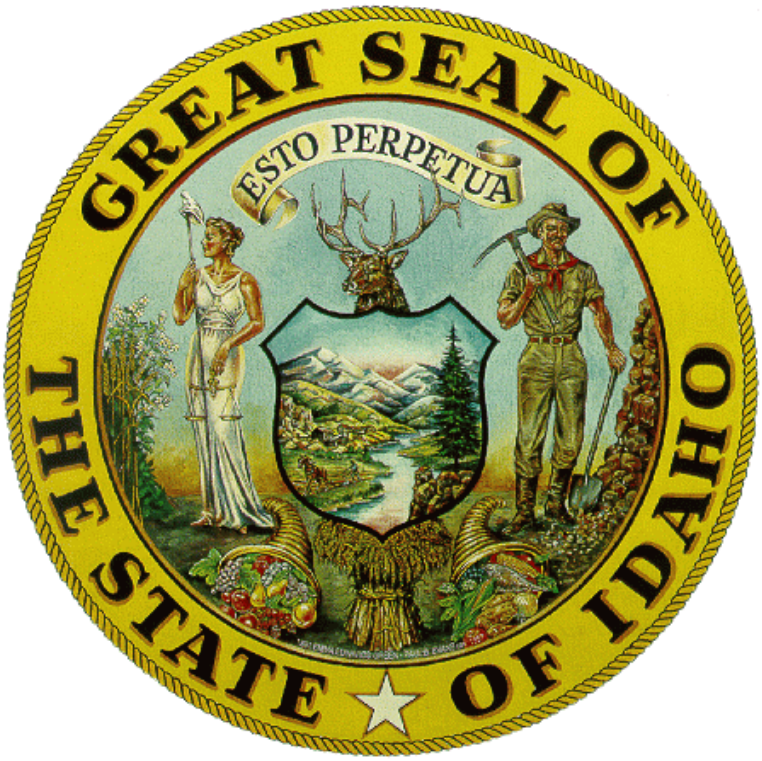
DIVISION OF BUILDING SAFETY

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD VIDEOCONFERENCE MEETING

MARCH 11, 2020



IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 01 **Agenda and Minutes**

PRESENTER: Ted Sermon, Chairman

OBJECTIVE: Approve the Idaho HVAC Board's March 11, 2020 Agenda, February 10, 2020 Special Meeting Minutes and January 8, 2020 Meeting Minutes.

ACTION: Consent

BACKGROUND:

PROCEDURAL HISTORY:

ATTACHMENTS: Tentative Agenda and Draft Minutes

TENTATIVE AGENDA

NOTICE OF PUBLIC MEETING

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD MEETING

Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian
1250 Ironwood Drive, Suite 220, Coeur d'Alene
155 North Maple Street, Blackfoot

Teleconference – 877-820-7831--529619
dbs.idaho.gov – (208) 332-7137

Wednesday, March 11, 2020

9:30 a.m.–11:30 a.m. (MDT)
8:30 a.m.–10:30 a.m. (PDT)

9:30 a.m. **CALL TO ORDER** – Ted Sermon, Chairman

- Roll Call & Introductions
- Open Forum

CONSENT AGENDA

1. Approval of the March 11, 2020 Agenda, February 10, 2020 Special Meeting Minutes and January 8, 2020 Meeting Minutes – Ted Sermon

ACTION AGENDA

2. HVAC Apprentice Testing Standards – John Nielsen, Program Manager

INFORMATIONAL AGENDA

3. Two Year Renewal Grace Period – John Nielsen

4. Contractor Inactive Status – John Nielsen

5. Program Manager Report – John Nielsen

6. Local Jurisdictions Checking Licenses – Ted Sermon

7. Compliance Program Report – Amy Kohler

8. Administrator Report – Chris L. Jensen, Administrator
    - Financial Report

11:30 a.m. ADJOURN

For additional agenda information, refer to the packet, available one week prior to this meeting, at the DBS's central and regional offices and https://dbs.idaho.gov/boards/hvacboard/hvacmeetings.html.

All times, other than beginning, are approximate and scheduled according to Mountain Daylight Time (MDT), unless otherwise noted. Agenda items may shift depending on the Idaho HVAC Board's preference. 02/26/2020rb

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD SPECIAL TELECONFERENCE/ VIDEOCONFERENCE MEETING

Monday – February 10, 2010 – 11:00 a.m. (MST)

Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian
1250 Ironwood Drive, Suite 220, Coeur d'Alene
155 North Maple Street, Blackfoot

DRAFT MINUTES OF THE FEBRUARY 10, 2020 SPECIAL MEETING

NOTE: ***The following report is not a verbatim transcript of the discussions at the meeting; however, is intended to record the significant features of those discussions.***

Chairman Ted Sermon called the special meeting to order at 11:00 a.m. (MST)

Board Members Present:
Chairman Ted Sermon
Randy Hart
Judy Van Cleave
Mark Ferm
Garret Christoffersen

DBS Staff Members Present:
Chris L. Jensen, Administrator
Ron Whitney, Deputy Administrator
Larry Jeffres, Regional Manager, Region 1
Patrick J. Grace, Regional Manager, Region 2
Adam Bowcutt, Regional Manager, Region 3
John Nielsen, HVAC Program Manager
Renee Bryant, Administrative Assistant 2

- **Authorize Notice of Adoption of Temporary Rule Regarding IDAPA 07.07.01**

At the adjournment of the 2019 Legislative Session, a concurrent resolution to extend the current administrative rules was not approved; therefore, all agencies with governing boards/commissions had to approve the re-adoption of their rules. In anticipation of the possibility of it happening again, the Board has been asked by the Governor's office to once more approve the re-adoption of their rules. The temporary rules are conditional and will only become effective at sine die if the pending rules are not approved or rejected by the 2020 Legislature.

Based on the memorandum provided by the Division, and specifically the Governor's findings concerning the adoption of temporary rules, the following motion was made.

MOTION: Mark Ferm made a motion that upon sine die of the 2020 session of the Idaho Legislature, and conditioned upon the Board's rules not otherwise being approved by the Legislature or not extended pursuant to the Idaho Administrative Procedure Act, the Board adopt as temporary and proposed rules, the Board's rules in IDAPA 07.07.01 presented to the 2020 Idaho Legislature, and that the Board delegate to the Administrator the authority to make and approve all notices and filings under the rulemaking process. Judy Van Cleave seconded. All in favor, motion carried.

- **Adjournment**
  Chairman Sermon adjourned the meeting at 10:07 a.m. (MST)

TED SERMON CHAIRMAN HEATING, VENTILATION AND AIR CONDITIONING BOARD	CHRIS L. JENSEN, ADMINISTRATOR DIVISION OF BUILDING SAFETY
DATE	DATE

These DRAFT minutes are subject to possible correction and final approval by the Idaho HVAC Board. 02/12/2020rb

DRAFT

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD VIDEOCONFERENCE MEETING

Wednesday – January 8, 2020 – 9:30 a.m. (MST)

Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian
1250 Ironwood Drive, Suite 220, Coeur d'Alene
155 North Maple Street, Blackfoot

DRAFT MINUTES OF THE JANUARY 8, 2020 HVAC BOARD MEETING

NOTE: The following report is not a verbatim transcript of the discussions at the meeting; however, is intended to record the significant features of those discussions.

Chairman Ted Sermon called the meeting to order at 9:36 a.m. (MST)

Board Members Present:
Ted Sermon, Chairman
Bill Carter, Vice-Chairman
Garret Christoffersen
Judy Van Cleave
Bill Hatch
Mark Ferm
Randy Hart

DBS Staff Members Present:
Chris L. Jensen, Administrator
Ron Whitney, Deputy Administrator
Spencer Holm, Deputy Attorney General
John Nielsen, HVAC Program Manager
Larry Jeffres, Regional Manager, Region 1
Josh Nyman, Regional Supervisor, Region 3
Amy Kohler, Compliance Program Specialist
Renee Bryant, Administrative Assistant 2

- **Open Forum**
  There were no new issues to address under open forum.

- **Approval of the January 8, 2020 Agenda, October 2, 2019 Special Meeting Minutes and November 12, 2019 Meeting Minutes**
  MOTION: Bill Carter made a motion to approve the January 8, 2020 agenda, October 2, 2019 special meeting minutes and November 12, 2019 meeting minutes as presented. Bill Hatch seconded. All in favor, motion carried.

- **Two Year Renewal Grace Period**
  Based on the License Freedom Act of 2019, it was suggested at the November 2019 meeting to extend the revival period from one to two years to renew a license without retesting. It was noted the modification in paragraph one of the proposed statute change, in the board packet, was incorrect. Licenses will continue to expire based on a 12-calendar month from the date of issue, not 24 months. The correct change to the extension is in paragraph two. All agencies have been asked to not begin the negotiated rulemaking process until sine die of the legislature. Therefore, the topic *Two Year Renewal Grace Period* will be brought back to the March 2020 meeting as informational item.

  ACTION: The topic *Two Year Renewal Grace Period* will be placed on the March 11, 2020 board meeting agenda as an informational item.

- **Contractor Inactive Status**
  To comply with the License Freedom Act of 2019, a statute change was provided that would allow an HVAC contractor to place his license inactive upon paying a $36 inactivation fee. To reactivate the license would require a bond and appropriate activation fee. Currently, an HVAC contractor license is renewed on a three-year basis. Following the same trend, it was suggested every three years the contractor confirm the license is to stay inactive and pay the inactivation fee. Agreeing with the suggestion, the HVAC Program Manager will modify the proposal for the next board meeting.

  ACTION: The HVAC Program Manager will modify the proposal for review at the March 2020 board meeting.

  ACTION: The topic *Contractor Inactive Status* will be placed on the March 11, 2020 board meeting agenda as an informational item.

- **Program Manager Report**
  2020 Legislative Session – The 2020 Legislative Session convened on Monday, January 6, 2020. In the past, the HVAC Program Manager has received notification anywhere from one to three days before proposed legislation goes to a subcommittee. The Division will attempt to notify the Board; specifically, on the proposed permit fees and codes. If passes, the codes will become effective at sine die of the legislative session; however, the Division will begin a soft implementation until January 1, 2021.

  HVAC Program – It has been one year since HVAC and plumbing split with each program having inspectors specific to their respective trades. One of the processes changed was to clean up all permits that had expired. Currently, an HVAC contractor receives a civil penalty and fine of $200 for a first offense. Revamping the process, the first violation will be a warning letter. There is a $65 reactivation fee to reopen a permit and receive a final inspection. Requests for extensions are available by calling or emailing the Division.

  Local Jurisdictions Checking Licenses – The Chairman as the topic *Local Jurisdictions Checking Licenses* be an informational item at the March 2020 Board meeting.

  ACTION: The topic *Local Jurisdictions Checking Licenses* will be placed on the March 11, 2020 board meeting agenda as an informational item.

- **Compliance Program Report**
  HVAC%NOV Activity by Date Report – Although a lengthy report, there has been no grievous activity. The report is not publicized; however, most contractors on the report have received a Notice of Violation (NOV) warning letter. For clarification, once the status becomes active, a warning letter is issued.

  Compliance/Outreach – A new full-time compliance/outreach advisor has been hired to check licenses in all jurisdictions. The Division's approach is to try to get everyone in compliance; however, those who refuse to comply and/or are habitual offenders will be dealt with more severely.

DRAFT

- **Administrator Report**

  Financial Report – The program is growing a little bit and is headed in the right direction to where the Division's wants it to be.

  Budget – January 16, 2020, will be the first budget presentation to the Joint Finance-Appropriations Committee. DBS recently received its budget back from the Division of Financial Management and there were no exceptions taken from the Governor's office. The Division has asked for three compliance officers and six additional inspectors. One of the big items in the budget is the purchase of the Blackfoot building; now occupied by DBS. There will be two to three additional agencies that will reside in the building as well.

  Economic Report – In a forecast report from the Governor's office, in 2011, there were 4,500 home-starts in Idaho. In 2020, there will be a little over 16,000 homes, and will increase by 1,000 homes every year for the next five years.

  Construction – Megaplex theatre, Idaho Falls, and 384 apartments/20 townhouses (Northgate project), Pocatello.

- **Adjournment**

  MOTION: Bill Hatch made a motion to adjourn the meeting. Garret Christoffersen seconded.

  The meeting adjourned at 10:27 a.m. (MST).

TED SERMON, CHAIRMAN HEATING, VENTILATION AND AIR CONDITIONING BOARD	CHRIS L. JENSEN, ADMINISTRATOR DIVISION OF BUILDING SAFETY
DATE	DATE

These DRAFT minutes are subject to possible correction and final approval by the Idaho HVAC Board. 02/28/2020rb

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IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 02 HVAC Apprentice Testing Standards

PRESENTER: John Nielsen, HVAC Program Manager

OBJECTIVE: Approve new HVAC Apprentice Testing Standards

ACTION: Vote to accept or deny the testing standards for HVAC apprentices.

BACKGROUND: Career and Technical Education, with assistance from educational and industry, have set qualifications and education standards for Idaho's HVAC apprenticeship programs.

Criticality Survey 2018 – Pages 1-18
Year 1 Program 2018 – Pages 19-20
Year 2 Program 2018 – Pages 21-23
Year 3 Program 2018 – Pages 24-28
Year 4 Program 2018 – Pages 29-35

PROCEDURAL HISTORY:

ATTACHMENTS: Testing Standards

HVAC Apprenticeship Program Standards Criticality Survey 2018

	CONTENT STANDARD 1.0: TRADE MATH				
	Performance Standard 1.1: Basic Math				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
1.1.1	Perform addition, subtraction, multiplication, and division calculations of whole numbers.	9	34	48	2.43
1.1.2	Perform addition and subtraction calculations of common fractions.	19	39	33	2.15
1.1.3	Perform multiplication and division calculations of common fractions.	27	38	26	1.99
1.1.4	Perform addition, subtraction, multiplication, and division calculations of decimal fractions.	26	37	28	2.02
1.1.5	Perform ratio and proportion calculations.	33	37	20	1.86
1.1.6	Perform percent, percentage, and discount calculations.	26	42	23	1.97
1.1.7	Perform angular, length, and converted temperature measure calculations.	19	43	29	2.11
1.1.8	Perform area calculations.	19	41	31	2.13
1.1.9	Perform volume calculations.	22	41	25	2.03
1.1.10	Solve basic equations.	16	35	39	2.26
1.1.11	Demonstrate the use of order of operations.	22	34	35	2.14
				Answered	**91**
				Skipped	**3**

	CONTENT STANDARD 2.0: GENERAL SAFETY				
	Performance Standard 2.1: Workplace Safety				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
2.1.1	Describe potential excavation site hazards.	27	34	27	2.00
2.1.2	Explain proper personal protective equipment (PPE) use.	12	38	39	2.30
2.1.3	Describe proper material handling, storage, use, and disposal.	12	44	34	2.24
2.1.4	Describe ladder, stairway, and scaffold hazards and proper use.	4	43	43	2.43
2.1.5	Describe jobsite electrical hazards and proper lockout/tagout use.	7	22	61	2.60
2.1.6	Describe proper refrigerant and pressure vessel use and storage.	8	27	55	2.52
2.1.7	Identify safety data sheets (SDS) properties of chemicals specific to HVAC.	11	46	33	2.24
2.1.8	Identify and describe environmental hazards (e.g., lead, silica, asbestos, carbon monoxide).	12	35	43	2.34
2.1.9	Identify the hazards associated with confined spaces.	14	34	41	2.30
2.1.10	Use appropriate fire extinguishers and other safety devices.	13	31	46	2.37
2.1.11	Describe the importance of safety procedures for brazing and soldering.	6	32	52	2.51
				Answered	**90**
				Skipped	**4**

	CONTENT STANDARD 3.0: TOOLS AND MATERIALS				
	Performance Standard 3.1: Power and Hand Tool Use				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
3.1.1	Describe proper use of hand tools used in the HVAC Industry.	9	49	30	2.24
3.1.2	Describe proper use of power tools used in the HVAC Industry.	9	44	35	2.30
3.1.3	Describe proper use of various types of torches.	14	43	31	2.19
3.1.4	Describe proper use of piping and tubing fabrication tools.	12	49	26	2.16
				Answered	**88**
				Skipped	**6**

	Performance Standard 3.2: Tubing and Piping				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
3.2.1	Identify the purpose of the piping, tubing, and fittings used in the heating, air-conditioning, and refrigeration industry.	9	44	35	2.30
3.2.2	Identify appropriate brazing and soldering alloys and materials.	12	37	39	2.31
3.2.3	Explain the purposes and procedures for protecting piping materials and fabrication, such as valves, fittings, and products from heat.	11	37	40	2.33
				Answered	**88**
				Skipped	**6**

	CONTENT STANDARD 4.0: FUEL GAS PIPING AND VENTING				
	Performance Standard 4.1: Fuel Gas Piping and Venting				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
4.1.1	Identify HVAC Idaho Administrative Procedures Act (IDAPA) rules and statutes.	20	44	20	2.00
4.1.2	Define key terms as applied to the International Fuel Gas Code (IFGC).	22	38	24	2.02
4.1.3	Describe the building structural safety requirements for fuel gas equipment installation.	14	36	34	2.24
4.1.4	Determine proper fuel gas equipment combustion, ventilation, and dilution air requirements.	7	29	48	2.49
4.1.5	Identify the requirements for installation of fuel gas fired equipment in a masonry chimney.	10	37	37	2.32
4.1.6	Identify fuel gas equipment location, access, and service space requirements.	7	39	38	2.37
4.1.7	Describe proper appliance condensate disposal and clearance reduction methods.	9	52	23	2.17
4.1.8	Perform gas pipe sizing exercises.	9	42	33	2.29
4.1.9	Identify proper gas pipe installation methods.	8	39	37	2.35
4.1.10	Describe proper gas pipe inspection, testing, and purging procedures.	7	38	39	2.38
4.1.11	Describe chimney and vent types and construction.	11	48	25	2.17

4.1.12	Determine chimney installation requirements.	13	45	26	2.15
4.1.13	Determine gas vent installation requirements.	6	44	33	2.33
4.1.14	Describe gas appliance category I, II, III, and IV characteristics.	16	41	27	2.13
4.1.15	Identify proper gas vent connector installation requirements.	7	47	30	2.27
4.1.16	Describe category I venting principles.	13	44	27	2.17
4.1.17	Perform single appliance category I vent sizing exercises.	10	49	25	2.18
4.1.18	Perform multiple appliance category I vent sizing exercises.	11	47	26	2.18
4.1.19	Determine capacity penalties for offsets in common vent and vent connectors.	15	44	25	2.12
4.1.20	Determine specific fuel gas appliance installation requirements.	12	36	36	2.29
4.1.21	Determine mechanical equipment location, access, and service space requirements.	8	44	32	2.29
4.1.22	Determine combustion air location and sizing requirements.	5	28	50	2.54
				Answered	**84**
				Skipped	**10**

	CONTENT STANDARD 5.0: ENERGY SOURCES				
	Performance Standard 5.1: Energy Sources				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
5.1.1	Explain natural, LP gas, and fuel oil combustion characteristics.	22	37	23	2.01
5.1.2	Describe the application of geothermal systems.	47	28	5	1.48
5.1.3	Describe the application of renewable energy systems.	49	26	6	1.47
5.1.4	Describe the application of electric production systems.	46	27	8	1.53
				Answered	**82**
				Skipped	**12**

	CONTENT STANDARD 6.0: BASIC SYSTEMS OVERVIEW				
	Performance Standard 6.1: Basic Systems Overview				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
6.1.1	Describe fossil-fuel and electrical furnace operations.	16	45	20	2.05
6.1.2	Describe the typical configuration of residential split air conditioning systems.	11	5	20	2.11
6.1.3	List various types of commercial air conditioning systems and their application.	26	41	14	1.85
6.1.4	Describe the configuration of common duct systems.	13	51	17	2.05
				Answered	**81**
				Skipped	**13**

	CONTENT STANDARD 7.0: INTRO TO APPLIED SCIENCE				
	Performance Standard 7.1: Intro to Applied Science				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
7.1.1	Perform energy conversion calculations.	43	31	7	1.56
7.1.2	Perform sensible, latent, and total heat calculations.	33	32	16	1.79
7.1.3	Differentiate between saturated, superheated, and subcooled refrigerant.	17	34	30	2.16
7.1.4	Explain atmospheric, absolute, and gauge pressure relationship.	25	40	16	1.89
7.1.5	Convert gauge pressure, absolute pressure, and vacuum.	28	34	19	1.89
7.1.6	Diagram a basic refrigeration cycle identifying pressure, temperature, and state of refrigerant.	18	36	27	2.11
7.1.7	List the type and function of the four major refrigeration components.	13	42	25	2.15
7.1.8	Describe the methods of heat transfer.	18	41	22	2.05
				Answered	**81**
				Skipped	**13**

	CONTENT STANDARD 8.0: APPLIANCE INSTALLATION				
	Performance Standard 8.1: Appliance Installation				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
8.1.1	Apply National Electric Code (NEC) standards to HVAC electrical circuit installations.	18	41	21	2.04
8.1.2	Interpret HVAC manufacturer electrical name plate data.	17	29	33	2.20
8.1.3	Apply appropriate code standards to appliance installation.	8	32	40	2.40
8.1.4	Describe gas, oil, and electrical appliance installation, start-up, and checkout procedures.	10	36	34	2.30
8.1.5	Describe sheet metal, fiberglass, and flex duct installation procedures.	17	47	16	1.99
8.1.6	Describe split and packaged air conditioning system installation, start-up, and checkout procedures.	9	51	19	2.13
				Answered	**80**
				Skipped	**14**

	CONTENT STANDARD 9.0: INTRODUCTION TO CONSTRUCTION DRAWINGS AND SPECIFICATIONS				
	Performance Standard 9.1: Introduction to Construction Drawings and Specifications				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
9.1.1	Describe the application of architectural plans and specifications.	33	34	10	1.70
9.1.2	Interpret mechanical, plumbing, and electrical drawing symbols.	20	39	18	1.97
9.1.3	Interpret specification documents and apply to plans.	29	31	18	1.86
9.1.4	Interpret shop drawings and apply to plans and specifications.	25	34	19	1.92
9.1.5	Describe a submittal and its derivation, routing, and makeup.	40	30	8	1.59
9.1.6	Develop cut lists for duct runs from shop drawings.	35	31	12	1.71
9.1.7	Interpret as-built modifications on HVAC mechanical plans.	31	32	15	1.79
9.1.8	Perform HVAC equipment and material takeoff.	35	31	12	1.71
				Answered	**78**
				Skipped	**16**

	CONTENT STANDARD 10.0: BASIC ELECTRICITY				
	Performance Standard 10.1: Basic Electricity				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
10.1.1	Describe basic electrical theory.	18	34	25	2.09
10.1.2	Describe series, parallel, and combination circuit characteristics.	24	31	22	1.97
10.1.3	Calculate electrical circuit values.	33	31	13	1.74
10.1.4	Describe electrical meter functions.	22	37	18	1.95
10.1.5	Measure electrical circuit values.	20	35	22	2.03
10.1.6	Identify electrical symbols.	21	34	22	2.01
10.1.7	Draw basic HVAC electrical circuit diagrams.	25	33	19	1.92
10.1.8	Interpret basic residential HVAC schematic diagrams.	15	33	29	2.18
10.1.9	Interpret basic commercial HVAC schematic diagrams.	22	31	24	2.03
10.1.10	Explain AC circuit characteristics.	18	42	17	1.99
10.1.11	Describe power distribution transformer systems.	33	35	8	1.67
10.1.12	Calculate HVAC branch circuit conductor, breaker, and disconnect sizes.	29	31	17	1.84
10.1.13	Describe basic motor theory.	24	41	11	1.83
10.1.14	Describe the five single-phase motor types.	35	35	7	1.64
10.1.15	Identify single-phase motor diagrams.	26	36	15	1.86
10.1.16	Explain single-phase motor starting relay operation.	29	39	9	1.74
10.1.17	Calculate motor capacitor replacement values.	26	40	11	1.81
10.1.18	Explain three-phase motor operation.	25	41	11	1.82
10.1.19	Explain ECM motor operation.	28	36	12	1.79
10.1.20	Perform Ohm's law calculations to series, parallel, and combination circuits.	25	33	18	1.91
				Answered	**77**
				Skipped	**17**

	CONTENT STANDARD 11.0: INDOOR AIR QUALITY				
	Performance Standard 11.1: Indoor Air Quality				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
11.1.1	Describe indoor air quality (IAQ) factors as related to HVAC.	26	41	9	1.78
11.1.2	Identify various indoor air quality pollutant and pollutant pathways.	34	34	8	1.66
11.1.3	Describe indoor air quality evaluation and measurement tools.	36	34	6	1.61
11.1.4	Explain appropriate prevention, control, and resolution strategies for IAQ issues.	35	33	8	1.64
11.1.5	Identify when to involve IAQ professionals as necessary.	28	39	8	1.73
				Answered	**76**
				Skipped	**18**

	CONTENT STANDARD 12.0: RESIDENTIAL LOAD CALCULATIONS				
	Performance Standard 12.1: Residential Load Calculations				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
12.1.1	Identify the importance of heat load calculation in building design.	24	34	18	1.92
12.1.2	Differentiate sensible, latent, and total heat gain/loss.	30	30	16	1.82
12.1.3	Determine U values and R values for various building construction components.	39	24	13	1.66
12.1.4	Calculate Btu gain/loss values using HTM and temperature difference factors.	40	23	13	1.64
12.1.5	Determine heating and cooling load temperature difference and daily range values.	40	22	14	1.66
12.1.6	Explain the relationship between house orientation and solar heat gain.	43	20	12	1.59
12.1.7	Conduct building component area and volume calculations from construction drawings.	47	18	11	1.53
12.1.8	Conduct winter/summer infiltration calculations using Manual J procedures.	42	23	11	1.59
12.1.9	Conduct heat gain calculations using Manual J procedures.	37	26	13	1.68
12.1.10	Conduct heat loss calculations using Manual J procedures.	37	26	13	1.68
12.1.11	Determine sensible, latent, and total heat for house block and room values.	43	21	12	1.59
				Answered	**76**
				Skipped	**18**

	CONTENT STANDARD 13.0: BASIC CONTROLS				
	Performance Standard 13.1: Basic Controls				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
13.1.1	Differentiate between operating and safety controls.	10	33	31	2.28
13.1.2	Describe the sequence of operation of standing pilot, intermittent, and direct ignition control systems.	11	32	30	2.26
13.1.3	Interpret basic gas furnace wiring diagrams.	7	35	30	2.32
13.1.4	Explain oil furnace primary control operation.	22	38	13	1.88
13.1.5	Describe electric furnace operating sequence.	12	38	23	2.15
13.1.6	Describe hydronic heating system controls.	27	33	13	1.81
13.1.7	Describe basic motor circuit troubleshooting procedures.	14	37	21	2.10
13.1.8	Interpret packaged and split air conditioning systems and wiring diagrams.	15	36	22	2.10
13.1.9	Identify commercial and industrial air conditioning system control methods.	25	28	19	1.92
13.1.10	Describe basic electronic control system troubleshooting procedures.	16	29	28	2.16
				Answered	**74**
				Skipped	**20**

	CONTENT STANDARD 14.0: SYSTEM AIR FLOW AND DUCT SIZING				
	Performance Standard 14.1: System Air Flow and Duct Sizing				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
14.1.1	Describe basic air flow characteristics.	12	44	17	2.07
14.1.2	Explain duct system pressures.	18	38	16	1.97
14.1.3	Calculate duct system air flow.	18	37	17	1.99
14.1.4	Determine proper air flow requirements.	12	43	17	2.07
14.1.5	Describe air distribution system configurations.	22	36	14	1.89
14.1.6	Select primary heating/cooling equipment using nationally recognized standards.	25	33	14	1.85
14.1.7	Determine air-side component pressure drops from manufacturer tables.	29	31	12	1.76
14.1.8	Sketch a residential duct system layout using nationally recognized standards.	29	33	10	1.74
14.1.9	Determine duct size based on nationally recognized standards.	19	34	19	2.00
				Answered	**73**
				Skipped	**21**

	CONTENT STANDARD 15.0: BASIC AIR CONDITIONING AND REFRIGERATION				
	Performance Standard 15.1: Basic Air Conditioning and Refrigeration				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
15.1.1	Explain latent, sensible, and total heat differences.	21	35	15	1.92
15.1.2	Diagram refrigeration cycle conditions and components.	20	33	16	1.94
15.1.3	Explain pressure-enthalpy diagrams.	35	21	14	1.70
15.1.4	Describe compressor design differences, efficiencies, and applications.	30	27	13	1.76
15.1.5	Explain water/air-cooled condenser operation and performance.	29	29	12	1.76
15.1.6	Describe metering device design and operation.	18	35	17	1.99
15.1.7	Describe refrigeration accessory components and operation.	23	31	16	1.90
15.1.8	Describe evaporator types.	23	34	13	1.86
15.1.9	Identify proper refrigerant line sizing and installation practices.	14	32	24	2.14
15.1.10	Explain various refrigerant physical and chemical properties.	32	24	14	1.74
15.1.11	Explain refrigerant oil properties and application.	27	28	15	1.83
15.1.12	Describe proper refrigeration system access procedures.	20	30	20	2.00
15.1.13	Differentiate between recovered, recycled, and reclaimed refrigerant.	12	36	22	2.14
15.1.14	Describe proper refrigerant recovery, evacuation, and charging procedures.	9	32	29	2.29
15.1.15	Describe the operation of a variable refrigerant flow system.	24	30	16	1.89
				Answered	**71**
				Skipped	**23**

	CONTENT STANDARD 16.0: INTRODUCTION TO HYDRONIC SYSTEMS				
	Performance Standard 16.1: Introduction to Hydronic Systems				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
16.1.1	Identify hydronic piping system configurations.	39	23	9	1.58
16.1.2	Describe hydronic system components.	36	26	8	1.60
16.1.3	Explain hydronic systems drain and fill procedures.	37	25	8	1.59
16.1.4	Diagram basic hydronic system control circuits.	40	21	8	1.54
				Answered	**71**
				Skipped	**23**

	CONTENT STANDARD 17.0: BASIC SHEET METAL				
	Performance Standard 17.1: Basic Sheet Metal				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
17.1.1	Define sheet metal layout terms.	33	28	10	1.68
17.1.2	Explain parallel line development procedures.	42	19	9	1.53
17.1.3	Layout and fabricate the following sheet metal fitting: Pittsburgh seam and square elbow.	30	29	11	1.73
17.1.4	Layout and fabricate the following sheet metal fitting: 90 degree elbow and transition.	32	27	11	1.70
17.1.5	Explain radial line development procedures.	43	18	9	1.51
17.1.6	Layout and fabricate the following sheet metal fitting: symmetrical tapered duct.	36	22	12	1.66
17.1.7	Layout and fabricate the following sheet metal fitting: square to square tapered duct.	33	26	11	1.69
17.1.8	Layout and fabricate the following sheet metal fitting: two-way offset transition.	36	24	10	1.63
17.1.9	Layout and fabricate the following sheet metal fitting: tapered duct section.	35	25	10	1.64
17.1.10	Explain triangulation development procedures.	36	25	9	1.61
				Answered	**71**
				Skipped	**23**

	CONTENT STANDARD 18.0: INTRODUCTION TO SERVICE				
	Performance Standard 18.1: Introduction to Service				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
18.1.1	Identify air conditioning system problems.	11	33	27	2.23
18.1.2	Prescribe air conditioning system problem solutions.	12	32	26	2.20
18.1.3	Identify gas heating system problems.	9	32	28	2.28
18.1.4	Prescribe gas heating system problem solutions.	11	32	26	2.22
18.1.5	Identify oil heating system problems.	21	33	16	1.93
18.1.6	Prescribe oil heating system problem solutions.	25	31	14	1.84
18.1.7	Identify electric heating system problems.	11	35	24	2.19
18.1.8	Prescribe electric heating system problem solutions.	14	32	23	2.13
18.1.9	List gas, oil, and electric heating and air conditioning maintenance procedures.	13	36	21	2.11
				Answered	**71**
				Skipped	**23**

	CONTENT STANDARD 19.0: FUNDAMENTALS OF PSYCHOMETRICS				
	Performance Standard 19.1: Fundamentals of Psychometrics				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
19.1.1	Explain psychometric properties.	45	21	4	1.41
19.1.2	Diagram psychometric conditions.	48	17	4	1.36
19.1.3	Describe comfort conditions as applied to psychometric properties.	47	18	4	1.38
19.1.4	Use the psychometric chart to measure enthalpy.	46	19	4	1.39
				Answered	**70**
				Skipped	**24**

	CONTENT STANDARD 20.0: TESTING AND BALANCING				
	Performance Standard 20.1: Testing and Balancing				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
20.1.1	Describe air flow and water flow measuring devices.	32	30	8	1.66
20.1.2	Explain basic air flow and water flow balancing procedures.	31	30	8	1.67
				Answered	**70**
				Skipped	**24**

	CONTENT STANDARD 21.0: INTRODUCTION TO HVAC CONTROL STRATEGIES				
	Performance Standard 21.1: Introduction to HVAC Control Strategies				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
21.1.1	Describe basic HVAC control principles.	14	42	14	2.00
21.1.2	Interpret basic HVAC pneumatic control diagrams.	38	23	8	1.57
21.1.3	Explain DDC control system basic operation.	38	26	5	1.52
				Answered	**70**
				Skipped	**24**

	CONTENT STANDARD 22.0: ADVANCED HVAC SYSTEMS				
	Performance Standard 22.1: HVAC Systems				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
22.1.1	Explain commercial fan coil unit operation.	31	27	11	1.71
22.1.2	Explain package unit building system configurations.	32	27	10	1.68
22.1.3	Describe building chilled water system operation.	42	21	6	1.48
22.1.4	Describe induced and forced draft cooling tower operation.	44	18	6	1.44
				Answered	**70**
				Skipped	**24**

	Performance Standard 22.2: Heat Pump Systems				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
22.2.1	Explain heat pump heating and cooling cycles.	12	35	23	2.16
22.2.2	Describe the purpose and operation of various heat pump components.	11	37	21	2.14
22.2.3	Prescribe heat pump charging procedures.	10	34	25	2.22
22.2.4	Differentiate heat pump time/temperature and demand defrost control systems.	16	31	22	2.09
22.2.5	Explain geothermal heat pump system applications.	31	26	12	1.72
22.2.6	Describe water-to-air and air-to-water heat pump operation.	26	31	12	1.80
				Answered	**70**
				Skipped	**24**

	CONTENT STANDARD 23.0: ADVANCED TROUBLESHOOTING				
	Performance Standard 23.1: Advanced Troubleshooting				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
23.1.1	Describe air flow troubleshooting procedures.	16	36	17	2.01
23.1.2	Determine operating conditions at variable loads.	27	29	13	1.80
23.1.3	Describe refrigeration side troubleshooting procedures.	16	32	21	2.07
23.1.4	Troubleshoot residential and commercial control systems.	14	36	19	2.07
23.1.5	Interpret manufacturer schematics.	10	35	23	2.19
23.1.6	Analyze furnace troubleshooting values.	11	41	17	2.09
23.1.7	Apply furnace troubleshooting values.	12	38	19	2.10
				Answered	**69**
				Skipped	**25**

	CONTENT STANDARD 24.0: CODE REVIEW				
	Performance Standard 24.1: Code Review				
	Answer Choices	**Nice to Know**	**Need to Know**	**Critical to Know**	**Rating Average**
24.1.1	Apply international fuel gas code standards.	11	31	27	2.23
24.1.2	Apply international mechanical code standards.	12	31	26	2.20
24.1.3	Apply HVAC rules and statutes as it pertains to the IDAPA administrative code.	14	29	26	2.17
				Answered	**69**
				Skipped	**25**

HVAC APPRENTICESHIP YEAR 1 PROGRAM STANDARDS | 2018

CONTENT STANDARD 1.0: TRADE MATH

Performance Standard 1.1: Basic Math

1.1.1 Perform addition, subtraction, multiplication, and division calculations of whole numbers.
1.1.2 Perform addition and subtraction calculations of common fractions.
1.1.3 Perform multiplication and division calculations of common fractions.
1.1.4 Perform addition, subtraction, multiplication, and division calculations of decimal fractions.
1.1.5 Perform ratio and proportion calculations.
1.1.6 Perform percent, percentage, and discount calculations.
1.1.7 Perform angular, length, and converted temperature measure calculations.
1.1.8 Perform area calculations.
1.1.9 Perform volume calculations.
1.1.10 Solve basic equations.
1.1.11 Demonstrate the use of order of operations.

CONTENT STANDARD 2.0: GENERAL SAFETY

Performance Standard 2.1: Workplace Safety

2.1.1 Describe potential excavation site hazards.
2.1.2 Explain proper personal protective equipment (PPE) use.
2.1.3 Describe proper material handling, storage, use, and disposal.
2.1.4 Describe ladder, stairway, and scaffold hazards and proper use.
2.1.5 Describe jobsite electrical hazards and proper lockout/tagout use.
2.1.6 Describe proper refrigerant and pressure vessel usage and storage.
2.1.7 Identify safety data sheets (SDS) properties of chemicals specific to HVAC.
2.1.8 Identify and describe environmental hazards (e.g. lead, silica, asbestos, carbon monoxide).
2.1.9 Identify the hazards associated with confined spaces.
2.1.10 Use appropriate fire extinguishers and other such safety devices.
2.1.11 Identify the importance safety procedures for brazing and soldering.

CONTENT STANDARD 3.0: TOOLS AND MATERIALS

Performance Standard 3.1: Power and Hand Tool Use

3.1.1 Describe proper hand tool use.
3.1.2 Describe proper power tool use.
3.1.3 Identify proper use of various types of torches.
3.1.4 Identify proper use of piping and tubing fabrication tools.

Performance Standard 3.2: Tubing and Piping

3.2.1 Identify the purpose of the piping, tubing and fittings used in the heating, air-conditioning, and refrigeration industry.
3.2.2 Identify appropriate brazing and soldering alloys and materials.
3.2.3 Explain the purposes and procedures for protecting piping materials and fabrication, such as valves, fittings, and products from heat.

HVAC APPRENTICESHIP YEAR 1 PROGRAM STANDARDS | 2018

CONTENT STANDARD 4.0: ENERGY SOURCES

Performance Standard 4.1: Energy Sources

4.1.1 Explain natural, LP gas, and fuel oil combustion characteristics.
4.1.2 Describe the application of geothermal systems.
4.1.3 Describe the application of renewable energy systems.
4.1.4 Describe the application of electric production systems.

CONTENT STANDARD 5.0: BASIC SYSTEMS OVERVIEW

Performance Standard 5.1: Basic Systems Overview

5.1.1 Describe fossil-fuel and electrical furnace operations.
5.1.2 Describe the typical configuration of residential split air conditioning systems.
5.1.3 List various types of commercial air conditioning systems and their application.
5.1.4 Describe the configuration of common duct systems.

CONTENT STANDARD 6.0: INTRO TO APPLIED SCIENCE

Performance Standard 6.1: Intro to Applied Science

6.1.1 Perform energy conversion calculations.
6.1.2 Perform sensible, latent, and total heat calculations.
6.1.3 Differentiate between saturated, superheated, and subcooled refrigerant.
6.1.4 Explain atmospheric, absolute, and gauge pressure relationship.
6.1.5 Convert gauge pressure, absolute pressure, and vacuum.
6.1.6 Diagram a basic refrigeration cycle identifying pressure, temperature, and state of refrigerant.
6.1.7 List the type and function of the four major refrigeration components.
6.1.8 Describe the methods of heat transfer.

HVAC APPRENTICESHIP YEAR 2 PROGRAM STANDARDS | 2018

CONTENT STANDARD 1.0: TRADE MATH

Performance Standard 1.1: Basic Math

1.1.1 Perform addition, subtraction, multiplication, and division calculations of whole numbers.
1.1.2 Perform addition and subtraction calculations of common fractions.
1.1.3 Perform multiplication and division calculations of common fractions.
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HVAC APPRENTICESHIP YEAR 2 PROGRAM STANDARDS | 2018

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6.1.7 List the type and function of the four major refrigeration components.
6.1.8 Describe the methods of heat transfer.

CONTENT STANDARD 7.0: APPLIANCE INSTALLATION

Performance Standard 7.1: Appliance Installation

7.1.1 Apply NEC standards to HVAC electrical circuit installations.
7.1.2 Interpret HVAC manufacturer electrical name plate data.
7.1.3 Apply appropriate code standards.
7.1.4 Describe gas, oil, and electrical appliance installation, start-up, and checkout procedures.
7.1.5 Describe sheet metal, fiberglass, and flex duct installation procedures.
7.1.6 Describe split and packaged air conditioning system installation, start-up, and checkout procedures.

CONTENT STANDARD 8.0: INTRODUCTION TO CONSTRUCTION DRAWINGS AND SPECIFICATIONS

Performance Standard 8.1: Introduction to Construction Drawings and Specifications

8.1.1 Identify the application of architectural plans and specifications.
8.1.2 Interpret mechanical, plumbing, and electrical drawing symbols.
8.1.3 Interpret specification documents and apply to plans.
8.1.4 Interpret shop drawings and apply to plans and specifications.

8.1.5 Describe a submittal and its derivation, routing, and makeup.
8.1.6 Develop cut lists for duct runs from shop drawings.
8.1.7 Interpret as-built modifications on HVAC mechanical plans.
8.1.8 Perform HVAC equipment and material takeoff.

CONTENT STANDARD 9.0: BASIC ELECTRICITY

Performance Standard 9.1: Basic Electricity

9.1.1 Describe basic electrical theory.
9.1.2 Describe series, parallel, and combination circuit characteristics.
9.1.3 Calculate electrical circuit values.
9.1.4 Describe electrical meter functions.
9.1.5 Measure electrical circuit values.
9.1.6 Identify electrical symbols.
9.1.7 Draw basic HVAC electrical circuit diagrams.
9.1.8 Interpret basic residential HVAC schematic diagrams.
9.1.9 Interpret basic commercial HVAC schematic diagrams.
9.1.10 Explain AC circuit characteristics.
9.1.11 Describe power distribution transformer systems.
9.1.12 Calculate HVAC branch circuit conductor, breaker, and disconnect sizes.
9.1.13 Describe basic motor theory.
9.1.14 Describe the five single-phase motor types.
9.1.15 Identify single-phase motor diagrams.
9.1.16 Explain single-phase motor starting relay operation.
9.1.17 Calculate motor capacitor replacement values.
9.1.18 Explain three-phase motor operation.
9.1.19 Explain ECM motor operation.
9.1.20 Perform Ohm's law calculations to series, parallel, and combination circuits.

HVAC APPRENTICESHIP YEAR 3 PROGRAM STANDARDS | 2018

CONTENT STANDARD 1.0: TRADE MATH

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1.1.3 Perform multiplication and division calculations of common fractions.
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9.1.16 Explain single-phase motor starting relay operation.
9.1.17 Calculate motor capacitor replacement values.
9.1.18 Explain three-phase motor operation.
9.1.19 Explain ECM motor operation.
9.1.20 Perform Ohm's law calculations to series, parallel, and combination circuits.

CONTENT STANDARD 10.0: INDOOR AIR QUALITY

Performance Standard 10.1: Indoor Air Quality

10.1.1 Describe indoor air quality (IAQ) factors as related to HVAC.
10.1.2 Identify various indoor air quality pollutant and pollutant pathways.
10.1.3 Describe indoor air quality evaluation and measurement tools.
10.1.4 Explain appropriate prevention, control, and resolution strategies for IAQ issues.
10.1.5 Recognize when to involve IAQ professionals as necessary.

CONTENT STANDARD 11.0: RESIDENTIAL LOAD CALCULATIONS

Performance Standard 11.1: Residential Load Calculations

11.1.1 Identify the importance of heat load calculation in building design.
11.1.2 Differentiate sensible, latent, and total heat gain/loss.
11.1.3 Determine U values and R values for various building construction components.
11.1.4 Calculate Btu gain/loss values using HTM and temperature difference factors.
11.1.5 Determine heating and cooling load temperature difference and daily range values.
11.1.6 Explain the relationship between house orientation and solar heat gain.
11.1.7 Perform building component area and volume calculations from construction drawings.
11.1.8 Perform winter/summer infiltration calculations using Manual J procedures.
11.1.9 Perform heat gain calculations using Manual J procedures.
11.1.10 Perform heat loss calculations using Manual J procedures.
11.1.12 Determine sensible, latent, and total heat for house block and room values.

CONTENT STANDARD 12.0: BASIC CONTROLS

Performance Standard 12.1: Basic Controls

12.1.1 Differentiate between operating and safety controls.
12.1.2 Describe the sequence of operation of standing pilot, intermittent, and direct ignition control systems.
12.1.3 Interpret basic gas furnace wiring diagrams.
12.1.4 Explain oil furnace primary control operation.
12.1.5 Describe electric furnace operating sequence.
12.1.6 Describe hydronic heating system controls.
12.1.7 Describe basic motor circuit troubleshooting procedures.
12.1.8 Interpret packaged and split air conditioning systems and wiring diagrams.
12.1.9 Identify commercial and industrial air conditioning system control methods.
12.1.10 Describe basic electronic control system troubleshooting procedures.

CONTENT STANDARD 13.0: SYSTEM AIR FLOW AND DUCT SIZING

Performance Standard 13.1: System Air Flow and Duct Sizing

13.1.1 Describe basic air flow characteristics.
13.1.2 Explain duct system pressures.
13.1.3 Calculate duct system air flow.
13.1.4 Determine proper air flow requirements.
13.1.5 Describe air distribution system configurations.
13.1.6 Select primary heating/cooling equipment using nationally recognized standards.
13.1.7 Determine air-side component pressure drops from manufacturer tables.
13.1.8 Sketch a residential duct system layout using nationally recognized standards.
13.1.9 Determine duct size based on nationally recognized standards.

CONTENT STANDARD 14.0: BASIC AIR CONDITIONING AND REFRIGERATION

Performance Standard 14.1: Basic Air Conditioning and Refrigeration

14.1.1 Explain latent, sensible, and total heat differences.
14.1.2 Diagram refrigeration cycle conditions and components.
14.1.3 Explain pressure-enthalpy diagrams.
14.1.4 Describe compressor design differences, efficiencies, and applications.
14.1.5 Explain water/air-cooled condenser operation and performance.
14.1.6 Describe metering device design and operation.
14.1.7 Describe refrigeration accessory components and operation.
14.1.8 Describe evaporator types.
14.1.9 Identify proper refrigerant line sizing and installation practices.
14.1.10 Explain various refrigerant physical and chemical properties.
14.1.11 Explain refrigerant oil properties and application.
14.1.12 Describe proper refrigeration system access procedures.
14.1.13 Differentiate between recovered, recycled, and reclaimed refrigerant.
14.1.14 Describe proper refrigerant recovery, evacuation, and charging procedures.
14.1.15 Describe the operation of a variable refrigerant flow system.

CONTENT STANDARD 15.0: INTRODUCTION TO HYDRONIC SYSTEMS

Performance Standard 15.1: Introduction to Hydronic Systems

15.1.1 Identify hydronic piping system configurations.

15.1.2 Describe hydronic system components.
15.1.3 Explain hydronic systems drain and fill procedures.
15.1.4 Diagram basic hydronic system control circuits.

CONTENT STANDARD 16.0: BASIC SHEET METAL

Performance Standard 16.1: Basic Sheet Metal

16.1.1 Define sheet metal layout terms.
16.1.2 Explain parallel line development procedures.
16.1.3 Layout and fabricate the following sheet metal fitting: Pittsburgh seam and square elbow.
16.1.4 Layout and fabricate the following sheet metal fitting: 90 degree elbow and transition.
16.1.5 Explain radial line development procedures.
16.1.6 Layout and fabricate the following sheet metal fitting: symmetrical tapered duct.
16.1.7 Layout and fabricate the following sheet metal fitting: square to square tapered duct.
16.1.8 Explain triangulation development procedures.
16.1.9 Layout and fabricate the following sheet metal fitting: two-way offset transition.
16.1.10 Layout and fabricate the following sheet metal fitting: tapered duct section.

CONTENT STANDARD 17.0: INTRODUCTION TO SERVICE

Performance Standard 17.1: Introduction to Service

17.1.1 Identify air conditioning system problems.
17.1.2 Prescribe air conditioning system problem solutions.
17.1.3 Identify gas heating system problems.
17.1.4 Prescribe gas heating system problem solutions.
17.1.5 Identify oil heating system problems.
17.1.6 Prescribe oil heating system problem solutions.
17.1.7 Identify electric heating system problems.
17.1.8 Prescribe electric heating system problem solutions.
17.1.9 List gas, oil, and electric heating and air conditioning maintenance procedures.

CONTENT STANDARD 18.0: ADVANCED HVAC SYSTEMS

Performance Standard 18.1: HVAC Systems

18.1.1 Explain commercial fan coil unit operation.
18.1.2 Explain package unit building system configurations.
18.1.3 Describe building chilled water system operation.
18.1.4 Describe induced and forced draft cooling tower operation.

HVAC APPRENTICESHIP YEAR 4 PROGRAM STANDARDS | 2018

CONTENT STANDARD 1.0: TRADE MATH

Performance Standard 1.1: Basic Math

1.1.1 Perform addition, subtraction, multiplication, and division calculations of whole numbers.
1.1.2 Perform addition and subtraction calculations of common fractions.
1.1.3 Perform multiplication and division calculations of common fractions.
1.1.4 Perform addition, subtraction, multiplication, and division calculations of decimal fractions.
1.1.5 Perform ratio and proportion calculations.
1.1.6 Perform percent, percentage, and discount calculations.
1.1.7 Perform angular, length, and converted temperature measure calculations.
1.1.8 Perform area calculations.
1.1.9 Perform volume calculations.
1.1.10 Solve basic equations.
1.1.11 Demonstrate the use of order of operations.

CONTENT STANDARD 2.0: GENERAL SAFETY

Performance Standard 2.1: Workplace Safety

2.1.1 Describe potential excavation site hazards.
2.1.2 Explain proper personal protective equipment (PPE) use.
2.1.3 Describe proper material handling, storage, use, and disposal.
2.1.4 Describe ladder, stairway, and scaffold hazards and proper use.
2.1.5 Describe jobsite electrical hazards and proper lockout/tagout use.
2.1.6 Describe proper refrigerant and pressure vessel usage and storage.
2.1.7 Identify safety data sheets (SDS) properties of chemicals specific to HVAC.
2.1.8 Identify and describe environmental hazards (e.g. lead, silica, asbestos, carbon monoxide).
2.1.9 Identify the hazards associated with confined spaces.
2.1.10 Use appropriate fire extinguishers and other such safety devices.
2.1.11 Identify the importance safety procedures for brazing and soldering.

CONTENT STANDARD 3.0: TOOLS AND MATERIALS

Performance Standard 3.1: Power and Hand Tool Use

3.1.1 Describe proper hand tool use.
3.1.2 Describe proper power tool use.
3.1.3 Identify proper use of various types of torches.
3.1.4 Identify proper use of piping and tubing fabrication tools.

CONTENT STANDARD 4.0: FUEL GAS PIPING AND VENTING

Performance Standard 4.1: Fuel Gas Piping and Venting

4.1.1 Identify HVAC IDAPA (define) rules and statutes.
4.1.2 Define key terms as applied to the IFGC.
4.1.3 Describe the building structural safety requirements for fuel gas equipment installation.

4.1.4 Determine proper fuel gas equipment combustion, ventilation, and dilution air requirements.
4.1.5 Identify the requirements for installation of fuel gas fired equipment in a masonry chimney.
4.1.6 Identify fuel gas equipment location, access, and service space requirements.
4.1.7 Describe proper appliance condensate disposal and clearance reduction methods.
4.1.8 Perform gas pipe sizing exercises.
4.1.9 Identify proper gas pipe installation methods.
4.1.10 Describe proper gas pipe inspection, testing, and purging procedures.
4.1.11 Describe chimney and vent types and construction.
4.1.12 Determine chimney installation requirements.
4.1.13 Determine gas vent installation requirements.
4.1.14 Describe gas appliance category I, II, III, IV characteristics.
4.1.15 Identify proper gas vent connector installation requirements.
4.1.16 Describe category I venting principles.
4.1.17 Perform single appliance category I vent sizing exercises.
4.1.18 Perform multiple appliance category I vent sizing exercises.
4.1.19 Determine capacity penalties for offsets in common vent and vent connectors.
4.1.20 Determine specific fuel gas appliance installation requirements.
4.1.21 Determine mechanical equipment location, access, and service space requirements.
4.1.22 Determine combustion air location and sizing requirements.

CONTENT STANDARD 5.0: ENERGY SOURCES

Performance Standard 5.1: Energy Sources

5.1.1 Explain natural, LP gas, and fuel oil combustion characteristics.
5.1.2 Describe the application of geothermal systems.
5.1.3 Describe the application of renewable energy systems.
5.1.4 Describe the application of electric production systems.

CONTENT STANDARD 6.0: BASIC SYSTEMS OVERVIEW

Performance Standard 6.1: Basic Systems Overview

6.1.1 Describe fossil-fuel and electrical furnace operations.
6.1.2 Describe the typical configuration of residential split air conditioning systems.
6.1.3 List various types of commercial air conditioning systems and their application.
6.1.4 Describe the configuration of common duct systems.

CONTENT STANDARD 7.0: INTRO TO APPLIED SCIENCE

Performance Standard 7.1: Intro to Applied Science

7.1.1 Perform energy conversion calculations.
7.1.2 Perform sensible, latent, and total heat calculations.
7.1.3 Differentiate between saturated, superheated, and subcooled refrigerant.
7.1.4 Explain atmospheric, absolute, and gauge pressure relationship.
7.1.5 Convert gauge pressure, absolute pressure, and vacuum.
7.1.6 Diagram a basic refrigeration cycle identifying pressure, temperature, and state of refrigerant.

7.1.7 List the type and function of the four major refrigeration components.
7.1.8 Describe the methods of heat transfer.

CONTENT STANDARD 8.0: APPLIANCE INSTALLATION

Performance Standard 8.1: Appliance Installation

8.1.1 Apply NEC standards to HVAC electrical circuit installations.
8.1.2 Interpret HVAC manufacturer electrical name plate data.
8.1.3 Apply appropriate code standards.
8.1.4 Describe gas, oil, and electrical appliance installation, start-up, and checkout procedures.
8.1.5 Describe sheet metal, fiberglass, and flex duct installation procedures.
8.1.6 Describe split and packaged air conditioning system installation, start-up, and checkout procedures.

CONTENT STANDARD 9.0: INTRODUCTION TO CONSTRUCTION DRAWINGS AND SPECIFICATIONS

Performance Standard 9.1: Introduction to Construction Drawings and Specifications

9.1.1 Identify the application of architectural plans and specifications.
9.1.2 Interpret mechanical, plumbing, and electrical drawing symbols.
9.1.3 Interpret specification documents and apply to plans.
9.1.4 Interpret shop drawings and apply to plans and specifications.
9.1.5 Describe a submittal and its derivation, routing, and makeup.
9.1.6 Develop cut lists for duct runs from shop drawings.
9.1.7 Interpret as-built modifications on HVAC mechanical plans.
9.1.8 Perform HVAC equipment and material takeoff.

CONTENT STANDARD 10.0: BASIC ELECTRICITY

Performance Standard 10.1: Basic Electricity

10.1.1 Describe basic electrical theory.
10.1.2 Describe series, parallel, and combination circuit characteristics.
10.1.3 Calculate electrical circuit values.
10.1.4 Describe electrical meter functions.
10.1.5 Measure electrical circuit values.
10.1.6 Identify electrical symbols.
10.1.7 Draw basic HVAC electrical circuit diagrams.
10.1.8 Interpret basic residential HVAC schematic diagrams.
10.1.9 Interpret basic commercial HVAC schematic diagrams.
10.1.10 Explain AC circuit characteristics.
10.1.11 Describe power distribution transformer systems.
10.1.12 Calculate HVAC branch circuit conductor, breaker, and disconnect sizes.
10.1.13 Describe basic motor theory.
10.1.14 Describe the five single-phase motor types.
10.1.15 Identify single-phase motor diagrams.

10.1.16 Explain single-phase motor starting relay operation.
10.1.17 Calculate motor capacitor replacement values.
10.1.18 Explain three-phase motor operation.
10.1.19 Explain ECM motor operation.
10.1.20 Perform Ohm's law calculations to series, parallel, and combination circuits.

CONTENT STANDARD 11.0: INDOOR AIR QUALITY

Performance Standard 11.1: Indoor Air Quality

11.1.1 Describe indoor air quality (IAQ) factors as related to HVAC.
11.1.2 Identify various indoor air quality pollutant and pollutant pathways.
11.1.3 Describe indoor air quality evaluation and measurement tools.
11.1.4 Explain appropriate prevention, control, and resolution strategies for IAQ issues.
11.1.5 Recognize when to involve IAQ professionals as necessary.

CONTENT STANDARD 12.0: RESIDENTIAL LOAD CALCULATIONS

Performance Standard 12.1: Residential Load Calculations

12.1.1 Identify the importance of heat load calculation in building design.
12.1.2 Differentiate sensible, latent, and total heat gain/loss.
12.1.3 Determine U values and R values for various building construction components.
12.1.4 Calculate Btu gain/loss values using HTM and temperature difference factors.
12.1.5 Determine heating and cooling load temperature difference and daily range values.
12.1.6 Explain the relationship between house orientation and solar heat gain.
12.1.7 Perform building component area and volume calculations from construction drawings.
12.1.8 Perform winter/summer infiltration calculations using Manual J procedures.
12.1.9 Perform heat gain calculations using Manual J procedures.
12.1.10 Perform heat loss calculations using Manual J procedures.
12.1.11 Determine sensible, latent, and total heat for house block and room values.

CONTENT STANDARD 13.0: BASIC CONTROLS

Performance Standard 13.1: Basic Controls

13.1.1 Differentiate between operating and safety controls.
13.1.2 Describe the sequence of operation of standing pilot, intermittent, and direct ignition control systems.
13.1.3 Interpret basic gas furnace wiring diagrams.
13.1.4 Explain oil furnace primary control operation.
13.1.5 Describe electric furnace operating sequence.
13.1.6 Describe hydronic heating system controls.
13.1.7 Describe basic motor circuit troubleshooting procedures.
13.1.8 Interpret packaged and split air conditioning systems and wiring diagrams.
13.1.9 Identify commercial and industrial air conditioning system control methods.
13.1.10 Describe basic electronic control system troubleshooting procedures.

CONTENT STANDARD 14.0: SYSTEM AIR FLOW AND DUCT SIZING

Performance Standard 14.1: System Air Flow and Duct Sizing

14.1.1 Describe basic air flow characteristics.

14.1.2 Explain duct system pressures.
14.1.3 Calculate duct system air flow.
14.1.4 Determine proper air flow requirements.
14.1.5 Describe air distribution system configurations.
14.1.6 Select primary heating/cooling equipment using nationally recognized standards.
14.1.7 Determine air-side component pressure drops from manufacturer tables.
14.1.8 Sketch a residential duct system layout using nationally recognized standards.
14.1.9 Determine duct size based on nationally recognized standards.

CONTENT STANDARD 15.0: BASIC AIR CONDITIONING AND REFRIGERATION

Performance Standard 15.1: Basic Air Conditioning and Refrigeration

15.1.1 Explain latent, sensible, and total heat differences.
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15.1.8 Describe evaporator types.
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15.1.10 Explain various refrigerant physical and chemical properties.
15.1.11 Explain refrigerant oil properties and application.
15.1.12 Describe proper refrigeration system access procedures.
15.1.13 Differentiate between recovered, recycled, and reclaimed refrigerant.
15.1.14 Describe proper refrigerant recovery, evacuation, and charging procedures.
15.1.15 Describe the operation of a variable refrigerant flow system.

CONTENT STANDARD 16.0: INTRODUCTION TO HYDRONIC SYSTEMS

Performance Standard 16.1: Introduction to Hydronic Systems

16.1.1 Identify hydronic piping system configurations.
16.1.2 Describe hydronic system components.
16.1.3 Explain hydronic systems drain and fill procedures.
16.1.4 Diagram basic hydronic system control circuits.

CONTENT STANDARD 17.0: BASIC SHEET METAL

Performance Standard 17.1: Basic Sheet Metal

17.1.1 Define sheet metal layout terms.
17.1.2 Explain parallel line development procedures.
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17.1.8 Explain triangulation development procedures.

17.1.9 Layout and fabricate the following sheet metal fitting: two-way offset transition.
17.1.10 Layout and fabricate the following sheet metal fitting: tapered duct section.

CONTENT STANDARD 18.0: INTRODUCTION TO SERVICE

Performance Standard 18.1: Introduction to Service

18.1.1 Identify air conditioning system problems.
18.1.2 Prescribe air conditioning system problem solutions.
18.1.3 Identify gas heating system problems.
18.1.4 Prescribe gas heating system problem solutions.
18.1.5 Identify oil heating system problems.
18.1.6 Prescribe oil heating system problem solutions.
18.1.7 Identify electric heating system problems.
18.1.8 Prescribe electric heating system problem solutions.
18.1.9 List gas, oil, and electric heating and air conditioning maintenance procedures.

CONTENT STANDARD 19.0: FUNDAMENTALS OF PSYCHOMETRICS

Performance Standard 19.1: Fundamentals of Psychometrics

19.1.1 Explain psychometric properties.
19.1.2 Diagram psychometric conditions.
19.1.3 Describe comfort conditions as applied to psychometric properties.
19.1.4 Use the psychometric chart to measure enthalpy.

CONTENT STANDARD 20.0: TESTING AND BALANCING

Performance Standard 20.1: Testing and Balancing

20.1.1 Describe air flow and water flow measuring devices.
20.1.2 Explain basic air flow and water flow balancing procedures.

CONTENT STANDARD 21.0: INTRODUCTION TO HVAC CONTROL STRATEGIES

Performance Standard 21.1: Introduction to HVAC Control Strategies

21.1.1 Describe basic HVAC control principles.
21.1.2 Interpret basic HVAC pneumatic control diagrams.
21.1.3 Explain DDC control system basic operation.

CONTENT STANDARD 22.0: ADVANCED HVAC SYSTEMS

Performance Standard 22.1: HVAC Systems

22.1.1 Explain commercial fan coil unit operation.
22.1.2 Explain package unit building system configurations.
22.1.3 Describe building chilled water system operation.
22.1.4 Describe induced and forced draft cooling tower operation.

Performance Standard 22.2: Heat Pump Systems

22.2.1 Explain heat pump heating and cooling cycles.
22.2.2 Describe the purpose and operation of various heat pump components.
22.2.3 Prescribe heat pump charging procedures.
22.2.5 Differentiate heat pump time/temperature and demand defrost control systems.
22.2.8 Explain geothermal heat pump system applications.
22.2.9 Describe water-to-air and air-to-water heat pump operation.

CONTENT STANDARD 23.0: ADVANCED TROUBLESHOOTING

Performance Standard 23.1: Advanced Troubleshooting

23.1.1 Describe air flow troubleshooting procedures.
23.1.2 Determine operating conditions at variable loads.
23.1.3 Describe refrigeration side troubleshooting procedures.
23.1.4 Troubleshoot residential and commercial control systems.
23.1.5 Interpret manufacturer schematics.
23.1.6 Analyze furnace troubleshooting values.
23.1.7 Apply furnace troubleshooting values.

CONTENT STANDARD 24.0: CODE REVIEW

Performance Standard 24.1: Code Review

24.1.1 Apply international fuel gas code standards.
24.1.2 Apply international mechanical code standards.
24.1.3 Apply HVAC rules and statutes as it pertains to the IDAPA administrative code.

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 03 **Two Year Renewal Grace Period**

PRESENTER: John Nielsen, HVAC Program Manager

OBJECTIVE: Extend the time to renew a license without having to retest from one to two years.

ACTION: Informational

BACKGROUND: **January 2020** – Based on the License Freedom Act of 2019, it was suggested at the November 2019 meeting to extend the revival period from one to two years to renew a license without retesting. It was noted the modification in paragraph one of the proposed statute change, in the board packet, was incorrect. Licenses will continue to expire based on a 12-calendar month from the date of issue, not 24 months. The correct change to the extension is in paragraph two. All agencies have been asked to not begin the negotiated rulemaking process until sine die of the legislature. Therefore, the topic *Two Year Renewal Grace Period* will be brought back to the March 2020 meeting as informational item.

PROCEDURAL HISTORY:

ATTACHMENTS: Idaho Code § 54-5013

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§ 54-5013. Certificate expiration -- Renewal -- Reinstatement

(1) Certificates of competency shall expire ~~twelve (12)~~ twenty-four (24) calendar months from the date of issue, or on the last day of the month of the certification period, unless renewed as provided in this section, or unless sooner revoked or suspended.

(2) Renewal of a certificate may be requested within sixty (60) days prior to the expiration date. Any certificate which has expired may be revived at any time within one (1) year from the first day of the final month of the certification period, by payment of a thirty-five dollar ($35.00) revival fee in addition to the full annual renewal fee, and if any, all outstanding civil penalties, permits or other fees and penalties.

(3) Any person whose certificate has been revoked may, after the expiration of one (1) year from the date of such revocation, but not before, apply for a new certificate. Successful application shall require satisfactory proof of payment of any and all out-standing civil penalties, permits or other fees and penalties.

(4) The administrator may renew, on an inactive basis, a certificate of competency for an HVAC contractor or specialty contractor who is not engaged in HVAC contracting in this state. The board shall fix and collect an inactive license fee for such an inactive license renewal in an amount not to exceed thirty-six dollars ($36.00) per year. An HVAC contractor or specialty contractor holding an inactive license may not engage in the practice of HVAC contracting or specialty contracting in this state. An HVAC contractor or specialty contractor's inactive license may be converted to an active license by paying a processing fee of thirty dollars ($30.00) to the administrator, and by furnishing a compliance bond in the amount of two thousand dollars ($2,000) or evidence of such coverage by a corporate industry group bond acceptable to the board.

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 04 **Contractor Inactive Status**

PRESENTER: John Nielsen, HVAC Program Manager

OBJECTIVE: Establish the ability for a contractor to put his license in an inactive status.

ACTION: Informational

BACKGROUND: To comply with the License Freedom Act of 2019, a statute change was provided that would allow an HVAC contractor to place his license inactive upon paying a $36 inactivation fee. To reactivate the license would require a bond and appropriate activation fee. Currently, an HVAC contractor license is renewed on a three-year basis. Following the same trend, it was suggested every three years the contractor confirm the license is to stay inactive and pay the inactivation fee. Agreeing with the suggestion, the HVAC Program Manager will modify the proposal for the next board meeting.

PROCEDURAL HISTORY:

ATTACHMENTS: Idaho Code § 54-5013

§ 54-5013. Certificate expiration -- Renewal -- Reinstatement

(1) Certificates of competency shall expire ~~twelve (12)~~ twenty-four (24) calendar months from the date of issue, or on the last day of the month of the certification period, unless renewed as provided in this section, or unless sooner revoked or suspended.

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(3) Any person whose certificate has been revoked may, after the expiration of one (1) year from the date of such revocation, but not before, apply for a new certificate. Successful application shall require satisfactory proof of payment of any and all out-standing civil penalties, permits or other fees and penalties.

(4) The administrator may renew, on an inactive basis, a certificate of competency for an HVAC contractor or specialty contractor who is not engaged in HVAC contracting in this state. The board shall fix and collect an inactive license fee for such an inactive license renewal in an amount not to exceed thirty-six dollars ($36.00) per year. An HVAC contractor or specialty contractor holding an inactive license may not engage in the practice of HVAC contracting or specialty contracting in this state. An HVAC contractor or specialty contractor's inactive license may be converted to an active license by paying a processing fee of thirty dollars ($30.00) to the administrator, and by furnishing a compliance bond in the amount of two thousand dollars ($2,000) or evidence of such coverage by a corporate industry group bond acceptable to the board.

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 05 **Program Manager Report**

PRESENTER: John Nielsen, HVAC Program Manager

OBJECTIVE: Discuss current topics/issues within the HVAC Trade.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho HVAC Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: No Documentation

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 06 Local Jurisdictions Checking Licenses

PRESENTER: Ted Sermon, Chairman

OBJECTIVE: Clarification as to whether local jurisdictions are required to check licenses.

ACTION: Informational

BACKGROUND:

PROCEDURAL HISTORY:

ATTACHMENTS: No Documentation

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 07 **Compliance Program Report**

PRESENTER: Amy Kohler, Compliance Program Specialist

OBJECTIVE: Provide an update on the statewide compliance program.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho HVAC Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: NOV Activity Report and Journeyman First Exam Attempts Report

HVAC JOURNEYMAN FIRST EXAM ATTEMPTS

		JAN '19	FEB '19	MAR '19	APR '19	MAY '19	JUN '19	JUL '19	AUG '19	SEP '19	OCT '19	NOV '19	DEC '19	TTL	%
CSI	T	1	1	2	0	1	1	0	0	2	1	1	0	10	30%
	P	1	1	1	0	0	0	0	0	0	0	0	0	3	
CWI	T	0	2	1	3	11	5	1	3	3	0	4	0	33	79%
	P	0	2	1	3	8	4	0	2	3	0	3	0	26	
CEI	T	0	0	1	1	5	0	0	0	1	1	0	0	9	67%
	P	0	0	1	0	3	0	0	0	1	1	0	0	6	
HVACR	T	0	1	1	2	2	0	0	1	0	0	1	0	8	50%
	P	0	1	0	1	1	0	0	0	0	0	1	0	4	
ISU	T	0	1	0	0	0	1	0	0	0	0	0	0	2	100%
	P	0	1	0	0	0	1	0	0	0	0	0	0	2	
JATC EA	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
	P	0	0	0	0	0	0	0	0	0	0	0	0	0	
JATC SW	T	2	0	2	1	1	1	2	1	1	2	2	1	16	56%
	P	1	0	2	0	1	1	0	0	1	2	1	0	9	
LCSC	T	0	0	0	0	0	0	0	0	0	0	1	0	1	0%
	P	0	0	0	0	0	0	0	0	0	0	1	0	1	
NIC	T	0	0	0	1	1	2	1	0	0	1	0	1	7	100%
	P	0	0	0	1	1	2	1	0	0	1	0	1	7	
PREV HE	T	2	1	3	0	0	1	0	1	2	1	1	0	12	58%
	P	1	1	2	0	0	0	0	1	1	1	0	0	7	
OOS	T	1	1	2	4	4	2	0	4	3	2	3	5	31	71%
	P	1	1	1	4	4	2	0	1	2	1	1	4	22	
TOTAL	**T**	**6**	**7**	**12**	**12**	**25**	**13**	**4**	**10**	**12**	**8**	**13**	**7**	129	67%
	P	**4**	**7**	**8**	**9**	**18**	**10**	**1**	**4**	**8**	**6**	**7**	**5**	87	
%		67%	100%	67%	75%	72%	77%	25%	40%	67%	75%	54%	71%	67%	

HVAC JOURNEYMAN FIRST EXAM ATTEMPTS

		JAN '20	FEB '20	MAR '20	APR '20	MAY '20	JUN '20	JUL '20	AUG '20	SEP '20	OCT '20	NOV '20	DEC '20	TTL	%
CSI	T	1	0											1	100%
	P	1	0											1	
CWI	T	2	0											2	100%
	P	2	0											2	
CEI	T	1	0											1	0%
	P	0	0											0	
HVACR	T	0	0											0	#DIV/0!
	P	0	0											0	
ISU	T	0	0											0	#DIV/0!
	P	0	0											0	
JATC EAST	T	2	0											2	0%
	P	1	0											1	
JATC SW	T	3	0											3	67%
	P	2	0											2	
LCSC	T	0	0											0	0%
	P	0	0											0	
NIC	T	2	3											5	80%
	P	2	2											4	
PREV HELD	T	1	0											1	100%
	P	1	0											1	
OOS	T	5	2											7	86%
	P	5	1											6	
TOTAL	T	**17**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	22	77%
	P	**14**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	17	
%		82%	60%	#####	####	####	####	####	####	####	####	####	####	77%	

HVC% NOV Activity by Date

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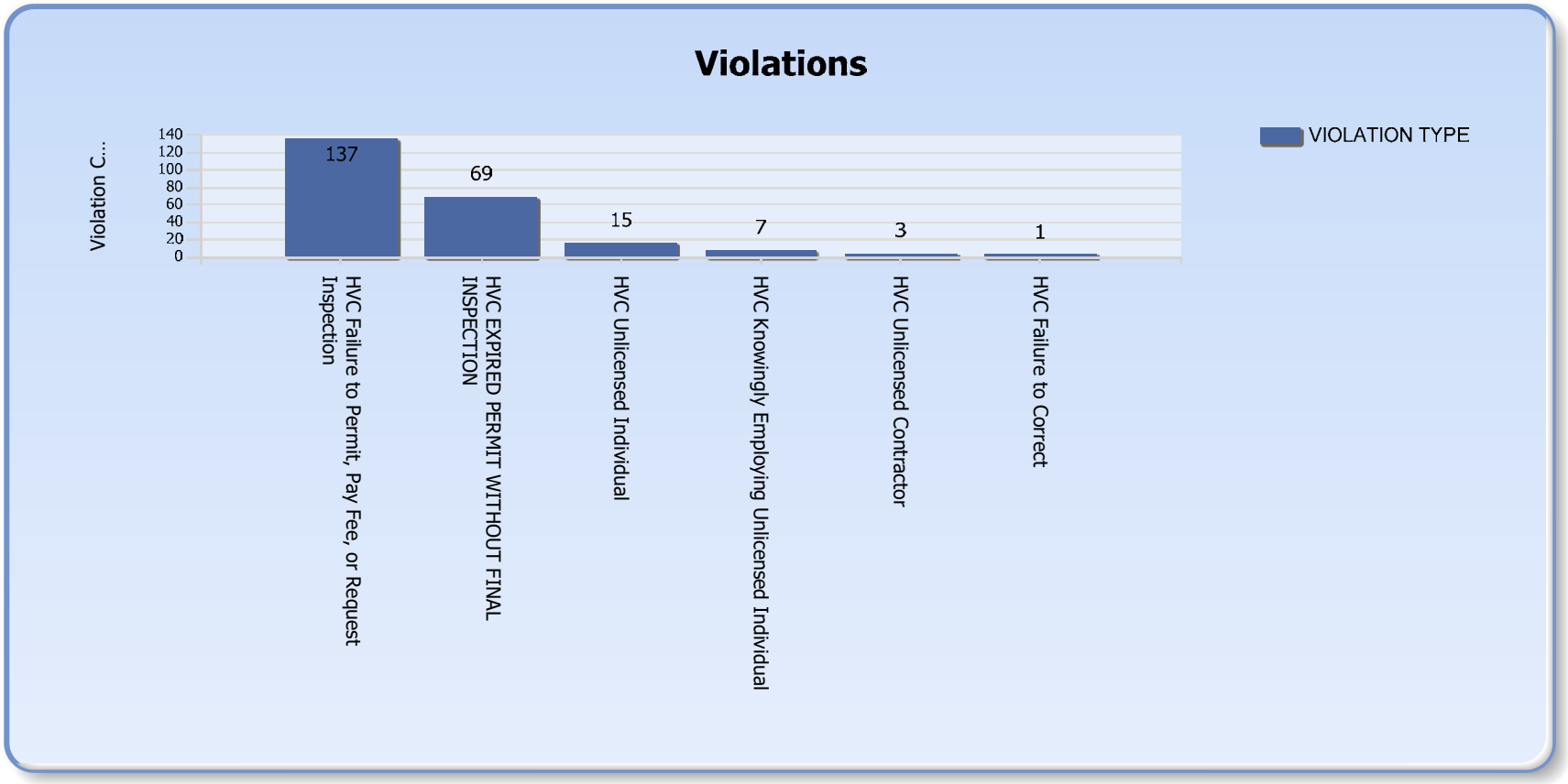
From 11/6/2019 to 2/29/2020

232 Cases 232 Violations



CASE NO	STARTED	CLOSED	Case Type	FEES CHARGED	FEES PAID	BALANCE DUE	STATUS	OFFENDER COMPLAINANT
HVC1911-0001 ISLAND PARK	11/12/2019	12/12/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**ALPHA MECHANICAL HEATING & AC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0002 MONTOUR	11/12/2019	1/23/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**VALLEY WIDE COOP**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0003 COUNCIL	11/12/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**RICK ORTENZIO**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0004 NEW MEADOWS	11/12/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**JERAME KOVIS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0005 HOPE	11/12/2019	12/3/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**MOSER INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0006 BONNERS FERRY	11/12/2019	12/10/2019	NOV	$200.00	$0.00	$200.00	CANCELLED	**PEND OREILLE MECHANICAL 18040**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1911-0007 SAGLE	11/12/2019	11/20/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**FRY CREEK HEATING & COOLING LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0008 BLACKFOOT	11/12/2019	1/7/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**RIGHT NOW HEATING & AIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0009 BONNERS FERRY	11/12/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Paul Harris / Paula D. Burt**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0010 ALBION	11/12/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**Ryan Newman**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0011 GARDEN CITY	11/12/2019	12/4/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**BUSS MECHANICAL SERVICES INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0012 POCATELLO	11/12/2019	12/3/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**EXCELLENCE HEATING & COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0013 MOYIE SPRINGS	11/12/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**ALL WEATHER HEATING & AIR**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0014 SUN VALLEY	11/12/2019	12/4/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**HIGH COUNTRY HEATING INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0015 WEISER	11/12/2019	12/3/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**AMERICOOL HEATING & COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0016 GARDEN CITY	11/12/2019	12/2/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**PERFECT PLUMBING AND AIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0017 CAMBRIDGE	11/12/2019	12/12/2019	NOV	$200.00	$200.00	$0.00	CLOSED	**DOUG ANDERSON**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0018 ISLAND PARK	11/15/2019	1/30/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**FREEDOM HEATING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0019 ISLAND PARK	11/15/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**FUSION HOME SERVICES INC**
VIOLATION: HVC Failure to Correct								
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1911-0020 GRACE	11/15/2019	2/19/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**REIDS PLUMBING & HEATING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0021 KELLOGG	11/15/2019	11/26/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**FLAME HEATING A/C LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0022 ST. MARIES	11/15/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**RAINDANCE INC dba RDI HTG & CL**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0033 MERIDIAN	11/21/2019	2/12/2020	NOV	$200.00	$200.00	$0.00	PAID	**ADVANCED HEATING & COOLING**
VIOLATION: HVC Unlicensed Individual								
HVC1911-0034 BELLEVUE	11/18/2019	12/13/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**KETCHUM HEATING CORP**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0035 MOUNTAIN HOME	11/18/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**KENNETH AND AMANDA YOUNG**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1911-0036 BLANCHARD	11/18/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**ROB'S HEATING & COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0037 MOUNTAIN HOME	11/18/2019	12/2/2019	NOV	$200.00	$200.00	$0.00	PAID	**PERFECT PLUMBING AND AIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0038 RIGBY	11/18/2019	1/10/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**BIGFOOT HEATING & COOLING SERVICE**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0039 BOISE	11/18/2019	2/4/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**DOUG ANDERSON**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0040 EMMETT	11/18/2019	12/12/2019	NOV	$200.00	$200.00	$0.00	CLOSED	**L&H HEATING & COOLING INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0041 WORLEY	11/18/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**ACI NORTHWEST**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0042 BLACKFOOT	11/18/2019	1/30/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**HOWELL & SONS PLUMBING & HEATING**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0043 INKOM	11/18/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Bret Barber**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0044 RIGBY	11/18/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**FUSION HOME SERVICES INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0045 KIMBERLY	11/18/2019	2/20/2020	NOV	$200.00	$200.00	$0.00	CANCELLED	**HOME HEATING & A/C INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0046 COEUR D ALENE	11/18/2019	11/25/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**TRADEMARK MECHANICAL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0051 BOISE	11/6/2019	11/25/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**ULTIMATE HEATING AND AIR INC**
VIOLATION: HVC Unlicensed Individual								
HVC1911-0052 BOISE	11/6/2019	11/25/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**SAMUEL MONSON**
VIOLATION: HVC Unlicensed Individual								

HVC1911-0053 EAGLE	11/7/2019	12/4/2019	NOV	$200.00	$200.00	$0.00	PAID	**L&H HEATING & COOLING INC**
VIOLATION: HVC Unlicensed Individual								
HVC1911-0054 EAGLE	11/7/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**RAMON QUINTERO**
VIOLATION: HVC Unlicensed Individual								
HVC1911-0055 MCCALL	11/20/2019	11/21/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**MASTER CRAFT HEARTH & HOME**
HVC1911-0056 BLACKFOOT	11/21/2019	1/7/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**ALPHA MECHANICAL HEATING & AC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0057 HAILEY	11/21/2019	2/20/2020	NOV	$200.00	$200.00	$0.00	CANCELLED	**EVANS PLUMBING INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0058 POST FALLS	11/21/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**doran thomas**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0059 BONNERS FERRY	11/21/2019	12/9/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**HOMETOWN HEATING AND AIR**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0060 MOUNTAIN HOME	11/21/2019	11/25/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**PERFECT PLUMBING AND AIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0061 BONNERS FERRY	11/21/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Allan Dahl**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0062 IDAHO CITY	11/21/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**ANDREW BOURRET**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0063 RIGBY	11/21/2019		NOV	$200.00	$200.00	$0.00	PAID	**FIRE & ICE HEATING AND AC LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0064 SAGLE	11/22/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Carol Bell**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0065 COEUR D ALENE	11/22/2019	12/12/2019	NOV	$200.00	$200.00	$0.00	PAID	**TRADEMARK MECHANICAL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1911-0066 GARDEN VALLEY	11/22/2019	2/7/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**WHOLESALE FIREPLACES OF IDAHO INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0067 KETCHUM	11/22/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**FIREPLACE OUTFITTERS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0069 BONNERS FERRY	11/25/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**mark keenan**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0070 RIGBY	11/25/2019	12/6/2019	NOV	$200.00	$200.00	$0.00	PAID	**COMMERCIAL METAL WORKS INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0071 DONNELLY	11/25/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**Allan Maki**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0072 CLARK FORK	11/25/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Molly Brown**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0073 POST FALLS	11/26/2019	1/31/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**ANDYS HEATING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1911-0074 CHALLIS	11/29/2019	12/11/2019	NOV	$200.00	$200.00	$0.00	PAID	**CENTRAL IDAHO TRADES**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0075 SANDPOINT	11/29/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Dean Christman**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1911-0076 HAILEY	11/29/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**FIREPLACE OUTFITTERS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0001 BURLEY	12/2/2019	2/20/2020	NOV	$200.00	$200.00	$0.00	CANCELLED	**RAMSEY HEATING & ELECTRIC INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0002 ISLAND PARK	12/2/2019	1/2/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**MECHAM AUTOMATION LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0003 SANDPOINT	12/2/2019	12/12/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**TRADEMARK MECHANICAL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0004 GOODING	12/2/2019	12/23/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**SOURCE REFRIG & HVAC INC**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0005 MELBA	12/2/2019	1/24/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**KEVIN SHOECRAFT DBA K&T CONTRACTING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0006 ARCO	12/2/2019	2/12/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**LOST RIVER HVAC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0007 ASHTON	12/2/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**RIVER RIDGE PLUMBING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0008 MACKAY	12/2/2019	12/12/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**FORCED AIR SYSTEMS INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0009 RIGBY	12/2/2019	12/5/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**Diane Sorrentino**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0010 WEISER	12/2/2019	12/3/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**COMFORT ZONE HEATING & COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1912-0011 COCOLALLA	12/2/2019	12/9/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**ALL ABOUT CHIMNEYS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0012 SHELLEY	12/2/2019	1/10/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**BIGFOOT HEATING & COOLING SERVICE**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0013 BOISE	11/21/2019	12/19/2019	NOV	$200.00	$200.00	$0.00	PAID	**SETH WAGNER**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0014 BOISE	11/26/2019	2/19/2020	NOV	$1000.00	$1000.00	$0.00	PAID	**SERVICE EXPERTS HTG & A/C**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0015 BOISE	11/26/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**PHILLIP RICHISON**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0016 EAGLE	12/4/2019	1/21/2020	NOV	$200.00	$200.00	$0.00	PAID	**LEISURE TIME BOISE**
VIOLATION: HVC Knowingly Employing Unlicensed Individual								
HVC1912-0017 EAGLE	12/4/2019	1/16/2020	NOV	$500.00	$500.00	$0.00	PAID	**KYLE KORB**
VIOLATION: HVC Unlicensed Contractor								

HVC1912-0018 EAGLE	12/4/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**BRIAN WIMER**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0019 AMERICAN FALLS	12/9/2019	1/22/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**VOGTS HEATING & AIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0020 INKOM	12/9/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**SUPERIOR COMFORT SYSTEMS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0021 PRIEST RIVER	12/9/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**CHRIS GREEN**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0022 DARLINGTON	12/9/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**John Wellisch**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0023 KETCHUM	12/9/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**FIREPLACE OUTFITTERS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0024 GARDEN CITY	12/9/2019	1/3/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**PROFLO HVAC AND HOME INSPECTIONS INC**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0025 NORDMAN	12/9/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Travis clemenson**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0026 SAGLE	12/9/2019	12/31/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**ALL ABOUT CHIMNEYS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0027 HOMEDALE	12/9/2019	1/3/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**PROFLO HVAC AND HOME INSPECTIONS INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0028 COEUR D ALENE	12/9/2019	12/12/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**TRADEMARK MECHANICAL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0029 EMMETT	12/9/2019	1/2/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**JOHNS PLBG & HTG**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0030 ATHOL	12/12/2019	1/2/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**BORDER SHEET METAL**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1912-0031 WESTON	12/12/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Mark Roberts**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0032 MCCALL	12/12/2019	1/8/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**B AND W HEATING AND COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0033 INKOM	12/13/2019	12/31/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**D&S BLACKSMITH**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0034 RIGBY	12/13/2019	1/16/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**SPRINTER HEATING & HYDRONICS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0035 ISLAND PARK	12/13/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Carla Benson**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0036 STAR	12/18/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**ALL PRO**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0037 STAR	12/18/2019	2/13/2020	NOV	$200.00	$0.00	$200.00	ACTIVE	**ICON AIR INC**

HVC1912-0038 BOISE	12/9/2019	12/23/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**LEGENDS MECHANICAL LLC**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0039 BOISE	12/11/2019	12/23/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**INTEGRITY HEATING & AIR LLC**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0040 STAR	12/18/2019	12/23/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**LEGENDS MECHANICAL LLC**
VIOLATION: HVC Unlicensed Individual								
HVC1912-0041 RATHDRUM	12/19/2019	1/10/2020	NOV	$200.00	$200.00	$0.00	PAID	**SHAFER HEATING & COOLING INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0042 PARMA	12/19/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**ROLAND LAIRD**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0043 RIGBY	12/19/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**THURGOOD MECHANICAL**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0044 CASCADE	12/19/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Brian Aldrich**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0045 BOISE	12/19/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**TOTAL SYSTEM SERVICES INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0046 EMMETT	12/19/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**BSR VENTURES LLC DBA ADVANCED HTG & COOL**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0047 PLACERVILLE	12/19/2019		NOV	$200.00	$200.00	$0.00	ACTIVE	**CONTROLLED COMFORT LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0048 GARDEN CITY	12/19/2019	12/27/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**DIAMOND HEATING AND COOLING INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0049 BUHL	12/19/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**QUIGLEY HTG AND SHEETMETAL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0050 GOODING	12/19/2019	1/9/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**INDUSTRIAL BUILDERS INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1912-0051 IDAHO CITY	12/19/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**CORTLAND WALKER**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0052 OAKLEY	12/19/2019	1/3/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**HARRIS REFRIG HTG & ELECTRIC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0053 IDAHO CITY	12/19/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**ROBERT WYLLIE**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0054 BURLEY	12/19/2019	12/27/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**HARRIS REFRIG HTG & ELECTRIC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0055 BONNERS FERRY	12/19/2019	12/27/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**PLUMB ON**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0056 POCATELLO	12/19/2019	2/10/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**AIRE CARE HTG & COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0057 SAGLE	12/19/2019	12/24/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**JW SHEETMETAL**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0058 AMERICAN FALLS	12/19/2019	1/8/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**AET INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0059 EMMETT	12/19/2019	2/13/2020	NOV	$0.00	$0.00	$0.00	WARNING	**KINNEY BROS & KEELE HDW**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0060 REXBURG	12/19/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	WARNING	**CORNELL HANSEN**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0061 BURLEY	12/19/2019	1/2/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**RAMSEY HEATING & ELECTRIC INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0062 BURLEY	12/19/2019	1/2/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**YMC INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0063 RIGBY	12/19/2019	12/26/2019	NOV	$0.00	$0.00	$0.00	CLOSED	**STEVE SANDERSON**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1912-0064 COEUR D ALENE	12/20/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**STORM MECHANICAL LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0065 WHITE BIRD	12/20/2019	1/7/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**QUALITY HVAC INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0066 MIDVALE	12/20/2019	1/2/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**LEGENDS MECHANICAL LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0067 INDIAN VALLEY	12/23/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	WARNING	**JOHN NOLTE**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0068 FILER	12/23/2019		NOV	$200.00	$0.00	$200.00	ACTIVE	**A & R Htg Refrg & Sheetmetal Fab**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0069 ATHOL	12/23/2019	1/24/2020	NOV	$200.00	$200.00	$0.00	PAID	**BILLS HEATING & APPLIANCE REPAIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0070 BLACKFOOT	12/23/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**LEWIS TODD WAYLAND SR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC1912-0071 INKOM	12/23/2019	1/10/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**RIGHT NOW HEATING & AIR**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0072 HORSESHOE BEND	12/23/2019	12/31/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**CAPITAL CITY HEATING AND COOLING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0073 DONNELLY	12/23/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Miles Mohler**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0074 HAYDEN	12/23/2019	12/31/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**QUALITY STOVES**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0075 MALAD	12/27/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	CANCELLED	**Aspen Air Design Inc**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0076 BURLEY	12/27/2019	2/5/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**RIMROCK HEATING & AIR COND**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0077 OAKLEY	12/27/2019	12/30/2019	NOV	$0.00	$0.00	$0.00	WARNING	**Heather Pulsipher**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0078 PAYETTE	12/30/2019	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**THOMAS JENSEN**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0079 SAGLE	12/30/2019	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Brent Binnall**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0080 KETCHUM	12/30/2019	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**FIREPLACE OUTFITTERS**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0081 FORT HALL	12/30/2019	1/7/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**Alpine Heating & A/C Inc**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0082 BOISE	12/30/2019	1/27/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**SERVICE EXPERTS HTG & A/C**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0083 SODA SPRINGS	12/30/2019	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**LEISURE TIME INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0084 PRIEST RIVER	12/30/2019	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Aaron Sands**

VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC1912-0085 BLOOMINGTON	12/30/2019	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**MR COOL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0001 BURLEY	1/2/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**MYRON WILSON CONSTRUCTION INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0002 SANDPOINT	1/2/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**CHAMBERLAIN HEATING & SUPPLY**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0003 BLACKFOOT	1/2/2020	1/10/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**BIGFOOT HEATING & COOLING SERVICE**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0004 MOUNTAIN HOME	1/6/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**SILVER HEATING AND AIR CONDITIONING LLC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0005 RATHDRUM	1/6/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**AAROW MECHANICAL & HEATING**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC2001-0006 GARDEN CITY	1/6/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ASHLEY HEATING & A/C**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0007 KIMBERLY	1/6/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**HOME HEATING & A/C INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								
HVC2001-0008 CALDWELL	1/6/2020		NOV	$200.00	$0.00	$200.00	ACTIVE	**GREENS HEATING and A/C**
VIOLATION: HVC Knowingly Employing Unlicensed Individual								
HVC2001-0009 ATHOL	1/6/2020		NOV	$700.00	$0.00	$700.00	ACTIVE	**Air Pro LLC**
VIOLATION: HVC Knowingly Employing Unlicensed Individual								
VIOLATION: HVC Unlicensed Contractor								
HVC2001-0010 RIGBY	1/9/2020	1/9/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Brent E Layton**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2001-0011 BLACKFOOT	1/9/2020	1/9/2020	NOV	$0.00	$0.00	$0.00	WARNING	**TRIPLE A SERVICE**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2001-0012 KOOTENAI	1/10/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Idaho Panhandle Habitat for Humanity Harvill**

VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0013 PRIEST LAKE	1/10/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ROB'S HEATING & COOLING**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0014 GRACE	1/10/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Randal Stepleton**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0015 SAGLE	1/13/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Solomon Dobrowski**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0016 IDAHO CITY	1/13/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**THE COMFORT SOURCE**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0017 SAGLE	1/13/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Randy Story**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2001-0018 RATHDRUM	1/13/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ANDYS HEATING**
VIOLATION: HVC Expired Permit without Final Inspection								

HVC2001-0019 POCATELLO	1/13/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**PRECISION HEATING & TILE**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0020 BLACKFOOT	1/13/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**HIGH TECH COMFORT HTG COOL LLC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0021 HANSEN	1/16/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**HOME HEATING & A/C INC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0022 AMERICAN FALLS	1/17/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ALL SEASONS HEATING AND COOLING**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0023 HAILEY	1/17/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**KURT HELMER**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0024 PINEHURST	1/17/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BILLS HEATING & APPLIANCE REPAIR**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0025 MCCALL	1/17/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ED STAUB & SONS PETROLEUM**

VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0026 ROCKLAND	1/17/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**RAPID APPLIANCE REPAIR LLC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0027 POST FALLS	1/20/2020	1/27/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ROBERT N WILSON**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0028 AMERICAN FALLS	1/20/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**SIERRA HEATING & COOLING LLC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0029 MOUNTAIN HOME	1/20/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**douglas Huffman**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0030 HARRISON	1/20/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**IRONSTONE INC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0031 KUNA	1/22/2020		NOV	$200.00	$0.00	$200.00	ACTIVE	**RM MECHANICAL INC**
VIOLATION: HVC Failure to Permit, Pay Fee, or Request Inspection								

HVC2001-0033 HARRISON	1/24/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**IRONSTONE INC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0034 HAILEY	1/24/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**FIREPLACE OUTFITTERS**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0035 FILER	1/24/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**HOME HEATING & A/C INC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0036 BOISE	1/24/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**WHOLESALE FIREPLACES OF IDAHO INC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0037 ISLAND PARK	1/27/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**A 1 STOVE & FIREPLACE**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0038 PINEHURST	1/27/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**PEGGY BECKEDAHL**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0039 MOYIE SPRINGS	1/27/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**SELKIRK PLUMBING**
VIOLATION: HVC Expired Permit without Final Inspection								

HVC2001-0040 PRIEST RIVER	1/27/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**IRONSTONE INC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0041 MACKAY	1/27/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**LOST RIVER HVAC**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0042 POCATELLO	1/27/2020	1/30/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Jeremy Sneddon**
VIOLATION: HVC Expired Permit without Final Inspection								
HVC2001-0043 BONNERS FERRY	1/31/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**David Byler**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2001-0044 COEUR D ALENE	1/31/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**IRONSTONE INC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0001 RIGBY	2/3/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Gene Sadler**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0002 RIGBY	2/3/2020	2/14/2020	NOV	$0.00	$0.00	$0.00	CANCELLED	**ADVANCED PLUMBING & MECHANICAL INC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								

HVC2002-0003 NAPLES	2/3/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Gary Penewit**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0004 PARIS	2/3/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**RIGBY PLUMBING AND HEATING**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0005 INKOM	2/3/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**LEISURE TIME INC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0006 BONNERS FERRY	2/3/2020	2/18/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Louis Fusco**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0007 ISLAND PARK	2/3/2020	2/6/2020	NOV	$0.00	$0.00	$0.00	WARNING	**COZY NIGHTS FIREPLACES & FINE WOODWORKIN**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0008 ASHTON	2/3/2020		NOV	$0.00	$0.00	$0.00	WARNING	**BULLSEYE HEATING and COOLING**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0009 MERIDIAN	2/6/2020		NOV	$200.00	$0.00	$200.00	ACTIVE	**ALLEY HEATING & COOLING LLC**

VIOLATION: HVC Knowingly Employing Unlicensed Individual								
HVC2002-0010 RATHDRUM	2/6/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BILLS HEATING & APPLIANCE REPAIR**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0011 EMMETT	2/6/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**A1 HEATING & AIR COND INC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0012 ISLAND PARK	2/7/2020		NOV	$0.00	$0.00	$0.00	CANCELLED	**Ray Pierce**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0013 HANSEN	2/7/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Matt Wilson**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0014 GARDEN VALLEY	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**dba PIONEER HTG, COOLING, REFRIG**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0015 WALLACE	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Ivan Linscott**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								

HVC2002-0016 WALLACE	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Ivan Linscott**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0017 MOSCOW	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Gropp Htg & Air**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0018 HAILEY	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**KURT HELMER**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0019 DECLO	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BOILER MAINTENANCE LLC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0020 KIMBERLY	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**HOME HEATING & A/C INC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0021 COOLIN	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ROB'S HEATING & COOLING**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0022 GARDEN VALLEY	2/11/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**CASCADE REFRIGERATION LLC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								

HVC2002-0023 EMMETT	2/11/2020		NOV	$200.00	$0.00	$200.00	ACTIVE	**CREEK HEATING**
VIOLATION: HVC Unlicensed Individual								
HVC2002-0024 HAYDEN	2/12/2020		NOV	$1000.00	$0.00	$1000.00	ACTIVE	**HURLIMAN HEATING & AC**
VIOLATION: HVC Knowingly Employing Unlicensed Individual								
HVC2002-0025	2/12/2020		NOV	$1000.00	$0.00	$1000.00	ACTIVE	**SHAUN MALONEY**
VIOLATION: HVC Unlicensed Individual								
HVC2002-0026 ATHOL	2/13/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BILLS HEATING & APPLIANCE REPAIR**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0027 SODA SPRINGS	2/14/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BRADY MOON**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0028 KIMBERLY	2/14/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BRIZEE HEATING AND A/C**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0029 NEW MEADOWS	2/14/2020	2/21/2020	NOV	$0.00	$0.00	$0.00	WARNING	**A1 HEATING & AIR COND INC**

VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0030 HAUSER	2/19/2020		NOV	$200.00	$0.00	$200.00	ACTIVE	**SPOKANE MECHANICAL HEATING & COOLING**
VIOLATION: HVC Knowingly Employing Unlicensed Individual								
HVC2002-0031 AMERICAN FALLS	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**VOGTS HEATING & AIR**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0032 SPIRIT LAKE	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ADVANCED TECH HTG/COOLING**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0033 OSBURN	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**Gabriel Mier**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0034 SWAN VALLEY	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**LEISURE TIME BOISE**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0035 RIGBY	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**LEISURE TIME BOISE**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								

HVC2002-0036 BLACKFOOT	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**HIGH TECH COMFORT HTG COOL LLC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0037 JEROME	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**A & R Htg Refrg & Sheetmetal Fab**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0038 BLACKFOOT	2/24/2020	2/25/2020	NOV	$0.00	$0.00	$0.00	WARNING	**BULLSEYE HEATING and COOLING**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0039 ATHOL	2/28/2020	2/28/2020	NOV	$0.00	$0.00	$0.00	WARNING	**SHAFER HEATING & COOLING INC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0040 OROFINO	2/28/2020	2/28/2020	NOV	$0.00	$0.00	$0.00	WARNING	**ALPINE HEATING & SHEETMETAL LLC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								
HVC2002-0041 AMERICAN FALLS	2/28/2020	2/28/2020	NOV	$0.00	$0.00	$0.00	WARNING	**RAPID APPLIANCE REPAIR LLC**
VIOLATION: HVC EXPIRED PERMIT WITHOUT FINAL INSPECTION								

HVC2002-0042 FRUITLAND	2/28/2020		NOV	$0.00	$0.00	$0.00	PENDING	**LEISURE TIME BOISE**
VIOLATION: HVC Knowingly Employing Unlicensed Individual								
HVC2002-0043 FRUITLAND	2/28/2020		NOV	$0.00	$0.00	$0.00	PENDING	**KYLE KORB**
VIOLATION: HVC Unlicensed Contractor								
Total Cases: 232				**$12200.00**	**$4900.00**	**$7300.00**		

IDAHO HEATING, VENTILATION AND AIR CONDITIONING BOARD

Agenda Item No. 08 **Administrator Report**

PRESENTER: Chris L. Jensen, Administrator

OBJECTIVE: Provide an overview of the Division's current activities.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho HVAC Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: Financial Report

Division of Building Safety

IDAHO HVAC BOARD FUND 0229-08
Fiscal Year 2020 Financial Statements
As of 01/31/20

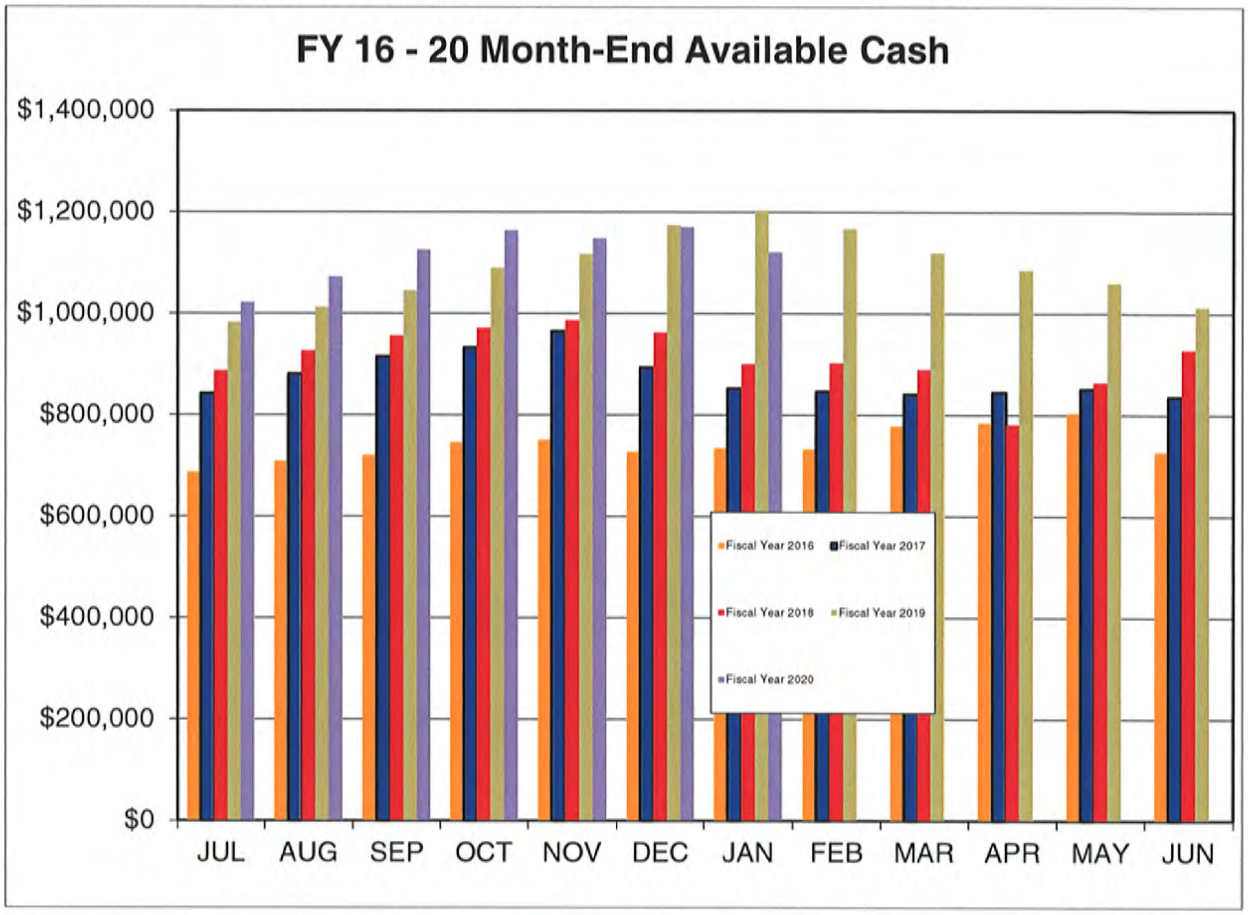
Statement of Revenues and Expenditures

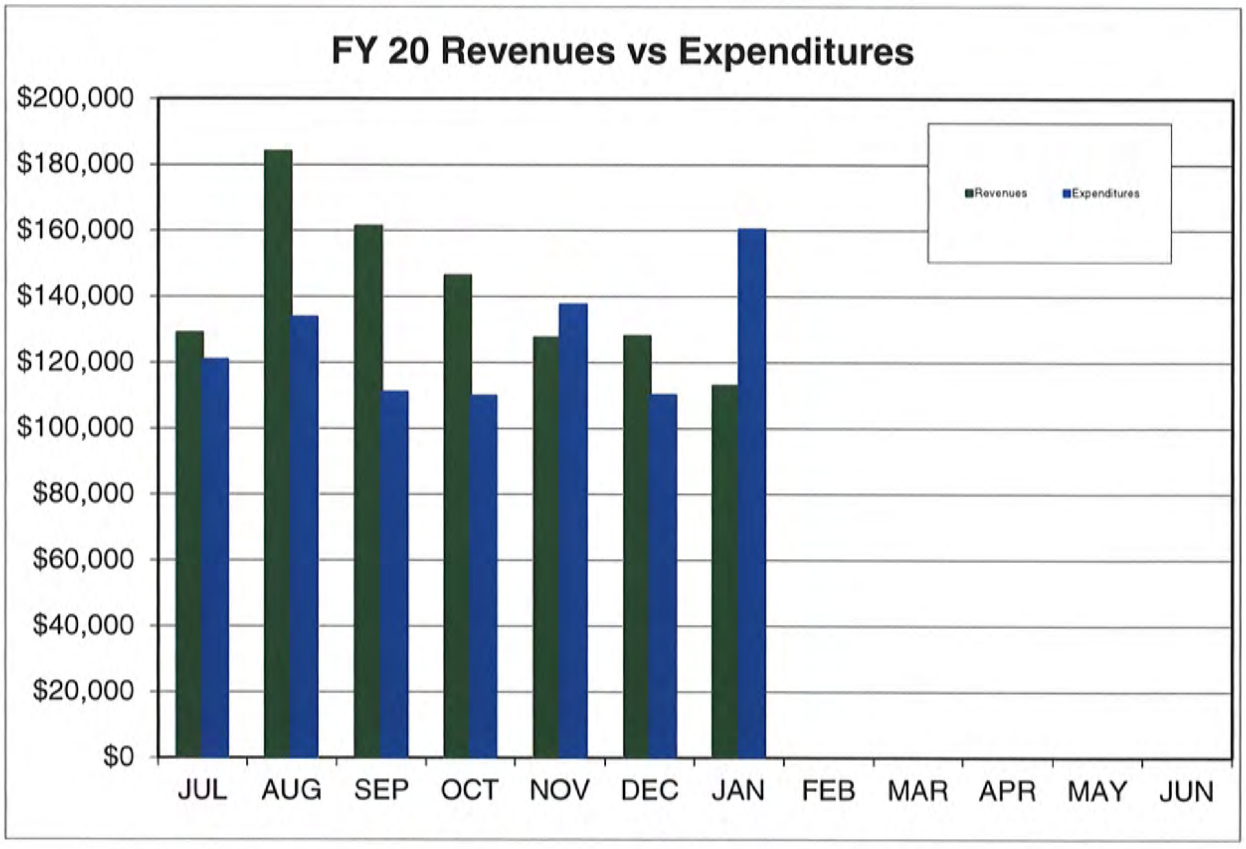
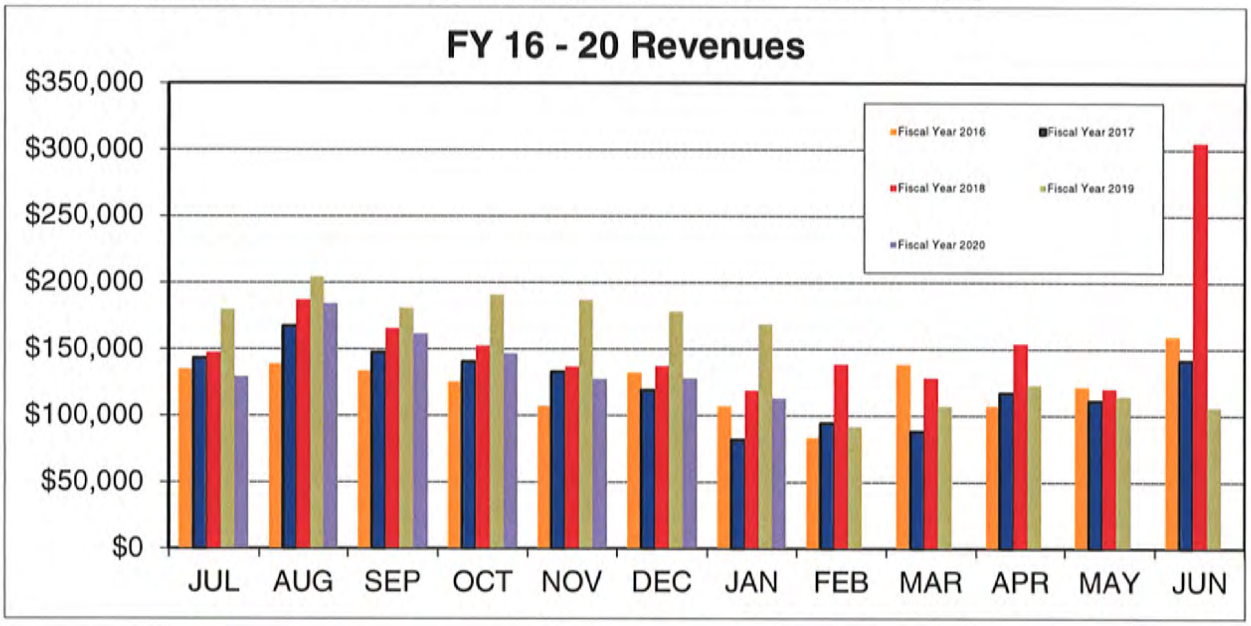
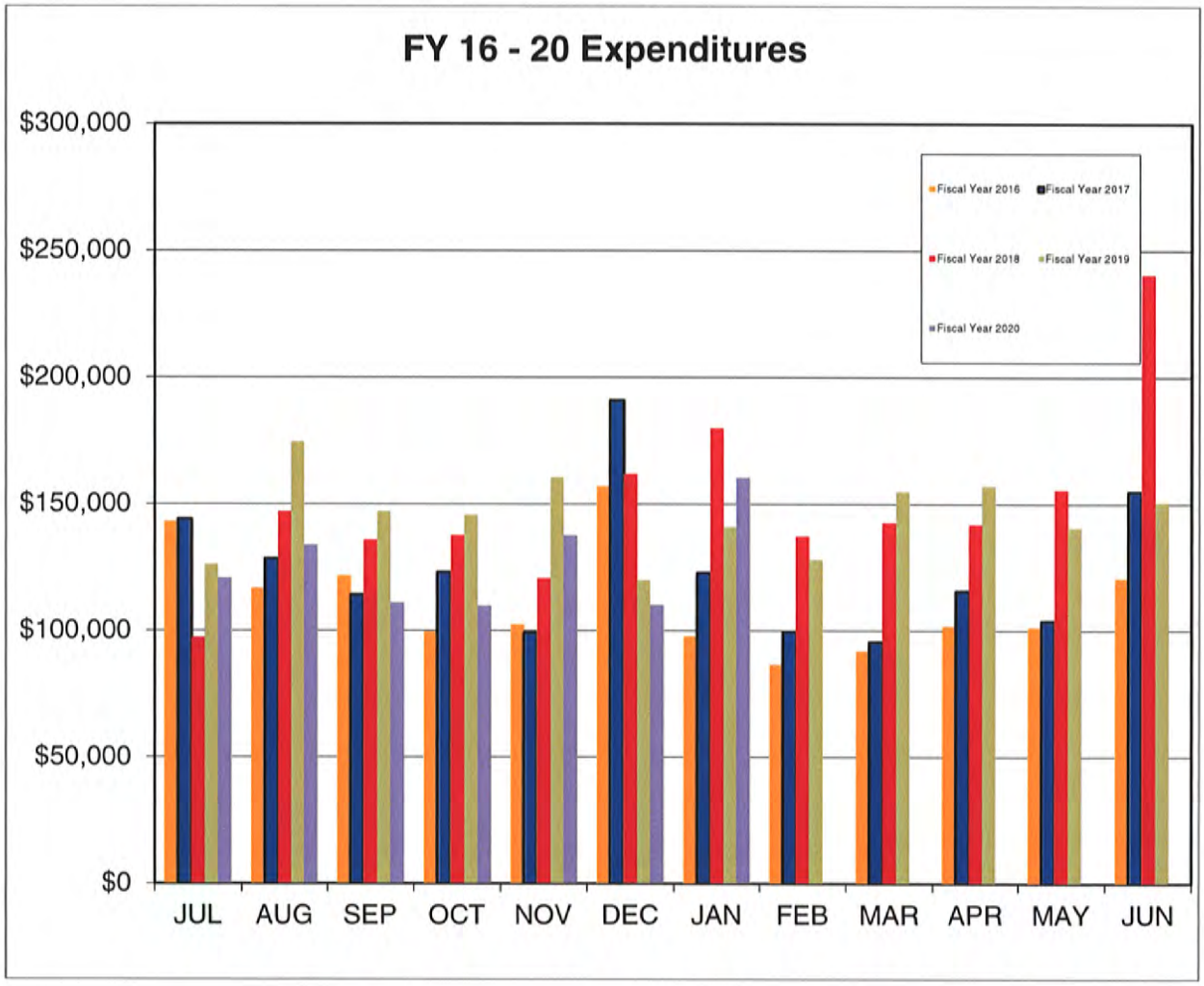
Class	Budget	Fiscal Year To Date	YTD as a % of Budget	Remaining Budget	Projected for Remainder of Year	Projected Year End Totals	Projected Total as a % of Budget
Revenues:	1,883,800	988,859	52.5%	894,941	650,963	1,639,821	87.0%
Expenditures							
Personnel:	1,411,900	632,812	44.8%	779,088	464,062	1,096,874	77.7%
Operating:	390,100	250,362	64.2%	139,738	128,946	379,308	97.2%
Capital:	81,800	-	0.0%	81,800	81,800	81,800	100.0%
Total Expenditures	1,883,800	883,174	46.9%	1,000,626	674,808	1,557,982	82.7%
Net for FY 2020	-	105,685			(23,845)	81,840	

Statement of Cash Balance

July 1, 2019 Beginning Cash Available	Fiscal Year to Date Revenues	Fiscal Year to Date Expenditures and Encumbrances	Other Changes in Cash	Available Cash as of January 31, 2020	Projected Change in Cash for Remainder of Year	Projected Year End Available Cash
1,013,181	988,859	(883,174)	1,983	1,120,849	(23,845)	1,097,004

IDAHO HVAC BOARD FUND 0229-08





IDAHO HVAC BOARD FUND 0229-08