PROCESSING TIP...

ACCURATE SAMPLING OF SMALL INTERMITTENT FLOW VOLUMES FROM SMALL PROCESSING PLANTS

Accurate sampling of small intermittent flow volumes in manholes is a difficult process. If the sampling tube is placed in either the influent or effluent pipe the flow depth in the pipe may not be deep enough for the sampler to pick up a wastewater sample. If the sampling tube is placed in the bottom of the manhole it can pick up sludge and debris and, therefore, deliver an inaccurate sample. If the influent and effluent pipes are not in the bottom of the manhole, a pool of wastewater will collect below the drain pipe. A sampling tube placed in this pool will continue to sample even if there is no flow from the plant. If the last wastewater discharged before the no flow period had unusually high or low levels of waste materials then an inaccurate sample will be collected.

To solve this sampling accuracy problem, a simple, inexpensive and easy to construct device can be inserted into the plant discharge pipe.

Select a piece of schedule 20 PVC pipe which is the diameter of the discharge pipe. Cut it about 2 feet long. Cut a slot 1 inch wide by and 1 foot long along the long axis of the pipe. This slot will allow the pipe to be compressed and inserted into the discharge pipe until it is snug.

Place a 450 elbow on the discharge end of the inserted pipe and rotate the elbow upward about 450 from vertical.

Place the sampling tube into the device.

Using this device, the sampling tube will have wastewater to sample that is constantly being purged by flow. During a no-flow period, the volume contained in the sampling device is so small that 1 or 2 200 ml samples will reduce the volume to the point that the sampler will not pick up a sample.

This device can be constructed for less than $5.00.

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**Consult with your poultry company representative before making management changes.**

“Your local County Extension Agent is a source of more information on this subject.”

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