HARMONY GROVE

FACT SHEET – NOVEMBER 29, 2021

Who is Harmony Grove:

Harmony Grove owns and operates a cemetery at 30 Grove Street in Salem, MA. Harmony Grove has provided burial services since 1839. Crematory services are also provided on the grounds of its cemetery.

What services do they provide:

Harmony Grove provides burial and cremation services in Salem, MA. The facility currently operates three (3) cremation units or retorts which were installed in 1991.

Current and Proposed Operations:

Harmony Grove proposes to replace all three (3) of its existing human cremation retorts with three (3) new Power-Pak I, IE43-PPI natural gas fired retorts manufactured by Matthews Cremation Division of Apopka, FL. The old units are at the end of their useful life (approximately 30-years old). The new retorts are predicted to be more efficient from an air emissions perspective – that is, particulate matter ("PM") emissions are reduced by 40% in the newer retort units.

The combined three (3) retort installation will continue to operate as a minor source of air emissions. MassDEP requires that all crematory facilities submit a non-major comprehensive plan approval ("nmCPA") application in accordance with 310 CMR 7.02.

Harmony Grove submitted its air quality application electronically via the MassDEP ePLACE portal on October 6, 2021. This application included: proposed project description, detailed air emissions calculations, manufacturer specifications and air quality dispersion modeling analysis.

What air emissions are generated:

Emissions from the crematory retorts include criteria pollutants from the incineration of human remains, the cremation container, and the associated byproducts of fuel burning. The three (3) new Matthews Power-Pak I, IE43-PPI retorts are of controlled air design, consisting of a primary incineration chamber, a secondary (i.e., afterburner) chamber, with integrated burner and air controls and refractory lined stacks.

The units' primary and secondary burners will only be allowed to fire clean-burning natural gas, and human remains (including the associated cremation casket) shall be the only materials incinerated in each unit.

The proposed new cremation retorts will each have a dedicated refractory-lined steel stack that exhausts 31 feet above grade. Air dispersion modeling analysis demonstrates that the proposed project will not exceed National Ambient Air Quality Standards ("NAAQS"), as required by the regulations.

The Power-Pak I, IE43-PPI natural gas fired cremation retorts include several control features to ensure good combustion and minimize air emissions consistent with Best Available Control Technology ("BACT") requirements. These include:

- Continuous temperature monitoring in both primary and secondary combustion chambers.
- Secondary combustion chamber with afterburner and thermocouple interlocked with primary chamber burner.
- Opacity monitor with visual and audible alarms, and automatic shutdown sequence.

MassDEP shall impose Best Available Control Technology ("BACT") emission limits for the Harmony Grove cremation retorts.

Public Involvement:

MassDEP will be reviewing the nmCPA application from Harmony Grove and will consider public input in that process.

The following 'Block Group' Environmental Justice ("EJ") locations were identified within 1-mile of the proposed project site.

EJ communities were identified using the Massachusetts Executive Office of Energy and Environmental Affairs ("EEA") interactive mapping system: https://www.mass.gov/infodetails/environmental-justice-populations-in-massachusetts.

