Best Environmental Management Practices for

Printers

Best Management Practices

Help us prevent sewer service charge increases by protecting our environment and our Publicly Owned Treatment Works by utilizing best environmental management practices.

Whether your business is two blocks or 20 miles from the water, it has two connections to the Monterey Bay. Indoor drains such as sinks, toilets, and most floor drains convey wastewater through the sanitary sewer system to a treatment plant where the water is treated before it is discharged into the Bay. Outside your business, rainwater, wash water from buildings, road surfaces, vehicles, and equipment pick up oil, grease, cleaning compounds, pesticides, paint, garbage and other pollutants. Storm drains carry these pollutants through the storm drain system directly into local creeks and the Bay. They are not filtered or treated in any way. Whether you pour something down the sanitary sewer drain or down a storm drain, it will eventually end up in the Bay.

Printing operations that utilize processes such as lithography, gravure, flexography, screen printing, and letterpress use chemicals that have the potential to impact sewer wastewater with contaminants. The main environmental contaminants associated with printers are silver, chromium, copper, zinc, and toxic organic chemicals. These can pass through, or interfere with our Water Treatment Plant, eventually polluting our Bay and ocean. **Yet the printing industry is important to our community.** The good news is that implementing the best management practices detailed in this pamphlet can drastically reduce environmental impacts from printing facilities.

This pamphlet has been prepared to familiarize print shop owners and their employees with the best management practices for dealing with typical wastes generated by the printing industry. It also details the County of Santa Cruz Industrial Wastewater Pretreatment requirements specific to your facility. Use this pamphlet as a tool to ensure that your business is compliant, to save money on costly spill cleanups and waste disposal, and to train all shop employees. Leave it posted in a visible location.

It is important to be familiar with the different types of printing processes and the potential harmful outputs that these processes generate. All printing operations produce wastewater. It is illegal to discharge hazardous waste water into the sanitary sewer or storm drain. Industrial waste may be discharged provided all pretreatment standards are met.

- The primary focus of this pamphlet is on printing facilities and their best management practices. Many printing facilities also conduct photoprocessing. However, photoprocessing practices are addressed in another pamphlet. For a pamphlet on the Best Management Practices for Photoprocessing Facilities, please contact the Santa Cruz County Sanitation District at (831) 477-3907.
- This pamphlet does not cover regulatory requirements concerning air emissions. For questions regarding Air Emissions, contact the Monterey Bay Unified Air Pollution Control District (MBUAPCD) at (831) 647-9411.

Floor Drains and Floor Cleaning

Discharge of any wastewater other than storm water directly or indirectly to a storm drain, a creek, an underground percolation sump, or other water body is strictly prohibited. All indoor floor drains and/or sumps that are connected to the storm drain system must be permanently plugged.

Floor drains in work areas are prohibited.
Utilize dry clean-up methods wherever possible. Clean up spills by using a shop vacuum, sweeping, and/or by using rags or dry absorbents. Oil spills may be cleaned up using a hydrophobic mop. Remove all unnecessary hoses to discourage employees from washing down floors and outdoor paved areas. Once the dry clean up is complete, floor and paved areas may be mopped.

Take the following steps while mopping floors:

- Clean up spills with rags or dry absorbent, or hydrophobic mops for oil.
- Sweep the floor. Collect all solid debris from the floor and dispose of properly. Mop the floor using a bucket of non-corrosive cleaner and water diluted as specified on the label. If possible, only spot mop the area that requires cleaning.
- Discharge the mop water to the sanitary sewer via a sink or toilet.

Training

Make sure that all employees understand and follow Best Management Practices. Mistakes and misunderstandings can lead to violations and costly cleanups!

The following page can be used as a training log. Ensure that all employees are trained on Best Management Practices upon hiring and annually thereafter. Log the training. See the following page for an example log.

Use the following as training and education tools:

- This Best Management Practice pamphlet.
- Your written Spill Response Plan.
- Drills on emergency spill cleanup.

Post and/or label the following:

- Post multiple copies of this pamphlet throughout your facility.
- Emergency telephone numbers to your local Fire Department and the City of Santa Cruz Wastewater Treatment Facility (831.420.6050).
- Post signs above all sinks prohibiting the discharge of solvents and wastes.
- Label all drains and pipes within your facility indicating whether they flow to a treatment system, directly to the sanitary sewer, or to the storm drain.
- Stencil or post signs near all storm drains on your property with a message- “No Dumping-Flows to Ocean.”

How do you know you’re complying? Use the Green Press Inspection Checklist at the end of this pamphlet. Enlist a different employee to perform this inspection every month so that they familiarize themselves with the Best Management Practices and solidify their training.

Training Record

Date: _____

Training Topic _____

Trainer Name _____

Trainer Signature _____

Printed Name of Attendee	Attendee Signature

Date: _____

Training Topic _____

Trainer Name _____

Trainer Signature _____

Printed Name of Attendee	Attendee Signature

Reuse and Recycling

Pollution Prevention Tips

- **Purchase reusable or recyclable products wherever possible. Reduce or eliminate the hazardous materials that you use. Materials that have the potential to be recycled include the following: oil, cleaning solvents, oily rags, and ink. Recycling is not only good for the environment, it is good for business. Often times, it is cheaper to recycle and you may even be able to get a return on your recycled goods.**

- Look for ways to recycle used plates, corrugated cardboard, and other solid wastes.
- Find ways to use and reuse extra paper. Make poster-paper, notepads, etc.
- Complete the paper-recycling loop by purchasing paper with recycled content.
- Minimize the use of packaging materials when delivering printed product to the customer.
- Recycle used aluminum printing plates.
- Use both sides of your make-ready paper to cut the amount used in half.
- Manage inventories on a first in first out basis (i.e. use materials in the order they were received) to make sure stockpiled materials do not expire before use and consequently become waste.

Hazardous Materials Storage

No hazardous materials or waste may be discharged to the sanitary sewer or storm drain!
Keep a record of disposal of hazardous wastes to their final resting place. You are liable for these wastes after they leave your facility.

Typical hazardous wastes generated by printers include the following:

- Press/screen cleaning solution
- Untreated fixer
- Parts cleaning solvents
- Waste inks
- Coatings or adhesives
- Waste oil

All hazardous materials and waste must be secondarily contained, or placed in a bin that can contain up to 110% of the entire contents of the containers should there be a leak.
Keep these items stored indoors or in a covered area outdoors. Do not store these items near a sanitary sewer drain or near a storm drain. If these items are stored near a drain, a spill has the potential to travel off of your property, making cleanup more costly and exposing poor business practices to the public.
Check all containers on a regular basis for potential holes and leaks. Leaks on steel drums can appear as rusted out spots or indentations initially. If a leak is discovered, place drip pans or absorbent material under the leak and then attempt to repair the leak immediately. Keep lids, bungs, and tops secured on waste barrels and containers at all times, except when adding waste to containers or dispensing product.

In areas where hazardous materials are stored, make sure there are adequate spill cleanup materials (see the section on Spill Prevention, Control, and Response). Hazardous waste containers must be labeled and stored according to hazardous waste regulations. Only store hazardous waste in your shop for as long as necessary and use only reputable, licensed waste management facilities.

For more information on Best Management Practices for Hazardous Materials Storage, contact the County of Santa Cruz Environmental Health Services Department at 831.454.2022.

Spill Prevention Control and Response

The best spill control is prevention!
Spills are cheaper to clean up when quickly contained! Write a Spill Response Plan. See the example Posted Spill Control Plan on the following page. Train employees on the plan annually. During the required annual training, perform drills to ensure that employees can put the Plan into action safely.

Adequate spill prevention and clean-up materials must be kept on-site and readily available for use. Examples of such materials are the following:

- Vermiculite (kitty litter)
- Absorbent mats - When obtaining mats, ensure that the material you have chosen will absorb the appropriate fluids. Some only absorb water-based fluids, or solvents, while others absorb oil and grease. There are also absorbents that neutralize as well as absorb for acids or bases.
- Portable berms and dikes
- Drain blockers - These are rubber mats that are generally stored on the walls and can be quickly thrown down to cover a drain to prevent a spill from going into the drain.
- Absorbent "socks" - These can be used as a temporary berm.
- Hydrophobic mops for oil spills.

Spill kits are available that contain a combination of the above-mentioned materials and are put together based on the quantity of liquid your facility has the potential to release in a worst-case scenario. Plan on getting enough material to clean up the largest quantity of material your shop has onsite. There are several commercial vendors that distribute these materials. They can usually be found on the Internet. Some of the larger suppliers are Lab Safety Supply (www.labsafety.com) and New Pig (www.pigalog.com 1.800.hot.hogs).

Minimize the distance between waste collection points and storage areas and, when transferring wastes, keep lids and containers secured. Attempt to use secondary containment "carboys" when transferring wastes so that if there is a spill, it will hopefully be contained in the carboy. Always use both hands when carrying wastes.

Posted Example
Spill Control Plan

Spill Response Procedures:

1. **Protect yourself first. Be sure and put on the appropriate personal protective equipment: gloves, goggles, and an apron.**
2. **Contain the spill with trays, or absorbent materials. Do not allow the material to reach storm or sewer drains.**
3. **Check the MSDS for the spilled substance for safe handling and disposition.**
4. **Clean up the spill as directed on the MSDS.**
5. **Use dry clean-up methods. Do not send any wash water to the storm drain!**
6. **Package and label all contaminated materials (absorbents, PPE, liquids) for off-site disposal.**
7. **Notify the manager/owner that a spill has occurred (see below).**
8. **Notify the appropriate government agency (see below)**

Spill Response Personnel

Manager Name:	**Pager/Phone:**
Owner Name:	**Pager/Phone:**
Government Entities	***Phone***
Santa Cruz County Sanitation District	**831.477.3907**
Fire Department	
Environmental Health Services	**831.454.2022**

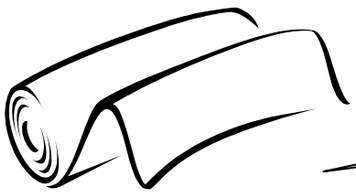
Posted Spill Control Plans do not need to be elaborate. They should be short and to the point so that they are just enough information to quickly and efficiently prevent a spill from spreading. However, if your facility has an Industrial Wastewater Discharge permit, a written Spill Control Plan is required. Call the County of Santa Cruz Industrial Wastewater Pretreatment Program (831) 477-3907 if you would like an example template.

Press Maintenance

Perform maintenance on equipment on a regular basis! Routine maintenance on all equipment will greatly extend the lifespan of your equipment and reduce the likelihood of malfunctions that can lead to costly clean up and repairs.

- Routinely check all dampening rollers and systems; remove and replace bad rollers as needed.
- Keep presses lubricated on a daily, weekly, or monthly basis, as required by the manufacturer. Clean and oil vacuum system.
- Clean presses on an as needed basis in order to help minimize cleaner consumption and prevent build-up of ink, paper-dust, and lint.
- Train employees in noticing potential malfunctions.

Shop Towels & Rags



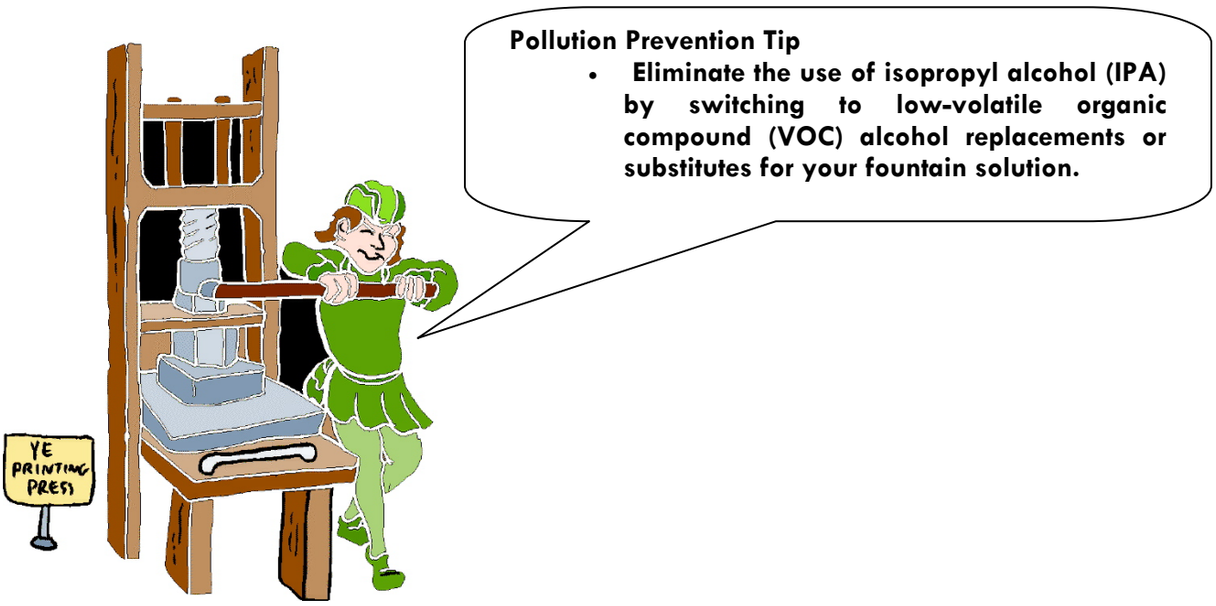
Pollution Prevention Tips

- **Segregate shop towel containers from other containers used for the disposal of inks and solvents. Do not use shop towel containers for waste disposal.**

Take the following steps to minimize and manage waste generated from used shop towels and rags:

- Minimize the amount of solvent and inks on shop towels so you can ship them to a laundry service qualified to wash cloth from printing facilities instead of managing them as hazardous waste.
- **You cannot send reusable shop rags to a commercial laundry with excess solvent or ink.** If they are saturated, they are hazardous; meaning they must be shipped as hazardous waste by a licensed hazardous waste hauler.
- Gravity drain or mechanically wring saturated shop towels to remove excess solvent; recover as much solvent as possible for recycling.
- Remove excess ink from surfaces or equipment with a scraper or spatula before wiping with a shop rag.
- Reuse lightly soiled shop towels for non-critical cleaning.
- Reuse press wipes for as long as possible by using dirty wipes for the first pass and clean wipes for the second.
- Always keep wipes and spent solvent in separate containers.
- Take special precaution to see that no rags end up in the waste solvent drum; they can jam pumping equipment and increase your waste disposal costs.
- Keep shop towel container lids closed.
- If you use disposable wipes remove as much solvent from them as possible before disposing. Non-hazardous wipes can be disposed as solid waste; however, you must be able to demonstrate that they are non-hazardous, and that they do not contain excess solvent or ink. If you wish to dispose of the wipes as non-hazardous, your shop must profile the waste by analytically proving that the wipes are not characteristically hazardous (they are not ignitable, corrosive or contain toxic metals).

Spent Fountain Solution



Fountain solutions have the potential to cause serious pollution if illegally discharged. If discharged directly or indirectly to surface water such as streams, these chemicals can render the water toxic to fish and other aquatic life.

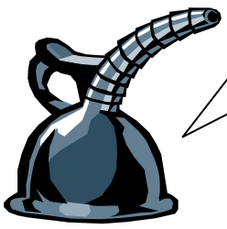
Fountain solution in its original state (i.e. not yet diluted with water) cannot be discharged to the sanitary sewer.

Although you should take every step possible to eliminate all disposal of fountain solution down the sanitary sewer, discharge of highly dilute spent solution is allowed, provided you are able to demonstrate that it will not create an atmosphere in the sewer line that is above 5% of the lower explosive limit (LEL).

Take the following steps to minimize and manage waste generated from fountain solutions:

- Keep fountain solutions stored in a cool place.
- Clean up spent fountain solution with shop towels and then place the towels in the designated waste towel container. See the previous page for shop towel and rag management.
- If you are using IPA, refrigerate (to about 60º F or less) to reduce evaporative loss of IPA.
- Carefully maintain proper conditions for the solution by checking pH and conductivity of fountain solution at least once per shift.
- Consider using a recirculating chiller unit to keep fountain solution clean and reduce fountain solution evaporation of contaminants.
- Use in-line filters in your recirculating units to reduce or eliminate the need to discharge or dispose of fountain solution prematurely.
- Consider investing in waterless presses that require no fountain solution or water.

Waste Oils



Pollution Prevention Tips

- **Don't add waste solvent to used oil. (Adding solvent to used oil hinders recycling potential).**
- **Find a recycler for lubricating oils. Recyclers can either re-refine the oil into new lubricating oil, create fuel grade oil, or use it for blending into asphalt.**

Used oil is considered a hazardous waste in the State of California and must be disposed of properly. Never discharge waste oil down the sanitary sewer or storm drain.

Lubricating oils are used in presses and bindery equipment. This equipment may need maintenance or oil changes from time to time. Oil leaks may also occur and you may have a small oil spill that requires clean up.

Take the following steps to minimize and manage waste generated from lubricating oils:

- Don't pour used oil on the ground or dispose of used oil in a storm drain, septic tank, sewer or dumpster (don't mix used oil with other solid wastes destined for a landfill).
- Keep used oil in a separate container, clearly marked "USED OIL ONLY".
- Immediately clean up any spills and replace any leaking containers.
- If an oil spill can be cleaned up with 3 or fewer shop rags, use the shop rags to clean up the oil and launder the rags off-site. If it is a larger spill, use a hydrophobic mop and designated oil mop bucket to soak up the oil and ultimately place it into the “USED OIL ONLY” container for recycling. This will save the costs of disposing of absorbent pads or “kitty litter” as hazardous waste. See Spill Prevention Control and Response for more details.
- Any absorbent containing waste oil from presses with oil leaks must be stored in designated containers and hauled by your hazardous waste hauler.
- Work with your vendor to identify lubricants with the longest life that are as environmentally friendly as possible.

Blanket Wash/Solvents

Pollution Prevention Tips

- **Use solvents only for cleaning inks and oils. Use alternative products for all other cleaning.**
- **Investigate use of low-volatile organic compound (VOCs) containing solvents. VOCs contribute to air pollution.**

Waste solvents generated when cleaning presses must be disposed of as a hazardous waste. They may not be disposed of in a landfill, sanitary sewer, water body, or storm drain.
Take the following steps to minimize and manage wastes generated from blanket washes and solvents:

- Use job scheduling to reduce press clean up and solvent use by running lighter colors, and then darker ones, whenever possible.
- Select and use blanket washes with the least amount of hazardous material.
- Consider installing automatic blanket washers to reduce the amount of solvent used and wastes generated. These systems are also safer for employees.
- Use pumps on solvent containers with a proper fit to minimize spills and evaporation.
- Develop ways to reuse spent solvent for gross cleaning.
- Use spot application of solvents for stubborn ink residues rather than over application of solvent to an entire area.
- If you must pour solvent over a roller, use a drip pan underneath to collect the solvent that falls beneath. Dispose of excess solvent in its designated waste container.
- Improve inventory control by preventing uncontrolled access and distribution of solvents.
- Use recirculating solvent sinks for parts cleaning to reduce once-used solvent cleaning of press parts. Solvent waste from parts cleaning must be disposed as a hazardous waste.
- Be wary of accepting free samples of solvents. If they turn out not to meet your needs, you will be left with the problem of disposing of them. Don't accept free samples unless the vendor agrees to take back any unused portion
- If possible, purchase solvents from a company that will pick up and recycle the spent solvent.

Screen Printers:

- Evaluate high pressure water/detergent rinsing systems (aqueous cleaners) to replace traditional solvent screen cleaning systems as a means to reduce the amount of solvent used in the workplace.
- Reclaim screens immediately after a print run; remove as much excess ink from screens prior to cleaning and return back to original container.
- Apply haze remover only to areas where a ghost image is visible rather than to the entire screen. This will reduce chemical use.
- Try to find a degreaser that does not contain hazardous and/or chlorinated solvents.
- **If you are using plastisol inks with metallic pigments, you cannot clean screens over the sink.** Instead, use a self-contained parts cleaner when cleaning screens.
- **Do not clean screens over the sink if you are using lacquer thinner or any other highly flammable solvent to clean them.**
- Place catch basins around the screen during screen reclamation in order to capture chemical over spray for recovery and reuse.

Ink

Pollution Prevention Tips

- **Consider using agri-based inks such as soy-based ink (a non-toxic renewable resource) instead of petrochemicals.**
- **When possible, purchase inks in recyclable bulk containers.**

Waste inks containing hazardous materials may never be discharged down the sanitary sewer. Some printing inks contain hazardous materials, such as heavy metals used for coloring and petroleum-based solvents used to disperse the pigments and accelerate the drying process. Heavy metals such as barium, copper, and zinc used in some pigments can contaminate soil and groundwater when released to the environment.

Take the following steps to minimize and manage waste generated from printing inks:

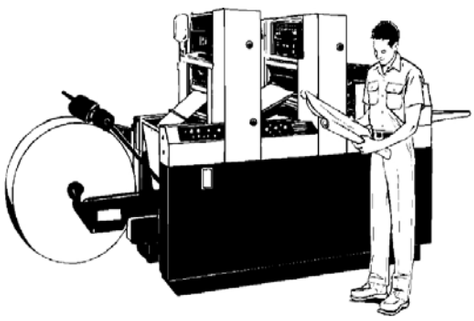
- Waste ink must be stored properly and hauled by your waste handler.
- Scrape as much ink out of containers as possible prior to disposal or recycling. Discard containers only when all ink is thoroughly scraped. In lieu of the fact that it is difficult and time consuming to thoroughly scrape ink containers, it is best to drum all used ink containers and have them hauled by a waste handler.
- Scrape leftover ink from fountains and containers for reuse or blending into black ink.
- Order only the amount of ink you need to do the job.
- Schedule jobs so as to minimize the need to change ink.
- Avoid letting ink “skin over” in cans and replace covers when ink is not in use.
- Investigate non-skinning inks and cartridge delivery systems. Non-skinning inks can greatly decrease production costs by reducing the amount of waste ink generated.
- If appropriate, install automatic ink levelers at fountains.
- Use ink thinners with less toxic ingredients whenever possible.
- Enclose or cover ink fountains, where appropriate.
- Evaluate ink recycling systems or vendors who provide this service.
- Donate ink that you no longer use to vocational/tech schools, colleges, etc rather than pay for disposal.
- Investigate UV-cured inks, electron-beam (ECB) inks or water-based inks.

Agri-based inks. Inks that are soy or vegetable based are lower in volatile organic compounds (VOCs), which react with other atmospheric pollutants to form smog.

Some advantages of soy-based inks:

- Soy inks are less likely to build up on the plate, have less of a tendency to skin over, and have greater stability.
- Soy oils tend to be clearer than petroleum oils, so the colors can be brighter. Also, some printers claim that soy ink pickup and transfer is quicker, resulting in shorter start-ups and less waste.
- Many printers claim that soy inks are more forgiving and thus make it easier to run a high quality job on older equipment. It is sometimes easier and faster to change from a dark to a light color ink with soy than with petroleum-based inks.

Finishing



Pollution Prevention Tips

- **Select glues that are low in volatiles.**
- **Choose finishing materials that can be recycled.**

Wastes generated from finishing processes include binding and laminating chemicals and scrap paper.

Take the following steps to minimize and manage waste generated from finishing:

- When possible, use water-based adhesives rather than solvent-based ones.
- Use bindery adhesives containing no more than 10% of a single chlorinated solvent.
- Reduce paper use by selecting properly sized paper.
- Use aqueous coatings to reduce air pollutant emissions.
- When possible, use mechanical binding methods to reduce the need for adhesives and glues.

Silver Bearing Waste/ Pre-Press Operations

Pollution Prevention Tip

- **Consider installing electronic imaging and laser plate making systems to reduce the need for photographing and reshooting in pre-press operations.**

Pre-press printing processes such as plate making and image processing use chemicals and materials similar to those in the photographic industry such as plastic film, fixers, and developers. These materials are usually composed of silver halide salts including silver chloride, silver bromide, and silver iodide. If you are using these types of materials, proper handling is necessary.

Spent fixer solution cannot be discharged to the sanitary sewer or storm drain! It must either be treated onsite (silver recovery) or collected by a certified silver recycler. Generally, if your facility is processing large volumes, then an onsite silver recovery system is warranted. If only processing small volumes, it is recommended that all waste be collected and hauled away for treatment.

If your facility is treating photoprocessing wastewater onsite, you are required to have an Industrial Wastewater Permit with the County of Santa Cruz. All wastewater discharged must meet the local discharge limits. All spent chemicals must be treated prior to discharge.

Please refer to the Best Management Practices for photoprocessing facilities for information on silver recovery units and photoprocessing wastes.

If your facility is collecting waste and sending it off-site for treatment, make sure you know where your waste is going. You are liable for your waste from cradle to grave, or cradle to cradle in the case of recycled material.

Pre-Press Operations:

Take the following steps to minimize and manage waste generated from pre-press processes:

- Use aqueous based plate developing systems instead of solvent based ones.
- Consider replacing metal plates with alternatives such as plastic, photopolymer, flexographic and electrostatic paper plates.
- Use non-hazardous plate developers.
- Use squeegees to wipe excess liquid from film and paper to minimize chemical carryover and process bath contamination.
- Use counter-current rinsing to reduce cross-contamination.
- Reuse fixer; talk with your vendor about ways in which to extend the life of your fixer bath.
- Extend photo developer life by monitoring and adjusting process baths.
- Look for a recycling vendor that will collect your scrap film.

Green Press Inspection Checklist

GREEN PRESS INSPECTION CHECKLIST All items marked "NO" will require corrective action. Items marked "N/A" do not apply to this area.		
YES NO	INSPECTION ITEM	CORRECTIVE ACTIONS/COMMENTS/DATES OF COMPLETION
☐ ☐	1. Ask an employee if they know what Best Management Practices are. Can they list an example Best Management Practice? Have they been trained on BMPs in the last year?	
☐ ☐	2. Are employees carefully calculating chemical needs to reduce the amount of excess waste? Are expired or surplus chemicals returned to vendors?	
☐ ☐	3. Press operators are trained to accurately estimate the amount of ink needed for each job. Accurate records of the quantity of ink needed are kept for specific jobs, particularly for repeat customers and re-orders.	
☐ ☐	4. All waste containers are properly labeled.	
☐ ☐	5. Only appropriate containers are used for hazardous wastes and all containers are labeled and in good condition.	
☐ ☐	6. All employees are trained on proper equipment operation and maintenance. A routine maintenance schedule is followed.	
☐ ☐	7. Equipment is not leaking any fluids? If so, are leaks adequately contained with absorbents or drip pans until they can be repaired?	
☐ ☐	8. Are waste oil, solvents, and inks being sent to a recycling vendor?	
☐ ☐	9. For facilities using photo chemicals, spent fixer is being captured for silver or hauled away for treatment.	
☐ ☐	10. Spill cleanup material is available in the immediate area. Employees are trained appropriately to cleanup spills and are familiar with the Spill Response Plan.	
☐ ☐	11. Are all chemical and waste containers (in storage or in use) in secondary containment?	
☐ ☐	12. Are floor drains absent in production areas where a potential spill could occur?	
☐ ☐	13. All hazardous wastes are secondarily contained and are stored indoors away from floor and storm drains.	
☐ ☐	14.Lids, bungs, and tops are secured on containers at all times, except when adding waste to containers or dispensing product.	
☐ ☐	15. There is a posted version of the Spill Response Plan in areas where hazardous materials are used and stored.	
☐ ☐	16. Dry clean up methods are being used in preference or always before wet clean up methods (those using water).	
☐ ☐	17. Only non-corrosive cleaners are being used to mop floors and they are being diluted appropriately. The mop bucket water is being poured into a drain going to the sanitary sewer. Floors are not being hosed down.	
☐ ☐	18. Waste removal manifests and product use logs have been properly maintained.	
Pollution Prevention Measures for a Green Business (not required but recommended)		
☐ ☐	19. Leftover ink is being reblended to make black ink.	
☐ ☐	20. Agri-based inks such as soy based, are used whenever possible.	
☐ ☐	21. Fountain solutions containing little or no concentrations of isopropyl alcohol are being used and steps are taken to eliminate discharge of fountain solution down the sanitary sewer.	
☐ ☐	22. Print jobs are conducted on recycled paper whenever possible.	