a plurality of vacutainers for receiving samples of the mixture, each of the vacutainers having a self-resealing stopper;

injection means connected liquid-tight to the container;

means to control the injection means to inject controlled quantities of the mixture into said vacutainers through their stoppers, the means to control the injection means comprising a rotary turret having a plurality of vacutainer-holding means, one for each of said vacutainers, means to rotate the turret in steps to align one of the vacutainers at a time with the injection means, and means to move the aligned vacutainer axially in one direction to force the injection means through the stopper of that vacutainer to allow the mixture to flow through the injection means into the vacutainer, and then to move the aligned vacutainer in the opposite direction to withdraw that vacutainer from the injection means, the injection means comprising resiliently biased sealing means to prevent leakage of the mixture when the injection means is not inserted through a vacutainer stopper.

3. The apparatus of claim 2 in which the means to control the injection means further comprises:

a liquid-tight closure for the container; and

a piston controlled to displace a predetermined volume of the mixture injected into a vacutainer.

4. Apparatus for treating relatively solid biowaste material, the apparatus comprising:

a biowaste receiver comprising an upper section shaped like a toilet bowl and an integrally connected lower section of generally toroidal configuration and a constricted opening between the upper and lower sections;

rotary stirring means in the lower section to produce a generally toroidal agitation of liquid and biowaste material to produce a substantially homogeneous mixture thereof;

a sample receiver externally disposed with respect to the lower section and movable into close juxtaposition therewith;

means for discharging a controlled quantity of the homogeneous mixture from the lower section into the sample receiver;

duct means in the upper section, the duct means comprising a first manifold located on the wall of the upper section below the uppermost part of that section and having several spaced, hooded openings through the wall into the interior of the upper section;

an exhaust fan to withdraw through the duct means substantially all odors from the biowaste material and the mixture;

a second manifold above the duct means manifold and having spaced openings along the uppermost interior wall of the upper section;

a connection from the second manifold to a source of water; and

an automatically controlled valve connected to the second manifold to control the flow of water through the second manifold to clean the interior of the biowaste receiver.

5. Apparatus for handling biowaste material in substantial isolation to limit the flow of odors from the material, the apparatus comprising:

a biowaste receiver comprising an upper section shaped like a toilet bowl tapering inwardly to a constricted opening, and a bulbous chamber below the opening and of greater diameter than the opening;

means near the uppermost part of the upper section to connect a source of homogenization fluid to direct the flow of that fluid down the interior wall of the upper section and into the chamber with the biowaste material;

sensor means to respond when the total quantity of solid material and homogenization fluid in the chamber reaches a certain level;

agitation means in the bulbous chamber to be automatically energized when the sensor responds and to agitate the solid material and fluid to form a substantially homogeneous mixture;

sampling mechanism comprising a turret to support a plurality of vacutainers adjacent the chamber;

an injection needle attached to the wall of the chamber at a lower level than the sensor and extending toward the sampling mechanism;

automatic stepping mechanism controlling the turret to feed one vacutainer at a time into engagement with the needle to receive an automatic injection of the mixture and then withdraw the vacutainer from the needle;

a second manifold located adjacent the first manifold and connected to a source of cleansing water; p1 an automatically controlled wash valve connected to the second manifold to control the flow of wash water through the second manifold and along the interior wall of the upper section of the bulbous chamber;

a third manifold extending around the upper section approximately midway between the first manifold and the constricted opening;

openings through the wall of the upper section and into the third manifold to allow air to flow from the lower part of the upper section into the third manifold;

a hood extending over each of the latter openings to prevent liquid from the first and second manifolds from entering the third manifold;

a liquid drain connected to the lowermost part of the bulbous chamber;

an automatic discharge valve connected to the drain;

an exhaust fan to draw air and odors out of the upper section through the third manifold;

a pump connected to the drain to remove liquid from the chamber and force it through the drain; and

automatic sequencing means to control the operation of the controls.

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