



PURDUE PESTICIDE PROGRAMS

Purdue University Cooperative Extension Service

PESTICIDES AND ENVIRONMENTAL SITE ASSESSMENT Assessing Compliance Through Self-Assessment

Fred Whitford, Coordinator, Purdue Pesticide Programs

David Gunter, Attorney, Beers, Mallers, Backs and Salin

Brian Miller, Supervisor, Operating Compliance E, H, & S, Crop Production Services

Joe Becovitz, Field Investigator, Office of the Indiana State Chemist

Edited by

Arlene Blessing, Production Editor and Designer, Purdue Pesticide Programs

TABLE OF CONTENTS

PAGE

INTRODUCTION	3
ENVIRONMENTAL SITE ASSESSMENT IS RISK MANAGEMENT	7
Site Assessment Means Risk Management	7
Reviewing Past, Present, and Future Liabilities	8
CONDUCTING ENVIRONMENTAL SITE ASSESSMENTS	14
Who Conducts Environmental Site Assessments?	14
Preparation for an Environmental Site Assessment	16
When to Conduct An Environmental Site Assessment	21
How to Conduct An Environmental Site Assessment	23
Where To Look	24
How to Evaluate Contamination	24
How Long Should the Assessment Take?	27
INCORPORATING SITE ASSESSMENT INFORMATION INTO BUSINESS PRACTICES	28
Changing Liabilities Into Assets	28
Developing Solutions	29
Company Policies Address Environmental Problems	30
Policy Implementation Through Employee Training	34
Routine Inspections Support Policy, Education, and Prevention	35
LEGAL IMPLICATIONS ASSOCIATED WITH ENVIRONMENTAL SITE ASSESSMENT	37
Attorney/Client Privilege	38
Attorney Work Product Privilege	39
Discoverable Evidence Linked to Privileges	39
Civil and Criminal Trials	40
Self-Assessments and Legal Advice	41
Be Aware of Legal Rights Under Assessments Conducted by Outside Parties	42
CONCLUSIONS	46
ACKNOWLEDGMENTS	48
APPENDICES	49

INTRODUCTION

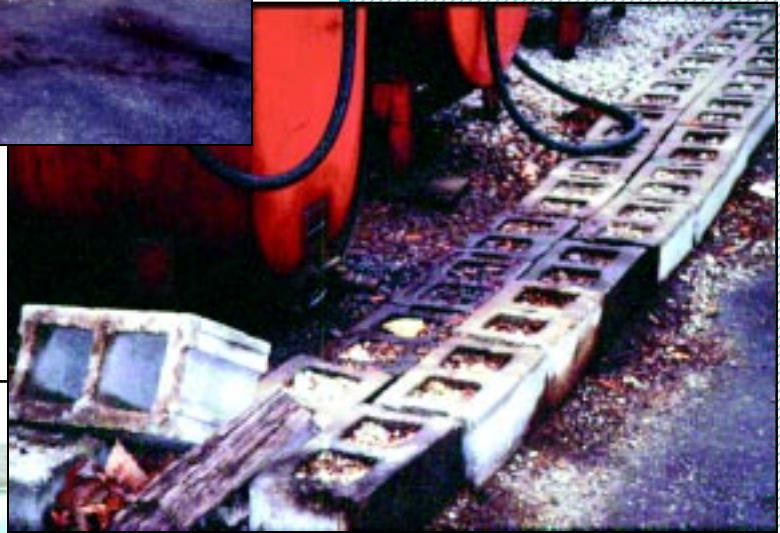
What is a business worth? Traditional benchmarks such as assets, liabilities, operating income, market share, goodwill, and customer satisfaction are used to gauge the financial success of a business. A new standard among these traditional measures of business success is *environmental liability*.

Environmental liability often is determined by conducting an environmental assessment which can disclose a history of real property use and abuse. Environmental assessments are now performed routinely at commercial pesticide and fertilizer application businesses, farms, golf courses, lawn care companies, pest control firms, and other businesses. Such assessments supplement the findings of financial institutions, independent consultants, and internal auditors who evaluate and report on financial records. The availability of liability insurance coverage and its cost often are based on the documentation of good environmental stewardship. Assessments also are used in determining the value of a potential investment. Some states also require property use disclosures prior to real estate transfers.



Real estate occupied by a company that operates on an otherwise profitable basis may actually be a poor risk for acquisition, or as collateral for a loan, when a poor environmental assessment is factored into the bottom-line equation. Mismanagement and poor housekeeping practices where pesticides, antifreeze, oils, batteries, fuels, chemical waste, and rinsates are

mismanagement and poor housekeeping practices where pesticides, antifreeze, oils, batteries, fuels, chemical waste, and rinsates are



concerned, or where a lack of credible documentation on waste handling, storage, and disposal may offset positive factors such as market share, assets, and future profits.

In addition to putting company personnel and perhaps the public at risk, improper handling of pesticides and fertilizer products has resulted in significant contamination. Many pesticide and fertilizer applicators are shocked by the magnitude of their environmental liability. The costs to clean up a property, especially ground water, where improper chemical storage and handling has occurred can range from thousands to millions of dollars. These costs take away from the bottom line. Such incurred liability can be devastating to a company's profitability and to its public image. For instance, how confident is the public with a company that spends four to five years' profit to clean up environmental contamination that could have been prevented? Even more critical to the financial future of the company is the view that investors take on such mismanagement.

Real estate normally is regarded as an *asset*; but a property may become a *liability* if the costs associated with an environmental cleanup exceed its fair market value. It is unlikely that the owner of such a property can sell it unless and until the contamination is remedied to the satisfaction of governmental officials, the prospective buyer, and the insurance carriers involved. Conversely, a buyer might commit to paying for the cleanup and, in doing so, use it as leverage to negotiate the purchase price. In some situations, money may be held in escrow until the site is cleaned; any money not spent on the cleanup is returned to the seller. In any of these possible scenarios, the seller pays for the environmental cleanup of a property.

Contaminated soil or water can lead to short- and long-term consequences. For example:

- The likelihood that governmental agencies will take action against past, present, or future owners of the property might increase.
- Persons found guilty of willfully, unintentionally, or ignorantly committing an environmental offense may be subject to criminal actions and sentenced to time in jail.
- Fines can be levied against those responsible.
- Retirement income for owners of small- to medium-sized companies may have to be forfeited to pay for remediation.
- The cost of remediation may exceed the real estate value.



- Substantial environmental cleanup costs may force a company into bankruptcy.
- Owners may face higher rates for (or be denied) liability insurance.
- Prospective buyers may encounter difficulty acquiring financial assistance from lending institutions.
- Owners may be unable to sell the property.
- Individuals exposed on the property, or as a result of contamination resulting from activities on the property, may file personal injury actions or worker's compensation claims for conditions derived or alleged from exposure.
- Persons exposed to soil and water contamination may file legal claims against past and present owners.

Is there an environmental time bomb at your facility? Can you afford to wait for the explosion, or should you take action, now, to defuse it? Pest control businesses are scrutinized by the public and the media; that is to say, *mistakes seldom go unnoticed*. The purpose of this publication is to explain why people and organizations involved in all aspects of pest control—both urban and rural—should place a premium on good environmental site management.



ENVIRONMENTAL SITE ASSESSMENT IS RISK MANAGEMENT

Business owners and stockholders benefit when their companies profit and grow. And maximum growth is achieved by retaining existing customers while securing new ones, by offering consistently better products or services, and by decreasing operation expenses. Taking shortcuts may yield short-term savings; but in order to guard against long-term liabilities, companies need to emphasize safe workplaces, good management practices, and environmental compliance. They should be *proactive*, not *reactive*!

Site Assessment Means Risk Management

Selling business property—either urban or rural—might be the most significant, long-term financial move that an owner will ever make. Poor environmental management practices put long-term—even lifelong—investments of time, energy, and funds at risk. Failing to recognize and address environmental site problems in a timely fashion and failing to correct unacceptable environmental practices can lead a profitable business into bankruptcy.

The major benefit of an environmental site assessment—whether performed by an outside consultant or in-house personnel—is the identification of *existing* liabilities and any potential for *future* liabilities. Ideally, following an assessment, steps are taken to reduce or eliminate practices determined to be conducive to liability.

Environmental site assessments provide insight into past and present practices that contribute to inadequate environmental protection. Likewise, they direct prudent business people toward total compliance and a contamination-free, environmentally sound facility. Following are questions that owners and managers should ask themselves:

- What was the condition of the property prior to my gaining control of it?
- Did my predecessor or a prior business leave the site contaminated?
- Have my neighbors' practices adversely impacted ground water beneath or surface water runoff onto my property?

- Have my own practices adversely impacted the environment on or near the property?
- What prior actions and practices of my own may have increased my liability potential?
- Do any of my current practices need to be changed to reduce the potential for future liability?
- Do I need legal advice?
- Does my state offer environmental assessment assistance programs?

Reviewing Past, Present, and Future Liabilities

Environmental assessments are essential to anyone planning to purchase, sell, or lend money on a business involving pesticide storage, handling, transport, application, or disposal. Taking title to a property sight unseen and without benefit of an environmental assessment is to be viewed as willingness to assume responsibility for all existing liabilities.

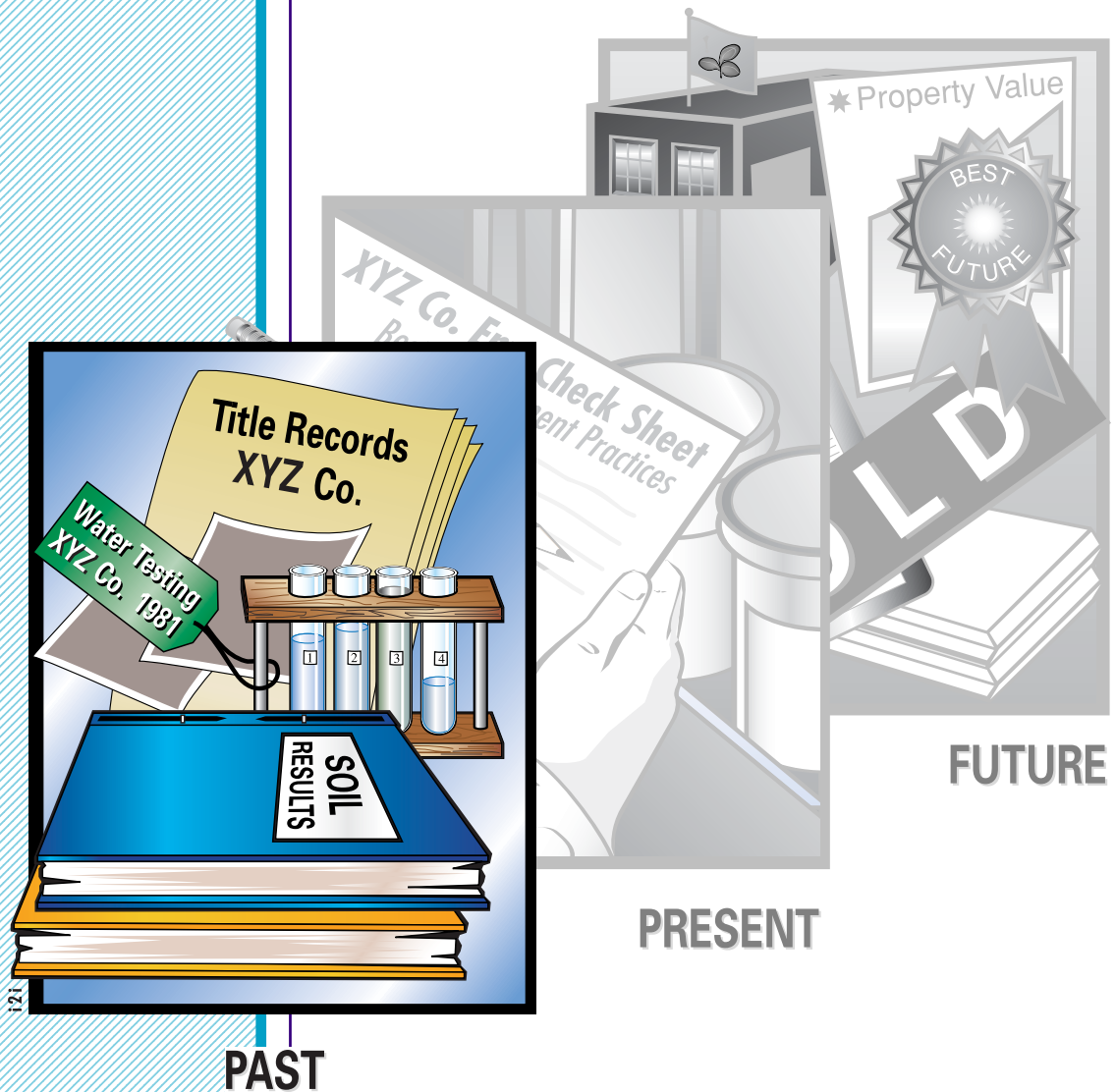
A buyer who purchases property without the benefit of an environmental site assessment could inherit a wide range of liabilities resulting from previous owners' practices. Lack of knowledge does not protect the buyer from environmental liabilities caused by the seller or predecessors of the seller. Buyers should be wary of a low price tag on a property because environmental liabilities—which may well translate to hidden costs—may be part of the “great deal.”

Banks and other lenders have a vested interest in the environmental status of property that they mortgage because any problems become *theirs* if the mortgagee defaults; that is, if they repossess a property, they likewise assume any existing environmental liability because most environmental statutes do not require evidence of improper conduct by the owner. Therefore, lenders are wary of approving loans without benefit of an environmental assessment, and most lending arrangements now specifically require periodic compliance audits.

The possibility of foreclosure on contaminated property affects loan acquisition for certain industries such as agriculture and urban pest control. Lenders are wary of soil and water contamination and generally take precautions to preclude it from their real estate transactions. In doing so, they complicate initial loan acquisition for purchasers, and companies whose practices are found to cause adverse environmental impacts have difficulty obtaining subsequent loans for improvements or expansion.

History— What Has Already Happened?

Many practices that were considered the norm, years ago, are now considered unacceptable. Certain seemingly acceptable practices, repeated over time, can trigger serious environmental problems that necessitate expensive solutions. Minor contamination is still contamination; and it can build up over a long period of time and eventually reach ground or surface water. Less-than-environmentally-sound practices, coupled with the use of pesticides that may linger in the environment, can dramatically increase the seller's liability and seriously diminish the property value. The buyer may gain the upper hand, using the decline in property value to negotiate a lesser price, thereby cutting into the seller's margin of profit.



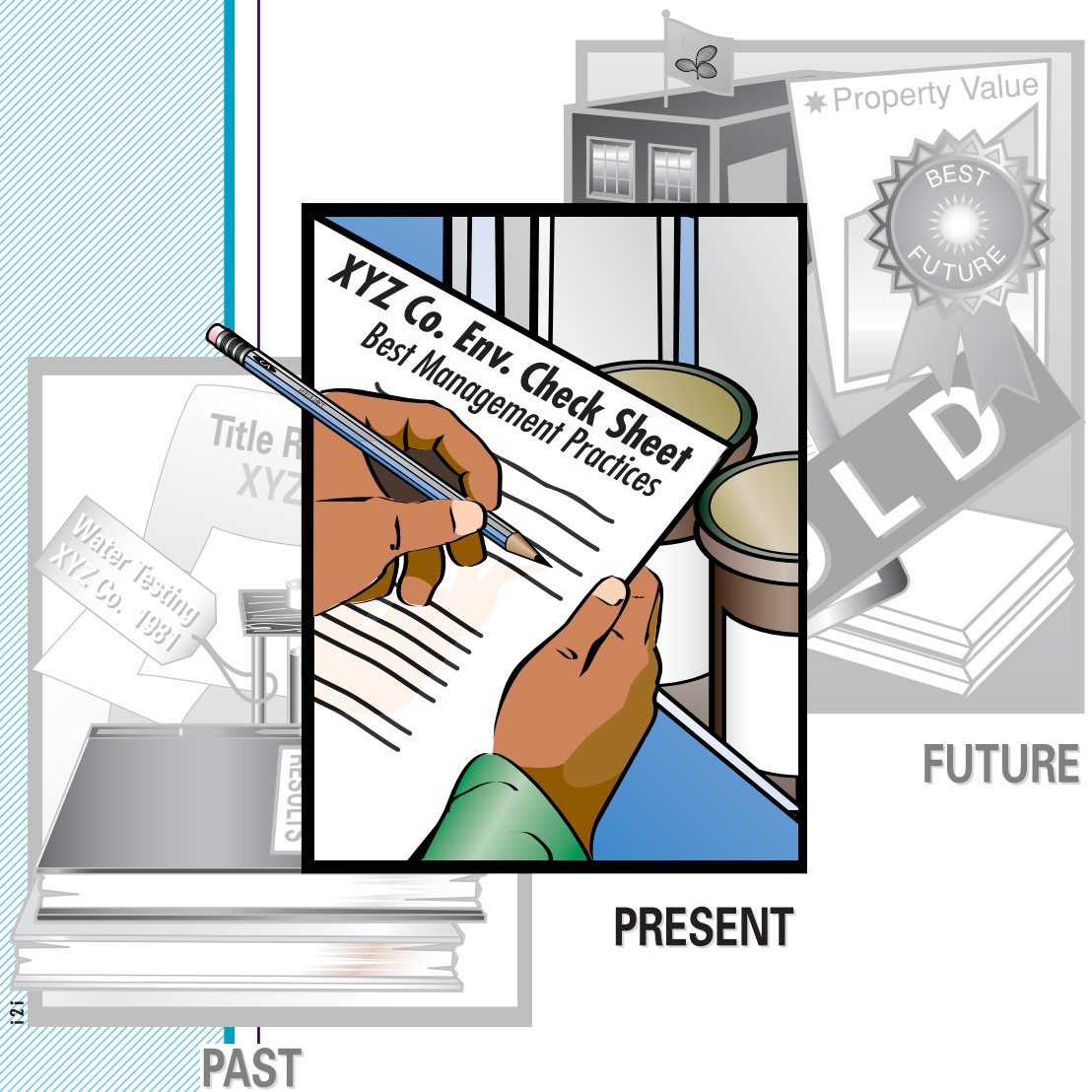
One purpose of an assessment is to gauge the probability of a contamination problem. The likelihood of a problem may be directly related to the actions of previous owners or occupants of the site. For instance, farm acreage used solely for crop production generally is of less concern than an area on the same property that contains an underground fuel tank, or an area where pesticides are or were previously mixed. Of even greater concern are commercial application business locations, both past and present. Older businesses generate a higher level of concern than those established in our modern climate of increased environmental awareness and responsibility.

The greater the concern about a particular site, the more important the environmental assessment. Properties with a high probability of contamination should be researched thoroughly. Professional site assessors can access a variety of land records and governmental databases to develop the history of a site. This allows them to determine who previously owned the property, when they owned it, what type of business they conducted on it, and which chemicals and other products they used. Aerial photographs are available for most sites and often provide a historical view of land use. The U.S. Geological Survey has a clearinghouse for aerial and satellite photographs.

Land ownership records may provide only partial information about a site. For example, the site assessor may find that XYZ, Inc., was the prior owner; but that information, alone, does not disclose prior *use* of the property. The assessor may need to interview former XYZ managers, employees, neighbors, etc., who have personal knowledge of how XYZ conducted its operations. Once a preliminary history of the site is determined, the assessor should inspect the property, paying specific attention to areas of concern (e.g., former pesticide mixing areas). An experienced professional assessor should be able to distinguish *normal* from *unusual* by visual inspection. If unacceptable conditions are present, the site assessor may elect to take soil and water samples. Personal interviews, government and business record searches, visual inspections, and soil and water samples yield information that the assessor can use in reaching a conclusion as to the risk—or risk potential—associated with the property.

Present Practices— What Is Happening Currently?

Obviously, what's done is done: Property owners have no control over what took place at the site under *previous* ownership. They can, however, identify and clean up problems and thereby minimize the potential for *future* risk—and they certainly can govern activities under *their* ownership. It is important that owners



and managers *control* their operations, minimizing exposure potential as a priority and maintaining property value.

Assessment of current practices and regulatory compliance at a facility determines how well the site is being managed from an environmental standpoint. Business owners should

- *know their role* in environmental stewardship,
- *devise a plan* to fulfill that responsibility, and
- *execute the plan*.

Based on information gathered during an assessment, the assessor may be able to predict whether or not the storage and use of pesticides, fertilizers, solvents, petroleum products, etc., will eventually have a negative impact on the property—tomorrow, next year, or ten years down the road.

Property owners and corporate decision-makers use site assessments routinely to identify existing liabilities and liability potential. Many businesses assign specific employees to perform internal assessments on a continual basis, usually annually

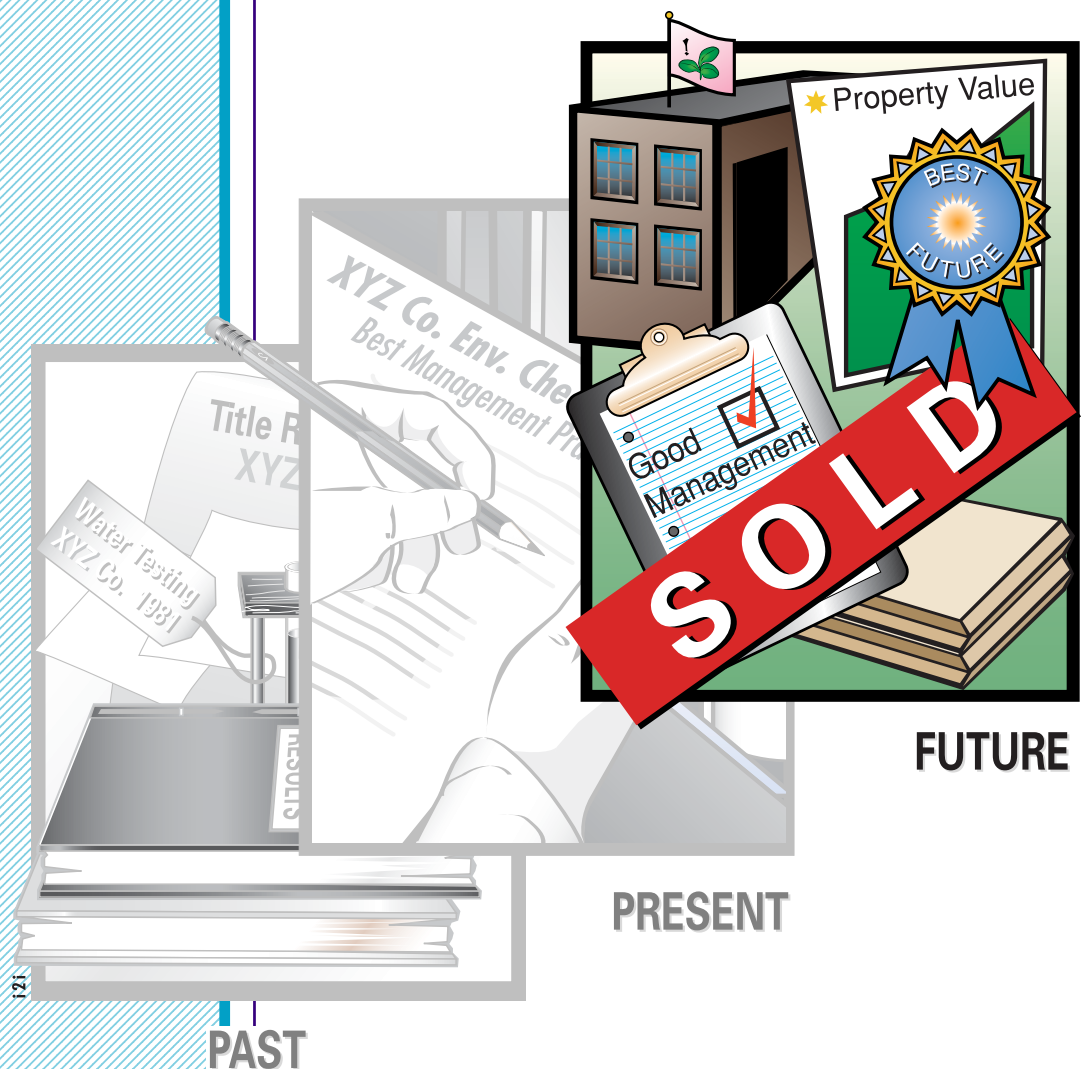
or semiannually; others hire outside firms or private consultants such as environmental or health and safety specialists. Comprehensive assessments include inspection of storage and handling practices as well as pesticide and pesticide container disposal methods.



Prudent business people combine good capital investments with sound operation procedures. For instance, investing in the construction of a quality containment facility and establishing a standard of impeccable work ethics for employees go hand in hand with environmental stewardship. Example: A concrete containment area where well-informed, responsible employees can mix and load without jeopardizing the surrounding area or ground water goes a long way toward environmental safety.

The Future: Will Rectifying Prior Problems Reduce Liabilities?

Environmental site assessments are conducted to deal with past and present contamination issues. These issues are raised at the time a business is offered for sale and during inheritance proceedings, mergers, and regulatory activities. Whether you are “buying” liabilities from the past or incurring new ones, the future sale or transfer of the property is impacted.



A prudent buyer should never purchase property on which chemicals have been used or stored, without the benefit of an environmental site assessment. The expenditure for a thorough professional assessment, up front, may save thousands, in the end; real estate titles should never be transferred without one. Failure to rule out liability potential could have disastrous financial consequences: possible property and business devaluation due to media attention, and significant cash outlay for remediation.

Occasionally, owners conduct internal environmental assessments and report their findings to potential buyers as assurance that the property is not contaminated. While this may be legitimate from the seller's point of view, the buyer's best interest is served by requesting a professional, third-party assessment. Ultimately, either the buyer or the seller may use the results as leverage for an adjustment of the purchase or sale price, respectively. For instance, if a seller conducts an internal assessment *and* a follow-up one conducted by a professional consultant yields identical or similar positive findings, the seller would be in a good position to ask premium dollar for his property.

CONDUCTING ENVIRONMENTAL SITE ASSESSMENTS

Who Conducts Environmental Site Assessments?

Anyone with a financial stake in a property may request an environmental assessment. The person or firm designated to perform it depends largely on its purpose. Buyers usually hire outside consultants to conduct environmental assessments to verify the absence of liability before signing a purchase agreement, whereas the seller's objective might be to confirm the worth of his property in support of the sales price. Hiring a third party is perceived as objective due to the extensive responsibility assumed in drawing conclusions about the liability or liability potential of a property.

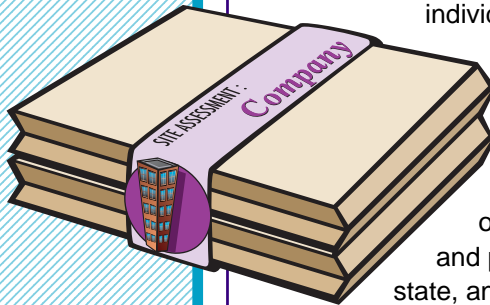
The professional consultant's report is intended to protect the interests of the buyer. The amount of work conducted by an environmental consultant depends on the scope of the project. The consultant's job is to make visual observations, conduct a



government records check, interview employees, identify past uses of the property, and develop a report summarizing the findings. Based on the findings, the consultant may recommend soil and water samples to confirm or rule out the presence of environmental problems. The buyer is made aware of environmental *problems* through the consultant's report, but no consultant will guarantee that the land is *clean*.

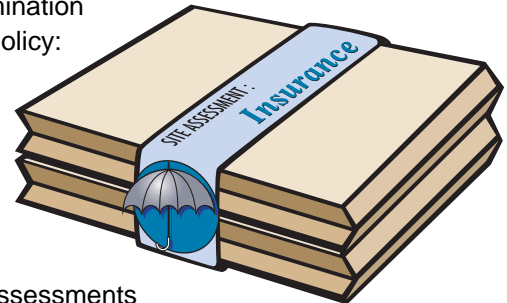
The in-house environmental specialist's report is intended to protect the interests of his company. Many businesses employ

individuals to conduct their own environmental assessments of corporate facilities and potential acquisitions. Findings are reported to facility and corporate management personnel, and problems noted become the focus of future inspections. Corporate auditors keep operations on cue with environmental policies and procedures and assure compliance with local, state, and federal laws.



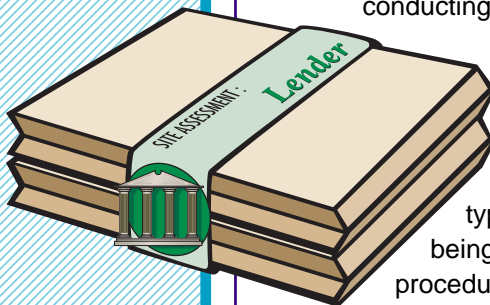
Insurance companies often conduct site inspections of pest control businesses that they insure. The focus is to rule out environmental contamination before renewing the policy:

The insurance assessor's report is intended to protect the insurance company. But the insured can benefit, as well.



When insurance assessments detect areas of environmental concern, owners are alerted to the need for remediation. Oftentimes, insurers can aid property owners in addressing problems before they create a liability. And by helping companies identify and address their environmental responsibilities, the insurance company reduces its own risk in underwriting the coverage.

Lenders have become experienced in the practice of conducting environmental site assessments, using consultants and occasionally their own staff. They often begin by requiring business owners to complete a questionnaire. If red flags go up, an on-site inspection may be conducted, although the decision to inspect is highly dependent on the type of business borrowing the money, the amount being borrowed, the collateral, and the lender's procedural policies.

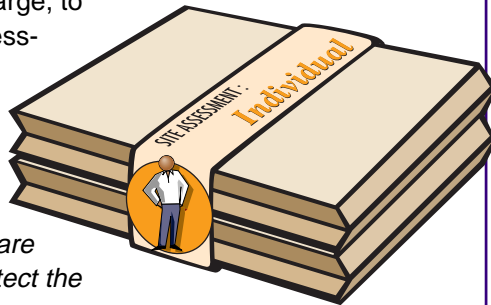
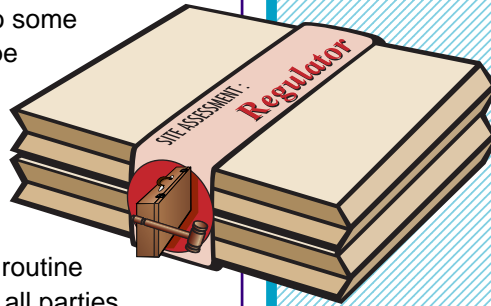


Site visits are customary when a business has become insolvent and the lender is considering foreclosure. At such a point in time, it is wise for the lender to know whether or not the site has environmental problems; if it does, foreclosure may not

be in the lender's best interest. In other words, in taking possession of a contaminated property, responsibility for remediation—and the cost thereof—would default to the lender, as well. *The lender's site assessment report is intended to protect the financial institution.*

Government agencies such as the U.S. Environmental Protection Agency and state departments of agriculture and natural resources conduct site assessments, as do some fire marshals, local fire departments, etc. The scope of their investigations typically is limited to enforcement of a select set of environmental and safety regulations. *Regulatory and environmental assessment reports are intended to protect the public and the environment.*

Environmental site assessments have become routine to protect property interests and reduce liability for all parties concerned. It is important for owners and managers of pest control businesses, small or large, to conduct periodic internal assessments. State disclosure laws regarding such assessments should be thoroughly understood. *Self assessments and those ordered and paid for by owners and managers are the only ones intended to protect the interest of the business.*

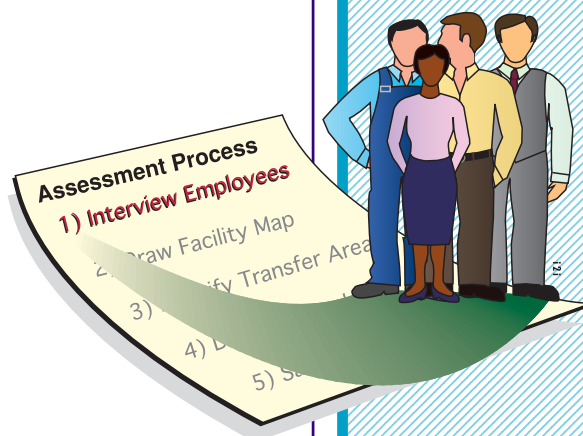


Preparation for an Environmental Site Assessment

Preparation is critical for managers who conduct their own assessments. A well-organized and thought out plan makes the visual assessment more meaningful. Such plans often include the following.

Interviews With Past and Present Employees

Employees (and sometimes neighbors) can provide managers valuable information regarding site history and past and present practices. Quiz employees about both company policy and actual activities. Ask how they might change practices for the better.



A Map of the Facility

Develop a detailed map of the property, citing areas of significance, and obtain a blueprint (or draw a graph) of each structure on-site. All permanent buildings, other structures, and activity-specific areas should be identified and each location assigned a name which best describes the activities that occur there:

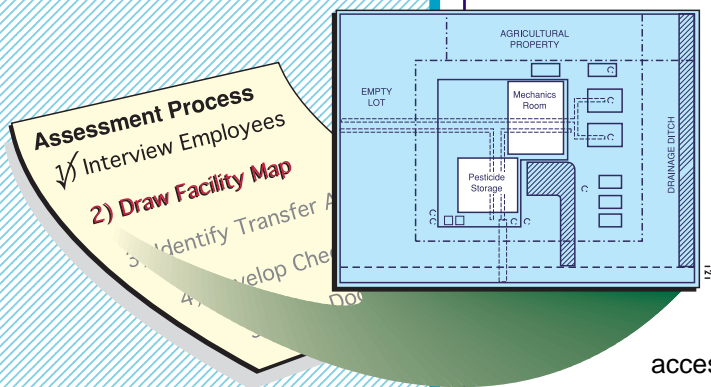
- mechanic's shop
- pesticide storage room (or building)
- fertilizer blending operation
- dry fertilizer area
- pesticide containment area
- trash dumpster
- aboveground and belowground fuel tanks
- anhydrous ammonia tanks
- holding tanks (for chemicals, fertilizer, waste oil, pesticide rinsate, etc.)
- parking areas
- railroad lines (and areas where railroad cars carrying bulk fertilizers are loaded or unloaded)

Clearly identify on the map any active and abandoned wells, soil type, and depth to ground water. Every spigot or location where water is accessed should be marked with its use. The map should provide information regarding the direction(s) in which surface water flows following a heavy rain. Be sure to indicate the presence of drainage tiles and the points on the property where surface water runs off. Identify the nearest down-gradient creek or ditch near the property boundaries. Identify all drains inside buildings. If known, mark the location of the septic system and the leachate field. All of these items are points of access for materials to reach soil and water. Identify utilities such as telephone poles, electrical transformers, pipelines, and sewers on the property.

After a map is developed, *but before it is used for inspection and marked on*, make photocopies of the clean original for subsequent use. When each site assessment is conducted, make sure the map is marked with

- the date of the inspection,
- the name of the person(s) conducting the assessment, and
- a clear, concise scale (and legend, if necessary).

Update the original map as new buildings are added or demolished, or when other modifications are made on-site.





Transfer Areas

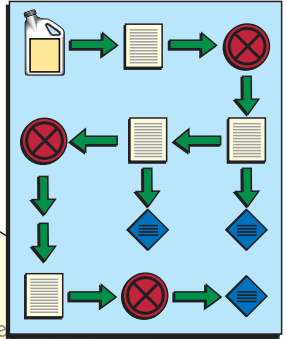
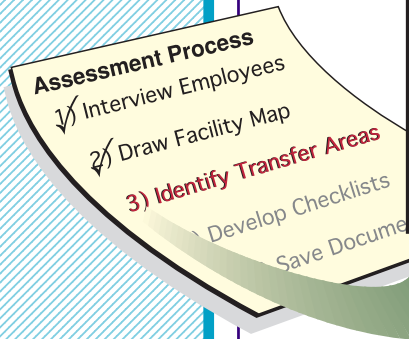
Identify (and mark on the map) all transfer areas, both current and past. This takes deliberate thought and interrogation. It is easy to overlook locations that might fit into the definition of

“transfer area.” Examples: the spot where unrinsed pesticide containers are stored until they are properly rinsed; and the equipment parking area.

Develop a diagram tracing the route of each pesticide, fertilizer, fuel, solvent, etc., from its arrival at the facility (or property) to its point of final departure. The diagram should include routes of the concentrated product, any altered (diluted) portion of the product, and

any waste from the product (unused dilutions; rinsates; excess product; clothing, equipment, and containers contaminated by the product, etc.).

Each point along the flow chart—wherever the chemical is stored, mixed, handled, applied, or disposed—becomes a “transfer area” and should be so designated in the site assessment. Label each point according to the activity that occurs there.

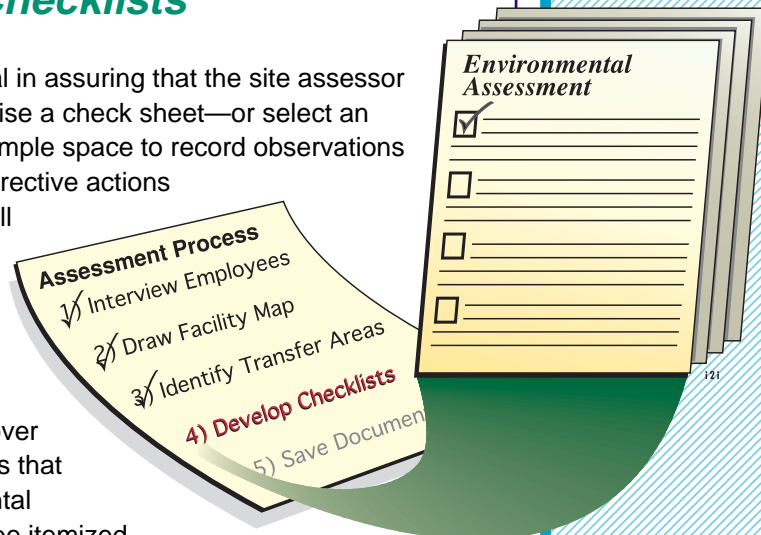




Check Sheets/Checklists

Check sheets are critical in assuring that the site assessor doesn't miss anything. Devise a check sheet—or select an existing one—that allows ample space to record observations and jot down notes and corrective actions required. Self-assessors will find that their check sheets will evolve and expand, over time, as they become more comfortable with the procedure.

Check sheets should cover all questions and comments that arise during an environmental assessment; there should be itemized



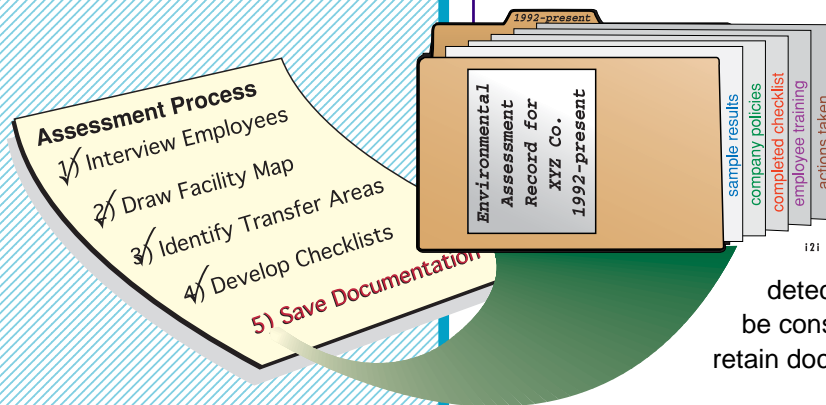
space, as well as blank space for notes, so that the assessor may record all information gathered during the inspection and evaluation process. Transfer areas may become checklist headings, with additional items listed under each. Sources such as the Fertilizer Institute; trade magazines, newsletters, newspapers, the Tennessee Valley Authority, and the American National Institute of Standards often offer checklists that yield helpful ideas in customizing one just right for a given facility or property. Also, insurance companies and regulatory officials sometimes offer written guidelines that can be used as the basis for (or a supplement to) check sheet composition. Examples of environmental check sheets are provided as an appendices to this publication (see inside back cover).

Maps, Check Sheets, and Documentation Files

A complete record of assessment should be maintained by the facility or company manager (or the property owner) for the purpose of answering regulatory inquiries and questions from prospective purchasers, investors, and insurance carriers.

Save all maps, check sheets, and documentation files as evidence of prudent operational procedures. These documents should be saved for as long as the manager and/or owner maintain their relationship with the property.

However: If serious problems are detected, an environmental attorney should be consulted as to whether it is still advisable to retain documentation (see page 37).



When to Conduct An Environmental Site Assessment

Ideally, environmental assessments should be conducted during the busiest months of the year—when everyone’s time is limited. This allows the assessor to observe how chemical handling practices (and perhaps the environment) are affected when the staff is juggling multiple priorities. Weaknesses are most likely to surface when time is short, sending up red flags.

Some managers prefer to review their operations during the off season, when there is more time to ask questions, identify and correct problems, and train employees. But it may be hard to address a contamination problem months after its inception; the source of the problem may be illusive, making it difficult to establish cause-and-effect and to prescribe remediation.

Another alternative is to conduct both a targeted *mini-assessment* and a *complete assessment* on an annual basis. Consider scheduling a complete assessment during the slower months, when time is ample, and an internal mini-assessment during the busy season.

Mini-assessments should target high risk operations (e.g., mixing and loading, chemical delivery, fertilizer outload, and pesticide storage areas) and take only a few hours. It is suggested that they be conducted without notice, as high risk areas often become environmental hot spots during the busy season as staff members scramble to meet production goals. Employees must be made *aware*, even when they seem too busy to *care!* They must fully recognize their ongoing role in protecting the business, the property, and the environment. Focused, unannounced mini-assessments tend to reveal the everyday, busy-season truth as to how chemicals are handled.





How to Conduct An Environmental Site Assessment

Clearly, the environmental assessor—whether a consultant or a company employee—needs a sharp eye for intricate details and potential problems. It is important to recognize subtle indications and contamination “fingerprints” indicating that a chemical may be or has been released into the environment.

Ask yourself if you would fix a particular problem or modify a practice if you knew the state agricultural or environmental inspector—or a potential buyer—were visiting tomorrow. If the answer is yes, then it is worth noting and changing. Ask yourself, What are the potential negative consequences of this situation?

Armed with a detailed map and check sheet, pay specific attention to anywhere chemicals can come into contact with soil or water, or where they may have in the past. Don't overlook the small spill. Repeated small leaks and spills—often overlooked—tend to create big environmental problems, eventually. In addition to the environmental liability, lost product translates to decreased profit: It gets you twice! When confronted with a problem, record observations in writing, directly on the map, or on audio or video tape (see page 37 for possible exception).

Treat existing and potential problems with the same concern, because today's problems were only *potential* problems, *yesterday*. The only way to break the contamination cycle is to address problem potential as soon as it is recognized.

Where To Look

Most self-assessments, as well as those conducted by consultants, buyers, and regulatory personnel, focus attention on operations in which a chemical product is transferred, moved, or stored. Transfer areas—hot spots—are earmarked for inspection because activities that occur there are more likely to result in soil and water contamination than activities elsewhere on-site. Examples of hot spot activities: unloading pesticides from delivery trucks; loading spray rigs; pouring pesticides into backpack sprayers; cleaning tanks; storing used motor oil; mixing fertilizer.

How to Evaluate Contamination

Visual inspection and research into past practices on-site comprise the first step in evaluating the environmental quality of real estate. Evidence that chemicals have interacted with soil often can be detected without the aid of laboratory analysis. However, the extent and magnitude of a problem can be established only through soil analysis of both contaminated and uncontaminated areas.

Walk the property at a slow pace, looking for telltale signs of contamination: soil staining, dead vegetation, odors, accumulation of batteries, and general untidiness. Be alert to odors. Make a note to walk the facility from a different direction when conducting the next audit.

Accurate visual assessment hinges on inspectors' insight into operations conducted at the site; assessors must be aware of *all* activities performed on-site in order to earmark *all* transfer areas for inspection. They must be able to differentiate between normal practices done *properly* and normal practices done *improperly*. They must recognize evidence of chemical release—even trace amounts—into the environment: for instance, a slow-leaking valve that drips ever so slightly, yet continuously, onto the soil over an extended period of time.

The following criteria are typically used to evaluate the environmental condition of real estate.

Discoloration and Staining

Discoloration and staining may occur: for example, black diesel stains on soil; yellow pesticide stains on concrete; and black oil sheen around drains. Such evidence may indicate previous spills (large or small) or ongoing releases of very small quantities.



Stressed or Dead Vegetation

High levels of most chemicals, including fertilizers, can kill vegetation. Even releases at very low concentrations can stress plants. They may appear different (smaller, thinner, distorted) than the same species growing just a few feet away, e.g., larger plants may be indicative of fertilizer runoff. A path of dead or stressed plants may indicate chemical damage caused by surface water runoff.



Unpleasant Odors

Odors are most evident when contaminated soils are disturbed, releasing trapped gases. Common occurrences include the release of ammonia or diesel fumes when contaminated soil is exposed during dumpsite excavation. Anaerobic (without oxygen) conditions prevent or slow the breakdown of chemicals in soil beneath the surface; but when the contaminated soil is turned, the release of odorous gases occurs.

Unsightly Housekeeping Practices

A messy site does not prove that there are environmental problems. But it does provide the assessor with a feel for how chemicals are handled and stored. A messy, dirty site always receives more negative attention from an environmental assessor than one that is neat and clean.



Sampling and Employee Questioning

Many environmental problems are obvious; but some are *not*. Problems that are difficult or impossible to detect during a visual inspection include

- leaking underground fuel tanks, piping, and plumbing;
- indoor drains that connect to leach beds or field tiles;
- soil contamination beneath concrete containment, mixing, and loading pads;
- old facilities that have been buried or had buildings placed over them; and
- water contamination.

Environmental assessors have to question past and present employees about previous activities at a site to get a feel for what problems or problem potential might exist. Accurate assessment of “hidden” elements requires soil and water analysis to determine whether or not there is contamination; what areas, if any, are contaminated; and the levels of detectable contamination.

How Long Should the Assessment Take?

The length of time required for the visual portion of most environmental assessments varies with the qualifications and experience of the assessor. Generally, the visual inspection can be completed in 4 to 8 hours, depending on the size of the facility. More time is needed to check records, conduct interviews, and take soil samples; these can take weeks or months to complete. Environmental site assessments of commercial, agricultural pesticide and fertilizer application businesses generally take more time, due to the diversity of their operations (pesticides, fertilizers, mechanic’s shop, fuel tanks) and because they occupy more acreage.

Visual inspections of most other pest control businesses (e.g, lawn care, pest control, golf course maintenance, aquatic weed control) commonly require only 2 to 4 hours. Their facilities typically support fewer operations and occupy minimal acreage.

INCORPORATING SITE ASSESSMENT INFORMATION INTO BUSINESS PRACTICES

Changing Liabilities Into Assets

Environmental site assessments that focus on daily practices need not be time consuming or expensive. Continual visual observation by managers usually allows quick remediation of any problems that arise; and problems caught early generally are not expensive to correct. Sometimes, a simple procedural change may be all that is necessary. But it should be noted that the gathering of information through routine, in-house assessment—or through more in-depth, annual review—is only the first step in replacing problems with solutions.

It is the responsibility of property and facility managers to practice sound environmental stewardship; e.g., they are obligated to prevent the release of pesticides and fertilizers into soil and water. Those who fail to correct problem practices are, in essence, condoning them; therefore, they must be willing to accept any resulting liability. Unfortunately, management often elects to ignore problems without seeking legal advice from knowledgeable environmental counsel. Failure to take action may result in unsalable property; environmental cleanup costs; charges of willful violation of the law; fines; or even criminal sanctions.

The optimal approach is to take remedial action to eliminate or significantly diminish problems or problem potential identified through site assessment. For example, everyone would agree that an aboveground diesel fuel tank located next to a creek represents an accident waiting to happen. The problem is the *location of the tank*, so the solution is to *move the tank* away from the creek: a simple, direct, and inexpensive approach.

Another example: On the edge of a 6-foot loading dock is a minibulk pesticide container on a wooden pallet. A *proactive* precautionary action to lessen the probability of a spill would be



to relocate the pallet and minibulk to the ground or into containment. A *reactive* approach would be to leave the minibulk on the loading dock, taking no action unless an accident actually occurs—e.g., a forklift operator could accidentally knock the minibulk off of the loading dock, creating a spill. Proactive initiatives are the key to preventing existing operational practices from creating liability.

Developing Solutions

Environmental site assessments not only identify existing problems and problem potential, they also influence business decisions such as allocating money for remedial action. Solutions to some problems—such as deciding where to locate mixing and rinsing pads—may require significant thought, planning, and expenditure. Others have quick fixes, such as educating workers to cap pesticide containers left outside to keep them from collecting rainwater.

Environmental site assessments—simple or complex, in-house or otherwise—provide a snapshot of facility operations. The more thorough the assessment, the better the focus on prevention and solution.

For example, one morning a manager decided to visually inspect her facility. She discovered many unrinsed empty pesticide containers, and others that were partially full of product, in the dumpster. She also discovered undrained, used oil filters. In the mixing and loading area she found obvious pesticide stains



on the soil and detected a strong, pungent odor. The manager called her staff together that very day to discuss the findings and to inform them that practices would have to change.

Simply and clearly, problems need to be corrected. Managers should personally address serious problems such as soil contamination. Solutions to simpler, less urgent problems, such as triple-rinsing containers and draining oil filters, can be assigned to other staff members. Never overlook or underestimate a well-educated staff in preventing and solving problems.

Practices which cause major problems such as soil contamination around a mixing area must be stopped immediately. Other examples of risky practices that a walk-through assessment might reveal are washing equipment and rinsing containers near wells, ditches, or creeks. Others include aboveground fuel tanks placed near roads or wells, and used antifreeze and solvents disposed into floor drains leading to outside septic systems or tiles. Sometimes, interim solutions are necessary to allow time for incorporation of permanent practices.

The entire assessment process must be documented (see page 37 for exception). Managers and supervisors should define a time frame for follow-up inspections to verify that remedial procedures are incorporated. Documentation of inspections and corrective procedures can be useful in communicating with company assessors, regulatory investigators, insurance companies, community leaders, potential buyers, and employees.



Company Policies Address Environmental Problems

Every aspect of every business is unique: facilities; operations; employee knowledge and education; and pesticide, fertilizer, fuel, and other chemical management policies. Therefore, written and practical policies should be company-driven, site-specific, and tailored to the company's specific environmental goals.

Both written and practical company policies should lend guidance to managers and employees on handling potentially hazardous materials in an environmentally sound manner. They should convey to employees specifically how to perform tasks in order to prevent accidents and contamination. Written policies and procedural practices must be clear and concise, yet detailed enough to cover the nuts and bolts of specific issues. Policies

provide other benefits, as well:

- Improvement of long-term profitability by avoiding situations that require expensive cleanups, penalties, and fines
- Reduction of environmental, legal, and regulatory liability
- Elimination or proper management of waste
- Clarification of expectations of employees
- Identification of employee education topics
- Communication of environmental stewardship to the community

Written Policies Can Be Sources of Liability

A written policy that is not followed can be worse than no written policy at all! During legal proceedings, attorneys may cite a company's written policy as evidence of responsibility awareness. Armed with the written policy stating what should have been done, they may argue that the company's failure to follow its own procedural guidelines demonstrates a conscious decision to disregard that responsibility. They may charge that the company's failure to implement the policy lead to the problem of concern and that the company acted recklessly, if not intentionally, by not following its own operational guidelines. The result? The company is held liable for environmental contamination.

A company's written environmental policy can even be used as the foundation for *criminal* charges. Given the fact that written policies demonstrate *awareness*, ignoring them may lead a judge or jury to conclude that the company *knowingly* and *willfully* violated environmental laws. Willful actions that lead to an environmental problem (e.g., disposing contaminated soil along a creek bank) can be deemed criminal offenses. And the severity of civil penalties and fines increases dramatically in cases of willful violation. Owners and managers must recognize that *they* will be held responsible for environmental stewardship, regardless what level of personnel actually performs an inappropriate action.

Tailoring Policies for Your Business

Because written policies are created for various purposes—educational, regulatory, legal—managers must devote serious thought to defining overall goals before putting a policy in place. Employees need to be brought into the fold, that is, they should be allowed input into policies that they will be required to implement. Oftentimes, they can offer workable methods for achieving and maintaining environmental stewardship—and their input can be very instrumental in their embracing company policy.

There is no easy way, best method, or simple strategy for writing environmental policies. Each policy is dependent on the environmental issue being addressed, the company's philosophy, the allocation and commitment of resources, and legal and business considerations. Following are examples of statements that might appear in a written policy.

- *Environmental Mission Statement.*

An environmental mission statement is a brief but profound declaration of company attitude toward, responsibility for, and commitment to environmental stewardship.

- *Problem Statement.* The problem statement specifies a given practice, such as disposal of used oil in a dumpster, as the primary concern. It clearly identifies the problem and explains the significant environmental and legal ramifications.



- *Solution Statement.* This is the most important section of an environmental policy. The solution statement details how the identified problem will be addressed and what specific steps are necessary to eliminate or reduce the likelihood of recurrence. The solution statement may include procedural steps, educational activities, and written documentation.



- *Benefits Statement.* The benefits statement details the anticipated advantages of the policy—to the business itself, to its employees, and to the community—as a result of implementation of the defined procedures.



- *Compliance Statement.* It is important that each employee understand the consequences of failing to follow written procedures. For example, the first incident of failure to comply might draw an oral warning; the second, a written warning; the third, time off without pay; and the fourth, employment termination. A flagrant infraction of any environmental or safety policy might evoke termination, even in the absence of previous infractions.



- *Date, Person Responsible, and Accessibility Statements.*

The date the policy was written (or updated) should appear within the document. The policy should list the names of personnel responsible for answering questions relative to company policy. All policies should be contained in a well-indexed, well-organized format (e.g., in a binder or on a computer); they should *not* be scattered among multiple departments. Managers should update their policy file, as necessary; but, in all cases, complete but separate copies of all policies—including those that have been updated and those that are no longer in force—should be kept in a secure location, accessible only to company officials and legal counsel. Such information can become valuable reference material if a company is asked to identify the policy (or version thereof) that was in place at a specified time.

Policy Implementation Through Employee Training

Procedural policies are difficult to implement. But with explanation and training, encouragement, enforcement, review, and teaching by example, implementation becomes routine. Training and education should equip employees with the knowledge necessary to make informed decisions on the products they use, store, and dispose of as a function of their employment. Continual education improves the probability that pesticides will be handled judiciously, protecting both the environment and the interests of the company. Annual employee evaluations can be used to reinforce the importance of company policy, especially if employees realize that pay raises are contingent upon their implementation of prescribed procedures.

Employee education processes must go beyond mere communication of company policy. They must cultivate and enhance employee understanding, skill, and motivation.

For instance, obligating employees to triple-rinse pesticide containers is one thing, but helping them comprehend why it is important encourages their cooperation. For instance, they might not appreciate why triple-rinsing is necessary. But employees are likely to give their all if employers do the following:

- *Make them understand:* Convey that by carrying out this simple task they, personally, are having economical, technical, regulatory, and environmental impact.
- *Equip them with the skills required:* Teach them techniques that facilitate the procedure.
- *Motivate them:* Offer incentives, or stress that their annual pay raises are contingent on compliance.

Employees must realize that their personal actions play an important role in the success and profitability of the business—

that *they are stakeholders in the company!* Pesticide applicators frequently use personal judgment and apply skills independently, both at their business headquarters and on job sites, so it makes sense that employees be trained to reflect company policy. And it may be beneficial for management to canvass employees, collectively and independently, for suggestions on policies and revisions.

All employees, including office staff, should receive training at least annually on all written company policies as well as OSHA and other applicable regulations. Written policies can be handed out with paychecks, with instructions for each employee to read them prior to the next scheduled safety and environmental meeting. Scheduling monthly meetings where issues, policies, and problems are addressed is a simple way to instill safety awareness.

Safety meetings that focus on environmental policies and preventive practices often generate the best results when they are held outdoors with an instructor demonstrating the “new” approach. Hands-on training is by far the best avenue for teaching employees how to handle chemicals properly, and employees retain the information longer. In either case—classroom education or hands-on training—learning activities underscore the importance of company policies and demonstrate that employee participation is essential to the company’s success.

It is important to document attendance and participation in training sessions, using the employee’s signature. Training documentation—whether an internal safety meeting or outside training session—should also include the agenda, title of each program, speakers, and the date. Such training documentation will assist the manager when questions are raised about the company’s training programs. Tests help give documentation credibility.

Routine Inspections Support Policy, Education, and Prevention

Even if a company prepares environmental policies, educates and trains its employees, and corrects problems identified during assessment, the benefits will be greatly diminished unless follow-up evaluations are conducted. Continual environmental assessment and monitoring of work activities are just as important as the ongoing activities that generate income, such as sales training, product performance, and quality service.

Failure to conduct routine environmental assessments could mean that past investments of time, energy, and financial resources were wasted. Companies must be vigilant to assure that previous environmental mistakes are not repeated. For instance, cleaned soil can become a new liability if contamination recurs; whatever practices were responsible for the initial problem, e.g., continual small spills at a mixing site, must be corrected.

Managers should never dismiss an opportunity to assess their facility or their employees. Early intervention is important in protecting the environment, so daily observance is paramount. It is a good idea to carry a notebook and jot down things that need attention, when they are first observed.

Things such as failure to triple-rinse containers in a timely manner or worn out sight gauges on equipment can be detected—and corrected—before they become an issue.

There are numerous reasons why employees may fail to follow prescribed company policies. While some may offer flimsy excuses, others' reasons may be more concrete—or at least more explainable. For example, some may cut corners under pressure to meet daily production schedules. Finding themselves between the proverbial rock and a hard place and recognizing that there is no way to accomplish all that is expected of them and stay on schedule, they skip procedural steps that aren't too obvious (maybe they won't get caught!). Managers must be cognizant of the pressure that prescribed procedures and production schedules impose; they must be alert to signs of compromised performance; they must step back and ask themselves if this is the result they want; they must consider the impact of resulting environmental liability on the bottom line. And they must ask themselves, Do I cut corners, too? Am I condoning inferior performance, by example?

Since changes in work practices may occur gradually, over extended periods of time, it is critical to monitor procedural policies and the impact of training on employee performance. Company rules and practices, as well as personnel training, need to be reviewed and supplemented continually. Those companies that do so, and those that stay abreast of their operations in relation to industry progression, will benefit. In other words, as practices change to meet an ever-increasing demand to perform more efficiently, effectively, and safely, management must adjust accordingly. The result will be managers with fewer worries, employees who are better educated and trained, reduced environmental liabilities, and happier neighbors who are less likely to contest facility operations.

LEGAL IMPLICATIONS ASSOCIATED WITH ENVIRONMENTAL SITE ASSESSMENT

It is important to understand that site assessments may compromise or threaten your legal rights, that is, to be aware of associated legal issues: what to do and what not to do prior to conducting (or hiring someone to conduct) an environmental site assessment.

Environmental attorneys can offer advice on how to conduct assessments and how to record the findings in a manner that will safeguard their clients' rights. Those who practice environmental law will know

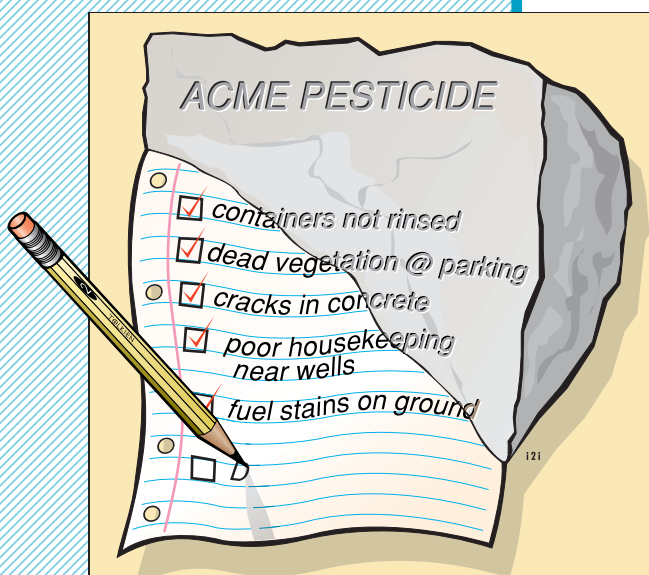
- the applicable laws,
- what liabilities are triggered by applicable laws,
- the consequences of action or inaction on the part of their clients, and
- the options potentially available for solving environmental problems.

Seek the advice of an attorney who practices environmental law, because the gathering, recording, and reporting of information derived from a site assessment may carry additional reporting responsibilities and legal ramifications. Never put in writing or

record electronically (by computer, video, or audio tape), and never discuss with employees or anyone else, any information relating to environmental problems discovered during an assessment; that is, don't document anything that you don't want a judge, jury, or regulatory agency to see or hear: Always discuss the situation with an attorney, *first*. In choosing an attorney, contact the state bar association to see if it has an environmental designation for attorneys specializing in that field.

Identifying an environmental problem and taking no remedial action can be worse than not identifying the problem at all. Regulators may view failure to address an identified environmental problem as willful violation. You may need to ask your attorney certain questions:

- How can we protect our legal rights and still conduct (or hire someone to conduct) an environmental site assessment?
- Should I write down or otherwise document whatever is discovered during a site assessment?
- Can information from an environmental site assessment be used against me?



*If it is written down,
it's etched in stone ...*

- If there is a perceived problem, is it under local, state, or federal jurisdiction?
- Which agencies will be involved if we report the problem?
- Is the problem serious or minor?
- Is it better to initiate corrective action prior to meeting with the authorities?
- What are the penalties associated with not reporting or correcting the problem?

Attorney/Client Privilege

The American legal system has long considered the relationship between clients and their attorneys to be strictly confidential. This edict is protected by the *attorney/client privilege*, which protects virtually all forms of communication between attorneys and their clients: verbal, written, taped, etc. Clients may speak freely and honestly to their legal counsel with confidence that disclosure is forbidden without their approval. Attorneys who gain their clients' trust under the attorney/client privilege are in a better position to render good legal advice than are those whose clients are afraid to tell all. Clients must realize that their attorneys need the benefit of complete, accurate information in structuring the best possible defense (or in building a case, if the client is the plaintiff). They want no "surprises" once they get to court.

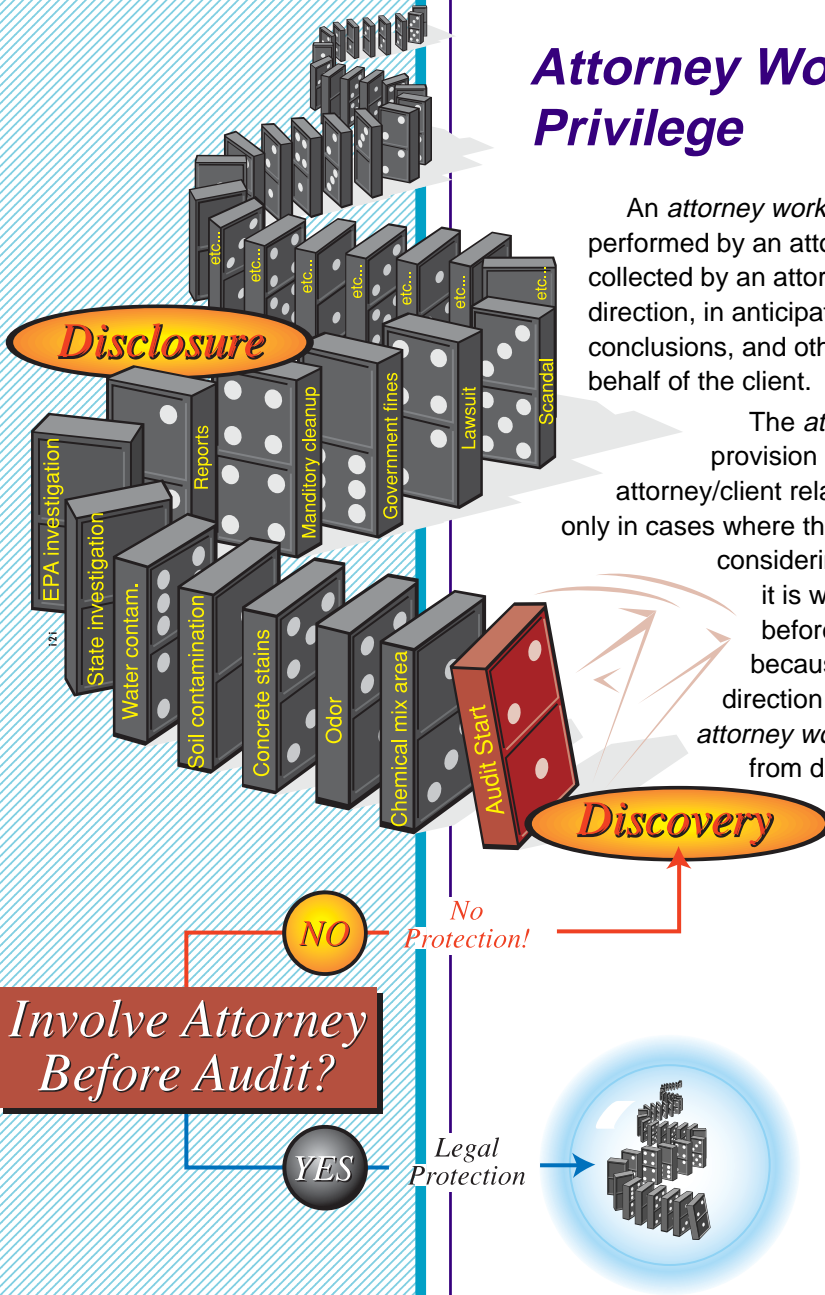


ATTORNEY/CLIENT
CONFIDENTIALITY

Attorney Work Product Privilege

An *attorney work product* is a compilation of work performed by an attorney. It consists of information collected by an attorney, or by someone under his/her direction, in anticipation of litigation; it includes analyses, conclusions, and other products of the attorney's efforts on behalf of the client.

The *attorney work product privilege* is a provision of the law that is invoked only after an attorney/client relationship has been established and only in cases where the possibility of litigation exists. When considering an environmental site assessment, it is wise to solicit the advice of an attorney before making even preliminary plans, because information gathered under the direction of counsel is legally protected by the *attorney work product privilege*; i.e., it is protected from discovery and disclosure.



Discoverable Evidence Linked to Privileges

Discovery is the litigation process where each side must disclose to the other whatever evidence or information they may present during formal proceedings: documents, photographs, recordings, etc. Lawyers may even require opponents to submit written responses to questions or to respond orally, under oath,

to questions asked during a deposition. This purpose of this procedure, *discovery*, is to make attorneys on both sides fully aware of all evidence that may be presented in the case.

Understanding the concept of *discoverable evidence* is important: Only the *attorney work product* and *communications between client and attorney* are protected from discovery and disclosure in any legal proceeding. Evidence or information developed by the client prior to establishing the attorney/client relationship generally *is* subject to disclosure. Recent laws that to some degree protect this type of information have been enacted in certain states.

Civil and Criminal Trials

Criminal Proceedings

A criminal act may be punishable by time in prison. Most environmental statutes permit judges to sentence violators to jail when the defendant has been convicted of knowingly or willfully committing an environmental crime. And, although criminal defendants cannot be forced to testify against themselves, any documents, observations, conversations, etc., not protected under the attorney/client privilege may be admitted into evidence.



Civil Proceedings

A civil proceeding is a lawsuit or administrative hearing in which defendants who are found liable may be ordered to pay for damages and/or assessed a monetary penalty. Defendants in a civil hearing can be forced to explain what they did, what they observed, and when they first observed the problem. However, attorneys cannot compel their adversaries to disclose information protected under *attorney/client privilege* or *attorney work product privilege*.

Self-Assessments and Legal Advice

Although legal opinions are not always needed, it is important to be sensitive to the legal implications of an environmental site assessment.

Environmental Problems Existing Prior to the Self-Assessment

Managers often know up-front whether serious problems exist. If a problem serious enough to bear legal ramifications—lawsuit, criminal action, administrative hearing, etc.—is *known* to exist, it is essential to seek counsel prior to organizing a self assessment. The determination of whether or not there is a problem should be made by an attorney on behalf of the client. Nothing should be committed to writing (or taped) under such circumstances until after an attorney has been commissioned. Information generated in researching the situation may need protection under the umbrella of *attorney/client privilege* or *attorney work product privilege*.

Housekeeping Self-Assessment

The *housekeeping self-assessment* focuses primarily on transfer areas and deals with routine, everyday problems relating to chemical storage, handling, mixing, and disposal. Housekeeping assessments are typically documented with detailed notes. Those that are routine and well-documented demonstrate the company's intention to identify and address problems, both real and perceived, before they become environmental issues. Housekeeping assessments also may be useful in dealing with regulatory agencies, potential buyers, insurance representatives, and attorneys.

Unanticipated, even serious, problems may be discovered during any environmental site assessment; and especially when it happens during a self-assessment, the findings should *not* be discussed with employees. The assessment activity should be halted and an environmental attorney contacted, immediately. The attorney should provide guidance as to the magnitude of the problem. If it is serious, available options will be explained and the client advised on how to proceed. The attorney may want to intercede on behalf of the client in order to protect evidence under the *attorney/client privilege* or *attorney work product privilege*.

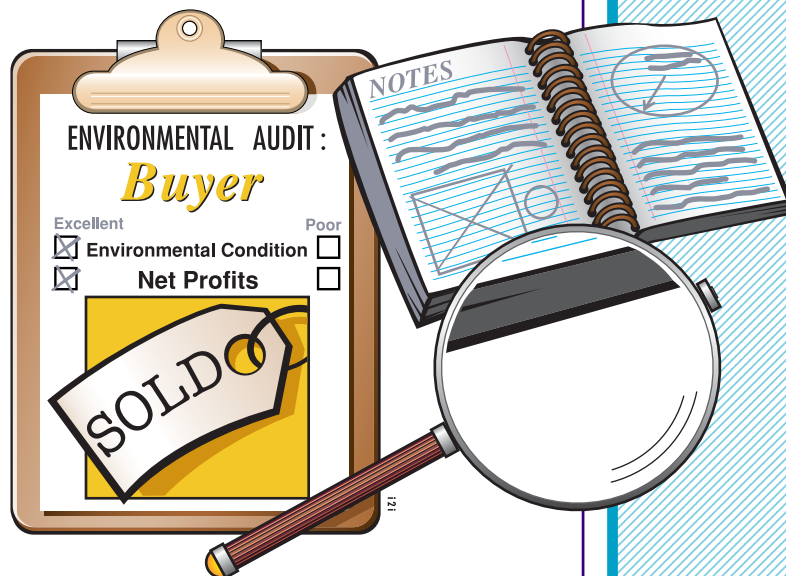
Be Aware of Legal Rights Under Assessments Conducted by Outside Parties

Owners/operators should assess their own property, first, and correct any existing problems before allowing outsiders to perform an environmental assessment of the property.

Buyer Assessments

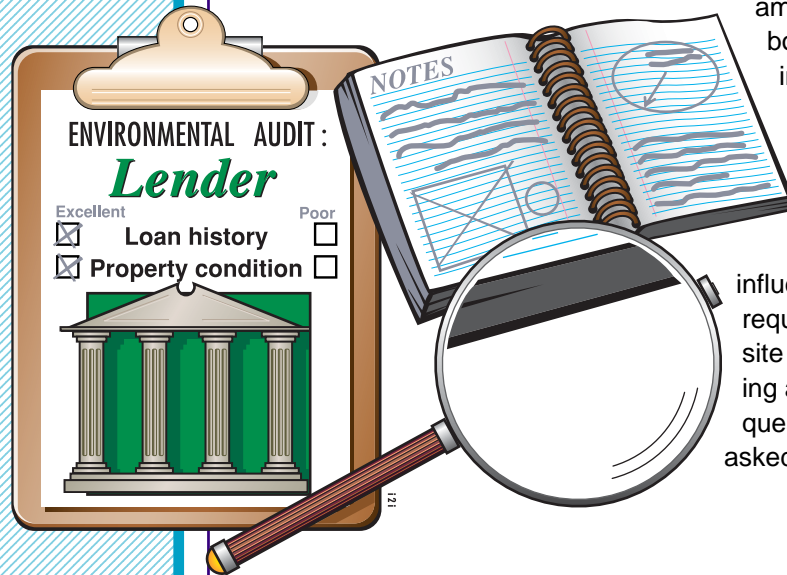
When an environmental assessment is performed for a prospective buyer of property, it is very difficult to later argue that the results of such an assessment are privileged and cannot be disclosed to regulators or other parties. This usually will not be a concern if the assessment reveals minor problems. However, if major problems are found and the prospective buyer decides not to purchase the property, the assessment prepared on behalf of the buyer could later cause problems for the seller.

For this reason, it is recommended that an attempt be made to identify and resolve major or serious problems through self-assessment before attempting to sell. The results of a self-assessment can be kept confidential more easily. If an attorney is consulted, it may be possible to have the assessment performed in a manner in which the findings can be protected from disclosure, thereby protecting the owner, through statutory or other types of legal privilege or protection, from later prosecution.



Lender Site Assessments

When lenders are concerned about environmental liabilities associated with a property, borrowers may have to answer certain environmental questions. The questions posed to the borrower often depend on the type of loan in question, the amount of money being borrowed, security interests and collateral applied toward the loan, etc. Answers to the environmental questions may influence the lender to require an environmental site assessment. Following are examples of questions frequently asked.



- Have there been any federal, state, or local environmental enforcement actions against the borrower?
- Is the borrower presently subject to any court or administrative orders (regarding environmental matters) that require continuing compliance?
- Has the borrower or the site ever had a reportable spill of petroleum or hazardous substances?
- Does the real estate contain asbestos or PCBs?
- Has the lender been provided a report showing the ownership of the real estate for the previous forty years?
- Are there any underground storage tanks on the property?
- Have any underground tanks ever been removed from the property? If so, who removed them (provide documentation)?
- Has the borrower ever conducted an environmental assessment?
- Have any claims for environmental problems been made under the borrower's insurance policies?
- Is the company or the site out of compliance with any of environmental permits that it holds?
- Are storage containers of fuels, chemicals, pesticides, solvents, cleaning fluids, animal waste, or other waste material stored on the property? If yes, is there any evidence of spills, leaks, or discharges into ground or surface water?
- Are there any areas at the property where the ground is stained or where there is dead or stressed vegetation?

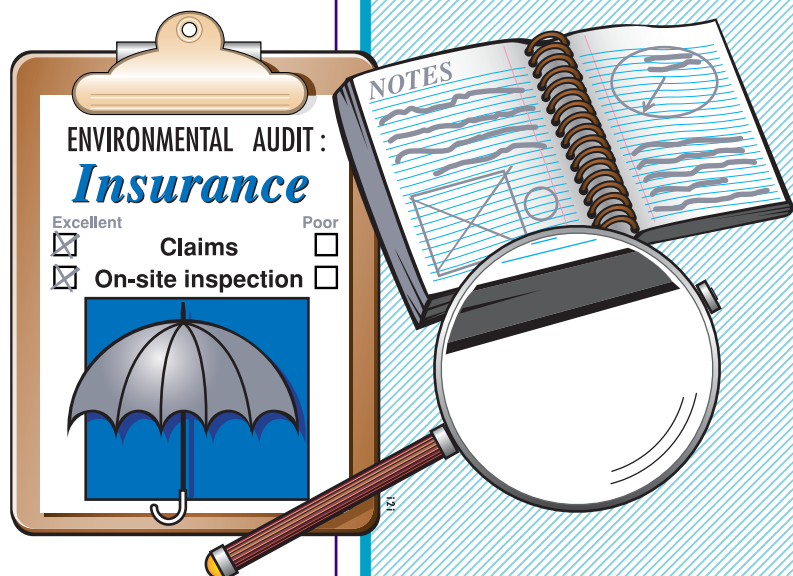
- Does the operation generate chemical or animal waste as a part of its operation?
- Has trash and/or waste ever been burned on the property?
- Are there any open or buried dumps on the property?
- Have there been any health-related complaints or claims filed by workers at the property?
- Are there currently any canceled pesticides on the property?
- Are there any hazardous waste problems or other environmental impairments existing on the property, from either current or previous operations?

It is a federal offense for anyone to be less than truthful when answering questions related to financial transactions. But providing a “yes” answer often compels the applicant to provide documentation. For instance, one lender has the following statement on its environmental questionnaire: “This checklist is designed to alert the user to environmental issues and conditions which may adversely affect the borrower or the bank. Any “yes” answer to the questions above needs satisfactory explanation and documentation in the file.”

Borrowers should be aware that lenders generally have questionnaires, and they should ask for a copy, early on. Difficult questions and any that make the borrower uncomfortable should be discussed in detail with an attorney. Seeking legal advice is important because the lender’s questionnaire may also be used as evidence.

Insurance Assessments

Insurance companies may conduct their own assessments to confirm that the policyholder remains a good risk. The insurance underwriting process allows insurers to go on-site to evaluate a property. Generally, the insurance assessment includes a visual inspection and the issuance of a questionnaire. Again, any environmental problems detected may be used, later, as evidence in a court of law; therefore, the best advice is to clean up the site and seek legal counsel prior to an assessment. Further, it is important to fully understand all insurance contracts, that is, to know explicitly what coverage is purchased. In particular, the insured must confirm coverage that would pay in the case of regulatory or civil action. Keep previous, obsolete policies as part of the permanent company file; in



certain instances, old insurance policies entitle the insured to compensation, retroactively, for problems discovered after the fact.

Regulatory Assessments

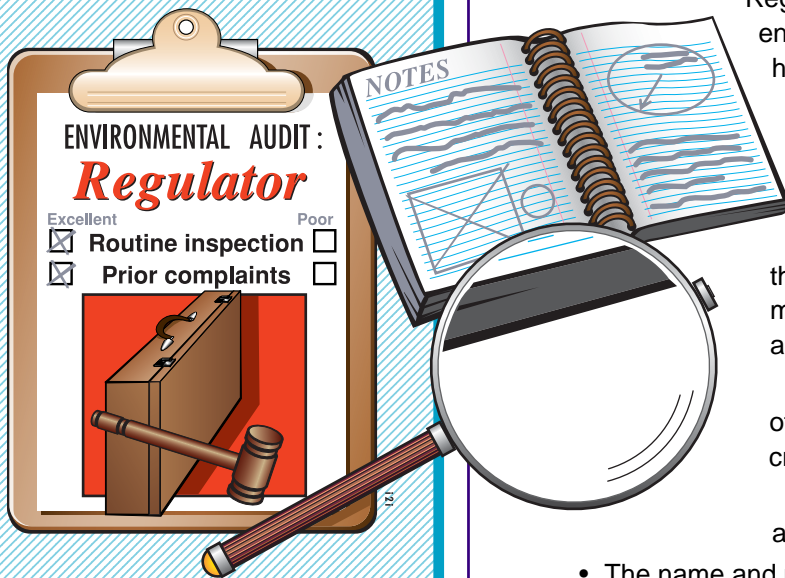
Environmental assessments performed by regulatory personnel can be stressful because they usually are unannounced.

Regulatory agencies have the legal right to enter any property during normal business hours to conduct an inspection. The inspection may be routine, or it may have been triggered by a complaint. In any case, the inspector representing the regulatory agency should provide the property owner with the following information. If the inspector does not volunteer this information, you have the right to it and should ask.

- The inspector's name and some form of identification (a card, badge, or other credential)
- The agency represented (name, address, phone number)
- The name and phone number of the inspector's supervisor
- Legal authority for the inspection
- Information as to whether the inspection is routine or the result of a complaint
- The nature of the complaint, if applicable
- The name of the person who filed the complaint
- Information as to what was alleged by the complainant
- Disclosure as to what is or is not found during the inspection
 - Any violations detected
 - Any enforcement action that is likely to result from the inspection
 - A date by which a written copy of the findings may be expected

It is the regulatory official's job to ask questions through legal means, but that does not mean that the owner/operator must volunteer information to support alleged complaints. Answering some questions could be construed as admission of guilt; these and certain other types of questions should be addressed through an attorney. Any information disclosed during a regulatory inspection is considered discoverable evidence and could be used against the company in a civil or criminal case.

Companies should have a plan in place for handling impromptu inspections. It is particularly important to plan who will



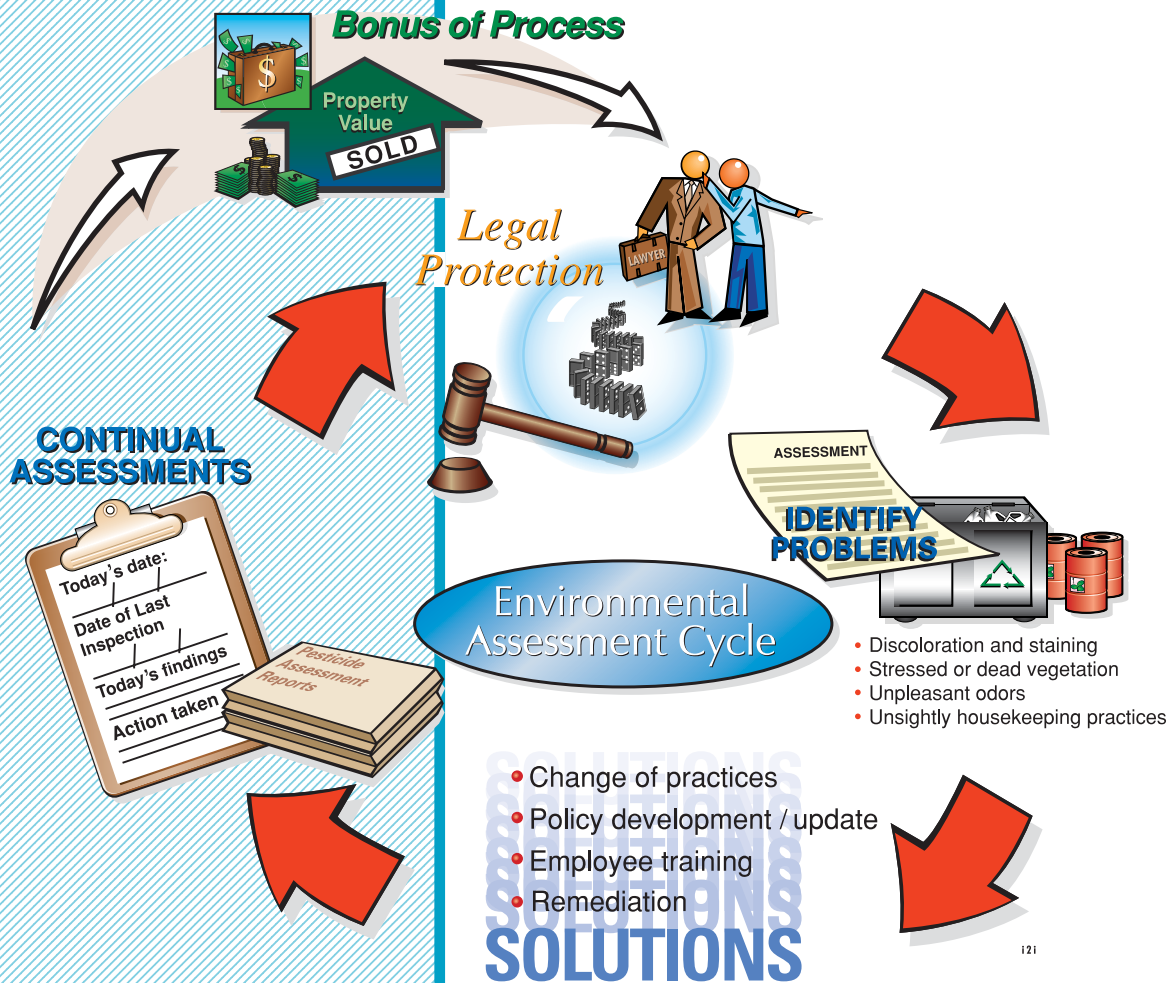
represent the company and accompany the inspector. All employees should be well aware of their role, i.e., their responsibilities, during an inspection. All samples drawn by the inspector should be split with the company for separate testing.

CONCLUSIONS

We live in a rapidly changing world, and we must change with it or be left behind. Government regulations, public scrutiny, and industry standards have mandated that pesticide and fertilizer industries change. Many environmental practices considered routine in the past are unacceptable, today. The days when small fertilizer and chemical spills and/or minor misuse were overlooked are over: The risks are too great.

An environmental site assessment can be a valuable tool. It can increase the bottom line and increase the value of a business by reducing liability. Lenders require verification of a property's environmental condition before lending money toward its purchase. And if a regulator takes soil and water samples in which fertilizer or pesticides are detected above acceptable levels, someone is going to have to pay for cleanup. The law provides that past property owners, years back, can be held liable for environmental cleanup, and it can cost thousands—sometimes millions—of dollars. A timely environmental site assessment can uncover problems—major, minor, potential—for remediation to reduce, prevent, or eliminate contamination. Identifying problems in a timely manner and taking appropriate remedial action can add to the bottom line. That is, early remedial intervention by way of assessment can save a company hundreds of thousands of dollars, down the road. Environmental cleanup isn't cheap, so it makes sense, monetarily and otherwise, to avoid the necessity.

Prudent managers maintain an awareness of the tools of compliance and environmental stewardship and, more importantly, they implement them. They assess their facilities and properties continually to ensure accordance. The effective management of a business requires sensitivity to information that site assessments present, and personnel must be cognizant that negative data might be admissible as evidence in criminal or civil proceedings. Seeking legal counsel ahead of the assessment process makes good business sense; it affords the company legal protection from disclosure under the *attorney/client privilege* and the *work product privilege*.



An in-house environmental assessor's work is never done. It requires constant awareness of the daily, monthly, and yearly operations that affect the economic and environmental success of the business. Conducting the assessment and documenting problems constitute only the first step. Formulating a solution, writing company policy, and training and monitoring employees round out the equation.

Environmental risks assumed in operating a chemical application business in today's world are greater than ever before. Smart business owners recognize that they must maintain control, and site assessment is a mechanism for evaluating and managing those risks.

ACKNOWLEDGMENTS

This publication is based on work partially supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under special project number EWQI01400.

All illustrations are by artists Stephen and Paula Adduci, i2i Interactive, Campbell, California. Their artistic interpretations greatly enhance *Pesticides and Environmental Site Assessment*, and we thank them.

The authors also gratefully acknowledge the contributions of the following individuals in developing the publication.

Bob Avenius, TruGreen-ChemLawn

Greg Baumann, National Pest Control Association

James Claffey, Brown and Caldwell

Allen Cummins, Capital Agricultural Property Services

Tom Delaney, Professional Lawn Care Association

Lee Eastland, Providian Capital Management

Danny Glaze, Arab Termite and Pest Control

John Graveel, Purdue University

Win Hock, The Pennsylvania State University

Ed Van Istendal, B. & D. A. Weisburger

Richard Judy, LESCO

Kip Landwehr, Terra International

Paul Liemandt, Minnesota Department of Agriculture

Kurt Neuharth, Western Farm Service

Michael Olexa, University of Florida

Bill Reid, Phase 1 Environmental Engineering

Charles Rock, Novartis

Matt Smith, Crop Production Services

John Strazanac, Zelenka Nursery, Inc.

Allen Summers, Asmark

Ron Turco, Purdue University

William Wainscott, ServiceMaster

Bob Williams, Agrium

Roger Yeary, TruGreen-ChemLawn

APPENDICES

It is suggested that owners and managers develop their own, company-specific checklists. Those found inside the back cover of this publication may be used as is or as a starting point in tailoring others to suit specific situations; each of the samples can be completed in 45 minutes or less.

The samples are divided into six categories:

- Facility Overview
- Waste Management
- Fuel Storage Tanks
- Fertilizers
- Pesticides
- General Awareness

NOTE: Some answer blocks on the sample check sheets appear in **red**; questions answered in **red squares** may require **follow-up** or **remedial action**.

Additional color copies of the sample check sheets may be obtained free of charge by calling Purdue Pesticide Programs, (765) 494-4566. Ask for a complete set of *PPP-42 Checklists*, or specify only those you need.

A single free copy of PPP-42, including the check sheets, can be obtained by calling Purdue's Media Distribution Center, (765) 494-6794. There is a charge for additional copies.

Reviewed 3/03

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by the Purdue University Cooperative Extension Service is implied.

It is the policy of the Purdue University Cooperative Extension Service, David C. Petritz, Director, that all persons shall have equal opportunity and access to the programs and facilities without regard to race, color, sex, religion, national origin, age, marital status, parental status, sexual orientation, or disability. Purdue University is an Affirmative Action employer.