



Minnesota Health Care Engineers Association

Bob Dehler, P.E. | Engineering Program Manager

September 14, 2017



All You Ever Wanted to Know About Healthcare Plan Review and Inspection

Bob Dehler, P.E.

Robert.Dehler@state.mn.us

651-201-3710

Agenda

- Hot Topics
- Who are we
- When Do We Review Projects
- Plan Review/Submittal Requirements



- New Staff Member, Michael Mireau
- FGI did not get hearing before deadline last session. Hopefully this next session
- 2018 FGI should be out before end of year
- ICRA During Construction. Great Training Available.
<http://constructionicra.org/upcoming-training-schedule/>



- Working on revamp of our website. Any input is appreciated. Intend to increase transparency and make the PDC process easier
- Ventilation in offsite units of hospitals. Comply with ASHRAE 170 per CMS COP's
- S&C 17-38-LSC, rated door inspections
 - Full compliance with NFPA 80 for fire doors, January 1, 2018
 - 7.2.1.15 not applicable to healthcare
 - 4.6.12.3, maintain or remove features of fire safety



- Outlet testing, NFPA 99 and NFPA 70
- Emergency center fall under healthcare?
- Effective November 28, 2016, each resident room must have a dedicated bathroom with at least a toilet and sink
- Updated Life Safety Code Documentation Guide. Big thanks to Bob Imholte! Please access through Engineering Services website



- S & C 17-30, Reduce Legionella Risk
 - Facilities must develop and adhere to policies and procedures that inhibit microbial growth. Based on national standard (ASHRAE 188 and CDC)
 - Applicable to Hospitals, Critical Access Hospitals and Nursing Homes
- Ligature risks being scrutinized. Joint commission announced that all ligature and self harm risks must be corrected within 60 days



Our Team



Bob Dehler, P.E.

Engineering Program Manager

651-201-3710

robert.dehler@state.mn.us

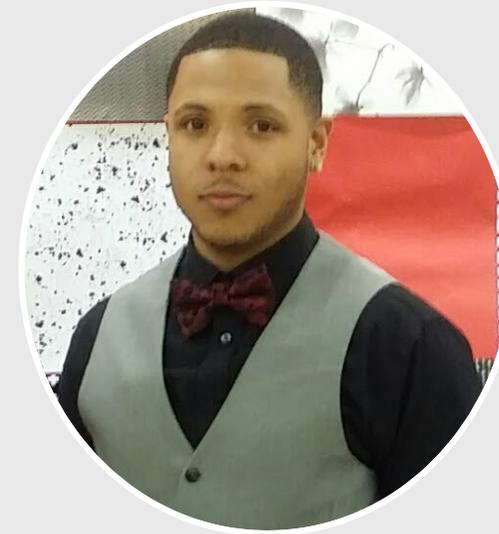


Roxanne Beyer

State Program Administrator

651-201-4229

roxanne.beyer@state.mn.us



Russell Williams

Office and Administrative Specialist

651-201-3704

russell.l.williams@state.mn.us

Our Team



Ben Zwart, P.E.

Public Health Engineer

651-201-3715

Benjamin.Zwart@state.mn.us



Rex Stromquist, P.E.

Public Health Engineer

651-201-3713

Rex.Stromquist@state.mn.us



Frances Adimoraegbu, E.I.T

Public Health Engineer

651-201-3711

frances.adimoraegbu@state.mn.us



Michael Mireau, NCARB

Public Health Architect

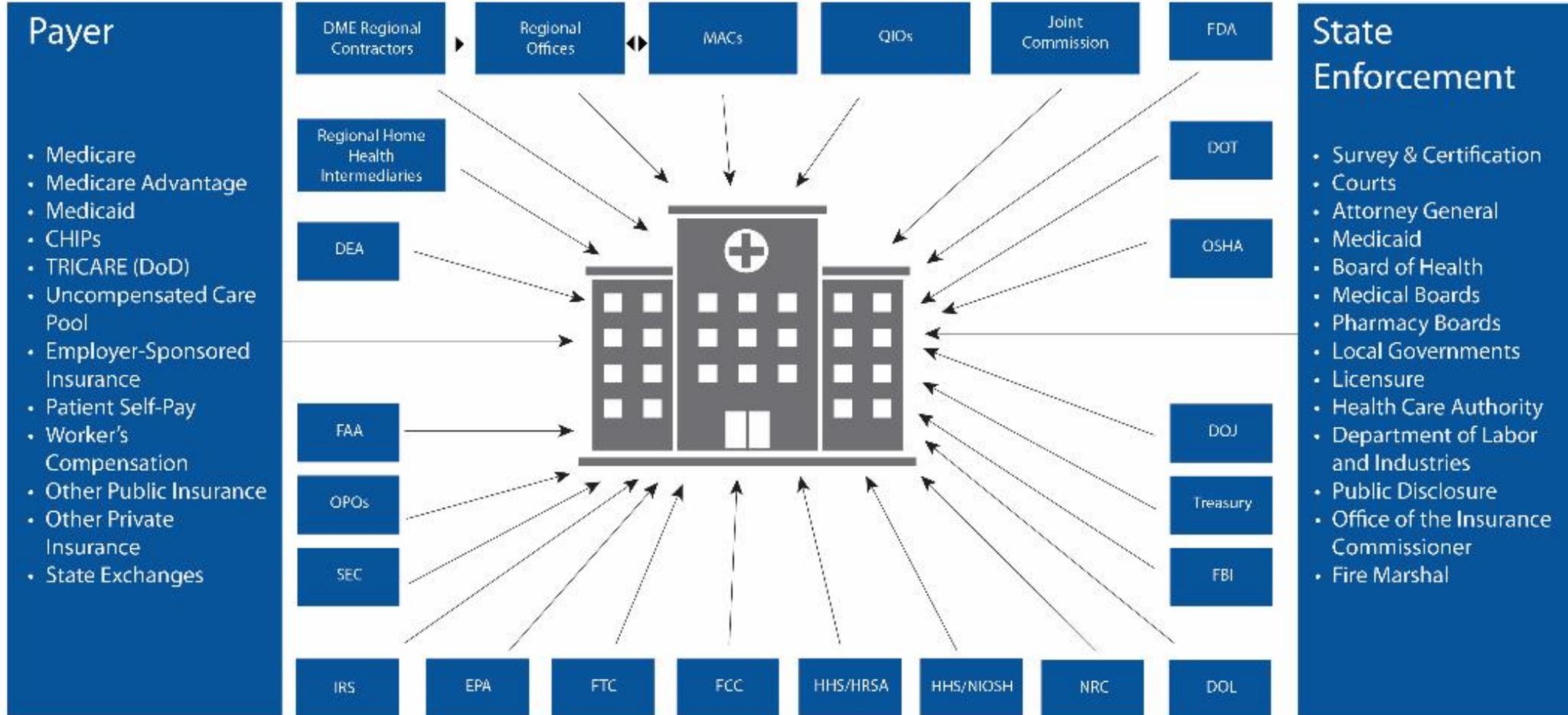
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michael.mireau@state.mn.us

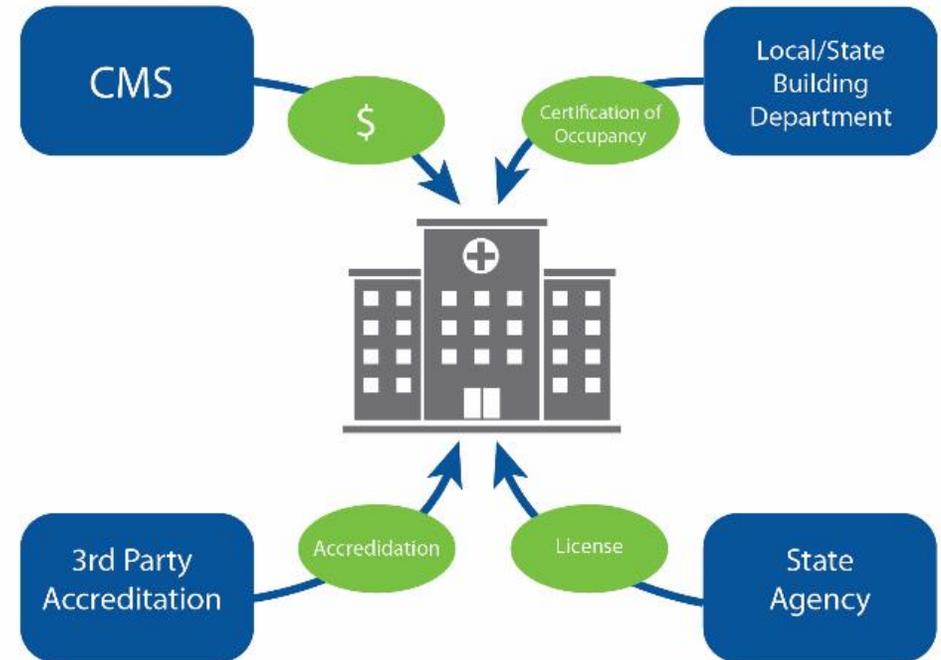
WHY DO WE REVIEW



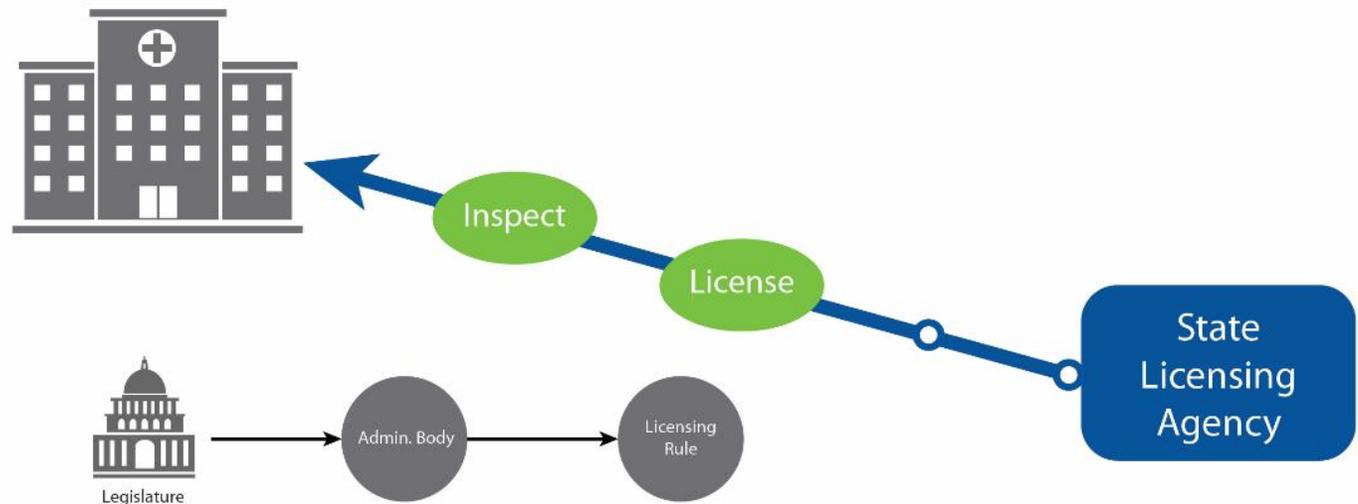
Who are some AHJ's?



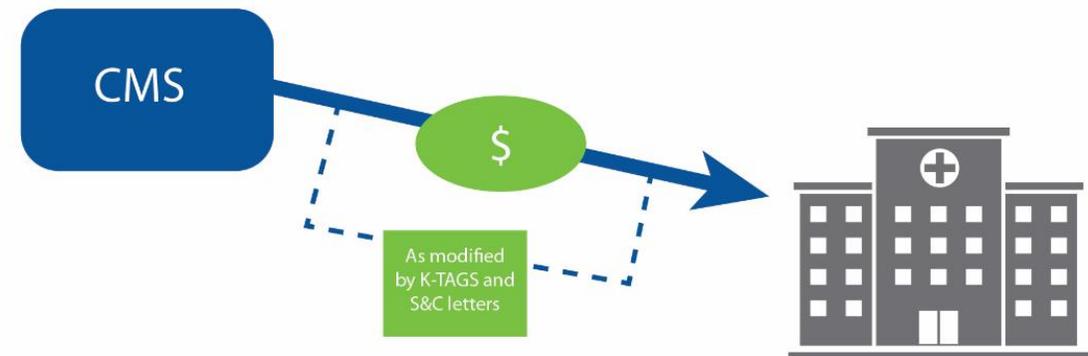
- There are many different authorities having jurisdiction (AHJ) in healthcare. Literally, hundreds
- Of the hundreds of AHJ's, here are a few...
 - MDH
 - CMS
 - State Fire Marshal
 - Joint Commission (3rd Party Accreditation)
 - Labor and Industry



- MDH is an authority having jurisdiction because we license the healthcare facility through the Health Regulation Division
- We get to work together because licensure requirements include physical environment
- In order to operate as a healthcare facility, you must have a state license and comply with all licensure requirements



- Federal Certification, Centers for Medicare/Medicaid Services (CMS)
- Federal certification is optional, but if you want CMS funding, you must comply with their requirements
- CMS has entered into a contract with MDH to enforce certification requirements
- CMS also deems other organizations

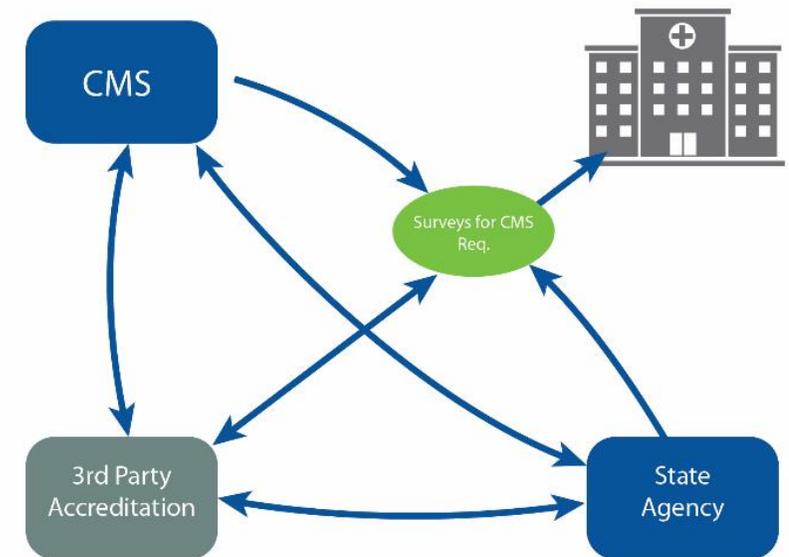


State Fire Marshal

- The Minnesota State Fire Marshal enforces the Minnesota State Fire Code
- The SFM has jurisdiction over healthcare facilities
- Highly trained and skilled in fire safety. MDH has an interagency agreement with the SFM to perform life safety code surveys for compliance with CMS
- You will see them with MDH performing construction inspections and life safety code surveys

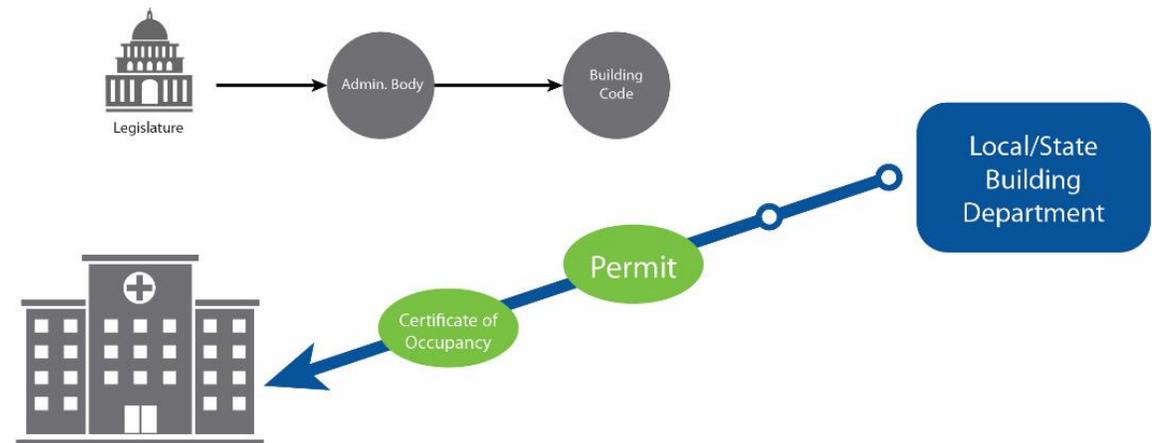
Third Party Accreditation (Joint Commission)

- The Joint Commission is an independent, not-for-profit organization. Most common in MN
- ‘Deemed’ by CMS as having standards and a survey process that meets or exceeds Medicare's requirements
- There are other organizations ‘deemed’ by CMS
- Facilities have the option to be accredited by accrediting organizations or CMS
- S&C 17-40-AO, List of accrediting orgs for CMS



Labor and Industry

- All building construction must meet state/local building codes
 - Building, electrical, mechanical, plumbing codes
 - Accessibility code
 - Elevator code
 - Sprinkler code



- Example: We look for all doors in the means of egress to be 44". Labor and Industry will ensure proper push/pull clearances at the doors

- Intricate web of AHJ's
- We are here to help facilitate your projects. We are part of the team
- We generally look at licensure and certification but will try to point out other issues we see
- The easier your project goes for you the easier your project goes for us. We do not like to deal with issues after construction when we can work out any wrinkles during design

Why Do We Review

Each of the applicable licensure rules include a requirement that construction plans and specifications be reviewed by the Department, either prior to commencement of the construction project or prior to occupancy of the spaces associated with the construction project

Why Do We Review

For example, MN. Rule 4645.5400 requires that; “Before construction is begun, plans and specifications covering construction of new buildings, additions to existing buildings, or for major remodeling or alterations of existing buildings shall be submitted in duplicate to the commissioner of health for its approval”

- Sending the plans to Engineering is adequate

Why Do We Review

As with other licensed health care categories, MN. Rule 4645.5300 requires that preliminary plans or sketches be submitted to the Department prior to the development of final construction documents

- We are part of the team and enjoy preliminary reviews to help the design process and minimize problems later

Why Do We Review

The licensed categories and associated rule part are as follows:

Hospital: 4645.5400

Nursing Home: 4658.4005

Boarding Care Home 4660.0500

Why Do We Review

Supervised Living Facility	4665.0400, subp. 4
Residential Hospice	4664.0360
Freestanding Outpatient Surgical Center	4675.0300, subp. 6

Why Do We Review

These licensed categories also have companion federal certification categories. These are as follows:

Licensure

Hospital

Nursing Home

Certification

Hospital

Skilled Nursing Facility
or Skilled Nursing
Facility/Nursing Facility

Why Do We Review

Licensure

Boarding Care
Home

Supervised Living Facility

Certification

Nursing Facility II

Intermediate Care
Facility for Individuals
with Intellectual
Disabilities

Why Do We Review

Licensure

Residential Hospice

Freestanding Outpatient Surgical Center

No Licensure

Certification

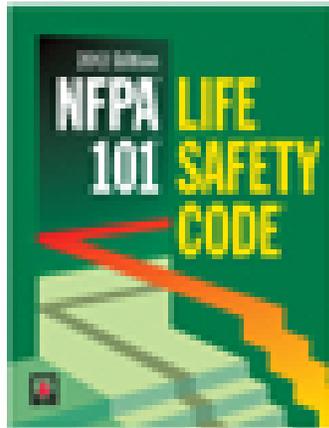
Hospice

Ambulatory Surgical Center

End Stage Renal Disease
Provider

Why Do We Review

Each of the federally certified categories has a requirement regarding compliance with National Fire Protection Association (NFPA) Standard 101 (Life Safety Code, 2012 edition)



Why Do We Review

Part of the plan review process involves assuring that the proposed design is compliant with the applicable provisions of the Life Safety Code (12) and other physical plant requirements detailed in the applicable Code of Federal Regulations (CFR)

Question????

What does CMS say about plan review

Why Do We Review

The applicable CFR cite for each category is as follows:

Hospital

42 CFR §482.41(b)

Critical Access Hospital

42 CFR §485.623(c)

Example Conditions of Participation

§ 482.41 Condition of participation: Physical environment.

The hospital must be constructed, arranged, and maintained to ensure the safety of the patient, and to provide facilities for diagnosis and treatment and for special hospital services appropriate to the needs of the community.

(a) Standard: Buildings. The condition of the physical plant and the overall hospital environment must be developed and maintained in such a manner that the safety and well-being of patients are assured.

(1) There must be emergency power and lighting in at least the operating, recovery, intensive care, and emergency rooms, and stairwells. In all other areas not serviced by the emergency supply source, battery lamps and flashlights must be available.

(2) There must be facilities for emergency gas and water supply.

(b) Standard: Life safety from fire.

Example Conditions of Participation

(1) Except as otherwise provided in this section -

(i) The hospital must meet the applicable provisions and must proceed in accordance with the Life Safety Code (NFPA 101 and Tentative Interim Amendments TIA 12-1, TIA 12-2, TIA 12-3, and TIA 12-4.) Outpatient surgical departments must meet the provisions applicable to Ambulatory Health Care Occupancies, regardless of the number of patients served.

(ii) Notwithstanding paragraph (b)(1)(i) of this section, corridor doors and doors to rooms containing flammable or combustible materials must be provided with positive latching hardware. Roller latches are prohibited on such doors.

(2) In consideration of a recommendation by the State survey agency or Accrediting Organization or at the discretion of the Secretary, may waive, for periods deemed appropriate, specific provisions of the Life Safety Code, which would result in unreasonable hardship upon a hospital, but only if the waiver will not adversely affect the health and safety of the patients.

(3) The provisions of the Life Safety Code do not apply in a State where CMS finds that a fire and safety code imposed by State law adequately protects patients in hospitals.

(4) The hospital must have procedures for the proper routine storage and prompt disposal of trash.

Example Conditions of Participation

(5) The [hospital](#) must have written fire control plans that contain provisions for prompt reporting of fires; extinguishing fires; protection of patients, personnel and guests; evacuation; and cooperation with fire fighting authorities.

(6) The [hospital](#) must maintain written evidence of regular inspection and approval by [State](#) or local fire control agencies.

(7) A [hospital](#) may install alcohol-based hand rub dispensers in its facility if the dispensers are installed in a manner that adequately protects against inappropriate access;

(8) When a sprinkler system is shut down for more than 10 hours, the [hospital](#) must:

(i) Evacuate the building or portion of the building affected by the system outage until the system is back in service, or

(ii) Establish a fire watch until the system is back in service.

Example Conditions of Participation

(9) Buildings must have an outside window or outside door in every sleeping room, and for any building constructed after July 5, 2016 the sill height must not exceed 36 inches above the floor. Windows in atrium walls are considered outside windows for the purposes of this requirement.

(i) The sill height requirement does not apply to newborn nurseries and rooms intended for occupancy for less than 24 hours.

(ii) The sill height in special nursing care areas of new occupancies must not exceed 60 inches.

Why Do We Review

Skilled Nursing Facility/
Nursing Facility

42 CFR §483.90(a)

Nursing Facility II

42 CFR §483.90(a)

ICF/IID

42 CFR §483.470(j)

Why Do We Review

Hospice

42 CFR §418.100(d)

Ambulatory Surgical Center

42 CFR §416.44(b)

ESRD

42 CFR §494.60(d)(1)

Why Do We Review

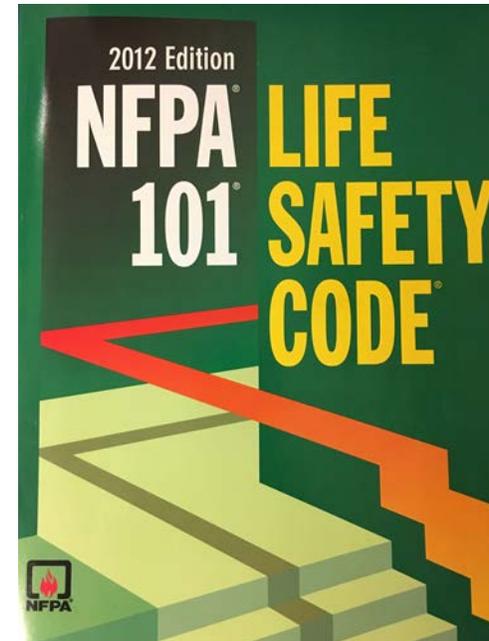
Our staff has limited knowledge of the State Building Code and the Minnesota State Fire Code. If, during the plan review process, they note some issues with compliance with either of these Codes, they will contact the appropriate staff at the Department of Public Safety or Department of Labor and Industry to discuss

HOSPITAL LICENSURE

- Minnesota Rule Chapter 4640
- Minnesota Rule Chapter 4645
- Minnesota Statute 144.55
 - References 42CFR 1395, Federal hospital certification regulations
- FGI Guidelines, Guidelines for Design and Construction of Health Care Facilities (2014 Edition)

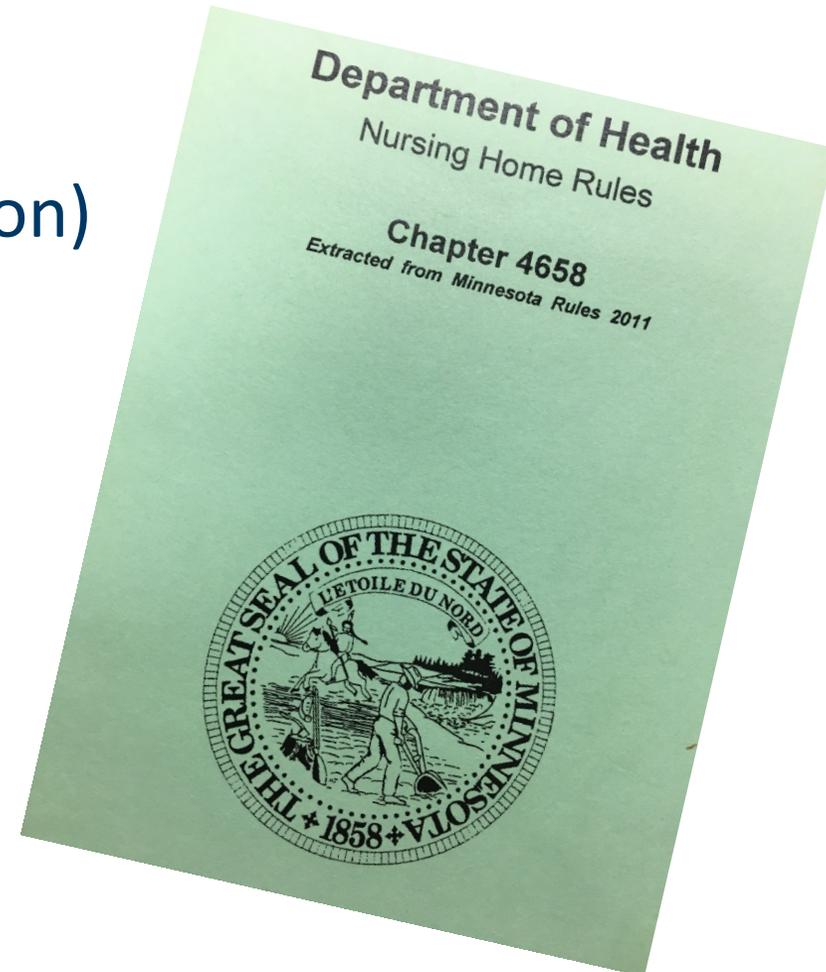
HOSPITAL CERTIFICATION

- NFPA 101 (2012 Edition)
 - Chapter 18, New (July 5, 2016)
 - Chapter 19, Existing



NURSING HOME LICENSURE

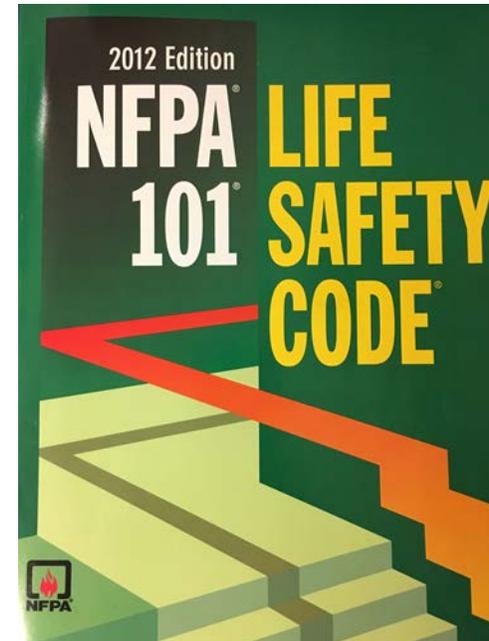
- Minnesota Rule 4658
 - References NFPA 101 (1985 Edition)
- Minnesota Statute 144A.04



Nursing Home Certification

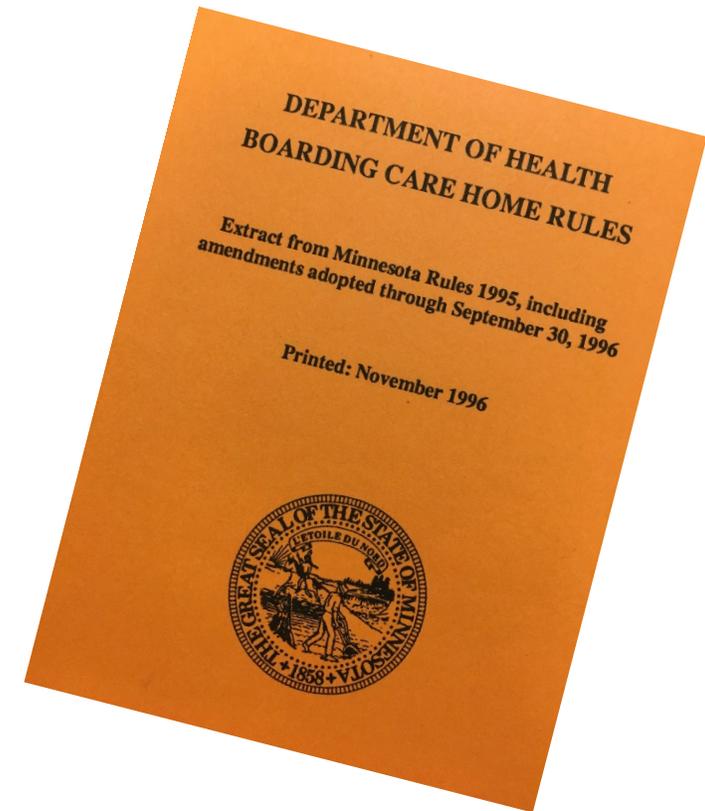
NFPA 101 (2012 Edition)

- Chapter 18, New (July 2016)
- Chapter 19, Existing



Boarding Care Licensure

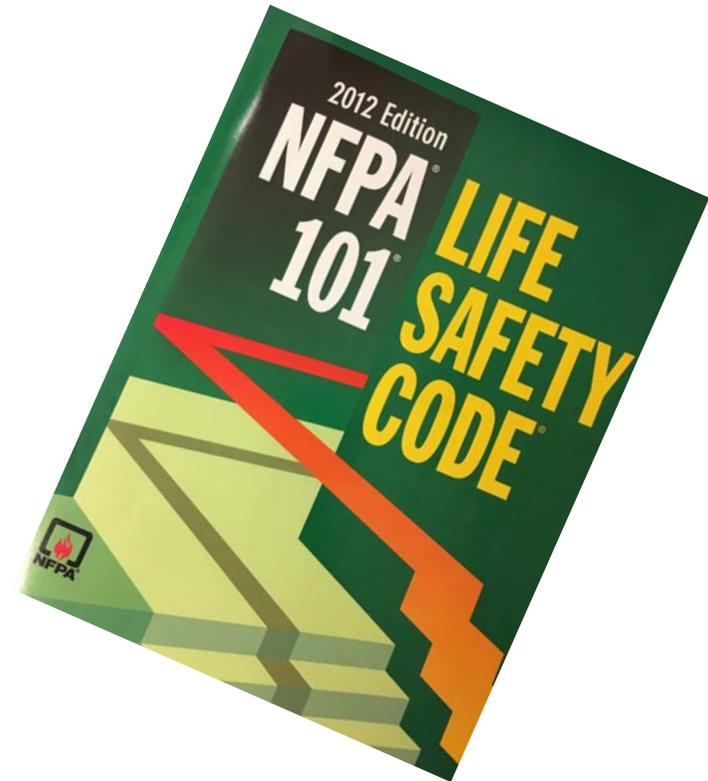
- Minnesota Rules 4660
- Minnesota Rules 4655 (operation)



Boarding Care Certification

NFPA 101 (2000 Edition)

- Chapter 18, New (March 2003)
- Chapter 19, Existing

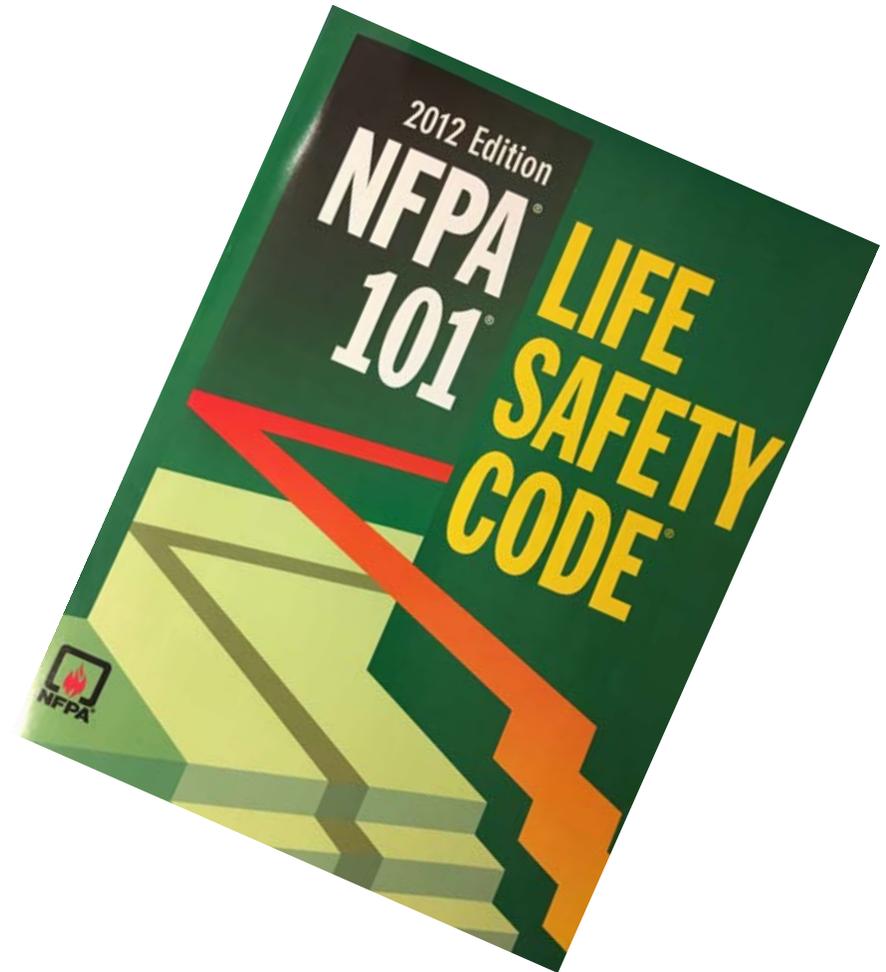


Residential Hospice Licensure

- Minnesota Rule 4664
 - (12 Bed Maximum)
- 1997 LSC (Licensed only)
 - Chapter 22 (Board & Care)

Hospice Certification

- NFPA 101 (2012 Edition)
 - Chapter 18 & 19



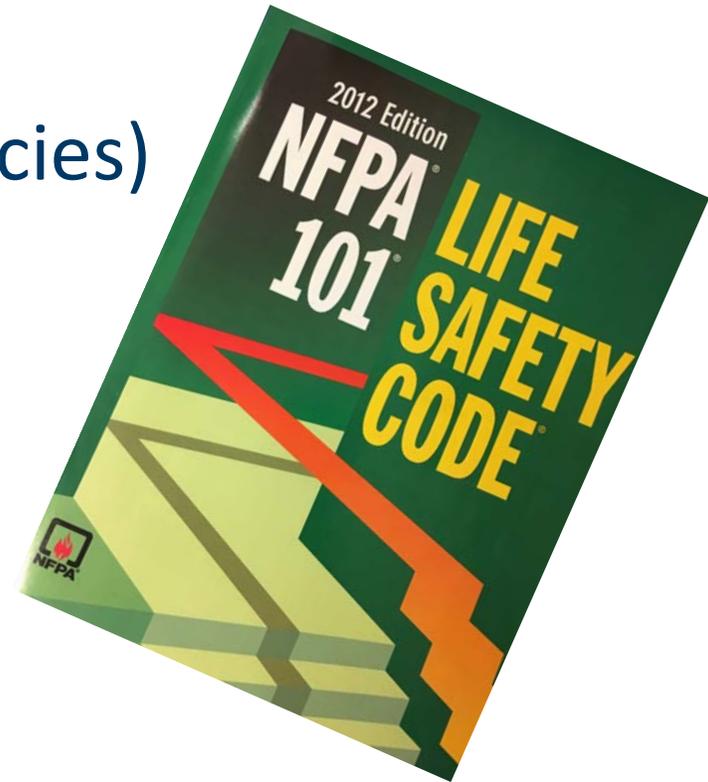
Supervised Living Facility Licensure

- Minnesota Rule 4665

ICF/IID Certification

- NFPA 101 (2012 Edition) Chapter 32/33

➤ (Residential Board & Care Occupancies)



Freestanding Outpatient Surgical Center Licensure

- Minnesota Rules 4675

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CHAPTER 4675
DEPARTMENT OF HEALTH
OUTPATIENT SURGICAL CENTERS

4675.0100 DEFINITIONS.
4675.0200 LEGAL AUTHORITY.
4675.0300 LICENSURE.
4675.0400 ADMINISTRATION.
4675.0500 MEDICAL STAFF.
4675.0600 ADMINISTRATIVE AREAS.

PATIENT TREATMENT AREAS

4675.0700 SEPARATE TREATMENT CENTERS.
4675.0800 PATIENT PREPARATION AREA.
4675.0900 SURGICAL SUITE.
4675.1000 POSTOPERATIVE RECOVERY AREA.
4675.1100 GENERAL SERVICE AREAS.
4675.1200 MEDICAL GASES AND FLAMMABLE LIQUIDS.
4675.1300 GENERAL MAINTENANCE.
4675.1400 MECHANICAL AND ELECTRICAL SYSTEMS.
4675.1500 EMERGENCY ELECTRICAL SERVICE.
4675.1600 AIR CONDITIONING, HEATING, AND VENTILATION.
4675.1700 EXCEPTIONS.
4675.1800 FILTER EFFICIENCIES.
4675.1900 DUCTS.
4675.2000 LININGS IN DUCTS.
4675.2100 SPECIAL EXHAUST SYSTEMS.

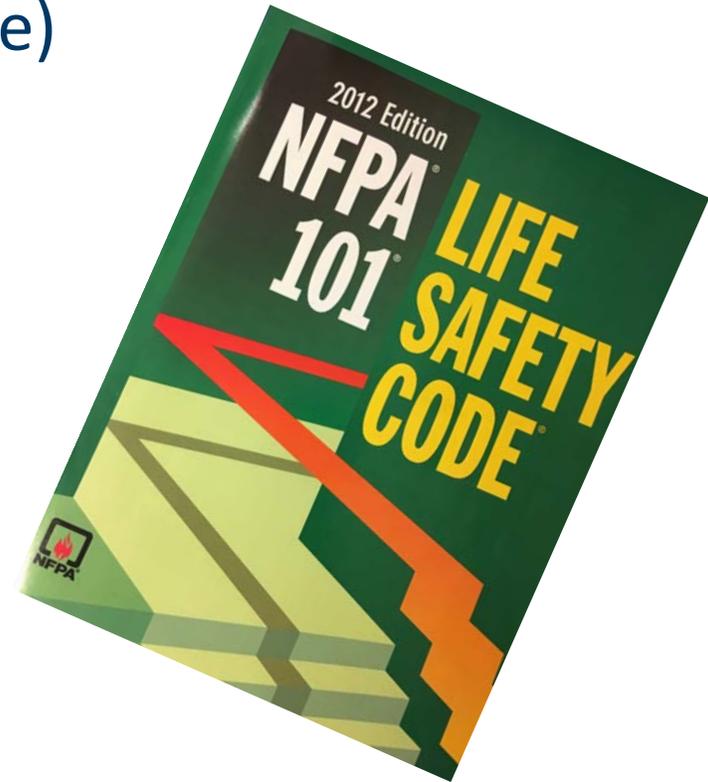
HANDLING AND DISPOSAL OF SOLID WASTE

4675.2205 INFECTIOUS WASTE AND PATHOLOGICAL WASTE.
4675.2700 LAUNDRY REQUIREMENTS.
4675.2800 TABLE A; GENERAL PRESSURE RELATIONSHIPS AND M
REQUIREMENTS.

4675.0100 DEFINITIONS

Ambulatory Surgical Center Certification

- NFPA 101 (2012 Edition)
 - Chapter 20/21 (ambulatory health care)



End Stage Renal Dialysis Licensure

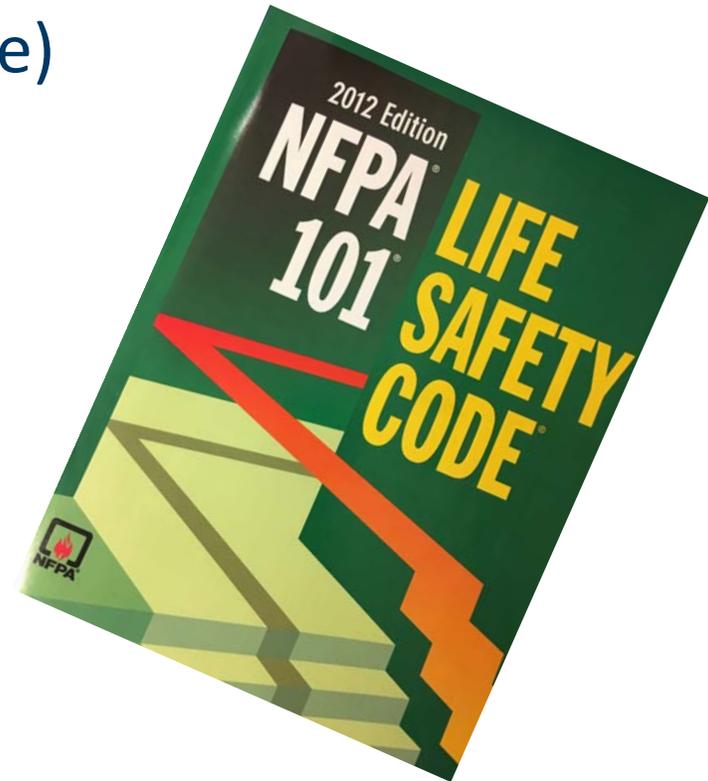
- Not Licensed in Minnesota
- Still must comply with state/local building codes. Including accessibility

ESRD Certification

- NFPA 101 (2012 Edition)
 - Chapter 20/21(ambulatory health care)

Only if...

- if attached to high hazard
- If not on level of discharge





WHEN DO WE REVIEW



When Do We Review

- MN. Rule 4645.5400 requires that; “Before construction is begun, plans and specifications covering construction of new buildings, additions to existing buildings, or for major remodeling or alterations of existing buildings shall be submitted in duplicate to the commissioner of health for its approval”

Federal Certification

Repair

Renovation

Modification

Reconstruction

Change of Use

Change of Occupancy

Addition

State Licensure

Redecoration/Replace in Kind

Addition of New Resident Serv.

When Do We Review

“Addition of new resident services” means the commencement of a resident service, such as physical or occupational therapy, that is not being provided for the residents as of November 12, 1996

➤ 4658.0010, subp.1a

When Do We Review

“Redecoration” means the repainting of walls or ceilings, or the covering or recovering of walls, ceilings, or floors with suitable interior finishing materials

➤ 4658.0010, subp.13a

When Do We Review

“Replace-in-kind” means the removal of mechanical or electrical equipment or construction materials from facility space and subsequent installation of new or used equipment or construction materials with similar operating capability, function, and physical composition

➤ 4658.0010, subp.13c

When Do We Review

“Remodel” means reconstruction of existing facility space, including floors, walls, and ceilings. Remodeling includes reconstruction work necessary to change the function of the facility space or to facilitate a change in operating capability or physical composition of existing equipment, fixtures, or appurtenances

➤ 4658.0010, subp.13b

- No new requirements, just new nomenclature. We are not changing the way we are doing business.
- For licensure or certification we would not review interior finish upgrades, repairs or replacement in kind



WHAT DO WE NEED

What Do We Need

Preliminary discussions regarding project concept, proposed designs, and preliminary plan reviews are generally conducted in face-to-face meetings in our offices. In most cases, documents brought to these meetings by professional designers and facility staff are not retained on file by the Department

What do we need

The review of final construction documents takes place in two different ways. A facility (generally through the professional designer) may submit the final documents via USPS or courier. These plans are logged into a tracking system and the review process begins

What Do We Need

The facility may request a face-to-face plan review. Again, the professional designer(s) generally attend these meetings. Following the meeting, the plans are added to the tracking system. In many cases, the facility/designer leaves our offices with a plan approval letter in hand

What Do We Need

The submittal of final construction documents includes a number of items as follows:

- A completed Plan Review Submittal Form
- One (1) hard copy of the final construction plans and specifications
- Electronic copy of the final construction plans
- Appropriate fee according to the submittal form

What Do We Need

The plan review submittal form is found on the Minnesota Department of Health website at

www.health.state.mn.us/divs/fpc/engineering/

- It must be filled out completely, including the estimated cost of the project and building type
- We just added HFID and offsite unit of hospital
- Use new form from website at all times. We try to keep it updated

Construction Plan Submittal Form

General Information		
Project Name: Enter the name of the project		Date: Enter the date
Project Narrative: Enter a description of the project		
Facility Administrator: Enter name		Phone: Enter phone
Administrator's Email: Enter email address		
Facility Name: Enter facility name	Facility Address: Enter facility address	
Project Address: Enter the project address		HFID # Enter HFID #
City: Enter city	State: MN Zip: Enter zip	County: Enter county
Submitter: Enter name		Phone: Enter phone
Submitter's Email: Enter email address		
Submitter's Firm Name: Enter firm name		
Firm Mailing Address: Enter firm address		

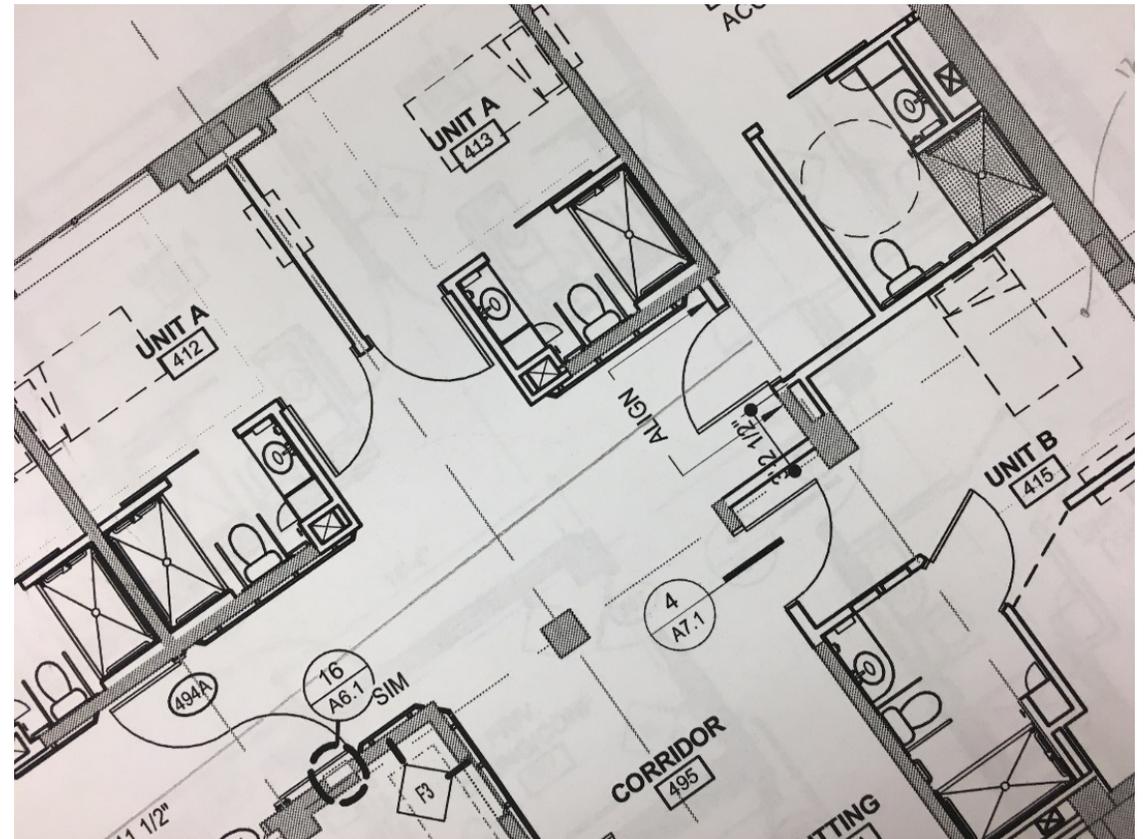
Building and Plan Code Information	
Number of Floors: Enter number of floors	Area Size in Square Feet: Enter square feet
Project Type:	
New Construction <input type="checkbox"/> Repair <input type="checkbox"/> Renovation <input type="checkbox"/> Modification <input type="checkbox"/> Reconstruction <input type="checkbox"/> Change Occupancy <input type="checkbox"/> Change of Use <input type="checkbox"/>	
Type of Construction:	
I (443) <input type="checkbox"/> I (332) <input type="checkbox"/> II (222) <input type="checkbox"/> II (111) <input type="checkbox"/> II (000) <input type="checkbox"/> III (211) <input type="checkbox"/> III (200) <input type="checkbox"/> IV (2HH) <input type="checkbox"/> V (111) <input type="checkbox"/> V (000) <input type="checkbox"/>	
State License Type:	Federal Certification Type:
FOOSC <input type="checkbox"/> HSP <input type="checkbox"/> NH <input type="checkbox"/> RES HOSPICE <input type="checkbox"/> SLF A <input type="checkbox"/> SLF B <input type="checkbox"/> SLF A & B <input type="checkbox"/> Off Site Unit of HSP <input type="checkbox"/>	ASC <input type="checkbox"/> CAH <input type="checkbox"/> ESRD <input type="checkbox"/> HSP <input type="checkbox"/> HOSPICE <input type="checkbox"/> ICF/IID <input type="checkbox"/> SNFNF <input type="checkbox"/>

What Do We Need

The hard copy of the final construction plans must be certified in accordance with MN. Rule 1800.4200. Plans and specifications that are not properly certified are not entered in the tracking system until the problem is corrected

What Do We Need

This means that the plan review process is put on hold for those plans and specifications



What Do We Need

The electronic copy of the documents must also be properly certified and an exact copy of the hard copy submittal

- Failure to provide any one item will delay your project from being completely entered in our system
- Any time construction activity takes place in a healthcare facility, plans should be submitted for review and approval
- The main exception is interior finish replacement
- Remember, we review plans to help the facility. Not be a pain to the facility or engineer/architect
- Please do not send MDH all drawing changes throughout construction. Only changes that affect licensure and certification requirements. If a change is sent to MDH, additional plan review fees may be required

What Do We Need

Upon completion of the plan review process, the hard copies are recycled



QUESTIONS





All You Ever Wanted to Know About Healthcare Plan Review and Inspection

Thank You!

Bob Dehler, P.E. | Engineering Program Manager