
Chapter 1

The Environment and Construction

Any construction project has a permanent effect on the local environment. A new building creates a variation in the environment around it.

*Life is fairly simple.
We, by ourselves,
create the
circumstances
that complicate it.*

The materials used in construction come from many natural resources. The environment in timber-producing states is in constant change because of the logging needed to get timber for lumber. Metals are mined from many sources and affect the terrain. Smelting metals into products has an effect on air and water.

A larger construction project demands a greater need for resources, therefore the effect on the environment is more dramatic.

Contracting and Environmental Issues

If you are a construction contractor, the law requires you to pay attention to environmental issues. This means that you have to understand how your individual contracting activity is regulated by environmental laws.

Environment and Construction Permits

Construction permits originally dealt with:

- Fire safety
- Health issues
- Structural safety
- The location of the building on the site

There are currently many issues involved in getting a building permit. Permits are necessary for other reasons than the specific building itself.

There are a number of building related activities that require permits. You will find out:

- How state and local land use laws affect almost any building project
- How important it is for you to know if you are dealing with asbestos in a remodeling project
- If your project is affected by wetland laws, even if it was not affected when it was originally built
- If there are any private restrictions to parts of the project in deed covenants or tenant limitations

Environment and Construction Waste Products

Often the contractor does not take into account the amount and types of waste generated by the project. Some of the waste may be hazardous or dangerous to others. This could be true even if the original construction item did not start out that way.

Other waste may be a result of inefficient use of materials. This is expensive to you, the contractor, and has a negative effect on landfills; some construction waste is simply hard to dispose of.

Hazardous Waste

Some waste is *hazardous* and dangerous to start with:

- Chemicals and thinners
- Discarded broken tools like saw blades, nails, and other sharp metal objects
- Glass fragments
- Asbestos



Note

Government agencies apply specific meaning to the word hazardous. This course will delve into government interpretation of hazardous waste in Chapter 3: "Hazardous Waste."

Other waste can have a hazardous or dangerous effect, some of these are:

- Dust from:

"There is nothing quite so useless as doing efficiently that which should not be done."
Peter Drucker

- ◆ Drywall sanding
 - ◆ Sanding of wood in preparation for finish
 - ◆ Excavation
 - ◆ Other sources that become airborne and can affect people who are not properly protected
- Construction products buried or left on the site and allowed to deteriorate, such as containers for:
 - ◆ Glue
 - ◆ Mastics
 - ◆ Other soft fasteners

These containers are normally made of a fiber material which will break down and allow water to leach out the contents that have not been used up.



Note

Many of these products are hazardous to ground water supplies because they mix into the rain water runoff:

- The same ground water issue is involved in the disposing of paints, thinners and other such materials around the building site. These materials will eventually leach into ground water.
- Roofing material debris often gets buried around the site. These materials will also affect the ground water by releasing chemicals into the water.

Design can make a big difference in how energy efficient a building is. A little bit of extra work up front can mean big energy savings over time.

Consumer Interest in the Environment

All around the country, the consumer is demanding better use of the environment. This means that the place where a person lives is of great value to them because of how it affects their lives.

Consumers place environmental value on their state, their local area (such as the county or city), and their neighborhood. In many cases, the consumer is demanding that the contractor pay more attention to the building site environment as well.

Contractor Benefits of Consumer Interest

The change to a greater consumer interest can be a positive factor to a contractor who sees how to benefit from the situation. Just as people have been willing to pay more for auto safety by purchasing cars with anti-lock brake systems and air bags, many consumers will pay extra for a contractor who uses products with low environmental impact.

In addition, consumers are more willing to pay a little extra for a clean, safe, and quiet work site. This means you can sell the service of understanding your customer's desires and responding with an "environmental" approach to the project (see chapter 5: "Marketing Environmental Quality").

While not all of your customers may fit this case, you may be surprised at how many will appreciate your offer of an environmental benefit in your construction activity.

Emotion makes the world go round, but common sense keeps it from going too fast.

Community as Environment

Most contractors live in the same community that they build in. As a construction contractor, you are literally building your community. Even though the project is not yours to live in or to deal with when it is completed, it becomes part of your own personal environment.

The contractors of today have to take into account the effect they have on the area they live in. This is true for the overall benefits to their communities, as well as to their business success.