Small Arms Ammunition Manufacturing

Overview
The manufacturing of ammunition is regulated by multiple state and federal agencies, each with its own specific laws, regulations and codes. This information sheet is intended to provide general information related to the 2020 Minnesota State Fire Code (MSFC).

Definitions
- Components: The individual items used to make a complete cartridge. This term includes but is not limited to:
  - Powder
  - Primer
  - Brass (case)
  - Projectile
- Reloading: The making of small arms ammunition for personal use.
- Manufacturing: The making of small arms ammunition that requires a Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) license.
- Group R-3: Buildings that do not contain more the two dwelling units.

Small arms ammunition reloading
The reloading of small arms ammunition is permissible under Section 5606 of the MSFC when:
- Reloading conducted in a Group R-3 occupancy only.
- Storage of not more than 10,000 primers within the Group R-3 occupancy.
- Storage of not more than 20 pounds of black powder stored within the Group R-3 occupancy.
- Storage of not more than 20 pounds of smokeless powder stored within the Group R-3 occupancy.
  - Quantities exceeding 20 pounds, not to exceed 50 pounds permitted when stored in a wooden bow or cabinet having a wall thickness of not less than 1 inch.

Display and storage in Group M occupancies
The display and storage of small arms ammunition components is permissible in Group M occupancies under Section 5606 of the MSFC when:
- Not more than 20 pounds of smokeless powder shall be displayed, contained within 1 pound containers.
Not more than 1 pound of black powder shall be displayed.

Not more than 10,000 primers shall be displayed.

Storage of smokeless powder, black powder and primers in excess of the above shall be in accordance with Section 5606.5.2-5606.5.2.3 of the MSFC.

Small and ammunition manufacturing
The manufacturing of small arms ammunition requiring an ATF license shall comply with Table 5003.1.1(1) and Section(s) 5601-5605 of the 2020 MSFC.

MSFC Table 5003.1.1(1), Explosives Division 1.3 requirements:
• Group H-1 or H-2 when quantities exceed 5 pounds
  o Footnote (e) allows for up to 10 pounds when stored in approved storage cabinets.
  o Footnote (g) requires a complete NFPA 13 fire sprinkler system regardless of quantity.

MSFC Table 5604.5.2(2) Table of Distances-Division 1.3 Mass-Fire Hazard
The specific separation distance requirements for the small arms ammunitions manufacturing building(s) shall be in accordance with MSFC Table 5604.5.2(2):
• Inhabited Building Distance (IBD):
  o A building regularly occupied in whole or in part not directly connected to the manufacturing, transportation, use or storage of explosive materials.

• Distance to Public Transportation Routes (PTR):
  o Any public street, road, highway, navigable stream or passenger railroad used for traffic by the general public.

• Intermagazine Distance (IMD):
  o Distance between storage magazines

• Intraline Distance (ILD) / Intraplant (IPD):
  o Distance between individual manufacturing buildings

Any and all other specific requirements per MSFC Section(s) 5601-5605 shall also be enforced along with any general Group H-1 or H-2 occupancy requirements per the MSFC and Minnesota Building Code (MBC).

Free access to the MSFC requirements in Chapter 56 for Explosives and Fireworks is available at this link to the [International Code Council's website](https://www.iccsafe.org).