

Statement of Need and Reasonableness

In the matter of proposed revisions of rule governing disposition of the dead

Minnesota Rules, chapters 4610

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Acronyms

APA	Administrative Procedures Act
ALJ	Administrative Law Judge
CAH	Court of Administrative Hearings (formerly known as OAH)
CJD	Creutzfeldt-Jakob Disease
CWD	Chronic Wasting Disease
Minn. R. pt.	Minnesota Rules part
Minn. Stat.	Minnesota Statutes
MDH	Minnesota Department of Health
MMB	Minnesota Management and Budget
MN	Minnesota
MORS	Minnesota Office of the Revisor of Statutes
NOR	Natural Organic Reduction
OAH	Office of Administrative Hearings
PMI	Preventative Maintenance Inspection
SONAR	Statement of Need and Reasonableness
STA	Seal of Testing Assurance
TCS	Transfer Care Specialists

Introduction and Overview

Introduction

The Minnesota Department of Health (MDH) proposes new rules on the topic of mortuary science, disposition of the dead, natural organic reduction, and transfer care specialists. This rule project is in response to new legislation passed in 2024 that created a registered position in funeral homes called “transfer care specialists,” who are registered support staff who may receive and transport dead bodies from their place of death to the funeral home for preparation. The legislature also passed a law providing for a new type of final disposition called natural organic reduction (NOR), which is a method that accelerates conversion of a dead body to soil.

Statement of General Need

The proposed rules are intended to add clarification and structure for MDH to better administer the new transfer care specialist registration and natural organic reduction process and licensure, as well as add clarity and specificity to existing mortuary science statutes, to promote safety in body preparation. These rules are necessary to ensure regulated parties understand their responsibilities and to set-up processes so that MDH may consistently enforce the statute to keep the public safe.

Scope of Proposed Amendments

The following chapters of Minnesota Rules are affected by the proposed changes:

- Chapter 4610, Disposition of the Dead

This proposed amendment adds new parts to this chapter.

Statutory Authority

The department’s statutory authority to adopt the rules is stated in Minnesota Statutes section 149A.03, which provides:

The commissioner shall:

- (1) . . . adopt and enforce rules relating to the:
 - (i) removal, preparation, transportation, arrangements for disposition, and final disposition of dead human bodies;
 - (ii) licensure, registration, and professional conduct of funeral directors, morticians, interns, practicum students, clinical students, and transfer care specialists;

- (iii) *licensing and operation of a funeral establishment;*
- (iv) *licensing and operation of an alkaline hydrolysis facility;*
- (v) *licensing and operation of a crematory; and*
- (vi) *effective July 1, 2025, licensing and operation of a natural organic reduction facility;*

Additionally, the statute requires the department to periodically review and optimize the regulations around mortuary science to improve the practice in Minnesota:

- (10) evaluate the laws, rules, and procedures regulating the practice of mortuary science in order to refine the standards for licensing and to improve the regulatory and enforcement methods used; and*
- (11) initiate proceedings to address and remedy deficiencies and inconsistencies in the laws, rules, or procedures governing the practice of mortuary science and the removal, preparation, transportation, arrangements for disposition, and final disposition of dead human bodies.*

As described above, the portions of section 149A.03 that specifically authorize proposed rules for natural organic reduction facilities and transfer care specialists were added by the legislature in 2024.

Under this statute, MDH has the necessary statutory authority to adopt the proposed rules. Additional authority for these rules is found at section 144.12, subdivision 1(3).

Background

Disposition of the Dead Rules

Minnesota Rule Chapter 4610, Disposition of the Dead, currently has no active rules. The rules were mostly repealed in 1997 due to the recodification and reorganization of the mortuary science statutes, which incorporated many of the rules into the statuteⁱ. The statute reorganization spawned a new rulemaking project for rules to support the new Chapter 149A, which were promulgated in 1998 under the new rulemaking authority granted in Minnesota Statutes section 149A.03. Those rules were later repealed and incorporated into statute, when appropriateⁱⁱ.

While chapter 149A is very detailed in terms of the duties and responsibilities of funeral directors, morticians, funeral establishments, and the Department of Health, the Department has found several areas where clarity is needed as to how the licensee or registrant will meet certain requirements or how the Department will apply certain statutes. These proposed rules seek to add additional clarity and guidance to morticians and funeral establishments on their responsibilities under statute, as well as establishing a clear and consistent interpretation of these statutes.

Transfer Care Specialists

Prior to the COVID health emergency in 2020, only licensed morticians and interns were allowed to pick up a body from the place of death and transport it to the funeral home for final preparation and

disposition of the body. Under Emergency Executive Order 20-32, 1cⁱⁱⁱ, this requirement was temporarily suspended to support licensed morticians as they handled anticipated excess deaths due to COVID. The suspension of that statutory requirement allowed the department to issue waivers for unlicensed personnel to recover bodies and bring them to funeral homes during the emergency. Approximately 100 people worked under that waiver.

In 2024, the Minnesota Legislature created a permanent registration for unlicensed personnel who can pick up dead bodies from their place of death and deliver them to the funeral home. This new registration is called a transfer care specialist, and the Legislature added training and registration requirements to ensure that these unlicensed employees of funeral establishments adhere to minimum standards for handling and transport of dead bodies.

Natural Organic Reduction

Natural organic reduction (NOR) is a disposition method for human bodies which optimizes the natural decomposition process and converts the body into compost, which can then be used to enrich soil in gardens and other landscapes. This type of disposition was first legalized in the United States in the state of Washington in 2019 and has since been adopted in 12 states. The Minnesota Legislature approved this type of disposition in 2024, and licensing of natural organic reduction facilities started on July 1, 2025.

Public Participation and Stakeholder Involvement

Consistent with the Administrative Procedures Act (APA), MDH published a Request for Comments in the Minnesota State Register on August 26, 2024. To increase accessibility and opportunity for feedback, the Department created a web page which displayed relevant information on this rulemaking process and provided the opportunity for the public to make comments. The webpage was available from the time the Request for Comments was published until MDH published the Dual Notice of Intent to Adopt Rules. The Department received three comments.

On February 11, 2025, MDH presented a first draft of the proposed rules to the Department's Mortuary Science Ad Hoc committee. This committee was created in 2014 as a way for MDH to communicate with the mortuary science industry and discuss issues pertaining to regulations that affect practitioners, their clients, the public, and MDH as the regulatory body. MDH shared the proposed rules, took notes on members' initial comments, and offered to meet with anyone or any organization that would like to discuss the rules in more detail.

On April 16, 2025, MDH met with the Minnesota Funeral Director Association and Live On Minnesota, a trade organization promoting natural organic reduction in Minnesota. Both organizations were given a preliminary draft of the rules ahead of the meeting. Based on the comments and conversations from

both organizations, the Department revised the rules to better reflect industry standards and best practices, as well as ensure the rules are fair and enforceable.

The Department received feedback on the proposed rules from other organizations that are most likely to be affected by the rules:

- Earth Funeral, a NOR provider in Washington and Nevada;
- Return Home, a NOR provider in Washington;
- Inspired Journeys, a deathcare company in Minnesota; and
- Final Blessings MN, a funeral ceremony company in Minnesota.

Finally, in accordance with the requirements of Minnesota Statutes, Chapter 14, and Minnesota Rules, Chapter 1400, the Department sought input and comments from the public, stakeholders, and individuals affected by these rules. These activities are described in detail on page 25 of this SONAR.

Reasonableness of the Amendments

General Reasonableness

The purpose of these rules is to create a consistent interpretation for transfer care specialists, natural organic reduction facilities, morticians, and facilities owners under Minn. Stat. Chapter 149A, and provide additional details to support that interpretation.

Rule-by-Rule Analysis

4610.2810 Definitions.

Subp. 1 Bulking Agents. It is necessary to define “bulking agents” because they are used in the NOR process, and the term is used elsewhere in the rule, as discussed below. This provision defines a bulking agent as a carbon-rich material that is added to optimize the composting process. Composting requires specific ratios of nitrogen, carbon, oxygen, and water to decompose the body quickly and completely. When composting animal carcasses, the Minnesota Department of Agriculture, University of Minnesota and the Minnesota Board of Animal Health recommend a carbon to nitrogen ratio of between 15:1 and 35:1 to allow the pile to create the heat needed to decompose the body quickly^{iv}. While neither Minnesota Statute Chapter 149A.955 nor these proposed rules create a required ratio, the statute does require that the pile maintain a temperature of at least 131 degrees Fahrenheit for a minimum of 72 consecutive hours, which is accomplished when the ratio of carbon to nitrogen is in the targeted ratio, creating aerobic reduction that naturally produces heat.

The Department proposes to define what bulking agents are and list out the main bulking agent materials that are used in natural organic reduction in today's industry. Consistent with the legislature's preference for performance-based rules, this open-ended definition will allow for leeway in the future, in the event the industry finds other types of carbon-rich materials that are beneficial for the NOR process.

Subp. 2. Natural organic reduction. This provision defines the term "natural organic reduction" with the same meaning and the definition in Minn. Stat. 149A.02, subd. 30b.

Subp. 3. Prion disease. This section defines a prion disease, based on the medical definition from the U.S. Centers for Disease Control and Prevention (CDC)^v. This is reasonable as it conforms to the medical definition, and it is necessary to differentiate from other types of degenerative brain diseases.

4610.2815 Recordkeeping

Minnesota Statutes, chapter 149A outlines several documents that need to be completed, whenever applicable, and maintained in the decedent's file by the funeral establishment for a minimum of three years. These forms are:

- (1) Statement of Goods & Services, Minn. Stat. sec. 149A.71 subd.2 (f)
- (2) Certificate of Removal, Minn. Stat. sec. 149A.90 subd.4
- (3) Authorization to Embalm, Minn. Stat. sec. 149A.91 subd.5
- (4) Authorization to Hydrolyze, Minn. Stat. sec. 149A.941, subd. 12
- (5) Authorization to Cremate, Minn. Stat. sec. 149A.95 Subd.4
- (6) Authorization to Naturally Reduce, Minn. Stat. sec. 149A.955, subd. 11.

Additionally, licensees are required to complete, maintain, and store embalming records (Minn. Stat. sec. 149A.91, subd. 10), a crematory log (Minn. Stat. sec. 149A.95, subd. 20), an alkaline hydrolysis record (Minn. Stat. sec. 149A.941, subd. 29) and a natural organic reduction record (Minn. Stat. sec. 149A.955, subd. 28), dependent on whether the establishment is licensed to perform those services. Those logs must be updated for every time a listed service is rendered. These records often contain the same information as contained in the documents listed (1)-(6) above, but are kept outside of individual decedent records, and act as a log of the activity the establishment has conducted.

The Department has observed inconsistent documentation practices within the industry with regard to how these required forms are filled out. This rule clarifies that when a statute requires one of these forms to be completed and saved, the form must include all information required on its own document. It is not acceptable to write shorthand notations such as "see previous document" to avoid copying information that may feel redundant, nor is it acceptable to piece together the components of each required document embedded in other forms throughout the file.

While the Department recognizes that this might create some repetition of information for the licensee, it is important each document stand on its own with all required information clearly listed. This protects consumers against misrepresentations and encourages the consumer transparency described in Minn. Stat., sec. 149A.72 and 149A.74. It is necessary for the consumer to understand any document they need to sign or approve for that consumer's signature to have value. This requirement is reasonable because compliance it will adhere to the letter and spirit of the statute. While it is reasonable to require the industry to specifically comply with the law, the department recognizes that most funeral establishments and licensed morticians already comply with this requirement. Funeral home establishments and licensed morticians who are not compliant may require minor form updates and update their recordkeeping and documentation practices to become compliant.

4610.2816 Flush Bowl with Water Connect

This provision clarifies that when a preparation room has both a flush bowl with water connections, provided under Minn. Stat. sec. 149A.92, subd. 2, as well as a non-flushing sink, like a hand washing sink or a direct drain on the floor, the mortician must use the flush bowl sink to dispose of embalming waste and bodily fluids. It is not a requirement that a preparation room have a direct drain, but many rooms contain a handwashing sink or drain in the floor of the room, and this is permissible under the statute. However, it is critically important to the maintenance, safety, and sanitation in the room that all hazardous waste is flushed down the flush bowl sink. This type of sink is designed to completely wash away and clear the bowl of hazardous material, in the same way that a toilet flush completely clears the bowl of waste. Using a direct drain potentially leaves behind hazardous materials around the drain that could linger, creating an environment that encourages bacterial and other microbes to multiply. Simply having a flush sink, but not using it, is not in the spirit of the statutory requirement and the Department believes this clarification is necessary to ensure licensed morticians understand their responsibilities when working with hazardous waste, chemicals, and bodily fluids.

4610.2817 Ventilation

Subpart 1 requires ventilation systems in preparation rooms must be maintained in a clean and sanitary condition including but not limited to rust free and clear of debris. The Department is proposing this rule to ensure ventilation systems do not become so rusted, dusty, or otherwise clogged with debris that the efficacy of the clean air exchange described in Minn. Stat. sec. 149A.92, subd. 3 becomes compromised, either due to particles from the rust or debris blowing into the preparation room, or due to the ventilation system becoming so rusted that it creates holes in the ducts. Excessive rust or debris may also trap infectious or pathological particles and compromises the ability to thoroughly clean and sanitize the room, as required in Minn. Stat. sec. 149A.92, subd. 8. Section 149A.92, subdivisions 3, 5, and 8 make clear that it is necessary for the health and safety of the

morticians, interns, and/or clinical students interns working in the preparation rooms, and clarifying that this extends to ventilation systems is a reasonable approach to doing so.

Subpart 2 requires the ventilation systems required in Minn. Stat. 149A.92, subd. 3 must be located inside the preparation room and placed in a way it is drawing fumes away from the mortician who is completing the embalming. The MDH has observed, in many funeral homes across the state, ventilation systems installed inside a closet in a preparation room, behind fixed cabinets or other furniture, or other similar issues. Ventilation systems that are blocked in any way or covered risk preventing the ventilation system from completing statutorily required twelve air exchanges per hour inside in the preparation room, or from drawing air away from the worker. This clarification is reasonable as it further defines how a ventilation system will be deemed compliant for the purposes of Minn. Stat. 149A.92, subd. 3. It is necessary to ensure all funeral establishment licensees are aware of the exact requirements and what the Department will be evaluating in future inspections.

4610.2830 Maintenance; Crematories.

Minnesota Statutes, section 149A.04 identifies the department as the regulatory authority over the practice of mortuary science and directs the agency to conduct both initial licensure inspections and compliance review inspections of facilities, including crematories. Section 149A.04, subd. 3 states that, as the regulatory authority, the department may

"... (1) examine and copy any relevant books, papers, records, memoranda, or data of any person subject to regulation under this chapter; and

(2) enter upon any property, public or private, for the purpose of taking any action authorized under this chapter or rules, orders, stipulation agreements, settlements, compliance agreements, licenses, or permits adopted or issued by the regulatory agency, including obtaining information from a person that has a duty to provide information under this chapter or conducting inspections or investigations."

Minnesota Statutes, sections 149A.95, subd. 2, requires a crematory have "...a human cremation system approved by the commissioner", and "follow all applicable local and state building codes...and environmental standards."

While 149A already requires the commissioner to approve cremation systems and licensed crematories must follow state and local building codes, this rule is necessary to clarify that during an inspection or investigation, in order for the commissioner to approve or continue to approve licensed crematory's cremation system, the department may ask a licensee for information related to the safety and working condition of the crematory system, which the licensee must provide.

4610.2835 Maintenance; Alkaline hydrolysis

Minnesota Statutes, section 149A.04 identifies the department as the regulatory authority over the practice of mortuary science and directs the agency to conduct both initial licensure inspections and compliance review inspections of facilities, including crematories. Section 149A.04, subd. 3 states that, as the regulatory authority, the department may

"... (1) examine and copy any relevant books, papers, records, memoranda, or data of any person subject to regulation under this chapter; and

(2) enter upon any property, public or private, for the purpose of taking any action authorized under this chapter or rules, orders, stipulation agreements, settlements, compliance agreements, licenses, or permits adopted or issued by the regulatory agency, including obtaining information from a person that has a duty to provide information under this chapter or conducting inspections or investigations."

Minnesota Statutes, sections 149A.941, subd. 2, requires an alkaline hydrolysis facility to have "...a purpose built human alkaline hydrolysis system approved by the commissioner of health", and "comply with all applicable local and state building codes...wastewater management regulations, and environmental statutes, rules, and standards."

While 149A already requires the commissioner to approve cremation systems, and licensed alkaline hydrolysis facilities must follow state and local building codes, this rule is necessary to clarify that during an inspection or investigation, in order for the commissioner to approve or continue to approve licensed facility's alkaline hydrolysis system, the department may ask a licensee for information related to the safety and working condition of the system, which the licensee must provide.

4610.2840 Initial Training Deadline; Transfer Care Specialist

This requirement limits the amount of time between learning the information required to do the work of a transfer care specialist and putting that knowledge to use.

Minnesota Statutes, section 149A.47, subd. 4 requires seven hours of training that must cover all of the following topics:

(1) ethical care and transportation procedures for a deceased person

(2) health and safety concerns to the public and the individual performing the transfer of the deceased person, and the use of universal precautions and other reasonable precautions to minimize the risk for transmitting communicable diseases;

(3) all relevant state and federal laws and regulations related to the transfer and transportation of deceased persons.

While the legislature recognized the need for these new registrants to have classroom training to learn these objectives prior to obtaining their registration and working as a transfer care specialist, the legislature did not put a time limit on how long a prospective registrant can go between taking the classes and applying for registration. The department, with these rules, proposes a six-month maximum limit between taking the class and applying for registration.

Adult brains best learn and retain information through active learning that applies information learned to real-world experiences^{vi}. The window for learning information and transferring it to working memory is short – often in the order of days to weeks. Requiring that the initial training happens relatively quickly before applying to work as a transfer care specialist is necessary to try to preserve as much of the initial training as possible for when the registrant first comes on the job. Six months is reasonable because it gives time for a prospective applicant to find a training class and complete their training hours before applying for registration. The Minnesota Funeral Directors Association, which is one organization offering this training to a majority of the transfer care specialists currently registered by Minnesota Department of Health, offers on-demand online classes that can be completed at any time. The department accepts registration applications year-round, and this rule will not create an undue burden to accessing classes and registering within 6 months of completion of that required training.

4610.2845 Supervision of Transfer Care Specialists

Minnesota Statutes section 149A.47, subdivision 1 requires that a transfer care specialist works under the direct supervision of a licensed mortician as a condition of registration. It also states that the transfer care specialist must be an employee of a licensed funeral establishment. This is a similar requirement to registered mortician interns under Minnesota Statutes, section 149A.20, subdivision 6, and the department created this rule to establish a similar process to the one that happens when an intern needs to change direct supervisors or funeral establishments. This is necessary so the department can keep accurate records of who is supervising a transfer care specialist, just as it keeps up-to-date records of who is supervising a mortician intern, who also works under the license of a licensed mortician and funeral establishment. It is reasonable because it is a very similar requirement and process to what the interns must follow, although it has a little more leniency than the mortician interns. This leniency is due to the fact that the transfer care specialists are only performing the task of transporting dead bodies, and not performing higher-skilled tasks, such as embalming. They also work more independently than interns, because of the nature of their work.

Subpart 1 provides that transfer care specialists must have one regular supervisor and outlines how long the transfer care specialist can be temporarily supervised by another licensed mortician in the

event that their supervising mortician is out of the office. Limiting the number of supervisors a transfer care specialist may have is necessary to allow the department to effectively regulate this area, as provided below in the justification for subpart 2.

Subpart 2 requires a transfer care specialist to update the department within thirty days if their supervising mortician or their employment at a funeral establishment changes. The department must be kept informed about who that employer and supervisor is so that when an investigation is opened on an incident related to a transfer care specialist's work, the department can easily determine who supervised the transfer care specialist at the time of the incident. This rule will allow transfer care specialists to change supervisors or employers during the year without needing to pay to reregister, as long as they keep their information updated with the Department.

These provisions give clear guidance to transfer care specialists about when they need to update their information with the department and allows for changes to occur without needing to re-register. This rule is reasonable because it gives consistency on how a transfer care specialist will be treated if they work for multiple funeral establishments or change their supervisors throughout the year.

4610.2847 Registration Display

This proposed rule mirrors the requirements for licensed morticians and registered interns in Minnesota Statutes, section 149A.20, subdivision 10 and Minnesota Statutes, section 149A.20, subdivision 6(b). This is necessary to ensure that the public can easily verify the registration of the person who transferred their loved one, and reasonable because it is the same standard that the morticians and interns follow and has proven effective in those contexts.

4610.2850 Natural Organic Reduction Facilities

This proposed rule is in response to an inadvertent licensing loophole that was found in Washington State. Washington was the first state in the country to allow for natural organic reduction as a disposition method for human bodies. In the original enacting legislation, there was no explicit mention that the NOR facility must be located inside of a building. An applicant was issued a license for an outdoor facility because of this oversight. While other types of composting are allowed to be completed outdoors, and green burial is an option for individuals or their loved ones who would prefer an outdoor experience, for the dignity of the deceased and to ensure the optimal conditions for aerobic reduction, the department clarifies that all natural organic facilities must be located inside of a building that complies with all requirements of Minnesota Statutes section 149A.955.

4610.2855 Natural Organic Reduction Prohibited

Prion diseases are progressive, fatal degenerative neurological disorders caused by misfolded prion proteins that accumulate in the brain. They are very rare in humans, with an estimated 300 cases reported every year in the United States. Prion diseases can be caused by genetics, transmitted through ingestion of contaminated food, receiving organs or other human-derived medications from a donor with a prion disease^{viiiviii}, or sporadically with no known cause. The most common prion disease in humans is Creutzfeldt-Jakob disease (CJD)^{ix}.

Decontamination of prions is an extraordinarily challenging endeavor. Early in the history of prion research it was observed that most common disinfectants had no appreciable effect for prion decontamination. Modern studies have identified a fleeting suite of chemicals capable of inactivating prions, and the majority of these are potent oxidizers. Incineration can inactivate prions, but extraordinarily high temperatures must be reached, in excess of 600°C^x. NOR and its requirement that the vessel maintain a temperature of 131 degrees Fahrenheit for a minimum of 72 hours, as described in Minn. Stat. sec. 149A.955, subd. 23 (1), will kill most pathogens, but will not neutralize prions^{xi}.

A more common prion disease in Minnesota is Chronic Wasting Disease (CWD), which is found in deer, elk, and moose in Minnesota and throughout North America. CWD is persistent in soil^{xii}, which is a cause of the spread of this condition among wildlife. The Minnesota Department of Natural Resources^{xiii} has an aggressive containment plan^{xiv} for CWD that requires that hunter-killed deer, elk, and moose be tested for CWD, and positive carcasses be disposed of at designated landfill locations, to control and slow the spread through Minnesota herds.

The final product of NOR is composted soil that is intended to be spread on top of existing soil. Prions are known to persist in the soil for extraordinary periods of time^{xvxi}, likely on the order of decades. Furthermore, prions can be assimilated by plants^{xvii}, further increasing their potential for dissemination once released into the broader environment^{xviii}. Though many of the studies utilized prions from sources other than humans (i.e. scrapie or laboratory strains), there is little evidence that human prions would behave any differently from these prions. Out of an abundance of caution, and without better research about how human prion diseases affect soil and potentially spread to other humans or animals, the department proposes to prohibit individuals who have prion disease from utilizing the NOR process. While we do not know whether human prion diseases can be spread to other humans or wildlife through infected compost, we do know for a fact that prion diseases will survive the NOR process and infect the final product. Studies have found that animal prions survive composting processes^{xix}. For this reason, out of an abundance of caution, the prohibition is necessary to protect the health of humans and animals, and reasonable, because it does not preclude any other type of disposition, including green burial instead of a designated cemetery. Evidence of the reasonableness of MDH's proposed approach can be found in how many states, including Washington, Delaware, Maryland, and New York have already prohibited NOR for decedents who have or are suspected of having contracted a prion disease.

4610.2856 Reduced Remains.

This rule part describes the process for releasing reduced remains to the family, as well as procedures for remains that are unclaimed, as defined in Minnesota Statutes, section 149A.955, subd. 27 and remains that are in excess of what the family would like to bring home.

Subpart 1 describes the container requirements to store and release processed compost to the family. These requirements are necessary to ensure adequate care and respect for the reduced remains. The facility must also include a care sheet for the reduced remains. This sheet, at a minimum, must include information about:

- A. The responsibility of the person or persons with the legal right to control the remains to follow all applicable laws regarding dispersal of remains;
- B. the legislature's intent to prevent the sale of naturally reduced remains, as reflected in Minnesota Statutes, section 149A.955, subd. 26.
- C. Instructions for optimal care of the reduced remains, including how to inhibit unwanted microbes, such as mold.

The instructions on this information sheet are important, because NOR is a new disposition method, and consumers may be unfamiliar with best practices for handling and releasing remains. The volume of the final product of naturally reduced remains averages one cubic yard of material, which is about 7-9 wheelbarrow loads of material. In comparison, cremated remains average 0.004 cubic yards, or about 3 liters of material. With the large amount of completed reduced remains, consumers need to be thoughtful about where they can spread this material. It is necessary to help consumers comply with existing laws, and reasonable as a consumer protection as this industry grows in Minnesota.

Regarding mold inhibition, Minnesota's natural hot and humid summers create the natural conditions for mold growth. Even though mold spores that are in the vessel during the required 72-hour period where the vessel is at a minimum of 131 degrees, per statute, it is possible for mold spores to find their way into the completed compost. Compost is a living material, and it is not possible to prohibit all mold from completed reduced remains. However, it is reasonable and necessary for NOR facilities to both take simple steps to discourage mold overgrowth as well as communicate to the recipients some best practices to keep the finished compost from becoming overgrown. Best practices include keeping the compost from becoming too wet, and to keep it in a breathable container, such as burlap, plastic mesh, or cardboard. These simple steps are an industry standard and are important for consumer protection. Loved ones should feel confident that their loved one's remains are well-cared for and not overgrown with mold.

Subpart 2 contemplates the scenario where a family or person with the legal right to control the disposition takes less than the full amount of reduced remains. This scenario is different from unclaimed remains in Minnesota Statutes, section 149A.955, subdivision 27, as the family has claimed the remains, but is willing to sign a release to donate the rest. According to existing facilities operating in Washington and Nevada, many families elect to take less than the full amount of reduced remains.

In this scenario, after the family takes the reduced remains they want, the donated portion will be released from the requirement to treat the donated compost as human remains. This is necessary to allow the facility to stop tracking individual remains as required by Minnesota Statutes, section 149A.955 subdivision 15 and to be able to spread the donated compost mixed with other donated compost in the manner designated by the facility in accordance with any applicable statutes, rules, and local ordinances.

Subpart 3 describes the NOR facility's responsibility to have a location to disperse donated soil. The rule allows a facility to choose whether to purchase land or have an agreement with a landowner or land manager to spread compost on their land. According to Minnesota Statutes, section 149A.955, subdivision 26, the agreement must not be to sell the compost and cannot allow the compost to be used to grow food for sale for human consumption. In states where NOR is already legal, the industry standard is that company partners with conservation groups to donate soil to restore topsoil, often in areas where the goal is to restore the ecology of the land to its natural state. This requirement is necessary, because the facility must have a plan to dispose of donated finished compost as part of their business plan. This subpart is performance based and consistent with the legislative policy underlying section 14.002 because it allows for maximum flexibility for facilities to choose whether to purchase land or partner with existing landowners, land managers, or conservation groups.

The department does not propose a specific timeline for returning donated compost to the earth. However, the facility must keep the building, including its storage areas, in a clean and safe manner. Excessive piles of donated compost that create safety hazards or impede on methods of egress are a safety concern that is prohibited under Minnesota Statutes, section 149A.955 subd. 2. The facility should have a plan for removing donated soil and returning it to the earth in a timely manner that ensures the cleanliness and safety of the facility is maintained.

4610.2857 Laboratory Results

This rule part further defines the requirement in Minn. Stat. 149A.955, subd. 23(5), that requires that a third-party laboratory analyzes samples of the naturally reduced remains to ensure a safe level of certain metals and bacteria. The department seeks to define laboratories for these tests, based on industry standards, and MDH's history of accrediting laboratories for environmental testing throughout the state of Minnesota.

The NOR facilities currently operating in other states that the department has consulted with all use laboratories that are listed on the US Composting Council's^{xx} Seal of Testing Assurance (STA) program. The US Composting Council is a trade organization that helps set standards for the compost industry. Their STA program ensures that laboratories on their list use The Test Method for the Examination of Composting and Compost (TMECC) test methods^{xxi} and are held accountable through a program that compares laboratory results against each other. There is a current list of acceptable laboratories that is updated regularly found on their website^{xxii}.

The Minnesota Department of Health has an Environmental Laboratory Accreditation program (MNELAP)^{xxiii} that certifies laboratories against a national standard as adopted by the National Environmental Laboratory Accreditation Program. These certified laboratories are referenced throughout Minnesota Statute and Minnesota Rules in most cases where the law requires analysis of our air, water, soil, and other materials. As of November 1, 2025, there are no laboratories on this list that can perform every test required in Minn. Stat. 149A.955, subd. 23(4), but MDH plans to proceed with a request for proposal to outline the tests and methodologies that are needed to test for the elements in statute and allow laboratories to be listed as an accredited laboratory under MNELAP.

The department will accept testing results from any laboratory listed under either accreditation and allows NOR facilities to use more than one lab if needed. This is consistent with the legislature's stated preference for performance-based rules as it will allow maximum flexibility for NOR facilities to test all samples required under Minnesota Statutes, section 149A.955, subdivision 23, while ensuring the accuracy of the test results. This is necessary to ensure that the testing is accurate and that finished reduced remains are not contaminated when they are dispersed back into the land.

4610.2858 Equipment Requirements

This rule establishes the materials that may not be included in a NOR vessel, as well as the requirement that the vessel be leak-proof and guard against odors and vector infestations. The vessel must accurately test and record the temperatures inside the vessel. The requirements in subparts 1 are standard in the industry, and are important to ensure optimal decomposition, and keep out contaminants that should not be introduced into the soil after the remains have reduced or that result in a product other than naturally reduced remains.^{xxiv}

A vessel that is leak proof is also an industry standard. Maintaining the correct balance of moisture to carbon is a vital part of the decomposition process, and there should be no extra moisture that seeps out of the reduction vessel. Keeping vectors such as insects and rodents out of the vessels is an important protection for workers and the loved ones of the decedent.

Finally, it is necessary and reasonable to require that the vessel has the sensors and recording capabilities to prove that it is complying with the requirements in Minn. Stat. sec. 149A.955, subd. 23

(1). This is not only helpful to the department in conducting its inspections and investigations but will also be helpful to NOR workers who are determining how far in the decomposition process a vessel is, without needing to open the vessel to check. This maintains dignity and respect for the decedent and the workers alike.

Regulatory Analysis

Classes Affected

These rule changes will affect current and prospective licensed funeral establishments including traditional funeral homes, crematories, alkaline hydrolysis facilities, and NOR facilities and funeral workers, including licensed morticians, registered interns, and transfer care specialists.

The main costs of compliance for these rules are in the new requirements to clarify that licensed crematories and licensed alkaline hydrolysis facilities may be asked for copies of maintenance documentation at the department's request, to show safe and compliant operation. If the department requests this documentation, the licensee must provide it. Licensees who do not maintain this documentation may undergo additional request to obtain an inspection or provide documentation, show that be requested. Any additional expense from the rule, however, would be minimal, as the rule merely requires licensees to maintain documentation of existing compliance obligations to maintain safe operations that adhere to statutory requirements.

These rules will indirectly affect families who use funeral services in Minnesota in the form of clearer consumer protections that ensures they understand the authorization forms they are signing and are assured that their loved one is being taken care of in a facility that meets clear standards.

Both MDH and licensees will benefit from a clear understanding of the requirements of chapter 149A.

Department/Agency Costs

The Department anticipates minimal costs to implement and enforce these rules. MDH anticipates the need to educate licensees on the changes, as part of its ongoing communications with licensees, and to make minor updates to forms and materials. MDH anticipates that the new rules will add five additional minutes or less to an inspection of a funeral establishment, cremation facility, alkaline hydrolysis facility, or natural organic reduction facility. The Department cannot anticipate whether these rules will create additional complaints for investigation, as most of the rules add specificity to existing statutory requirements, instead of new requirements.

Less Costly or Intrusive Methods

The Department has determined that there are no less costly or less intrusive methods for achieving the purpose of the proposed rule. These rules are largely performance based and written to give a standard that can be accomplished by licensees in a variety of ways to avoid costs and inefficiencies. Accordingly, the proposed rules represent the least costly and least intrusive method for reaching the safety and consumer protections needed.

Alternative Methods

The Department considered alternatives to the rule as described above and here. The Department has made many revisions from the first draft that was sent to stakeholders, in order to create a baseline standard with maximum flexibility in how to achieve that goal. Examples of alternatives that MDH considered and the reasons for their rejection include:

- Creating a definition for bulking agents instead of creating a closed list of current industry bulking materials, in case new materials are found to be more effective in the future.
- Allowing NOR facilities to choose whether to use either a laboratory certified by the Minnesota Department of Health or the US Composting Council rather than settling on one or the other. MDH chose this path to maximize flexibility, as described in more depth in the above rule-by-rule analysis for that rule part.
- Creating the expectation that donated soil is returned to the earth in a reasonable time period without mandating a specific length of time. Instead of setting a rigid deadline, the department will take note of whether the stored compost awaiting dispersal is creating a safety or sanitation violation under general building code by blocking egress or kept in an unsanitary condition. MDH rejected this alternative because Minnesota weather would make it impossible to create one window of time. Compost cannot amend soil when it is placed on top of snow or frozen soil, and the nutrients would wash away in snow melt.

Performance-Based Rules

Minnesota Statutes section 14.002 requires state agencies, whenever feasible, to develop rules that are not overly prescriptive and inflexible, and rules that emphasize achievement of the agency's regulatory objectives while allowing maximum flexibility to regulated parties and to the agency in meeting those objectives.

These proposed rules state the standards that MDH will be reviewing upon inspection or in the course of an investigation, and give the licensees flexibility in how to achieve those standards. The specific

performance-based standards are identified and explained in the rule-by-rule analysis section of this document.

Costs to Comply

The main costs to comply with the proposed rules are minor costs related to updating forms or documentation practices to ensure that each form stands on its own. There also may be costs for an NOR facility to find a donation agreement and move donated compost to a donation site.

Ventilation systems

The Department maintains that the new rules around ventilation are simply specifying requirements that already exist in Minnesota Statutes, section 149A.92 subdivisions 3 and 5. Ventilation systems that are either blocked by a door, furniture, or other unmovable object cannot provide “at least 12 air changes per hour and [be] located so that air is drawn away from the person performing the preparation.” Likewise, vents or ducts that are rusted may not be exchanging air out of the room and ensure sanitary conditions as required by Minnesota Statutes, section 149A.92, subdivision 5. Therefore, any funeral establishment that needs to update or replace its ventilation system based on these rules should have replaced it under existing statute.

NOR Donations

This provision may add extra costs to a NOR facility’s cost of doing business, depending on which option the facility decides to take to handle excess compost that a family chooses not to take or doesn’t claim. This could involve buying a plot of land to disperse compost, or entering into an agreement with a nonprofit organization to take the compost, for free or for the cost of pick up or delivery, depending on the agreement. Because facilities are required to make every effort to ensure the compost is not sold or used for commercial purposes under Minnesota Statute section 149A.955, subdivision 26, the agreements will most likely be with not-for-profit entities that are not likely to charge facilities more than the actual costs for the delivery and handling of the compost.

The requirement to have a place to donate excess compost is a normal cost of doing business for this industry, and the cost of donating soil is built into the base price for every NOR reduction. The providers that the Department spoke with about this requirement indicated that they have partnerships with multiple organizations and also own land in the states where they operate to handle donated compost. Costs that will be paid by the facility will depend on the specific agreement with a partner organization, and can be as little as zero dollars, depending on the agreement.

NOR Vessel Requirements

Part 4610.2858 requires NOR vessels to have an instrument for reading the temperature in the vessel, and for records of these readings to be kept with the decedent's file. This is to ensure that the process complies with Minnesota Statutes, section 149A.955, subdivision 23(1). This does not add any costs of compliance as it merely articulates a necessary element of statutory compliance.

Funeral Establishment Forms

There may be minimal costs to redesign and reprint certain forms, if a funeral establishment is not already treating each record in Chapter 149A as a separate form. This cost will vary but should range from \$50-\$500, based on online estimates for designing and printing custom business forms^{xxvxxvi}.

Costs of Non-Adoption

NOR Facilities

The NOR rules fill important gaps about how to handle reduced remains after final reduction, as well as creating the standards that allow NOR facilities to comply with statute. Without these rules, existing illegal dumping laws will apply, but Consumers may not be aware that they apply to composted remains. Because of the volume of material that is created with the NOR process, it could quickly become a problem if people felt they were allowed to disperse composted remains anywhere, without permission. People also need information on how to store the finished compost safely before returning it to the earth, and these rules require that information be given with the finished compost.

There are some technical details in these rules that support the NOR statutes, such as the laboratory requirements and the temperature-monitoring and recording equipment. Without these details, the department is not sure how to ensure that the laboratory results are valid, and the compost is safe to disperse into the environment. The Department will also be unable to enforce the temperature requirements without records to show that the correct temperatures have been reached.

Transfer Care Specialists

The cost to not adopt these rules for transfer care specialists is having transfer care specialists pay more than they need to in order to update their registration. The statute is clear that the registration is tied to having a supervising mortician and working as an employee in a funeral establishment, and without this clarification, the industry lacks clarity as to whether a transfer care specialist must re-register every time there is a personnel update during the year, via a change of supervisor or change of employment.

Funeral Establishments

The largest cost to not adopting the remainder of the proposed rules is the potential cost of crematories and alkaline hydrolysis systems operating in an unsafe manner. Most facilities operate safe systems; however, the department is aware of a few facilities with very old equipment. While department inspectors can cite visual defects to a retort or hydrolysis system, they do not have expertise in inspecting things like gas lines and electrical components. Without these rules, the Department cannot explicitly require proof that equipment is safe for use and cite facilities who are using dangerous equipment in need of repair. Unsafe equipment could result in crematory fires, and injury or death to crematory or alkaline hydrolysis operators.

Likewise, the cost of not adopting the ventilation and preparation room rules is a lack of clarity for funeral establishments that may lead to unsafe working conditions. Flushing embalming waste down a sink without using a flush rim can harbor disease and is a risk for funeral workers, as is breathing air that is not exchanging properly through the ventilation system. The goal of these rules is to clarify statute, so that funeral establishments understand what they need to do to keep everyone safe and comply with the law.

Differences from Federal Regulations

There are no federal laws regarding disposition of the dead or funeral industry practices, outside of Federal Trade Commission regulations around the transparent pricing in the sale of funerals goods and services.

Cumulative Effect

These rules clarify existing statute and how the department will interpret existing statute, as well as to address areas where the new statutes for transfer care specialists and natural organic reduction are silent. The rules are constructed to fit within both existing state statute, as well as industry standards. The rules give more certainty about how the department will interpret and apply statute, to funeral establishments, transfer care specialists (and the facilities that employ them) and natural organic reduction facilities.

Additionally, there are rules for natural organic reduction facilities to fill in gaps where statute is silent, mostly around how to store and disperse remains after their final reduction. For those rules, the department points the consumer or facility back to existing local government authority to get proper permission to disperse remains, which is existing statute. This gives local governments maximum control over whether NOR compost can be spread on public lands under their control.

Notice Plan

Minnesota Statutes, section 14.131, requires that an agency include in its SONAR a description of its efforts to provide additional notification to persons or classes of persons who may be affected by the proposed rule or must explain why these efforts were not made.

Details on the previous measures taken to ensure stakeholders received both required and additional notice of this rulemaking during the Request for Comments and rule development period can be found on pages 7-8 of this SONAR.

Required Notice

The department is required under Minnesota Statutes, chapter 14 to identify and send notice to several groups. The steps the Department will take to meet those statutory requirements are laid out in detail below.

Consistent with Minnesota Statutes, section 14.14, subd. 1a, on the day the Dual Notice is published in the *State Register*, the Department will send via email or U.S. mail a copy of the Dual Notice and the proposed rule to the contacts on the Department's list of all persons who have registered with the Department for the purpose of receiving notice of rule proceedings. There are two persons on the Department list of persons who have requested notice via United States Postal Service, and one person who has requested noticed of all rule proceedings via email or GovDelivery. The Dual Notice will be sent at least 33 days before the end of the comment period.

Consistent with Minnesota Statutes, section 14.116(b), the Department will send a copy of the Dual Notice a copy of the proposed rules, and a copy of the SONAR to the chairs and ranking minority party members of the applicable finance and policy committees and the Legislative Coordinating Commission. These documents will be sent at least 33 days before the end of the comment period.

Consistent with Minnesota Statutes, section 14.131, the Department will send a copy of the SONAR to the Legislative Reference Library when the Dual Notice is sent.

Minnesota Statutes, section 14.116(c) requires the Department to "make reasonable efforts to send a copy of the notice and the statement to all sitting legislators who were chief house of representatives and senate authors of the bill granting the rulemaking authority" if it is within two years of the effective date of the law granting rulemaking authority.

Minnesota Statutes, section 14.111 requires the Department to provide the commissioner of agriculture with a copy of the proposed rule change if the agency plans to adopt or repeal a rule that

affects farming operations. This requirement does not apply because the proposed amendments will not have any effect on farming operations in Minnesota.

Additional Notice

In addition to the required notice referenced above, the department will make the Dual Notice, SONAR, and proposed rule available on the webpage created for this rulemaking.

The department also intends to send an electronic notice with a hyperlink to electronic copies of the Dual Notice, SONAR, and proposed rule to:

- All funeral establishments licensed by the Minnesota Department of Health, via GovDelivery;
- All crematories licensed by the Minnesota Department of Health, via GovDelivery;
- All alkaline hydrolysis facilities licensed by the Minnesota Department of Health, via GovDelivery;
- All NOR facilities licensed by the Minnesota Department of Health, via GovDelivery;
- All morticians licensed by the Minnesota Department of Health, via GovDelivery;
- All mortician interns registered by the Minnesota Department of Health, via GovDelivery;
- All transfer care specialists registered by the Minnesota Department of Health, via GovDelivery;
- Every member of the MDH Ad Hoc Mortuary Science Advisory Committee;
- The Minnesota Funeral Directors Association;
- LiveOn Minnesota, the advocacy group for NOR in Minnesota;
- Return Home, an NOR facility in Washington that has expressed interest in opening a facility in Minnesota;
- Earth Funeral, an NOR facility in Washington and Nevada that has expressed interest in this rulemaking project and has consulted on these rules;

On December 12, 2025, the department received confirmation from CAH that these steps meet the notice requirements for persons or classes of persons who may be affected by the proposed amendments to these rules under Minn. Stat. § 14.14, subd. 1a.

Consultation with MMB on Local Government Impact

As required by Minnesota Statutes, section 14.131, the Department consulted with Minnesota Management and Budget (MMB). We did this by sending MMB copies of the proposed rule and SONAR on November 3, 2025. The Department will submit a copy of the cover correspondence and any

response received from Minnesota Management and Budget to OAH at the hearing or with the documents it submits for ALJ review.

Impact on Local Government Ordinance and Rules

As required by Minnesota Statutes, section 14.128, subdivision 1, the Department has considered whether these proposed rules will require a local government to adopt or amend any ordinance or other regulation in order to comply with these rules. The Department has determined that they do not because these rules fit into the existing funeral statutes and practices, and do not change the authority that local governments have to decide to issue zoning permits for businesses or cemeteries. The ability for a local government to decide whether they will issue permission for the dispersal of NOR remains is the same authority they have to issue permission to disperse cremated remains, that authority is just made specific in these rules.

Costs of Complying for Small Business or City

Agency Determination of Cost

As required by Minnesota Statutes, section 14.127, the Department has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed \$25,000 for any small business or small city. The Department has determined that the cost of complying with the proposed rules in the first year after the rules take effect will not exceed \$25,000 for any small business or small city.

The Department has made this determination based on the probable costs of complying with the proposed rule, as described in the Regulatory Analysis section of this SONAR on pages 19-22.

Authors, Witnesses, and Exhibits

Authors

The primary authors of this SONAR are Celeste Marin, Agency Policy Specialist, Health Regulation Division, Department of Health, Daphne Ponds, Executive Operations Manager, Health Regulation Division, Department of Health, and Rick Michals, Executive Operations Manager, Health Regulation Division, Department of Health.

The section on prion disease was reviewed, edited, and augmented by Dr. Stuart Lichtenberg, Research Manager at the Minnesota Center for Prion Research and Outreach at the University of Minnesota's Department of Veterinary and Biomedical Sciences.

Witnesses

Dr. Stuart Lichtenberg, Research Manager at the Minnesota Center for Prion Research and Outreach at the University of Minnesota's Department of Veterinary and Biomedical Sciences is expected to testify on prion disease.

Conclusion

In this SONAR, the Department has established the need for and the reasonableness of each of the proposed amendments to Minnesota Rules, Chapter 4610. The Department has provided the necessary notice and documented its compliance with all applicable administrative rulemaking requirements of Minnesota statute and rules.

Based on the forgoing, the proposed amendments are both needed and reasonable.

s/ WENDY UNDERWOOD

12/19/2025

Wendy Underwood, Deputy Commissioner
Minnesota Department of Health

Date

ⁱ See Minn. Laws 1997, ch. 215, §46

ⁱⁱ See Minn. Laws 2007, ch. 147, art. 9, § 38; 2009, ch. 157, art. 1, § 18.

ⁱⁱⁱ https://mn.gov/governor/assets/1a.%20EO%2020-32%20Final._tcm1055-427412.pdf

^{iv} *Composting Animal Mortalities*, Minnesota Department of Agriculture, 2009

^v <https://www.cdc.gov/prions/about/index.html>

^{vi} *We knew it all along! Using cognitive science to explain how andragogy works* (2016)

^{vii} *Possible Person-to-Person Transmission of Creutzfeldt-Jakob Disease | New England Journal of Medicine*

^{viii} *Iatrogenic Creutzfeldt-Jakob Disease from Commercial Cadaveric Human Growth Hormone - Volume 19, Number 4—April 2013 - Emerging Infectious Diseases journal - CDC*

^{ix} <https://www.cdc.gov/creutzfeldt-jakob/hcp/clinical-overview/index.html>

^x Brown, P.; Rau, E. H.; Lemieux, P.; Johnson, B. K.; Bacote, A. E.; Gajdusek, D. C. Infectivity Studies of Both Ash and Air Emissions from Simulated Incineration of Scrapie-Contaminated Tissues. *Environmental Science & Technology* **2004**, *38*, 6155–6160.

^{xi} *Effects of Chemicals, Heat, and Histopathologic Processing of High-Infectivity Hamster-Adapted Scrapie Virus*

^{xii} *Prions Adhere to Soil Minerals and Remain Infectious | PLOS Pathogens*

^{xiii} <https://www.dnr.state.mn.us/cwd/index.html>

^{xiv} https://files.dnr.state.mn.us/wildlife/research/health/disease/cwd/cwd_responseplan.pdf?v=2024.11.06-12.44.13

^{xv} (8) Georgsson, G.; Sigurason, S.; Brown, P. Infectious Agent of Sheep Scrapie May Persist in the Environment for at Least 16 Years. *Journal of General Virology* **2006**, *87*, 3737–3740.

^{xvi} [Survival of scrapie virus after 3 years' interment - ScienceDirect](#)

^{xvii} [Plants as vectors for environmental prion transmission - ScienceDirect](#)

^{xviii} [Grass Plants Bind, Retain, Uptake, and Transport Infectious Prions - ScienceDirect](#)

^{xix} [Biodegradation of bovine spongiform encephalopathy prions in compost | Scientific Reports](#)

^{xx} <https://www.compostingcouncil.org/>

^{xxi} <https://www.compostingcouncil.org/page/TMECC>

^{xxii} <https://www.compostingcouncil.org/page/CertifiedLabs>

^{xxiii} <https://www.health.state.mn.us/communities/environment/mnelap/index.html>

^{xxiv} See § 149A.02, subds. 30b (defining “natural organic reduction” or “naturally reduce” as “the contained, accelerated conversion of a dead human body to soil”), 30e (defining “naturally reduced remains” as “the soil remains following the natural organic reduction of a dead human body and the accompanying plant material”).

^{xxv} [Pricing that makes sense | Paperform](#)

^{xxvi} [Breaking Down How Much Does It Cost to Hire a Designer - Floowi](#)