



New Hampshire Department of Safety
Division of Fire Standards and Training and Emergency Medical Services

33 Hazen Drive, Concord, NH 03305

1-800-371-4503 or 603-223-4200

FAX: 603-271-1091

FIRE STANDARDS AND TRAINING COMMISSION

CURRICULUM DEVELOPMENT AND APPROVAL GUIDE

Driver Operator Pumping Apparatus NFPA 1002 2017

Approved by the New Hampshire Fire Standards and Training Commission

Commission Approval

Date:

9/5/19

Curriculum Information Sheet

Name of Certification:
(including NFPA Standard)

Standard for Fire Apparatus Driver/Operator Pumps
NFPA Standards #: 1002 Edition Date: 2017 Next Edition: 2022

Type of Certificate:

NH Certification: _____ Pro-Board Certified X
Certificate of Attendance: _____

Curriculum Committee Approval

Yes _____ Date: June 6, 2019

Proboard/Certification requirements:

*Please attached all job sheets
and NFPA matrix*

Question bank validation: Pending
Number of exam questions: 50
Job Sheets updated and formatted: Yes
NFPA Matrix: Pending

Reference Material for Students:
Include edition numbers

IFSTA Pumping and Aerial Driver/Operator Handbook 3rd Edition

Class Size: Min: 8 Max: 16 **Number of Hours:** 32

Module Breakdown:

| | |
|--|------------------|
| <u>1 Suppression Systems</u> | Hours: <u>4</u> |
| <u>2 Understanding Pumping Apparatus</u> | Hours: <u>4</u> |
| <u>3 Operating Pumping Apparatus</u> | Hours: <u>8</u> |
| <u>4 Maintaining Pumping Apparatus</u> | Hours: <u>4</u> |
| <u>5 Pumping on the Fire Ground</u> | Hours: <u>12</u> |

Prerequisites:

Valid Driver's License
Driver/Operator All Vehicle or Emergency Vehicle

Requirements for Testing:

Successful completion of all training requirements

What type of factor determines successful completion:

Attach sample schedule of proposed training program:
Attach roster of all visiting committee members

Yes x No _____
Yes x No _____

Public Hearing Dates Daytime: _____
60 day comment period window Evening: _____

Please attach all public comment material to this document

J. Talley

6/6/19

Driver Operator – Pumping Apparatus

The Fire Standards and Training Commission is seeking public comment on the following revision of the Driver Operator – Pumping Apparatus NFPA 1002 program.

The proposed program recommends little change to the existing program. Below is a highlight of the changes.

- **NFPA Standard Changes:**
 - Fire Fighter I removed as a prerequisite for meeting 1002, Chapter 5
 - Section 5.1.1, General Knowledge, requirements expanded to account for removal of Fire Fighter I requirement
 - Section 5.2, Operations, requirements expanded to account for removal of Fire Fighter I requirement
- **Program Changes:**
 - Added content to address the requirements of Section 5.1.1
 - Modified existing Skill Drills to address the requirements of Section 5.2
 - Modified delivery format to decrease lecture and increase hands-on & small group activities
 - Reduced program hours from 36 to 32 on account of delivery format changes
 - Revised & Re-ordered course outline to account for delivery format changes
 - Revised Skill Sheets for certification testing

Public Hearings held: July 10, 2019 at 3:00PM and 5:00PM

- Public Hearing Information attached

Public comment period June 17, 2019 through August 16, 2019.

- There was one comment submitted.

Comment 1: Dana Cullen

I would definitely like to see firefighter 1 stay in as a pre req. I think it makes sense for someone operating a pump to also have that basic firefighting training

NFPA 1002-2017 VISITING COMMITTEE ROSTER

- 1. Eric Uitts**
- 2. Robert Field**
- 3. Andy Parent**
- 4. John Uitts**
- 5. David Quick**
- 6. Scott Cathy**
- 7. Rick Payne**
- 8. Jeff Phillips**
- 9. Dan Tice**
- 10. Andy Anderson**
- 11. Scott Doherty**

Driver / Operator – Pumping Apparatus Sample Course Schedule

Day Delivery

| | | | |
|--------|-----------|---|--------------|
| Day 1 | 0800-1200 | Module 1: Suppression Systems | All Students |
| | 1230-1630 | Module 2: Understanding Pumping Apparatus | |
| Day 2A | 0800-1200 | Module 3: Operating Pumping Apparatus, Block 1 | Group A |
| | 1230-1630 | Module 3: Operating Pumping Apparatus, Block 2 | |
| Day 2B | 0800-1200 | Module 3: Operating Pumping Apparatus, Block 1 | Group B |
| | 1230-1630 | Module 3: Operating Pumping Apparatus, Block 2 | |
| Day 3 | 0800-1200 | Module 4: Maintaining Pumping Apparatus | All Students |
| | 1230-1630 | Module 5: Pumping Apparatus on the Fire Ground, Block 1 | |
| Day 4A | 0800-1200 | Module 5: Pumping Apparatus on the Fire Ground, Block 2 | Group A |
| | 1230-1630 | Module 5: Pumping Apparatus on the Fire Ground, Block 3 | |
| Day 4B | 0800-1200 | Module 5: Pumping Apparatus on the Fire Ground, Block 2 | Group B |
| | 1230-1630 | Module 5: Pumping Apparatus on the Fire Ground, Block 3 | |

| | | | |
|------|-----------|---------------------------------|---------|
| Exam | 0800-1200 | Written & Practical Skills Exam | Group A |
| | 1230-1630 | | Group B |

Evening Delivery

| | | | |
|---------|-----------|---|--------------|
| Night 1 | 1800-2200 | Module 1: Suppression Systems | All Students |
| Night 2 | 1800-2200 | Module 2: Understanding Pumping Apparatus | All Students |
| Day 1A | 0800-1200 | Module 3: Operating Pumping Apparatus, Block 1 | Group A |
| | 1200-1630 | Module 3: Operating Pumping Apparatus, Block 2 | |
| Day 1B | 0800-1200 | Module 3: Operating Pumping Apparatus, Block 1 | Group B |
| | 1200-1630 | Module 3: Operating Pumping Apparatus, Block 2 | |
| Night 3 | 1800-2200 | Module 4: Maintaining Pumping Apparatus | All Students |
| Night 4 | 1800-2200 | Module 5: Pumping Apparatus on the Fire Ground, Block 1 | All Students |
| Day 2A | 0800-1200 | Module 5: Pumping Apparatus on the Fire Ground, Block 2 | Group A |
| | 1200-1630 | Module 5: Pumping Apparatus on the Fire Ground, Block 3 | |
| Day 2B | 0800-1200 | Module 5: Pumping Apparatus on the Fire Ground, Block 2 | Group B |
| | 1200-1630 | Module 5: Pumping Apparatus on the Fire Ground, Block 3 | |

| | | | |
|------|-----------|---------------------------------|---------|
| Exam | 0800-1200 | Written & Practical Skills Exam | Group A |
| | 1230-1630 | | Group B |

Pumping Apparatus Checks Skill Sheet DOP-1

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|---|---|--|
| Walk-Around / Visual Checks | | |
| Checks for obvious apparatus damage and leaks | 1 | |
| Checks water tank level | 1 | |
| Checks condition of all intakes and discharges | 1 | |
| Checks primer fluid level (If applicable) | 1 | |
| Checks transfer case for fluid leaks | 1 | |
| Checks condition of pump heat shields (if applicable) | 1 | |
| Checks condition of all hose loads & appliances | 1 | |
| Operational Checks | | |
| Engages pump and circulates water | 1 | |
| Checks primer operation | 1 | |
| Checks that pump builds pressure | 1 | |
| Checks operation of pressure control device: | 1 | |
| <input type="checkbox"/> Pressure Relief Valve | | |
| <input type="checkbox"/> Pressure Governor | | |
| Checks operation of all gauges and indicators | 1 | |
| Checks operation of all discharges and intakes | 1 | |
| Checks operation of all drain valves, bleeders, blow-outs | 1 | |
| Checks operation of all auxiliary cooling & heating systems | 1 | |
| Checks for any leaks with pump operating | 1 | |
| Foam System Check (If Applicable) | | |
| Checks foam concentrate condition and tank level | 1 | |

| | | |
|--|-----------|--|
| Checks operation of foam system | 1 | |
| Checks operation of foam tank refill system (if applicable) | 1 | |
| Documentation | | |
| Completes Pump Check form | 1 | |
| Completes Pump Maintenance / Repair form if deficiencies are found | 1 | |
| Total | 21 | |

Critical Criteria

- _____ Failure to complete 21 steps in a safe manner
- _____ Failure to verify that apparatus is secure (parking brake applied & chocks set) prior to starting Walk-Around / Visual Checks

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Emergency Response
Skill Sheet DOP-9**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|--|---|--|
| Receives an emergency call (confirms location & nature of response) | 1 | |
| Completes a 360° safety check | 1 | |
| Dons PPE per department policies & procedures | 1 | |
| Enters cab safely; adjusts driver's seat, steering wheel, & mirrors | 1 | |
| Confirms that the apparatus is safe to respond (crew seated & belted, equipment in cab secure) | 1 | |
| Total | 5 | |

Critical Criteria

_____ Failure to complete 5 steps in a safe manner

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Establishing & Operating in Work Areas
Skill Sheet DOP-3**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|---|----------|--|
| Drives the apparatus to the simulated fire ground location | 1 | |
| Assesses simulated fire ground location for hazards | 1 | |
| Positions apparatus appropriately according to the given scenario & assignment, identified & potential hazards, and terrain | 1 | |
| Verifies that the parking brake is set, the wheel chocks are deployed, and the apparatus is secure | 1 | |
| Correctly deploys traffic control devices | 1 | |
| Describes actions to be taken to ensure continued scene safety | 1 | |
| Total | 6 | |

Critical Criteria

- _____ Failure to complete 6 steps in a safe manner
- _____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Establishing a Water Supply – Pressurized Source
Skill Sheet DOP-4P**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|---|---|--|
| Correctly engages the pump and circulates tank water | 1 | |
| Correctly flushes and dresses the hydrant | 1 | |
| Connects the supply hose to the hydrant and pump intake and verifies there are no kinks | 1 | |
| Fully opens the hydrant | 1 | |
| Opens the pump intake and transitions from tank water to hydrant water | 1 | |
| Notes the incoming hydrant pressure | 1 | |
| Total | 6 | |

Critical Criteria

- _____ Failure to complete 6 steps in a safe manner
- _____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Establishing a Water Supply – Static Source
Skill Sheet DOP-4S**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Evaluator: _____

Time Allowed: TBD

Total Time: _____

| | | |
|--|----------|--|
| Removes hard suction hose from the apparatus & connects strainer if needed | 1 | |
| Connects hard suction hose to pump intake | 1 | |
| Repositions apparatus to connect hard suction hose to static source (As needed) | 1 | |
| Verifies that the parking brake is set, the wheel chocks are deployed, and the apparatus is secure | 1 | |
| Connects hard suction hose to dry hydrant connection / places hard suction hose in static water source | 1 | |
| Primes pump | 1 | |
| Correctly engages pump and circulates water to maintain the draft | | |
| Total | 6 | |

Critical Criteria

_____ Failure to complete 6 steps in a safe manner

_____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Producing an Effective Fire Stream – Pressurized Source
Skill Sheet DOP-5P**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|---|---|--|
| Correctly engages the pump and circulates tank water | 1 | |
| Determines the required flow of the hand line to be used; calculates the required PDP | 1 | |
| When directed to do so, charges the hand line using tank water & sets the PDP to provide the correct pressure / flow | 1 | |
| Correctly sets the pressure control device: <input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Pressure Governor | 1 | |
| When directed to do so, transitions to the pressurized water source | 1 | |
| Determines the required flow of the master stream to be used; calculates the required PDP | 1 | |
| When directed to do so, charges the master stream & sets the PDP to provide the correct pressure / flow | 1 | |
| Correctly sets the pressure control device: <input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Pressure Governor | 1 | |
| Refills the apparatus booster tank | 1 | |
| Total | 9 | |

Critical Criteria

- _____ Failure to complete 9 steps in a safe manner
- _____ Failure to calculate and set the correct PDPs
- _____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Producing an Effective Fire Stream – Static Source
Skill Sheet DOP-5S**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|---|----------|--|
| Correctly establishes a static water supply | 1 | |
| Determines the required flow of the hand line to be used; calculates the required PDP | 1 | |
| When directed to do so, charges the hand line using tank water & sets the PDP to provide the correct pressure / flow | 1 | |
| Correctly sets the pressure control device: <input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Pressure Governor | 1 | |
| Determines the required flow of the master stream to be used; calculates the required PDP | 1 | |
| When directed to do so, charges the master stream & sets the PDP to provide the correct pressure / flow | 1 | |
| Correctly sets the pressure control device: <input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Pressure Governor | 1 | |
| Verifies that the apparatus booster tank is full | 1 | |
| Total | 8 | |

Critical Criteria

- _____ Failure to complete 8 steps in a safe manner
- _____ Failure to calculate and set the correct PDPs
- _____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Pump a Supply Line
Skill Sheet DOP-6**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|---|--------------|--|
| Verifies that the parking brake is set, the wheel chocks are deployed, and the apparatus is secure | 1 | |
| Correctly Engages the Pump | 1 | |
| Establishes a water supply to the apparatus: <input type="checkbox"/> Pressurized Source <input type="checkbox"/> Static Source | 1 | |
| Determines the required flow needed by the attack engine, verifies that the attack engine is ready for water, and establishes water flow to the attack engine | 1 | |
| Sets the correct PDP to provide the required pressure / flow | 1 | |
| Correctly sets the pressure control device: <input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Pressure Governor | 1 | |
| Maintains communications with the attack engine and adjusts PDP to provide correct pressure / flow if the required flow needed by the attack engine changes | 1 | |
| Correctly operates auxiliary cooling system | 1 | |
| Correctly sets transfer valve (two stage pump only) | 1 | |
| Total | 8 / 9 | |

Critical Criteria

_____ Failure to complete 8 steps (Single stage pump) or 9 steps (Two stage pump) in a safe manner

_____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Foam Operations
Skill Sheet DOP-7**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Time Allowed: TBD

Evaluator: _____

Total Time: _____

| | | |
|--|----------|--|
| Verifies that the parking brake is set, the wheel chocks are deployed, and the apparatus is secure | 1 | |
| Identifies the type / concentration of foam needed for the given scenario | 1 | |
| Verifies that the hose and nozzle combination is appropriate for the foam eductor / foam system to be used | 1 | |
| Correctly Engages the pump | 1 | |
| Correctly assembles or engages the foam system: <input type="checkbox"/> Portable Foam Eductor <input type="checkbox"/> On-Board Foam System | 1 | |
| Sets the appropriate concentration on the foam eductor / foam system | 1 | |
| Sets the correct PDP to provide the required pressure / flow to produce a correctly proportioned foam fire stream | 1 | |
| Total | 7 | |

Critical Criteria

- _____ Failure to complete 7 steps in a safe manner
- _____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below:

**Supporting Building Systems
Skill Sheet DOP-8**

State of New Hampshire
Department of Safety
Division of Fire Standards & Training and Emergency Medical Services
Driver / Operator – Pumping Apparatus Practical Exam

Candidate: _____

Date: _____

Evaluator: _____

Time Allowed: TBD

Total Time: _____

| | | |
|---|----------|--|
| Verifies that the parking brake is set, the wheel chocks are deployed, and the apparatus is secure | 1 | |
| Establishes the appropriate hose connection to the FDC | 1 | |
| Establishes a water supply to the apparatus | 1 | |
| Correctly Engages the pump | 1 | |
| Establishes water flow to the building system | 1 | |
| Sets the correct PDP to provide the required pressure / flow to the system | 1 | |
| Correctly sets the pressure control device: <input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Pressure Governor | 1 | |
| Total | 7 | |

Critical Criteria

- _____ Failure to complete 7 steps in a safe manner
- _____ Failure to wear appropriate PPE

Circle one: 1st Attempt Retest

Document all reasons for not awarding points or for checking any critical criteria below: