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DEPARTMENT OF BUSINESS AND INDUSTRY DIVISION OF INDUSTRIAL RELATIONS

INFORMATIONAL STATEMENT OF ADOPTED PERMANENT REGULATIONS AS REQUIRED BY NRS 233B.066

The following informational statement as required by NRS 233B.066 is submitted for the adopted permanent amendments to Nevada Administrative Code (NAC) Chapter 455C as follows:

1. EXPLANATION OF THE NEED FOR THE ADOPTED PERMANENT REGULATION

Current Nevada Revised Statutes (NRS) and Nevada Administrative Codes (NAC) define a "pressure vessel" as "a vessel in which pressure is obtained from an external source or by the application of heat from a direct or indirect source." NAC 455C.114 provides for exemptions of certain boilers and pressure vessels from application of NAC 455C.020 to 455C.300. The proposed permanent regulation seeks to provide an exemption from the application of NAC Chapter 455C to brazed plate heat exchangers under certain instances. Brazed plate heat exchangers are broadly used throughout the country and are very cost effective and efficient. They carry third-party testing and label certification, including UL, ETL, and CSA. They have also been recognized in ASHRAE Standard 15 as having a low safety risk. The proposed permanent regulations would allow this mechanical equipment to be utilized in Nevada without a requirement to get a permit.

The proposed permanent regulations exempt certain brazed plate heat exchangers from regulation under NAC 455C due to their low safety risk. Objects that would be exempt from regulation include brazed plate heat exchangers which are installed in any chiller, heat pump, or refrigeration equipment that is located within an outdoor installation, regardless of size, volume of refrigerant in the unit or rated pressure and is limited to use with A1 or A2L refrigerants. It also exempts brazed plate heat exchangers that are installed within autoclave assemblies, regardless of size or rated pressure; or which are A1 refrigerants that are installed in any chiller, heat pump, or refrigeration equipment that is located within an indoor installation, and that do not exceed 50 pounds in volume of refrigerant per circuit; and do not exceed a tonnage of 50 tons cooling capacity per circuit. Further the proposed regulation seeks to exempt those brazed plate heat exchangers which contain A2L refrigerants that are installed in any chiller, heat pump, or refrigeration equipment that is located within an indoor installation and that do not exceed 50 pounds in mass of refrigerant per circuit, do not exceed a tonnage of 50 tons cooling capacity per circuit, and is not installed in a room or area that is less than 500 square feet floor space.

2. DESCRIPTION OF HOW PUBLIC COMMENT WAS SOLICITED, A SUMMARY OF PUBLIC RESPONSE, AND AN EXPLANATION OF HOW OTHER INTERESTED PERSONS MAY OBTAIN A COPY OF THE SUMMARY.

Carson City: 1886 College Parkway, Suite 110 Carson City, Nevada 89706 - Telephone (775) 684-7270

Copies of the proposed regulation, notice of workshop, and notice of intent to act upon the permanent regulations were sent by e-mail to persons who were known to have an interest as well as any persons who had specifically requested such notice. This included the Division's Mechanical Compliance Section Listserv, which includes 196 recipients. Additionally, notices were sent to the Administrator's list of business stakeholders, which consists of 90 recipients.

These documents were also made available at the Division's website, http://dir.nv.gov/Meetings/Meetings and were also posted at the following locations:

The State of Nevada Website (www.notice.nv.gov)

The Nevada State Legislature Website (http://leg.state.nv.us/App/Notice/A/)

The Division of Industrial Relations Website (http://dir.nv.gov/Meetings/Meetings)

The information was also physically posted at the Division's offices, located at Division of Industrial Relations, 2300 W. Sahara Ave., Ste. 300, Las Vegas, Nevada 89102, and 1886 College Parkway, Suite 110, Carson City, Nevada 89706.

The Division previously adopted a temporary regulation exempting brazed plate heat exchangers from the application of NAC Chapter 455C to under certain instances (T010-25A). During that time, the Division held a Public Workshop on December 19, 2024, to solicit comments on the proposed temporary regulation. At the conclusion of the Public Workshop, the Division invited members of the public to submit written public comments. Thereafter, the Division held a Public Adoption Hearing for the temporary regulation on February 20, 2025. Again, after the conclusion of the Public Adoption Hearing, the Division invited members of the public to submit written public comments. Following the adoption of the temporary regulation, the Division proceeded with adopting a permanent version of the regulation. On September 4, 2025, the Division held a Public Adoption Hearing for the permanent regulation (R012-25P) and, after the conclusion of the Public Adoption Hearing, the Division invited members of the public to submit written public comments.

A summary of the comments is below in Section 3 and may also be obtained by contacting Tina Buck, Legal Secretary II, Division of Industrial Relations, 702-486-9014, or by writing to the Division of Industrial Relations, 2300 W. Sahara Ave., Ste. 300, Las Vegas, Nevada 89102.

3. THE NUMBER OF PERSONS WHO:

a.	Attended the December 19, 2024 Workshop (T010-25A):	15
b.	Attended the February 20, 2025 Public Hearing (T010-25A):	8
c.	Attended the September 4, 2025 Public Hearing (R012-25P):	5
d.	Testified at the December 19, 2024 Workshop (T010-25A):	1
e.	Testified at the February 20, 2025 Public Hearing (T010-25A):	2
f.	Testified at the September 4, 2025 Public Hearing (R012-25P):	3
g.	Submitted Written Comments Related to December 19, 2024 Workshop:	0
h.	Submitted Written Comments Related to February 20, 2025 Public Hearing:	0
i.	Submitted Written Comments Related to February 20, 2025 Public Hearing:	0

4. FOR EACH PERSON IDENTIFIED IN PARAGRAPHS (c) through (i) OF NUMBER 3 ABOVE, THE FOLLOWING INFORMATION, IF PROVIDED TO THE AGENCY CONDUCTING THE HEARING:

December 19, 2024, Public Workshop (T010-25A)

1 Name: Alexis Motarex

Telephone number: 775-329-6116 **Business address**: Nevada Chapter AGC 5400 Mill Street | Reno, NV 89502

Business telephone number: 775-813-8150 **Electronic mail address**: alexism@nevadaagc.org

Name or organization represented: Nevada Chapter AGC

Summary of comment: The AGC would like language to be added exempt A2L refrigerants since A1 refrigerants are being phased out. They would also like

smaller systems to be exempted from regulation as a system.

February 20, 2025, Public Hearing (T010-25A)

1 Name: Alexis Motarex

Telephone number: 775-329-6116 **Business address**: Nevada Chapter AGC 5400 Mill Street | Reno, NV 89502

Business telephone number: 775-813-8150 **Electronic mail address**: alexism@nevadaagc.org

Name or organization represented: Nevada Chapter AGC

Summary of comment: The Nevada AGC would like to thank MCS for including the language addressing A2L refrigerants. The AGC is in support of the regulation and looks forward to working with MCS on adoption of the permanent regulations when that process begins.

2 Name: Anthony Fragale

Telephone number: None Provided Business address: None Provided

Business telephone number: None Provided **Electronic mail address**: None Provided

Name or organization represented: None Provided

Summary of comment: Mr. Fragale would like to understand what this regulation does. Safety Supervisor David Robinson stated that he will contact Mr. Fragale to

provide more information.

September 4, 2025, Public Hearing (R012-25P)

1 Name: Alexis Motarex

Telephone number: 775-329-6116 **Business address**: Nevada Chapter AGC 5400 Mill Street | Reno, NV 89502

Business telephone number: 775-813-8150 **Electronic mail address**: alexism@nevadaagc.org

Name or organization represented: Nevada Chapter AGC

Summary of comment: The Nevada AGC is in support of the regulation and thanks MCS.

2 Name: Tomas Hammond

Telephone number: 702-469-1592

Business address: 11035 Lavender Hill Dr., Ste. 160-163 | Las Vegas, NV 89135

Business telephone number: None Provided **Electronic mail address**: tomas@carraranv.com

Name or organization represented: Mechanical Contractors Association of LV Summary of comment: Mechanical Contractors Association of LV is in support of

the regulation.

3 Name: Jordan K. Krahenbuhl

Telephone number: None Provided **Business address**: None Provided

Business telephone number: None Provided **Electronic mail address**: None Provided

Name or organization represented: Plumbing Hearing Cooling Contractors of NV **Summary of comment**: Plumbing Hearing Cooling Contractors of NV is in support

of the regulation.

5. DESCRIPTION OF HOW COMMENT WAS SOLICITED FROM AFFECTED BUSINESSES, A SUMMARY OF THEIR RESPONSE, AND AN EXPLANATION OF HOW OTHER INTERESTED PERSONS MAY OBTAIN A COPY OF THE SUMMARY.

Copies of the proposed regulation, notice of workshop, and notice of intent to act upon the regulation were sent by e-mail to persons who were known to have an interest as well as any persons who had specifically requested such notice. This included the Division's Mechanical Compliance Section Listserv, which includes 196 recipients. Additionally, notices were sent to the Administrator's list of business stakeholders, which consists of 90 recipients.

These documents were also made available at the Division's website, http://dir.nv.gov/Meetings/Meetings and were also posted at the following locations:

The State of Nevada Website (www.notice.nv.gov)

The Nevada State Legislature Website (http://leg.state.nv.us/App/Notice/A/)

The Division of Industrial Relations Website (http://dir.nv.gov/Meetings/Meetings)

The information was also physically posted at the Division's offices, located at Division of Industrial Relations, 2300 W. Sahara Ave., Ste. 300, Las Vegas, Nevada 89102, and 1886 College Parkway, Suite 110, Carson City, Nevada 89706.

The Division held a Public Workshop to solicit comments on the proposed temporary regulation on December 19, 2024. At the conclusion of the Public Workshop, the Division invited members of the public to submit written public comments. Thereafter, the Division held a Public Adoption Hearing on the proposed temporary regulation on February 20, 2025. Again, after the conclusion of the Public Adoption Hearing, the Division invited members of the public to submit written public comments. Finally, after adopting the temporary regulation, the Division proceeded with adopting a proposed permanent regulation. The Division held a Public Adoption Hearing for the permanent regulation (R012-25P) on September 4, 2025, and, after the conclusion of the Public Adoption Hearing, the Division invited members of the public to submit written public comments.

The Division did not receive any written public comments.

Additionally, to determine whether the proposed permanent regulation is likely to have an impact on small businesses, the Division considered the purpose and scope of the proposed regulation. The proposed permanent regulation would provide an exemption from the application of NAC Chapter 455C to brazed plate heat exchangers under certain instances.

The Division previously adopted a temporary regulation exempting brazed plate heat exchangers from the application of NAC Chapter 455C to under certain instances. At that time, the Division sent out a Small Business Impact Statement Questionnaire to interested parties on the Division's Mechanical Compliance Section Listserv, which includes 196 recipients, on November 19, 2024. Additionally, on November 20, 2024, the Division also sent out the Small Business Impact Statement Questionnaire to the Administrator's list of business stakeholders, which consists of 90 recipients. The Questionnaire inquired from small businesses whether they believed there would be any economic effects, adverse or beneficial, direct or indirect, on their respective businesses from the proposed regulation. The Division also placed a link on its website to the questionnaire for interested parties to complete, should they choose. The deadline to return the questionnaire was November 26, 2024. The Division received one (1) response, which may be summarized as follows:

Waylon Lowery, PE, of Efficient Mechanical Systems Engineering – Mr. Lowery indicated that the proposed temporary regulation would not have an economic effect, adverse or beneficial, on his business. Mr. Lowery further noted that he did not believe that the proposed temporary regulation would have an indirect adverse effect on his business. Mr. Lowery believes the regulation would have an indirect beneficial effect on his business, noting, "I anticipate that with the code changes allowing non-ASME brazed plate heat exchangers[,] that it will free up funds for more customers to hire my company to design Air Cooled Chiller systems."

A summary may be obtained by contacting Tina Buck, Legal Secretary II, Division of Industrial Relations, 702-486-9014, or by writing to the Division of Industrial Relations, 2300 W. Sahara Ave., Ste. 300, Las Vegas, Nevada 89102.

6. IF THE REGULATION WAS ADOPTED WITHOUT CHANGING ANY PART OF THE PROPOSED REGULATION, A SUMMARY OF THE REASONS FOR ADOPTING THE REGULATION WITHOUT CHANGE.

Comments received at the public workshop supported the adopted version of the regulation.

7. THE ESTIMATED ECONOMIC EFFECT OF THE REGULATION ON THE BUSINESSES WHICH IT IS TO REGULATE AND ON THE PUBLIC. THESE MUST BE STATED SEPARATELY, AND IN EACH CASE MUST INCLUDE:

A. ADVERSE AND BENEFICIAL EFFECTS

1. Effect on Businesses

The Division anticipates no adverse effects, either direct or indirect, on regulated businesses or small businesses as the result of these regulations. The adverse effects, if any, are difficult to determine at this time. There will be no direct or indirect cost to regulated or small businesses.

The Division believes that there may be an indirect beneficial effect on regulated businesses and small businesses as a result of the permanent regulation, namely that with the code changes allowing non-ASME brazed plate heat exchangers, consumers will have additional funds to hire Nevada businesses to design Air Cooled Chiller systems.

2. Effect on the Public

The Division does not anticipate any adverse or beneficial effects, either direct or indirect, on the public as the result of these regulations. There will be no direct or indirect cost to the public.

B. IMMEDIATE AND LONG-TERM EFFECTS

1. Effect on Businesses

The Division does not anticipate any immediate or long-term effects, either adverse or beneficial, on regulated or small businesses as a result of these regulations. There will be no direct or indirect costs to regulated or small businesses.

2. Effect on the Public

The Division does not anticipate any immediate or long-term effects, either adverse or beneficial, on the public as a result of these regulations. There will be no direct or indirect costs to the public.

8. THE ESTIMATED COST TO THE AGENCY FOR ENFORCEMENT OF THE PROPOSED REGULATION

The Division does not anticipate incurring any additional cost for these proposed permanent regulations.

9. DESCRIPTION OF ANY REGULATIONS OF OTHER STATE OR GOVERNMENT AGENCIES WHICH THE PROPOSED REGULATIONS OVERLAPS OR DUPLICATES AND A STATEMENT EXPLAINING WHY THE DUPLICATION OR OVERLAPPING IS NECESSARY. IF THE REGULATION OVERLAPS OR DUPLICATES A FEDERAL REGULATION, THE NAME OF THE REGULATING FEDERAL AGENCY.

The Division is not aware of any similar regulations of other state or government agencies that which the proposed regulations overlap or duplicate.

10. IF THE REGULATION INCLUDES PROVISIONS WHICH ARE MORE STRINGENT THAN A FEDERAL REGULATION WHICH REGULATES THE SAME ACTIVITY, A SUMMARY OF SUCH PROVISIONS.

The Division is not aware of any similar federal regulations of the same activity in which the adopted regulations are more stringent.

11. IF THE REGULATION PROVIDES A NEW FEE OR INCREASES AN EXISTING FEE, THE TOTAL AMOUNT THE AGENCY EXPECTS TO COLLECT AND THE MANNER IN WHICH THE MONEY WILL BE USED.

The proposed regulation does not provide for a new fee and does not increase an existing fee payable to the Division.

Dated this 11th day of September, 2025.

DIVISION OF INDUSTRIAL RELATIONS

Vidoria Caran

By:

Victoria Carreón Administrator, Division of Industrial Relations 2300 W. Sahara Ave., Ste. 300 Las Vegas, Nevada 89102