MEMORANDUM

TO:   Current or prospective owners / operators of industrial scrap metal shredders in the City and County of Philadelphia.

FROM: Edward Braun, Air Management Services Program Manager

RE: Classification of Industrial Scrap Metal Shredders as Potential Sources of Excessive Noise and Vibration, and Required Abatement / Control Measures Pursuant to Philadelphia Code §§10-405(7),(9)

The City of Philadelphia, Department of Public Health, Air Management Services (AMS) is tasked with enforcement of noise and vibration requirements as set forth in Sections 10-401 – 10-411 of the Philadelphia Code, known as the Noise and Excessive Vibration Code, and the Noise and Excessive Vibration Regulation promulgated thereunder. The Noise and Vibration Code establishes several limits for sound and vibration emanating from commercial and industrial property. In particular, sound from a non-residential property cannot be greater than a) 5 decibels above background sound levels when measured at the property boundary of the nearest occupied residential property; or b) 10 decibels above background sound levels when measured at the property boundary of the nearest occupied non-residential property. See Phila. Code §§ 10-403(3)(a), (b). Similarly, vibration generated by activity on any, non-residential property may not exceed 0.15 inches per second when measured at the boundary of that property. See Phila. Code § 10-403(11).

Pursuant to Phila. Code §§ 10-405(7), (9), AMS has determined that industrial scrap metal shredders, including but not limited to auto shredders, are sources that are likely to generate sound and vibration in excess of the sound and vibration limits described above. Accordingly, current and prospective owners or operators of such industrial scrap metal shredders rated at ≥ 1,000 hp, are hereby required to submit plans for the installation of noise and vibration abatement measures to ensure compliance with the Noise and Excessive Vibration Code (Improvement Plans). These measures include at a minimum, but are not limited to:

1. **Prohibition against the shredding of material and metals that otherwise have the potential to explode when processed.** Such materials include, but are not limited to:
   - Free flowing liquids and organic solvents such as gasoline and oil
   - Explosives of any type
- Pressurized or closed containers (e.g. propane tanks, compressed gas cylinders, uncut bulk storage tanks)
- Any container containing unknown liquids / residues.

Shredder owners and operators will be required to inspect and otherwise remove such prohibited items from the material to be shredded.

2. **Installation of foam and water suppression systems, with appropriate monitoring / control systems, to reduce / eliminate the occurrence of explosions during shredder operations.** Such foam and water suppression systems must be operated at all times when shredding of scrap metal is being performed.

3. **Construction of an enclosure around shredder equipment to reflect and / or absorb sound generated by shredder operations.** Such an enclosure must be designed and constructed to ensure that the sound generated by the operation of the shredder otherwise will not exceed the 10 decibel and 5 decibel above background sound limits for residential and non-residential properties. See Phila. Code 10-403(3)(a), (b).

   Improvement Plans must address how proposed noise and vibration measures will ensure compliance with the Noise and Vibration Code, and include a timeline for the construction / adoption of such measures. Such plans must be submitted to AMS, in writing, for approval at the following address:

   Attn: Chief of Source Registration

   AMS  
   321 University Ave., 2nd Floor  
   Philadelphia, PA 19104

   Questions pertaining to these requirements maybe forwarded to Edward Wiener, Chief of Source Registration (Phone: 215 685-9426, Email edward.wiener@phila.gov).