**Section 406.250 Sample Collection, Handling and Preservation**

The following requirements for container types and preservation shall be met for each individual parameter a:

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| Parameter | Preservative b | Container c |
| Gross alpha | Conc HC1 or HNO 3 to pH less than 2 d | P or G |
| Gross beta | Conc HC1 or HNO 3 to pH less than 2 d | P or G |
| Strontium-89 | Conc HC1 or HNO3 to pH less than 2 | P or G |
| Strontium-90 | Conc HC1 or HNO3 to pH less than 2 | P or G |
| Radium-226 | Conc HC1 or HNO 3 to pH less than 2 | P or G |
| Radium-228 | Conc HC1 or HNO 3 to pH less than 2 | P or G |
| Cesium-134 | Conc HC1 to pH less than 2 | P or G |
| Iodine-131 | None | P or G |
| Tritium | None | P or G |
| Uranium | ConC HC1 or HNO 3 to pH less than 2 | P or G |
| Phonton emitters | Conc HC1 or HNO 3 to pH less than 2 | P or G |

AGENCY NOTES:

a If a laboratory has no control over these factors, the laboratory director must reject any samples not meeting these criteria and so notify the authority requesting the analyses.

b Preservative shall be added to the sample at the time of collection, unless suspended solids are to be measured or unless the concentrated acid specified for preservation cannot be added because of shipping restrictions. If it is necessary to ship the sample unpreserved to the laboratory or storage area, acidification may be delayed up to 5 days. After acidification, samples shall be thoroughly mixed and then preserved for a minimum of 16 hours before analysis.

c P = Plastic, hard or soft; G = Glass, borosilicate or flint.

d If HC1 is used to acidify samples to be analyzed for gross alpha or gross beta activity, the acid salts shall be converted to nitrate salts before transfer of samples to planchets.