



WHITE MOUNTAIN IMAGING

P.O.BOX 216 • SALISBURY, NH 03268 • (603) 648-2124 • FAX (603) 648-2197

Automatic X-ray Processor Effluent

Many Federal, State and local authorities have concerns for any chemicals that may enter the public drains, sewers, or other land drainage systems. Such effluents may have an adverse effect on the bacteria or other reactions that break down sewage and waste.

Many studies on photographic processing effluents have provided detailed information. Eastman Kodak has several informative publications on these studies and they are available from the Eastman Kodak Company, Department 412-L, Rochester, NY 14650. We recommend that all solution service companies obtain these publications.

Processor Effluent

In general, most X-ray processor effluents are harmless to the environment. The alkaline developer, when mixed with the acidic fixer and neutral wash water typically yields an effluent pH in the range of 6.5 to 9.5. This is well within range for most publicly owned treatment works (POTW). “No lubricating oils, greases, heavy metals, flammable or explosive materials are present, and suspended solids are generally less than 20 milligrams per liter- too low to be of consequence. The odor and color of processing effluents are very slight.”*

Silver Reclamation

The use of silver reclamation equipment is required to meet federal and local standards. The federal discharge limit for silver is 5 parts per million (ppm), however, many state and/or local municipalities may have more stringent requirements. It is advised that you contact your municipality for more information. It should be stated that after proper silver recovery, the low level of the chemical complex (silver thiosulfate) is such that it is not toxic or detrimental to waste treatment facilities.

Effluent Plumbing

Plastic piping (PVC or ABS) is best suited for processor effluent. However, local building codes may prohibit the use of these materials. It is imperative that you check with your building inspector's office on which material meets local code. If cast iron piping is used, the effluent should be flushed away as quickly as possible to reduce the chance of chemical deposits and iron buildup-commonly associated with ion exchange silver recovery systems. *Under no circumstances should brass, copper, or any piping material containing these metals be used for processor effluent.*

*"Disposal of SMALL VOLUMES of PHOTOGRAPHIC PROCESSING Solutions"; J-52, Eastman Kodak Company 1981