



Fire Department

DATE: April 19, 2022
FROM: Joel Boespflug, Fire Chief
ITEM: Request to Continue Utilizing Federal Signal for Outdoor Warning Siren System

REQUEST:

Bismarck Emergency Management is requesting permission to continue utilizing Federal Signal sirens and activation components as the outdoor warning system grows with Bismarck (Sole Source with Federal Signal for sirens and siren activation equipment). Installation of the sirens, however, will be competitively bid.

Please place this item on the April 26, 2022, City Commission meeting agenda.

BACKGROUND INFORMATION:

Federal Signal is the only company that provides a rotating mechanical siren. Other sirens, even if providing a similar steady tone would not produce the same tone with which our citizens are familiar. Because of the rotation, the steady tone is altered both in volume and in pitch (doppler effect) as it rotates. Both pitch and volume rise and fall as each siren rotates towards and away from a given point. To avoid questions or potential confusion for the public, it is best to remain consistent with our outdoor warning siren tone.

Federal Signal also holds proprietary rights as it relates to the activation components of the siren system. The activation components include the radio controllers (128-bit encrypted digital communications protocol), the SS2000+ encoder/decoder unit, and the Commander Software which activates and monitors siren status. This entire system (activation element) was updated in 2021 for all existing sirens. Additional sirens, when added, need to be integrated into the activation and siren monitoring system. Federal Signal cannot guarantee our current siren monitoring system will reliably monitor the status of differing sirens.

Funding for the installation of sirens in north Bismarck in 2022 is already approved (budgeted).

RECOMMENDED CITY COMMISSION ACTION:

Provide Bismarck Emergency Management with approval to purchase Federal Signal sirens and related siren activation equipment (sole source).

STAFF CONTACT INFORMATION:

Gary Stockert | City Emergency Manager | 222-6727 | gstockert@bismarcknd.gov