Course Learning Outcomes for Unit V

Upon completion of this unit, students should be able to:

5. Examine laws related to toxic substances.

Reading Assignment

Chapter 7:
Controlling Toxic Substances

Chapter 8:
Waste Management and Hazardous Releases

Unit Lesson

Welcome to Unit V of Environmental Law. Unit V covers Chapters 7 and 8. Chapter 7 discusses controlling toxic substances while Chapter 8 discusses waste management and hazardous releases.

Have you heard of the insecticide DDT? It became widely used around 1948 (Kubasek & Silverman, 2014, p. 240). DDT killed mosquitoes, and thus eliminated malaria in many parts of the world, saving lives. However, after about 10 to 20 years of use, studies showed that mosquitoes became resistant to DDT, DDT was slow to biodegrade, it bio-accumulated in animals, it probably caused cancer in people, it caused bird eggs to become brittle ultimately reducing bird populations, and damaged fish habitat (EPA, 2011; FWS, 2014).

One of the main laws addressing toxic substances was passed by the U.S. federal government in 1976. It is the Toxic Substances Control Act (TSCA). The law can be found in Title 15, Chapter 53 of the United States Code (U.S.C.). As of 2014, TSCA has six sub-chapters (I through VI). TSCA began with Subchapter I and over the years, the additional chapters have been added.


The entire Title 15 of the U.S.C. can be found at GPO (2011). TSCA starts out with the following in 15 U.S.C. §2601 (GPO, 2011):

§ 2601. Findings, policy, and intent
(a) Findings
The Congress finds that -
(1) human beings and the environment are being exposed each year to a large number of chemical substances and mixtures;
(2) among the many chemical substances and mixtures which are constantly being developed and
produced, there are some whose manufacture, processing, distribution in commerce, use, or disposal
may present an unreasonable risk of injury to health or the environment; and
(3) the effective regulation of interstate commerce in such chemical substances and mixtures also
necessitates the regulation of intrastate commerce in such chemical substances and mixtures
(p. 1620).

Prior to passing TSCA, companies could develop new chemicals and have the chemicals enter public use
with very little disclosure of health effects. TSCA implemented a system called the pre-manufacturing notice
(Kubasek & Silverman, 2014, p. 248) whereby companies have to provide the U.S. EPA with test data related
to the health and safety risks of new chemicals.

In addition to TSCA, Chapter 7 discusses other important laws related to toxic substances. These include the
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetics Act
(FFDCA); and Food Quality Protection Act (FQPA).

Unit V also covers Chapter 8 of our textbook, which includes waste management and hazardous releases.
The two main laws in this area are the Resource Conservation and Recovery Act (RCRA) and
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). RCRA was passed in
1976 and CERCLA in 1980. Both have had updates since their original passage. Essentially, RCRA covers
current practices of waste management while CERCLA addresses past practices. For instance, if your
company uses hazardous waste, then it must abide by RCRA. However, if there is a site where hazardous
wastes were dumped back in 1940, then the cleanup of that site is handled by CERCLA.

One of the main aspects of RCRA is that it instituted a "cradle to grave" tracking system of hazardous waste.
If hazardous waste is hauled from one location to another, it must be kept track of by a manifest. RCRA also
initiated permitting of waste storage facilities and required improved landfill design.

Hopefully, this lecture has whetted your appetite so that you want to learn more about toxic substance and
waste management laws. We hope that you learn a lot from Unit V!

References

Environmental Protection Agency. (2011). Persistent bioaccumulative and toxic (PBT) chemical program-


title15/pdf/USCODE-2011-title15.pdf

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Suggested Reading

Search the Internet for information about TSCA, FIFRA, RCRA, or CERCLA.

Search the CSU Online Library’s GreenFILE database for articles related to the National Priorities List and
hazardous waste.
**Learning Activities (Non-Graded)**

Write a five-page paper discussing the pros and cons of one of the acts presented in Chapter 7 or 8.

Non-graded Learning Activities are provided to aid students in their course of study. You do not have to submit them. If you have questions, contact your instructor for further guidance and information.