CITY OF GRAND JUNCTION, COLORADO ORDINANCE NO. 5147

AN ORDINANCE AMENDING CHAPTER 39 OF THE 2018 INTERNATIONAL FIRE CODE TO BE APPLIED THROUGHOUT THE CITY OF GRAND JUNCTION WITH CERTAIN AMENDMENTS THERETO

RECITALS:

Pursuant to the constitutional, statutory and Charter authority of the City Council of the City of Grand Junction to adopt ordinances for the protection of the health safety and general welfare of the population of the City the following ordinance is proposed.

After full hearing and consideration of the ordinance and upon recommendation by the City staff the Council finds that adoption of the ordinance is necessary to preserve the health, safety and general welfare of the people of the City of Grand Junction.

NOW, THEREFORE, BE IT ORDAINED, BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

Title 15 of the Municipal Code of Ordinances of the City of Grand Junction is hereby amended as follows:

15.44.040 Amendments to International Fire Code.

The International Fire Code is amended and changed in the following respects for Chapter 39 Processing and Extraction Facilities as follows:

- (a) Section 3901.2 is deleted and replaced with: **3901.2 Existing buildings or facilities**. Existing buildings or facilities used for the processing of plants shall comply with this chapter. Existing extraction processes where the medium of extraction or solvent is changed shall comply with this chapter.
- (b) Sections 3904.2 through 3904.4 are deleted and replaced with: **3904.2 Systems and equipment**. Systems or equipment used for the extraction of oils from plant material shall comply with Section 3904.2.1 or 3904.2.2.
 - **3904.2.1 Listings.** Systems or equipment used for the extraction of oils from plant material shall be *listed* and *labeled* in accordance with UL 1389 and installed in accordance with the listing and the manufacturer's installation instructions.
 - **3904.2.2 Approvals.** System or equipment used for the extraction of oils from plant material shall be *approved* for the specific use. The system shall be reviewed by a *registered design professional*. The *registered design professional* shall review and consider any information provided by the system's designer or manufacturer. A technical report in accordance with Section 3904.2.2.1 shall be prepared and submitted to the *fire code official* for review and approval. The firm or individual

preparing the technical report shall be *approved* by the *fire code official* prior to performing the analysis.

3904.2.2.1 Technical report. A technical report, reviewed and *approved* by the *fire code official* as required by Section 3904.2, is required prior to the equipment being located or installed at the facility. The report shall be prepared by a *registered design professional* or other professional *approved* by the *fire code official*.

3904.2.2.2 Report content. The technical report shall contain all of the following:

- 1. Manufacturer information.
- 2. Preparer of record of the technical report.
- 3. Date of review and report revision history.
- 4. Signature page, including all of the following:
- 4.1. Author of the report.
- 4.2. Date of report.
- 4.3. Date and signature of *registered design professional* of record performing the design or peer review.
- 5. Model number of the item evaluated. If the equipment is provided with a serial number, the serial number shall be included for verification at the time of site inspection.
- 6. Methodology of the design or peer review process used to determine minimum safety requirements. Methodology shall consider the basis of design and shall include a code analysis and code path to demonstrate whether specific codes or standards are applicable.
- 7. Equipment description. A list of every component and subassembly, such as fittings, hose, quick disconnects, gauges, site glass, gaskets, valves, pumps, vessels, containers, and switches, of the system or equipment, indicating the manufacturer, model number, material, and solvent compatibility. Manufacturer's data sheets shall be provided.
- 8. A general flow schematic or general process flow diagram of the process. Post-processing or winterization shall be included in this diagram. Primary components of the process equipment shall be identified and match the equipment list required in Item 7. Operating temperatures, pressures and solvent state of matter shall be identified in each primary step or component. A piping and instrumentation diagram (PID or P&ID) shall be provided.
- 9. Analysis of the vessel(s) if pressurized beyond standard atmospheric pressure. Analysis shall include purchased and fabricated components.

- 10. Structural analysis for the frame system supporting the equipment.
- 11. Process safety analysis of the extraction system, from the introduction of raw product to the end of the extraction process.
- 12. Comprehensive process hazard analysis considering failure modes and points of failure throughout the process. The process hazard analysis shall include a review of emergency procedure information provided by the manufacturer of the equipment or process and not that of the facility, building or room.
- 13. Review of the assembly instructions, operational and maintenance manuals provided by the manufacturer.
- 14. List of references used in the analysis.
- **3904.2.2.3 Site inspection**. Prior to operation of the extraction equipment, where required by the *fire code official*, the engineer of record or *approved* professional, as *approved* in Section 3904.2, shall inspect the site of the extraction process once equipment has been installed for compliance with the technical report and the building analysis. The engineer of record or *approved* professional shall provide a report of findings and observations of the site inspection to the *fire code official* prior to the approval of the extraction process. The field inspection report authored by the engineer of record shall include the serial number of the equipment used in the process and shall confirm that the equipment installed is the same model and type of equipment identified in the technical report.
- (c) Section 3905.1 is deleted and replaced with **3905.1 Gas detection**. For extraction processes utilizing flammable gases as solvents, a gas detection system complying with Section 916 shall be provided.
 - **3905.1.1 Operation**. Activation of the gas detection system shall result in all the following:
 - 1. Initiation of distinct audible and visual alarm signals in the extraction room.
 - 2. Deactivation of all heating systems located in the extraction room.
 - 3. Activation of the mechanical ventilation system, where the system is interlocked with gas detection.
 - 4. De-energize all light switches and electrical outlets.
 - **3905.1.2 Failure of the gas detection system**. Failure of the gas detection system shall result in the deactivation of the heating system; activation of the mechanical ventilation system where the system is interlocked with the gas detection system; and initiation of a trouble signal to sound in an *approved* location.

Miscellaneous provision:

The remainder of Chapter 39 and the remaining chapters in Title 15 not specifically set forth herein or in conflict herewith shall remain in full force and effect.

PUBLIC HEARING:

A public hearing on the adoption by reference thereto of the 2018 International Fire Code (2018 IFC), with certain amendments is scheduled in the City Council Chambers at 250 N. 5th Street, Grand Junction Colorado on April 5, 2022 at 6:00 P.M. and the City Clerk is hereby directed to publish Notice of said public hearing in the manner and style and pursuant to the schedule of such publication prescribed in C.R.S. 31-16-201 *et. seq.*

At least one copy of the 2018 IFC, as described herein together with certain amendments thereto all certified to be true copies, shall be on file in the office of the City Clerk of the City of Grand Junction, Colorado. At least one copy of the 2018 IFC including the appendices thereto, together with certain amendments, all certified to be true and correct, shall be on file as aforesaid in the office of the City Clerk at least fifteen (15) days preceding said hearing and may be inspected by any interested person between the hours of 8:00 A.M. and 5:00 P.M., Monday through Friday, holidays excepted.

Introduced, set for public hearing, and passed for publication the 5th day of April 2023 and ordered published in pamphlet form.

Passed and adopted on second reading the 17th day of May 2023 and ordered published in pamphlet form.

Anna M. Stout

President of the City Council

Attest:

Amy Phillips City Clerk

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Ordinance No. 5147 was introduced by the City Council of the City of Grand Junction, Colorado at a regular meeting of said body held on the 5th day of April 2023 and the same was published in The Daily Sentinel, a newspaper published and in general circulation in said City, in pamphlet form, at least ten days before its final passage.

I FURTHER CERTIFY THAT a Public Hearing was held on the 17th day of May 2023, at which Ordinance No. 5147 was read, considered, adopted and ordered published in pamphlet form by the Grand Junction City Council.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 19th day of May 2023.

City Records Manager

Published: April 07, 2023 Published: May 17, 2023

Effective: June 18, 2023

