IBC).
>
> **When:** While the 2021 IBC has already been adopted in the Wisconsin Commercial Building Code (CBC), based on feedback from the Wisconsin building industry, DSPS has delayed the hard deadline for building plan compliance. Plans submitted on November 1, 2025, or after, will need to comply with the updated CBC.

While new building plan submissions must follow the updated CBC starting November 1, any supplemental submissions (such as fire suppression/alarm, HVAC, boilers, conveyances, refrigeration) must be aligned with the code under which the commercial building plan was approved, regardless of how many months later they follow.

"We want to be good partners to Wisconsin's building professionals," said DSPS Secretary Dan Hereth. "The process to develop this code experienced delays beyond usual rulemaking, including legislative tactics that stalled progress and the resulting court proceedings. As a result, this is the first upgrade to this code in a decade and represents a big change for the industry. So, to ensure a smooth transition for our partners in the building industry, we are granting an additional grace period for project submittals."

> **Want more information?**
>
> DSPS hosted two virtual webinars for industry professionals in August to explain key code changes. Watch a recording of the webinar on the DSPS YouTube channel.

Catch Us on Your Firefighting Podcast

DSPS's Fire Prevention team is all about enforcing safety and health standards for the public and fire department employees. We've been joining a variety of firefighting podcasts to help share information. Listen to recent shows or save the date for future ones!

April Hammond, Section Chief, on The Forward Figherfighter
Sarah Brown, NFIRS State Program Manager, on Fireman Kenny
Gary Peck, Fire Prevention Coordinator, on Fireman Kenny
(upcoming) Aaron Andre, Fire Prevenetion Coordinator, on Inside the Firehouse

Fire Suppression/Alarm Petition for Variance – Make It Equivalent

If an automatic fire sprinkler system or fire alarm system design does not meet the minimum requirements or scope provided by the Wisconsin Commercial Building Code, the design will require that a petition for variance be submitted to DSPS.

As of September 1, 2025, Wisconsin adopted codes and standards include the International Building Code 2021, the International Existing Building Code 2021, the International Mechanical Code 2021, the International Fuel Gas Code 2021, the International Energy Conservation Code 2021, and portions of the International Fire Code 2021. NFPA 13 2019, NFPA 13R 2019, NFPA 14 2019, NFPA 20 2019, and all other 2021 or earlier NFPA standards are referenced within these codes.

In addition, FM Loss Prevention Data Sheet 7-29 (dated January 2021) has been adopted for distilled spirits or wine, and FM Loss Prevention Data Sheet 2-0 (dated October 2021) and FM Loss Prevention Data Sheet 8-9 (dated July 2021) have been adopted for storage occupancies.

When the adopted referenced design standards or requirements cannot be met, or if a newer version of a design standard is desired, a petition for variance is required. Regardless of the situation, equivalency or exceeding the adopted codes and standards is required for conditional approval of a petition for variance.

A petition for variance must be submitted online at esla.wi.gov. Requirements for submission include:

- The owner shall be the petitioner and the owner's information and signature shall be provided.
- The petitioner must include the code section that is being petitioned.
- The petitioner must include the design standard or the proposed equivalency to the adopted code.
- The municipal fire department's information, position statement, and Fire Chief / Fire Prevention Officer's signature shall be provided noting any conditions of approval.

More Resources

Review general information about submitting a Petition for Variance.

Walk through the petition for variance submission process by watching a video tutorial.

See other eSLA guidance documents at the eSLA User Guides and Videos page.

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Help improve the quarterly calls and newsletters by taking the survey linked below.

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DIS PROGRAM INFO

DIS PROGRAMS

See the list of DIS program webpages

DIS TECHNICAL QUESTIONS

Each program maintains separate communication inboxes.

Find these email addresses on the DIS Contact page.

CREDENTIAL LOOK-UP

All credentials should now be searched using the NEW Credential Look-Up Tool

license.wi.gov/s/license-lookup

—

ESLA CORNER

USER GUIDE AND HELP PAGE

dsps.wi.gov/Pages/eSLAResources.aspx

eSLA esla.wi.gov

Change of Use? See SPS 320.04

The topic comes up quite often regarding the use of existing buildings and whether they can be used as dwellings. A **DWELLING** is defined in SPS 320.07(25) as any building that contains one or two dwelling units, while **DWELLING UNIT** is defined in SPS 320.07(27) as a structure or part of a structure which is used or intended to be used as a home, residence, or sleeping place by one or more persons.

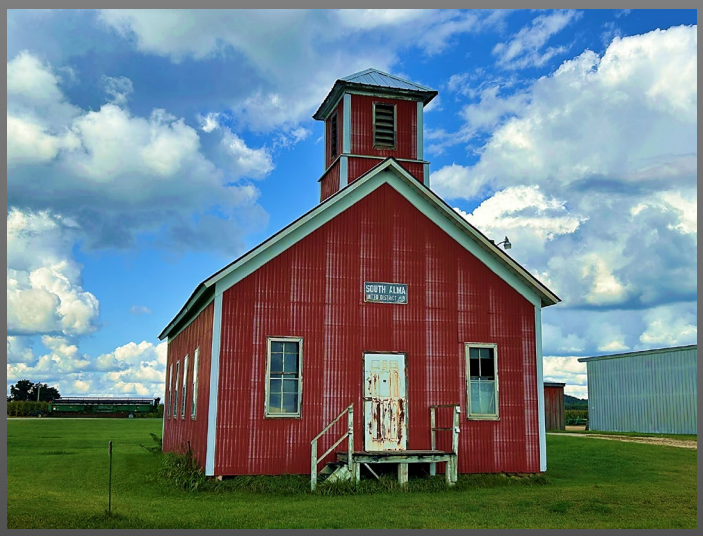
The question is: Can a building that began its life as an accessory or commercial building be used as a dwelling? SPS 320 addresses this exact scenario:

SPS 320.04(4) CHANGE OF USE. A building previously used for another purpose, such as a barn or garage, shall comply with this code upon conversion to residential use.

The conversion of a commercial building or an existing accessory building to residential use is an example of what this code section is referring to. As such, it is treated as a new dwelling for the purposes of permitting, inspection, and construction under the Uniform Dwelling Code (UDC) for one- and two-family dwellings.

There are several different aspects of the UDC code to keep in mind when attempting to convert a building into a dwelling. First, a dwelling must meet the requirements set in SPS 320-325. Some of these items are easy to remedy while others are more difficult.

- Exits - SPS 321.03
- Interior circulation - SPS 321.035
- Stairways and elevated areas - SPS 321.04-321.045
- Natural light and ventilation - SPS 321.05
- Safety glazing - SPS 321.05
- Fire separation and blocking - SPS 321.08-321.085
- Smoke detectors - SPS 3321.09
- Carbon monoxide alarms - SPS 321.097
- Protection against decay and termites – SPS 321.10
- Foam plastic insulation (Styrofoam) - SPS 321.11
- Finished grades - SPS 321.12
- Erosion control - SPS 321.25



Example of the South Alma Schoolhouse converted to a dwelling.

Also keep in mind requirements for:

- Energy conservation - SPS 322
- HVAC installation - SPS 323
- Electrical installation - SPS 324 and NEC
- Plumbing installation - SPS 325, 382-387

Other items that may pose a challenge are footing and frost protection requirements as footings need to comply with SPS 321.25. If the conversion involves a previously built pole type building, it is very likely that the footings are undersized. SPS 321.15(2)(b) requires a column footing to be a minimum of 2'x2'x1' (width, length, thickness) unless designed through structural analysis. Depending on the post spacing and the width of the dwelling (load being transferred through trusses to posts to footings), they may need to be larger than the minimum required. Buildings built on floating slabs also require analysis to show that the thickened edge is of sufficient size to satisfy the design criteria of SPS 321.02.

Continued on next page

Change of Use continued from previous page

Structural analysis is a term frequently used when discussing the possibility of converting an existing building into a dwelling. SPS 320.07(73) defines **STRUCTURAL ANALYSIS** as a branch of the physical sciences which uses the principles of mechanics in analyzing the impact of loads and forces and their effect on the physical properties of materials in the form of internal stress and strain. What falls under the scope of engineered design/structural analysis? This is a design that falls outside of the UDC prescriptive design tables and specifications. A local inspector can accept them if the underlying code requirements, such as design load requirements, are met. Typical acceptable engineering standards are listed in SPS 320.24 and 321.02.

SUMMARY: An existing building can be converted into a dwelling if it meets the requirements of the UDC. Some buildings will be harder than others to convert. Some buildings may be impossible to bring in line with the UDC given access to concealed areas of insulation or excavation required for frost protection and footing verification. In situations where the UDC cannot be met, the owner has the option of submitting a Petition for Variance to propose an alternate method of achieving the code intent. Anything in an administrative code can be petitioned, except for those items that are part of a state statute. Petitions for variances to state administrative codes are reviewed by DSPS or local agencies that have been delegated such authority.

2025 Fall Fire Prevention/FD Safety and Health Training

Wisconsin's Fire Prevention/Safety and Health Program is providing another free Fall training session!

Training started in August and will be going until mid-November. Trainings are held each month in a different district and each session can be attended either in-person and/or virtually. You are not limited to attending the training in your district so you can register for the session that best fits your schedule!

Training Topics:

Updates on Migrant Housing

NFPA 1403 Live Fire Training

CRR-WI CRAIG 1300

Stump the State Q&A (new this year)

Image Trend Elite

NERIS Updates and Q&A

Additional Resources

Schedule and Registration Information

Printable Flyer to post at your fire department or organization.

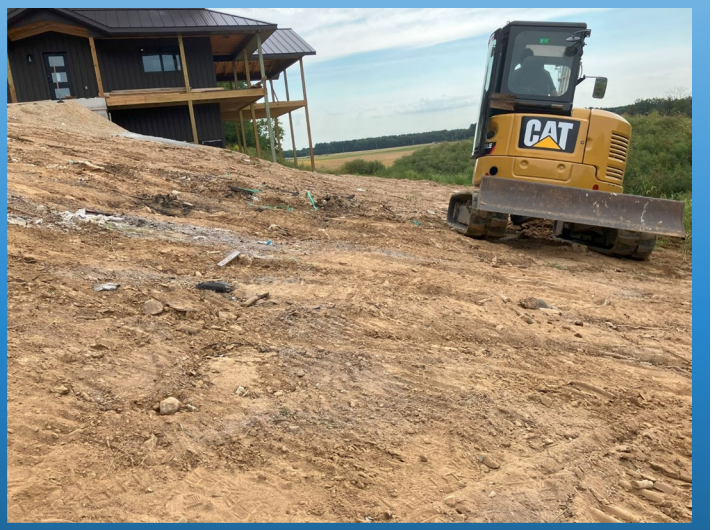
Submit your Stump the State questions to: DSPSSBFirePrevention@wisconsin.gov

Visit the DSPS Fire Prevention webpage for more program and training information.

Know Enough NOT To Be Dangerous

You've probably heard the phrase, "I know enough to be dangerous." When it comes to septic system tested areas (or POWTS), our goal is to help you know enough NOT to be.

Before a building permit can be issued for a structure that requires a POWTS, a sanitary permit with an approved system plan must be in place. That plan usually includes a soil test which identifies both the location and the type of dispersal system that can be installed.



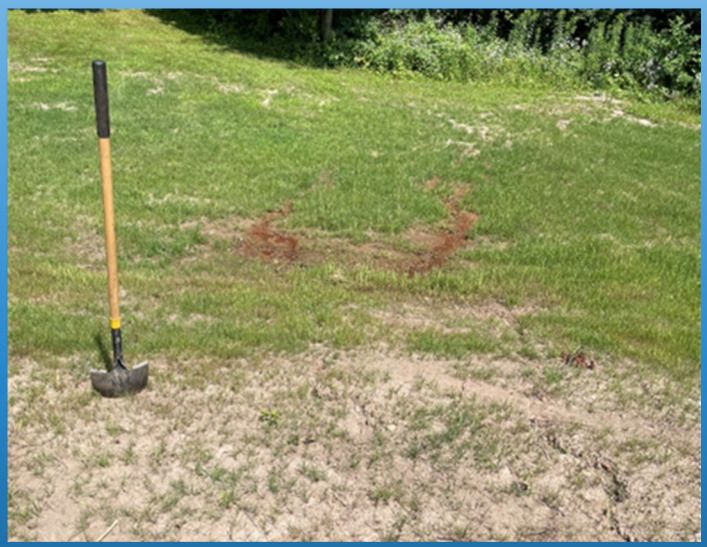
This is the area where an at-grade system was planned. Due to the grading, a new site had to be found, a new soil test conducted, and a new design proposed.

Because this area is so critical to the functionality of the system, it's important to protect the soil from damage. This is especially true for at-grade or mound systems because the topsoil is an integral part of the system. Once soil has been compacted or disturbed, it can take a long time to be suitable again and, in some cases, may never fully recover. Avoid driving on, storing materials in, excavating, removing stumps, diverting surface water onto, or otherwise altering the tested area and the area up to 15 feet downslope. Soil is especially vulnerable to compaction when it is wet or has a heavier texture. If the soil utilized for the system in the tested area is damaged or destroyed, a new soil test and plan revision will likely be required and in the worst-case scenario, the property owner may be left with no option but a holding tank.

Tips for spotting a tested area:

- Flags, stakes, or other markers outlining a section of land.
- Three or more spoil piles or other signs of excavation in a defined area.
- Asking someone knowledgeable.
- Looking up the soil test or permit through the County.

What happens if a system is installed on compacted and/or disturbed soils? The rate of failure skyrockets, with some systems failing immediately after installation. It is important to protect installed systems from damage as well. Avoid driving on or around installed systems and avoid channeling surface water onto them.


This is a recently installed but failed mound system. The soil was compacted and could not infiltrate the wastewater. This led to the system discharging wastewater to grade on the downslope side, or what is commonly called a "leaky toe."

More POWTS News

POWTS Plan Reviewer, Matthew Janzen, has been popular on Wisconsin Public Radio. Watch his sessions for more septic system info!

The Larry Mieller Show - 7/17/2025 and The Larry Mieller Show - 2/6/2025

Crunching the Numbers: Annual Safety Service Fees

SPS 308.10 specifies an annual requirement for notifying DSPS of crushing operations at a mine site. This is important because in any given year, over 600 surface mines are operating in Wisconsin. For comparison, only the state of Texas has more operating surface mines in any given year than Wisconsin. Knowing which of the thousands of permitted mine sites are making sand, gravel, or dimension stone helps in addressing community concerns about mining. Complaints regarding noise, dust, heavy truck traffic, hours of operation, and blasting resultants are all too common throughout the year. You might think this is a spring/summer/autumn problem. Not so. Mining issues are year-round - the first mining complaint for 2025 was received on January 2nd.

SPS 308.13 is the funding mechanism for the Mine Safety program. This means that individual mining companies, blasting contractors, or those who file complaints are not billed for inspections or complaint investigations. SPS 308 requires companies who operate crushing equipment yo pay DSPS a fee for the amount of product produced at each individual mine, pit, or quarry. This fee is paid by the operator of the crushing equipment, which may be a different company than that which owns or leases the mine site. The fee starts at $70 for up to 50,000 tons of material produced, then climbs by $70 per increment until it tops out at $1,120 for over 500,000 tons. You might assume that there are a lot of payments closer to $70 and very few for $1,120, and you'd be right.

eSLA makes the reporting process quicker. The annual Notice to Commence Operations required in SPS 308.10 is used as the source document for the SPS 308.13 Safety Service Fee payment. When the customer logs in to eSLA at www.esla.wi.gov they see the Notice to Commence Operations of each mine site they submitted for each location they were going to operate this year. At the right side of that list of notices, there are gray buttons for "options." Then, the customer just needs to select "Safety Service Fee Payment," report how much material was produced at that specific site, and submit the form. Once complete, the customer may enter the information for another mine site or go directly to the payment system. eSLA accepts credit card or the company's check routing number to pay the fee(s).

More Resources

See the step-by-step instructions to help guide you through the reporting process.

DIS Staff Updates

The following individuals are no longer with DIS. Check the District Maps for new contact information in your area

Brad Johnson
Bureau Director for Field Services

James Fay
Occupational Safety Inspector

Matthew Grimm
Boiler/PV Inspector

Cynthia Becker
Operations Program Associate

Skylar Pierce
POWTS Intern

Who Is My Electrical Contact?

Have a question about commercial electrical permitting or inspections?

FIRST: Contact the municipality where the installation is taking place. If they have been delegated authority by DSPS, they should be your first stop.

NEXT: If the municipality is not delegated, use the DSPS Permitting and Inspection District Map.

UL 1738 Discussion Notes and Commentary

Historical Context

For decades, the plumbing and HVAC industry has not had a unified, national regulation for the use of thermoplastic flue gas venting (FGV) piping, fittings, and accessories.

In practice, installers often used drain, waste, and vent (DWV) piping—such as ABS or Schedule 40 PVC (solid wall or cellular foam core) for venting flue gases. These materials were attractive primarily because they were inexpensive and widely available.

However, DWV piping was never designed or tested for high-temperature corrosive environments associated with flue gases from gas-fired appliances.

Safety Concerns

Material Degradation: Non-tested plastics tend to become brittle over time, leading to cracking.

Adhesive Failures: Standard plumbing glues often lose adhesion, resulting in failed joints.

Health Hazards: Failures in venting systems can release carbon monoxide and other combustion byproducts inside occupied spaces, creating serious life safety risks.

Regulatory Shift

With the adoption of the 2021 International Fuel Gas Code, DSPS incorporated an amendment into SPS 365.0501(4):

"Plastic venting systems associated with gas-fired appliances shall meet the requirements of UL 1738, inclusive of specific testing and marking requirements for pipe, fittings, and cement."

This is a major change because UL 1738 establishes strict performance criteria for:

- Temperature resistance
- Chemical resistance
- Required markings (traceability and compliance labeling)
- Pressure integrity
- Joint strength

Practical Impact

Appliance Manufacturers: While some still allow generic DWV plastics, more are adopting UL 1738 compliance in their installation instructions.

Future Retrofits: If a non-UL 1738 system is installed today and a replacement appliance later requires UL 1738 materials, the entire venting system must be removed and replaced. This adds cost, disruption, and liability for building owners and contractors.

Code Committee Rationale: The Wisconsin commercial building committee's intent is to prevent stranded installations – systems that meet today's relaxed standards but will not comply with future requirements.

Key Takeaways

Cost vs. Safety: Historically, cost drove the use of DWV piping but safety failures have shown the need for change.

UL 1738 is now the benchmark for plastic venting systems covering not just pipe, but fittings and cement.

Long-Term Compliance: Installing UL 1738 products now protects against costly replacements later.

Industry Trend: Adoption is accelerating. Contractors, inspectors, and owners should expect UL 1738 to become the default national standard in coming years.

Tech Box Questions

DIS maintains program-specific email inboxes (Tech Box) to provide a general code answer or direct you to an appropriate code section. Non-technical questions for eSLA, permits, delegated agents, and invoices have their own Tech Box! Use the appropriate email to ensure a timely response to your question. View the full list of Tech Box emails here! See an example below of actual customer questions submitted to our tech boxes!

Dear DSPS Building Tech,

I want to build a storage shed with a permanent opening on one of the four walls. The building would have a gravel floor and vehicle storage. Is this acceptable for the floor or must it be concrete?

Signed,
Gravel Floor

Dear Gravel Floor,

Floors of motor vehicle storage buildings must be concrete or asphalt finish per IBC 406.4.5 or IBC 406.3.3 of the current Wisconsin commercial building code rules. Gravel floor in buildings prohibits motor vehicle storage in those buildings.

- DSPS Building Tech

Dear DSPS Fire Prevention,

My municipality has an ordinance that adopts the most current version of "NFPA 1 and referenced documents." I know Wisconsin currently uses the 2012 edition of NFPA 1 but will move to a newer edition soon.

Can a municipality use a more current version or does the Wisconsin code preside?

Signed,
NFPA Codes

Dear NFPA Codes,

Per SPS 314, the municipality is allowed to adopt a different model fire code by ordinance. Here is the verbiage of SPS314.01(2) but see the full code for notes.

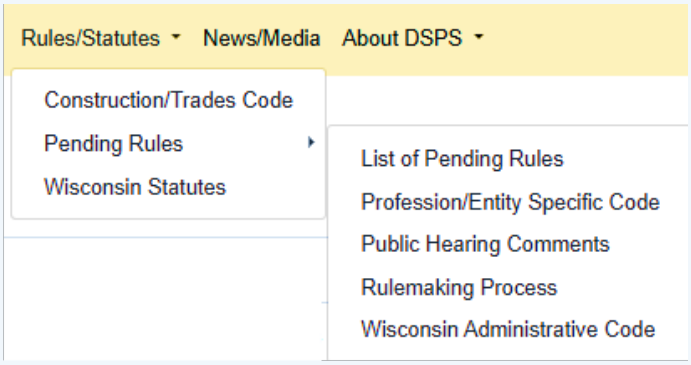
SPS 314.001(2) **(2)** Alternate model fire code. Where a municipality has by ordinance adopted requirements of an alternate model fire code and any additional requirements, that, in total, are equivalent to NFPA 1 as referenced in sub. (1), the department will not consider that ordinance to be in conflict with sub. (1); and property owners or managers, or employers, need only comply with that ordinance.

- DSPS Fire Prevention

When Will The Code Be Updated?

Looking for the status of a code update? Go to dsps.wi.gov to review pending rules and learn more about the rulemaking process.

From the DSPS website menu > Rules/Statutes > Pending Rules



Below are the statuses of current updates pertaining to DIS programs:

SPS 302, 305, 316, 318, 321, 362, 366, 381, and 382: Conveyance Safety Code – Public Hearing

SPS 305: Fees – Drafting Rule

SPS 305 and 320: Dwelling Contractor Education Requirements – Drafting Rule

SPS 314: Fire Prevention Code – Scope Published

SPS 316: Electrical Code – Drafting Rule

SPS 320 to 325: Uniform Dwelling Code – Drafting Rule

SPS 333: Passenger Ropeways – Drafting Rule

SPS 381 to 387: Plumbing Code – Drafting Rule

DIS Open Positions

Visit wisc.jobs to apply today!

Electrical Inspection Consultant

This position requires independent statewide travel throughout Wisconsin to be a primary consultant on technical and complex code issues related to electrical permitting and installation. Qualified candidates have the Wisconsin Commercial Electrical Inspector license and the Wisconsin Master Electrician license at the time of application. *Job ID 14648*

Recent Enforcement Actions

- The Department granted a limited license for a Milwaukee registered electrician based on the electrician being convicted for crime(s) substantially related to the registration. The Department later suspended this credential after it was found that the electrician violated the terms of their limited license.
- The Department granted a limited license for a Potosi Dwelling Contractor Qualifier based on the qualifier being convicted for crime(s) substantially related to the credential.
- The Department entered a Notice of Violations and Order against commercial buildings in Townsend that had fallen out of compliance with the commercial building code.
- The Department entered a forfeiture against a master plumber for overseeing plumbing installations performed by unlicensed individuals.
- The Department entered a Notice of Violations and Order against a commercial building in the Village of Genoa for operating without proper plan review submittal and approval.
- The Department entered a Notice of Violations and Order against a commercial building in the Village of Eleva. The exterior stair was constructed without plans and the work was done not to code.
- The Department entered a Notice of Violations and Order against a commercial building in the Town of Algoma. The building underwent alterations and an inspection found that the site was not in compliance with the building plans.
- The Department entered a Notice of Violations and Order against a Town of Edgewater commercial building and campground after finding plumbing, electrical, POWTS, and commercial building code violations.
- The Department entered a Notice of Violations and Order against a commercial building in the city of Fountain City. The building was constructed without commercial building plan submittal, approval, or inspection.
- The Department entered a Notice of Violations and Order against a commercial building in the city of Rhineland for electrical code violations.
- The Department entered a Notice of Violations and Order against a manufactured home community in the Town of Lewiston for sites that were too close to each other in violation of administrative code.
- The Department entered a Notice of Violations and Order against a commercial building in the Village of Elkhart Lake for commercial building code violations.
- The Department entered a Notice of Violations and Order against a City of Menomonie manufactured home community for operating with an expired permit.
- The Department entered a Notice of Violations and Order against a Town of Doty Resort/RV Park for plumbing and POWTS violations.
- The Department entered a Stop Use Order against a Village of Viola site for failure to submit HVAC plans.