Dam **104** comprises a relatively fixed part including a pair of parallel, somewhat sector-shaped side plates **106** rigidly joined by a channel member **108**. The side plates **106** have normally lower circularly curved edges **110** and slightly V-shaped normally upper edges **112**. The channel member **108** has a web **114** which seats on and conforms to the V-shape of the upper edges **112** of the side plates **106** and depending flanges **116** along the edges of the web which overlap and are welded or otherwise rigidly joined to the upper edge portions of the side plate.

At the inner confronting sides of the dam side plates **106** are elongate angle members **118** which have an L-shape in transverse cross-section and extend along the full lengths of the circular side plate edges **110**. One flange **120** of each angle member seats against and is welded or otherwise rigidly secured to the inner surface of its dam side plate **106** with the longitudinal edge of the flange flush with the respective arcuate plate edge **110**. The other flanges **122** of the angle members **118** are cylindrically curved about the axis of curvature of the arcuate side plate edges **110** and open toward one another in coplanar relation.

Between and coextensive with the angle members **118** is an elongate, generally flat inflatable seal **124** having laterally opening grooves **126** along its longitudinal edges which receive the angle member flanges **122**. The seal has an outer surface which is substantially flush with the circularly curved edges **110** of the dam side plates **106** and those of the angle member flanges **120** and is inflatable through an inflation tube **128** at one end of the seal to expand the seal outwardly beyond these edges.

The dam side plates **106** have generally centrally located coaxially aligned circular holes **130**. Bolted to the outer sides of the plates **106** coaxially with the holes **130** are annular collars **132** and intervening annular gaskets **134** which seal the collars to the plates. The collars **132** and the gaskets **134** have circular openings coaxially aligned with the side plate holes **130**, and these holes and openings are sized to snugly but removably receive the sample collection tank **36** of the liquid sampling device **18**. Extending over and firmly fixed to the collars **132** are inverted generally U-shaped anchor straps **136** having lower out-turned ends **138**.

The supporting base clamp **105** of the dry season sampler **100** includes a circularly curved clamp band **86** having normally upper free ends joined by a turnbuckle **88**. The clamp band has a radius of curvature approximating that of the pipe **14** in which the sampler **100** is to be placed and is expandable by extension of the turnbuckle **88** to secure the clamp **105** in a fixed position within the pipe. On the inner side of the clamp band **86** below the upper gap in the band and the turnbuckle **88** are clips **92**. In the dry season sampler, the out-turned ends **138** of the anchor straps **136** engage under these clips, as shown in FIG. **9**, to releasably secure the dam **104** to the clamp **64**.

Except as explained below, the dry season water sampler **100** is installed in the storm drain pipe **14** and is used to collect samples of water flowing through the pipe all in the same way as described earlier in connection with the wet season sampler **10**. The only differences between the installation and sample collection procedures of the dry season sampler and those of the wet season sampler are as follows. The wet season sampler **100** is inserted into the pipe **14** with its seal **124** deflated. The sampler **100** is placed in the pipe with its dam **104** situated within the lower portion of the pipe and with its inlet means **22** situated upstream of the dam relative to the direction of flow through the pipe. After the sampler **100** is properly placed in the pipe, the turnbuckle **88** of its supporting base clamp **64** is extended to expand the clamp band **86** outwardly against the wall of the pipe and thereby firmly secure the clamp band to the pipe. The seal **124** of the sampler **100** is then inflated through its inflation tube **128** to expand the seal outwardly against the clamp band **86** and thereby both secure and seal the dam **104** to the firmly anchored clamp band about the normally lower arcuate side of the dam.

The dam **104** of the sampler **100** blocks water flow through the drain pipe **14** until the water level behind the dam rises to the height of the dam after which the water overflows the dam as long as sufficient water flow through the pipe continues. The dam will then maintain a relatively constant water level behind the dam so long as sufficient water flow through the pipe continues. The water sampler **100** is constructed in such a way that the upper inlet of the inlet passage **24** to its sample collection chamber **26** is located at a slightly lower level than the upper side or edge of the dam **104**, that is at a slightly lower level than the upper channel web **114** of the dam so that the water level behind the dam will reach the level of the inlet before the water overflows the dam. The water sampler **100** remains in its normal state with its inlet valve means **28** closed to seal the device against the entrance of dirt and other foreign matter into its sample collection chamber **26** until the water level behind the dam rises to the level of the inlet. The inlet valve means then opens to admit water into the collection chamber until the chamber is filled, whereupon the inlet valve means recloses to seal the chamber. The water sampler **100** is then removed from the pipe **14** and its collected sample is sent to a laboratory for analysis.

The clips **92** in the pipe **14** permit the wet season sampler and the dry season sampler to be easily interchanged for use of each during its respective sampling season. This interchange is accomplished by disengaging the sampler currently in the pipe from the pipe clips **92**, engaging the other sampler with these clips, and deflating or inflating the seal **124** of the wet season sampler to remove or install this sampler, as the case may be. It is important to note here that the vent tube **61***a* of each sampler permits all of the air to be pushed from its collection chamber **26** during collection of a sample. This is important when testing for the presence of volatile components, such as volatile organic carbons, in a collected sample because accurate test results then requires that no air remain in the filled collection chamber, i.e. that the filled chamber have zero head space.

The inventor claims:

1. In combination:

a liquid receiver having an interior liquid receiving space bounded by a wall,

a liquid sampling apparatus disposed in a sampling position within said space,

mounting means releasably securing said sampling apparatus to said wall to retain said apparatus in said sampling position within said space, and wherein

said liquid sampling apparatus comprises inlet means including a liquid inlet opening to said liquid receiving space, and a sample collection chamber connected to said inlet means for receiving liquid entering through said inlet, and

said mounting means is releasable to permit removal of said sampling apparatus from said liquid receiver for retrieving a liquid sample from the apparatus.

2. The combination according to claim **1** wherein:

said liquid receiver is a liquid conduit having a passage which constitutes said liquid receiving space and through which a liquid may flow,