ORDINANCE NO. 4000

AN ORDINANCE TO AMEND MOTOR VEHICLE NOISE RESTRICTIONS BY AMENDING CHAPTER 10.24 OF THE RAPID CITY MUNICIPAL CODE.

WHEREAS, the City of Rapid City has previously adopted an ordinance restricting motor vehicle noise within the City of Rapid City; and

WHEREAS the City of Rapid City deems it in the best interest of the City to amend the previously adopted ordinance in order to delete certain unenforceable provisions thereof;

NOW, THEREFORE, BE IT ORDAINED by the City of Rapid City that Chapter 10.24 of the Rapid City Municipal Code be and hereby is amended to read as follows:

Chapter 10.24

MOTOR VEHICLE NOISE RESTRICTIONS

10.24.0<u>21</u>0 Definitions.

A. For the purposes of this chapter, certain words and phrases used herein are defined as follows:

"A-weighted sound level" means the sound level as measured with a sound level meter using the A-weighting network. The standard notation is db(A) or dbA.

"Ambient sound pressure level" means the sound pressure level of the all-encompassing noise associated with a given environment, usually a composite of sounds from many sources. It is also the A-weighted sound pressure level exceeded ninety percent of the time based on a measurement period of not less than ten minutes nor more than thirty minutes.

"Decibel" means the logarithmic and dimensionless unit of measure used in describing the amplitude of sound. Decibel is denoted as db.

"Emergency vehicle" means a motor vehicle used in response to a public calamity or to protect persons or property from an imminent exposure to danger.

"Motor vehicle" means any vehicle which is self-propelled by mechanical power, including, but not limited to, passenger cars, trucks, truck trailers, semitrailers, campers, motorcycles, minibikes, go-carts and racing vehicles.

"Muffler" means an apparatus consisting of a series of chambers or baffle plates designed for the purpose of transmitting gases while reducing sound emanating from such apparatus.

"Noise" means any sound which is unwanted or which causes or tends to cause an adverse psychological or physiological effect on human beings.

"Sound" is mechanical energy transmitted by a cyclic series of compressions and rarefactions of molecules of the material or materials through which it passes.

"Sound level meter" means an instrument, including a microphone, amplifier, RMS detector and integrator or time averager, output meter and/or visual display and weighting networks, used to measure sound levels. The sound level meter shall conform as a minimum to the requirements of ANSI S 1.4-1971 Type 2 or its successor publication; and be set to an A-weighted response. An acoustical calibrator accurate to within plus or minus one decibel shall be used to verify the before and after calibration of the sound level meter on each day noise measurements are taken.

"Sound pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given point in space, as produced by sound.

"Sound pressure level" means twenty times the logarithm to the base ten of the ratio of the RMS sound pressure to the reference pressure of twenty micropascals. The sound pressure level is denoted Lp or SPL.

B. Terminology not defined in subsection A of this section shall be in conformance with applicable American National Standards Institute publications, including, but not limited to, S1. 1-1960, R 1971, or those from its successor publications or bodies.

10.24.030 Exceptions.

This chapter shall not apply to the operation of emergency vehicles or to the operation of vehicles at speeds greater than thirty-five miles per hour in a speed zone in which the posted limit is greater than thirty-five miles per hour.

10.24.040 Noise limits.

A. No person shall drive, move or operate or cause or knowingly permit to be driven or moved a motor vehicle or combination of vehicles, within the city limits of Rapid City, at any time in such a manner as to exceed the following noise limits for the category of motor vehicle shown below. The standard measurement height shall be not less than four feet above the immediate surrounding surface and the measurement distance not less than twenty-five feet.

Sound Level

(db(A))

Motor vehicles with a manufacturers gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of 10,000 pounds or more, or any combination of vehicles towed by such motor vehicle 90

Motorcycles 80

Any other motor vehicle or any combination of vehicles towed by any motor vehicle 80 B. This section shall apply to the total noise from a vehicle or combination of vehicles and shall not be construed as limiting or precluding the enforcement of any other provisions of this title relating to motor vehicle mufflers for noise control.

C.

10.24.0320 <u>Noise Limits On Motor Vehicle Exhaust Systems.</u>

No person shall operate or cause to be operated any motor vehicle within the city limits of Rapid City unless the exhaust system of such vehicle is:

- 1. Free from defects which affect sound reduction;
- 2. Equipped with a muffler or other noise dissipative device;
- 3. Not equipped with any cutout, bypass, or similar device; and
- 4. Not modified in a manner which will amplify or increase the noise emitted by the motor of such vehicle above that emitted by a muffler of the type originally installed on the vehicle.

10.24.050 Sound level measurement.

Sound level measurements shall be made with a sound level meter Type II or better using the A-weighted scale, in accordance conforming with the standards promulgated by the American National Standards Institute. (Prior code § 18-4)

10.24.060 Effective date.

The provisions of this chapter shall be effective upon and after the first day of June, 1978.

10.24.07<u>3</u>0 Violation--Penalty.

Violation of any provision of this chapter may be punishable by not more than thirty days in jail or a fine of not more than one <u>two</u> hundred dollars, or both.

CITY OF RAPID CITY

Mayor

ATTEST:

Finance Officer

(SEAL)

First Reading: Second Reading: Published: Effective: