| ORDINANCE NO | |
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AN ORDINANCE TO ADD ARTICLE 4 TO CHAPTER 46, ENVIRONMENT, OF THE CODE OF ORDINANCES OF THE CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, REPEAL CONFLICTING OR INCONSISTENT ORDINANCES, AND PRESCRIBE A PENALTY FOR VIOLATIONS.

THE CITY OF ROCHESTER HILLS ORDAINS:

<u>SECTION 1</u>. Article 4 of Chapter 46 of the Code of Ordinances of the City of Rochester Hills is hereby modified as follows:

ARTICLE IV **PERFORMANCE STANDARDS**

The following performance standards are established in order to preserve the environmental health, safety and welfare of the City. No activity, operation or use of land, building or equipment shall be used or occupied in any manner so as to create any dangerous, injurious, noxious or otherwise objectionable element or condition that adversely affects the surrounding area. All activities, operations and uses of land, buildings and equipment shall be conducted in a manner that is not injurious, dangerous, noxious or otherwise objectionable to the surrounding area. Any use permitted by Chapter 138 Zoning shall be operated in conformance with all applicable performance standards set forth in Article IV. The following standards are deemed the minimum requirements to be maintained.

A. Airborne Emissions.

- 1. <u>Smoke and other air contaminants. It shall be unlawful for any person, firm or corporation to permit the emission of any smoke or air contaminant in violation of the following:</u>
 - a. All applicable air quality standards adopted by the Federal Clean Air Act and the Michigan Department of Environmental Quality, Great Lakes and Energy (EGLE).
 - b. A density greater than that density described as No. 1 of the Ringelmann Chart provided that the following exceptions shall be permitted: smoke, the shade or appearance of which is equal to but not darker than No. 2 of the Ringelmann Chart for a period or periods aggregating four (4) minutes in any thirty (30) minutes.
 - Method of Measurement: For the purpose of grading the density of smoke, the Ringelmann Chart, as now published and used by the United States Bureau of Mines, which is hereby made a part of this Ordinance, shall be the standard. All measurements shall be taken as close to the emission point of the smoke as reasonably possible.
- 2. Gases. The escape or emission of any gas which is injurious or destructive, harmful to person or property or explosive is prohibited.
- 3. Dust, Dirt and Fly Ash. All furnaces or combustion devices for the burning of any fuel materials shall be equipped and operated with recognized and approved equipment, means, methods, devices or contrivances to reduce the quantity of gasborne or airborne solids or fumes emitted into the open air, so that the quantity of gasborne or airborne solids shall not exceed 0.20 grains per cubic foot of the carrying medium at a temperature of five-hundred (500) degrees Fahrenheit.
- B. Odors. Any condition or operation which results in the creation of odors of such intensity and character as to be detrimental to the health and welfare of the public or which interferes

unreasonably with the comfort of the public shall be removed, stopped or so modified as to remove the odor. Such odors shall be prohibited when perceptible at any point along the property line, or beyond the property line if a place where people live, work or assemble is impacted. Whether or not an odor emission interferes with the reasonable and comfortable use and enjoyment of a property shall be measured against the objective standards of a reasonable person of normal sensitivity. The use of a field olfactometer that provides a "dilution-to-threshold" (D/T) reading may be used for documentation, verification and enforcement as needed. A measurement reading of four (4) D/T or less shall be maintained at the property line.

- C. Gases. The escape or emission of any gas which is injurious or destructive, harmful to person or property or explosive is prohibited.
- C. <u>Noise Noise which is objectionable due to intensity, frequency or duration shall be muffled, attenuated or otherwise controlled, subject to the following:</u>
 - 1. Objectionable sounds of an intermittent nature or sounds characterized by high frequencies shall be controlled even if falling below the decibel limits so as not to become a nuisance to adjacent uses. This shall particularly apply to loading and unloading areas in commercial or industrial districts adjacent to residential districts.
 - 2. The following shall be exempt from the provisions in this section:
 - a. Emergency repair activity directed at vital services or any emergency or alarm devices; however, any alarms not terminating within 30 minutes after being activated shall be unlawful; Sirens and related apparatus used solely for public purposes are exempt from this requirement.
 - b. <u>Noise resulting from temporary construction activity conducted between 7:00am and 8:00pm</u>
 <u>Monday through Saturday shall also be exempt from this requirement.</u>
 - c. Bells or chimes from any building, school or place of worship.
 - 3. The emission of measureable noises from the premises shall not exceed the levels provided in the table below, or at ambient level, as measured at the property line, whichever is higher 65 decibels as measured at the boundary or property lines, except that where normal street traffic noises exceed 65 decibels during such periods, the measureable noise emanating from the premises may equal, but shall not exceed, such traffic noises. Within the I district, sound levels not exceeding 75 decibels may be permitted.

| | <u>Use receiving the sound</u> | | |
|----------------------------------|--------------------------------|------------------------------------|-------------------|
| Time period | Residential | Commercial/Mixed Use/Institutional | <u>Industrial</u> |
| <u>Daytime (7:00am – 8:00pm)</u> | <u>65 dBA</u> | <u>65 dBA</u> | <u>75 dBA</u> |
| Nighttime (8:00pm – 7:00am) | <u>50 dBA</u> | <u>65 dBA</u> | <u>65 dBA</u> |

In addition, objectionable sounds of an intermittent nature or sounds characterized by high frequencies, even if falling below the decibel limits, shall be so controlled so as not to become a nuisance to adjacent uses. This shall particularly apply to loading and unloading areas in commercial or industrial districts adjacent to residential districts.

D. Vibration

- 1. Ground transmitted vibration is measured with a complement of instruments capable of recording vibration displacement and frequency, particle velocity or acceleration simultaneously in three mutually perpendicular directions. The instruments used to measure vibration in industrial zone districts shall conform to the applicable ANSI standard for such equipment used to measure community vibrations.
- Maximum permitted vibration levels. Vibration shall not exceed the maximum permitted particle
 velocities in the table below. When a vibration source can be identified and its effects are on more
 than one land use category, the limits of the most restrictive use shall apply at the boundaries
 between different land use categories. Readings may be made at points of maximum vibration
 intensity.

Maximum Permitted Vibration Levels

| Use Affected by Vibration | Steady State Vibration (continuous) | Pact Vibration (discrete) |
|---------------------------|-------------------------------------|---------------------------|
| Residential* | 0.02 | 0.04 |
| Commercial | 0.05 | 0.10 |
| <u>Institutional</u> | 0.05 | 0.10 |
| <u>Industrial</u> | 0.15 | 0.30 |

^{*}Includes the residential component of a mixed-use development.

- 3. The maximum particle velocity shall be the maximum vector sum of three mutually perpendicular components recorded simultaneously. Particle velocity shall be measured in inches multiplied by the frequency in cycles per second. For purposes of these standards, steady-state vibrations are vibrations which are continuous; or vibrations in discrete impulses more frequent than 60 per minute, shall be considered impact vibrations. Between the hours of 8:00pm and 7:00am all the permissible vibration levels indicated in the previous table for residential district boundaries shall be reduced to one-half the indicated levels.
- 4. <u>Authorized construction activity conducted between 7:00am and 8:00pm shall be exempt from these requirements.</u>

Vibration. No use shall generate any ground transmitted vibration in excess of the limits set forth below. Vibration shall be measured at the nearest adjacent lot line. The vibration maximums set forth below are stated in terms of particle velocity, which may be measured with suitable instrumentation or computed on the basis of displacement and frequency. When computed, the following standards shall apply:

Particle Velocity in Inches Per-Second

| Frequency in Cycles per Second | Displacement in Inches |
|--------------------------------|------------------------|
| 0 to 9.99 | 0.0010 |
| 10 to 19.99 | 0.0008 |
| 20 to 29.99 | 0.0006 |
| 30 to 39.99 | 0.0004 |
| 40 and over | 0.0002 |

- a. If requested by the enforcement official the petitioner shall provide evidence of compliance with the above noted vibration calculations.
- b. <u>Vibrations</u> resulting from temporary construction activity shall be exempt from the requirements of this section.
- E. Electrical Disturbance, Electromagnetic or Radio Frequency Interference. No use shall The operations of any use shall not create any electrical disturbance that adversely affects any operations of equipment other than those of the creator of such disturbance or cause, create or contribute to the interference with electronic signals (including television and radio broadcasting transmission) to the extent that the operation of any equipment not owned by the creator of such disturbance is adversely affected. All uses, activities and processes shall comply with applicable Federal Communications Commission regulations.
- F. <u>Hazardous Substances</u>. Hazardous substances include materials or products that may threaten the public health, safety or welfare because of combustibility, flammability, toxicity or disease potential.
 - Any person, firm, corporation or other legal entity operating a business of conducting an activity which uses, stores or generates hazardous substances shall obtain the necessary permits and/or licenses from the appropriate Federal, State or local authority having jurisdiction. The property owner City shall be informed the City of any and all inspections conducted by a Federal, State or local authority in connection with a permit and/or license within 90 days of receipt of the result of said inspection.
 - 2. Any person, firm, corporation or other legal entity operating a business or conducting an activity which uses, stores or generates hazardous substances shall complete and file a hazardous materials survey that describes such materials and their storage, disposal and plan for containment in the event of a spill, leak or other unintended discharge. This survey shall be in conjunction with the following:
 - a. Upon submission of a site plan.
 - b. <u>Upon any change of use or occupancy of a structure or premise.</u>
 - c. <u>Upon any change of the manner in which such substances are used, handled, stored and/or</u> in the event of a change in the type of substances to be used, handled or stored.

- 3. Fire and Explosive Hazards. The storage and handling of flammable liquids, liquefied petroleum gases and explosives shall comply with the state rules and regulations as established by Public Act No. 207 of 1941 (MCL 29.1 et seq., MSA 4.559(1) et seq.).
- G. Glare and Radioactive Materials Glare is the sensation produced within the visual field by luminance that is sufficiently greater than the luminance to which the eyes are adapted, causing annoyance, discomfort or loss in visual performance and visibility. The following standards intended to reduce glare:
 - 1. Glare from any process, such as or similar to arc welding or acetylene torch cutting, which emits harmful ultraviolet rays shall be performed in such a manner as not be seen from any point beyond the property line and as not to create a public nuisance or hazard along lot lines.
 - 2. Glare from automobile headlights or commercial or industrial vehicle headlights shall not be directed into any adjacent property so as to become a nuisance.
 - 3. In nonresidential areas, exterior lighting shall be installed so that the source of light shall not be visible from any residential dwelling or passenger car driver's line of sight and shall be so arranged as far as practical to reflect light away from the residential use and public roadways. In no case shall more than one candlepower of light cross a lot line five feet above the ground into a residential district.
 - 4. Buildings more than one story in height where glass constitutes more than one quarter of the upper floor façade shall have a non-reflective coating on all upper story glass in order to mitigate glare onto roadways.
- H. Radioactive Materials. Radioactive materials and wastes, including electromagnetic radiation such as X-ray machine operation, shall not be emitted to exceed quantities established as safe by the U.S. Bureau of Standards, when measured at the property line.
- I. Fire and Explosive Hazards. The storage and handling of flammable liquids, liquefied petroleum gases and explosives shall comply with the state rules and regulations as established by Public Act No. 207 of 1941 (MCL 29.1 et seq., MSA 4.559(1) et seq.)

J. Waste.

- 1. <u>Any water discharged into the public sewer system shall comply with Chapter 102, Article V, Wastewater discharge.</u>
- 2. Waste and Rubbish Dumping. Garbage, sewage, filth, refuse, waste, trash, debris or rubbish, including cans, bottles, wastepaper, cartons, boxes and crates or other offensive or obnoxious matter shall not be kept in open containers or piled, placed, stored or dumped on any land within the City in such a manner as to constitute a nuisance or create a hazard to health, safety, morals and general welfare of the citizens of the City. All uses in every zoning district shall place waste materials in an appropriate covered container and properly dispose of it at least once each month in accordance with State Law. Refer to Section 138-10.311 of Chapter 138 Zoning of the City Code for additional standards related to screening.
- K. <u>Compliance</u>. Where a preliminary investigation indicates that a site is not compliant with this chapter, it shall be the responsibility of the owner to verify compliance.

SECTION 2. Severability. This ordinance and each article, section, subsection, paragraph, subparagraph, part, provision, sentence, word and portion thereof are hereby declared to be severable, and if they or any of them are declared to be invalid or unenforceable for any reason by a court of competent jurisdiction, it is hereby provided that the remainder of this ordinance shall not be affected thereby.

SECTION 3. Penalty. All violations of this ordinance shall be municipal civil infractions and upon a determination of responsibility therefore shall be punishable by a civil fine of not more than \$500, or as otherwise prescribed herein.

SECTION 4. Repeal, Effective Date, Adoption.

| (1) Repeal. All regulat | * * | · · | nces, which are inconsistent with |
|---------------------------------------------------------------------|---------|-----------------------------------|-------------------------------------------|
| (2) Effective Date. This ordinance shall become effective on, 2022. | | | , 2022, following its |
| (3) Adoption. This or meeting thereof held on _ | | | f the City of Rochester Hills at a |
| | Bryan K | . Barnett, Mayor Rochester Hills | _ |
| CERTIFICATE | | | |
| I HEREBY CERTIFY THAT TH OF ROCHESTER HILLS AT A | | | Y THE CITY COUNCIL OF THE CITY , 2022. |
| | | ne Scott, Clerk | |
| | City of | Rochester Hills | |