**Section 200.APPENDIX C Table of Separation Distances of Ammonium Nitrate and Blasting Agents From Explosives or Blasting Agents1**

|  |  |  |
| --- | --- | --- |
| Donor weight  | Minimum separation distance of receptor when barricaded2 (ft.)  | Minimum thickness of artificial barricades5 (in.)  |
| Pounds over  | Pounds not over  | Ammonium nitrate3  | Blasting agent4  |
|  | 100 | 3 | 11 | 12 |
| 100 | 300 | 4 | 14 | 12 |
| 300 | 600 | 5 | 18 | 12 |
| 600 | 1,000 | 6 | 22 | 12 |
| 1,000 | 1,600 | 7 | 25 | 12 |
| 1,600 | 2,000 | 8 | 29 | 12 |
| 2,000 | 3,000 | 9 | 32 | 15 |
| 3,000 | 4,000 | 10 | 36 | 15 |
| 4,000 | 6,000 | 11 | 40 | 15 |
| 6,000 | 8,000 | 12 | 43 | 20 |
| 8,000 | 10,000 | 13 | 47 | 20 |
| 10,000 | 12,000 | 14 | 50 | 20 |
| 12,000 | 16,000 | 15 | 54 | 25 |
| 16,000 | 20,000 | 16 | 58 | 25 |
| 20,000 | 25,000 | 18 | 65 | 25 |
| 25,000 | 30,000 | 19 | 68 | 30 |
| 30,000 | 35,000 | 20 | 72 | 30 |
| 35,000 | 40,000 | 21 | 76 | 30 |
| 40,000 | 45,000 | 22 | 79 | 35 |
| 45,000 | 50,000 | 23 | 83 | 35 |
| 50,000 | 55,000 | 24 | 86 | 35 |
| 55,000 | 60,000 | 25 | 90 | 35 |
| 60,000 | 70,000 | 26 | 94 | 40 |
| 70,000 | 80,000 | 28 | 101 | 40 |
| 80,000 | 90,000 | 30 | 108 | 40 |
| 90,000 | 100,000 | 32 | 115 | 40 |
| 100,000 | 120,000 | 34 | 122 | 50 |
| 120,000 | 140,000 | 37 | 133 | 50 |
| 140,000 | 160,000 | 40 | 144 | 50 |
| 160,000 | 180,000 | 44 | 158 | 50 |
| 180,000 | 200,000 | 48 | 173 | 50 |
| 200,000 | 220,000 | 52 | 187 | 60 |
| 220,000 | 250,000 | 56 | 202 | 60 |
| 250,000 | 275,000 | 60 | 216 | 60 |
| 275,000 | 300,000 | 64 | 230 | 60 |

NOTES TO TABLE OF RECOMMENDED SEPARATION DISTANCES

OF AMMONIUM NITRATE AND BLASTING AGENTS

FROM EXPLOSIVES OR BLASTING AGENTS

NOTE 1 − Recommended separation distances to prevent explosion of ammonium nitrate and ammonium nitrate‑based blasting agents by propagation from nearby stores of high explosives or blasting agents referred to in the Table as the "donor". Ammonium nitrate, by itself, is not considered to be a donor when applying this Table. Ammonium nitrate, ammonium nitrate‑fuel oil or combinations thereof are acceptors. If stores of ammonium nitrate are located within the sympathetic detonation distance of explosives or blasting agents, one‑half the mass of the ammonium nitrate is to be included in the mass of the donor.

NOTE 2 − When the ammonium nitrate and/or blasting agent is not barricaded, the distances shown in the Table shall be multiplied by six. These distances allow for the possibility of high velocity metal fragments from mixers, hoppers, truck bodies, sheet metal structures, metal containers, and the like that may enclose the donor. When storage is in bullet‑resistant magazines recommended for explosives or when the storage is protected by a bullet‑resistant wall, distances and barricade thicknesses in excess of those prescribed in the American Table of Distances (Appendix A) are not required.

NOTE 3 − The distances in the Table apply to ammonium nitrate that passes the insensitivity test prescribed in the definition of ammonium nitrate fertilizer promulgated by the Fertilizer Institute and ammonium nitrate failing to pass the test shall be stored at separation distances determined by competent persons and approved by the authority having jurisdiction.

NOTE 4 − These distances apply to blasting agents that pass the insensitivity test prescribed in regulations of USDOT and ATF.

NOTE 5 − Earth, or sand dikes, or enclosures filled with the prescribed minimum thickness of earth or sand are acceptable artificial barricades. Natural barricades, such as hills or timber of sufficient density that the surrounding exposures that require protection cannot be seen from the donor when the trees are bare of leaves, are also acceptable.

NOTE 6 − For determining the distances to be maintained from inhabited buildings, passenger railways and public highways, use the American Table of Distances for Storage of Explosive Materials (Appendix A).

(Source: Added at 37 Ill. Reg. 14090, effective August 26, 2013)