

The background is a teal color with several large, overlapping geometric shapes. On the right side, there are two prominent diamond shapes (squares rotated 45 degrees). Each diamond contains a series of smaller, concentric diamonds, creating a fractal-like effect. The colors of these shapes range from light blue to dark teal. The text is positioned on the left side of the cover.

MOTOR CARRIER SAFETY

A Guide to Regulatory Compliance

E. Scott Dunlap

Occupational Safety and Health Guide Series

**MOTOR
CARRIER SAFETY**
A Guide to
Regulatory
Compliance

Occupational Safety and Health Guide Series

Series Editor

Thomas D. Schneid
Eastern Kentucky University
Richmond, Kentucky

Published Titles

Creative Safety Solutions
by Thomas D. Schneid

Occupational Health Guide to Violence in the Workplace
by Thomas D. Schneid

Motor Carrier Safety: A Guide to Regulatory Compliance
by E. Scott Dunlap

Forthcoming Titles

Physical Hazards of the Workplace
by Larry R. Collins

Managing Workers' Compensation: A Guide to Injury Reduction
by Keith Wertz and Brad Layton

Disaster Management and Preparedness
by Thomas D. Schneid

MOTOR CARRIER SAFETY

A Guide to Regulatory Compliance

E. Scott Dunlap



CRC Press

Taylor & Francis Group

Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an informa business

Reprinted 2010 by CRC Press

CRC Press
6000 Broken Sound Parkway, NW
Suite 300, Boca Raton, FL 33487
270 Madison Avenue
New York, NY 10016
2 Park Square, Milton Park
Abingdon, Oxon OX14 4RN, UK

Disclaimer

Although the author has taken great pains to ensure that the information included in this text is accurate and up-to-date, prudent professionals are advised to research the specific issue to ensure complete accuracy. As we are all aware, the law changes with every court decision and governmental standards are being modified on a daily basis. The reader should also be aware that not all areas of potential liability are covered in this text. The author has attempted to identify the areas that have the greatest frequency or carry the greatest potential liability in terms of frequency and severity. The author provides no warranty, either expressed or implied, as to the accuracy of the law, standards, or other information contained in this text. Although suggestions are offered, the author does not intend this text to provide specific legal counsel with regard to individual circumstances. Competent legal counsel should be acquired to assist in specific circumstances and situations.

Library of Congress Cataloging-in-Publication Data

Dunlap, E. Scott (Erik Scott)

Motor carrier safety : a guide to regulatory compliance / by E. Scott Dunlap.

p. cm. — (Occupational safety and health guide series)

Includes index.

ISBN 1-56667-035-65 (alk. paper)

1. Hazardous substances — Transportation — Law and legislation — United States.
2. Trucking — Safety regulations — United States. I. Title. II. Series.

KF3945.D86 1999

343.7309'38—dc21

99-051410

This book contains information obtained from authentic and highly regarded sources. Reprinted material is quoted with permission, and sources are indicated. A wide variety of references are listed. Reasonable efforts have been made to publish reliable data and information, but the author and the publisher cannot assume responsibility for the validity of all materials or for the consequences of their use.

Neither this book nor any part may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, microfilming, and recording, or by any information storage or retrieval system, without prior permission in writing from the publisher.

The consent of CRC Press LLC does not extend to copying for general distribution, for promotion, for creating new works, or for resale. Specific permission must be obtained in writing from CRC Press LLC for such copying.

Direct all inquiries to CRC Press LLC, 2000 Corporate Blvd., N.W., Boca Raton, Florida 33431

Trademark Notice: Product or corporate names may be trademarks or registered trademarks and are used for identification and explanation, without intent to infringe.

© 2000 by CRC Press LLC

Lewis Publishers is an imprint of CRC Press LLC

No claim to original U.S. Government works
International Standard Book Number 1-56670-356-5
Library of Congress Card Number 99-051410

2 3 4 5 6 7 8 9 0

About the author



E. Scott Dunlap, M.S., is the North American Grain U.S. Safety and Loss Control Coordinator for Cargill, Inc., in Minneapolis, MN. Prior to his position with Cargill, he was a Distribution Center Safety Manager for AutoZone, Inc., in Zanesville, OH. Scott holds a B.A. in religious studies from Tennessee Temple University and an M.S. in loss prevention and safety from Eastern Kentucky University. He was first published in the July 1996 issue of the *Journal of Emergency Medical Services* and is a professional member of the American Society of Safety Engineers (ASSE). Scott is also a member of the Safety and Health Committee of the Grain Elevator and Processors Society (GEAPS), for which he has been a conference speaker.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

Preface

Motor carrier safety is an issue that affects not only business, but also the public at large. The need to understand and follow applicable governmental regulations is critical in providing safety for all of those affected by the transportation industry. This includes workers preparing shipments, drivers delivering the product, and motorists on public highways.

This text will provide the reader with information concerning various areas of legal compliance. The goal is to draw simplicity out of complexity. Information will be given concerning only those regulations and standards that affect motor carrier safety. Agencies involved include the Department of Transportation (DOT), U.S. Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and National Fire Protection Association (NFPA). This text is intended as a guide to legal compliance, not a substitute for legal compliance.

Information provided in the text highlights general points of compliance and practical application. Regulations are addressed individually and examined to determine the issues and requirements that are relevant, and options for compliance are given. Bulleted lists enable the reader to more clearly understand what is being communicated in the regulations. This text guides the reader toward full regulatory compliance by providing the tools and focus to further study applicable regulations to determine what exceptions or special provisions may apply to a particular situation.

In the case of hazardous materials, it is impractical in this text to undertake a close examination of every requirement of each possible variation of hazardous materials shipments. Instead, the material presented creates an awareness of the general compliance issues relevant to particular regulations. The reader will then be able to better investigate the actual regulations to determine specific regulatory requirements that might affect one's place of business.

In addition to summaries of appropriate regulations and standards, points of training and sample recordkeeping forms are provided which will be helpful in launching in-house training programs. Suggestions for annual audits and follow-up training are also included. Case studies that relate to various regulations assist the reader in understanding the impact of violating or complying with regulatory requirements. These case studies include the

geographical location of the company involved, a summary of the situation, and the initial proposed penalty, if pertinent. In each case, these proposed penalties illustrate a company's exposure for noncompliance. Though companies mentioned in the various case studies may have been successful in their attempts to have the penalty lowered, there is no guarantee that the reader will have the same success.

Contents

Introduction

1	The creation of a safety program	3
	Where do I look?	3
	What do I include in a safety program?	4
	Purpose	4
	Responsibilities delineated	5
	Training	5
	Procedures	6
	Discipline/corrective action	6
	Audit	7
	Appendices	7
	Summary	7

Hazardous materials

2	Definitions and applicable legislation	11
	What is a hazardous material?	11
	Legislation and applicability	12
3	General requirements	17
	Chartered information	18
	Definitions	18
	Measurement	18
	Importing and exporting hazardous materials	19
	Compliance deadlines	19
	Incident reporting	20
	Bureau of Explosives	21
	What does this mean to the driver?	22
4	Hazardous Materials Table	23
	Column 1: symbols	24
	Column 2: proper shipping name	24
	Column 3: hazard class or division	25

Column 4: identification number	26
Column 5: packing group	27
Column 6: labels	27
Column 7: special provisions	27
Column 8: packaging authorizations	28
Column 9: quantity limitations	28
Column 10: vessel stowage requirements	28
Shipping papers	29
Emergency response information	30
What does this mean to the driver?	32
5 Hazardous materials shipments	35
General requirements for shipments and packagings	36
Interaction with international laws	36
Types of hazardous materials	37
Exceptions	37
Fumigation	37
Forbidden shipments	38
Specifications for packagings	40
Continuing qualifications and maintenance of packagings	40
What does this mean to the driver?	41
6 Transportation of hazardous materials	43
Carriage by public highway	43
Legal compliance	44
Driver training	44
Shipping papers	45
Emergency situations	45
Loading and unloading	46
Hazardous materials segregation and separation	47
Stopped vehicles	48
Passenger-for-hire vehicles	49
Transportation of hazardous materials: driving and parking rules	49
7 Emergency response	51
Emergency response planning	51
Emergency response training	52
Training format	52
Emergency response information	53
Emergency response equipment	53
Spill prevention and response	54
Packaging	54
Emergency response plan	54
Hazardous materials spills and the EPA	55
What does this mean to the driver?	55

8	Shipping papers	57
	Hazardous materials description	58
	Shipper's certification	59
	Retention period	59
	Hazardous waste manifest	59
	What does this mean to the driver?	60
9	Hazardous materials package marking and labeling	61
	Marking	61
	Non-bulk packaging	61
	Bulk packaging	62
	Specific marking requirements	63
	Labeling	63
	Specifications for certain materials	64
	Physical aspects	64
	Placarding	65
	Placard selection	66
	Visibility	66
	Specifications	67
	Emergency response information	67
	Telephone number	68
	Training	68

Federal motor carrier safety regulations

10	Commercial driver's license	73
	Restricted commercial driver's license	73
	Waivers	74
	Notifications of convictions for driver violations	75
	Employment	75
	Testing and licensing procedures	76
	Vehicle groups	78
	Tests	78
	What does this mean to the driver?	80
11	Safety fitness	81
	Commercial driver's license (49 CFR 383)	81
	Financial responsibility (49 CFR 387)	82
	Driver qualifications (49 CFR 391)	82
	Physical qualifications	84
	Files and records	85
	Exemptions	86
	Driving and use of motor vehicles (49 CFR 392)	86
	The driver	86
	Routing	87

The motor vehicle.....	87
The load.....	88
Driving.....	88
Stopped commercial molar vehicles.....	89
Vehicle lights and reflectors.....	90
License revocation.....	91
Vehicle fuel.....	91
Prohibited practices.....	91
Vehicle operation on highways (49 CFR 393).....	92
Lighting devices, reflectors, and electrical equipment.....	92
Wiring and electrical systems.....	93
Brakes.....	93
Motor vehicle glass.....	95
Fuel systems.....	96
Coupling devices and towing methods.....	96
Miscellaneous parts and accessories.....	96
Emergency equipment.....	97
Protection against shifting or falling cargo.....	98
Frames, cab, and body components; wheels; steering and suspension systems.....	99
Maintenance of accident registers and reports (49 CFR 390).....	99
Driver fatigue (49 CFR 395).....	100
Vehicle inspection, repair, and maintenance (49 CFR 396)....	102
One-trip inspection.....	103
Annual inspection.....	103
Transportation of hazardous materials, driving, and parking (49 CFR 397).....	104
Parking.....	104
Other precautions.....	104
Non-radioactive hazardous materials.....	105
Radioactive materials.....	105

Hazardous materials (49 CFR 170-177).....	107
Penalties.....	107
What does this mean to the driver?.....	108

12 Training.....111

Training techniques.....	111
The training room.....	111
Training aids.....	112
The presentation.....	113
Hazardous materials training topics.....	115
HM-126F.....	115
HM-181.....	117
Hazard communication.....	117
What does this mean to the driver?.....	118

Drug and alcohol testing programs

13 Drug and alcohol regulatory requirements.....121

49 CFR 40.....	121
Drugs to be tested.....	122
Test preparation.....	122
Specimen collection.....	122
Medical review officer.....	123
Insufficient sample.....	124
Laboratory.....	125
Employee rights.....	126
Alcohol testing.....	126

49 CFR 382.....	128
Post-accident (382.301).....	129
Random testing (382.305).....	130
Reasonable suspicion (383.307).....	130
Return to duty (382.309).....	131
Follow-up (382.311).....	131
Record retention.....	131
Annual reports.....	132
Notification of test results.....	133
Background checks.....	133
Employee information.....	133
Rehabilitation.....	134
What does this mean to the driver?.....	134

Assorted Department of Transportation topics

14	Federal and state interaction.....	139
	Commercial motor carrier assistance programs.....	139
	Grant approval.....	140
	Grant content.....	140
	Funds distribution.....	141
	Types of grants available.....	142
	Grant revocation.....	142
	Costs associated with the grant.....	142
	State compliance with commercial driver's license program.....	143
	Compatibility of state laws and regulations affecting interstate motor carrier operations.....	144

Annual program review	144
Cooperative agreements with states	145
15 Employee safety and health	147
Job hazard analysis	148
What does this mean to the driver?	148

Occupational Safety and Health Administration

16 Inspections, citations, and proposed penalties	151
Summary of 29 CFR 1903	151
The OSHA poster	152
Inspections	152
Citations and penalties	155
Employer responsibilities	157
Employee responsibilities	157
Case study: <i>Secretary of Labor vs. Caterpillar, Inc.</i> (OSHRC Docket No. 93-373)	158
Discussion of case study	161
17 Recording and reporting occupational injuries and illnesses	163
Summary of 29 CFR 1904	163
Purpose and scope	164
OSHA 200 Log	164
Case study: <i>Secretary of Labor v. Sterling Plumbing Group</i> (OSHRC Docket No. 95-580)	165
Discussion of case study	166
18 Hazard communication	167
Summary of 29 CFR 1910.1200	167
Purpose	168
Scope and application	168
Definitions	169
Hazard determination	169
Written hazard communication program	169
Labels and other forms of warning	170
Material Safety Data Sheets	170
Employee information and training	171
Trade secrets	172
Effective dates	172
What does this mean to the driver?	172
19 Fire extinguishers	173
Summary of 29 CFR 1910.157	173
Scope	173

Exemptions	174
General requirements	174
Selection and distribution	175
Inspection, maintenance, and testing	176
Hydrostatic testing	177
Training and education	179
Fire triangle and tetrahedron	179
Fire extinguisher use	180
Pull	180
Aim	180
Squeeze	180
Sweep	181
Fire alarms	181
Practical skills training	181
Testing	181
Suggested training recordkeeping	181
What does this mean to the driver?	182
20 Emergency action plan and fire prevention plan	183
Summary of 29 CFR 1910.38	183
Emergency action plan	183
Fire prevention plan	183
Emergency action plan	184
Scope and application	184
Elements	184
Alarm system	185
Evacuation	185
Training	185
Fire prevention plan	186
Scope and application	186
Elements	186
Housekeeping	187
Training	187
Maintenance	187
Emergency plans	187
Plant location	187
Culture	188
In-house environmental factors	188
What does this mean to the driver?	189
21 Transportation-focused regulations	191
Tractor and trailer wheel rims	191
Summary of 29 CFR 1910.177	191
Scope	191
Definitions	192
Employee training	192

Tire servicing equipment.....	193
Wheel component acceptability.....	194
Safe operating procedures.....	194
What does this mean to the driver?.....	194
Explosives and blasting agents.....	195
Summary of 29 CFR 1910.109.....	195
Definitions.....	195
Miscellaneous provisions.....	196
Storage of explosives.....	196
Transportation of explosives.....	196
Use of explosives and blasting agents.....	199
Explosives at piers, railway stations, and cars or vessels not otherwise specified in this standard.....	199
Blasting agents.....	199
Water gel (slurry) explosives and blasting agents.....	200
Small arms ammunition, propellants, and primers.....	200
Other OSHA regulations.....	201
What does this mean to the driver?.....	201
Case study: Secretary of Labor v. Yellow Freight Systems, Inc. (OSHRC Docket No. 93-3292).....	202
Preemption.....	202
Discussion of case study.....	203
22 Personal protective equipment.....	205
Hazard determination.....	205
Job hazard analysis.....	206
Environmental sampling.....	206
Hearing conservation.....	207

Summary of 29 CFR 1910.95.....	207
Occupational noise exposure.....	208
Administrative or engineering controls.....	208
Hearing conservation program.....	208
Monitoring.....	208
Audiometric testing program.....	209
Hearing protectors.....	209
Training program.....	209
Recordkeeping.....	210
Appendices.....	210
Respiratory protection.....	210
Summary of 29 CFR 1910.134.....	210
Respirator use.....	211
Respirator maintenance.....	211
Eye and face protection.....	211
Eye and face protection selection.....	212
Head protection.....	212
Foot protection.....	213
Recommended personal protection equipment.....	213
Required personal protection equipment.....	213
Hurdles to overcome.....	213
What does this mean to the driver?.....	214
Case study: OSHRC Docket No. 96-0563.....	214
Discussion of case study.....	217

Other issues

23 Ergonomics.....	221
Proactively addressing ergonomic concerns.....	221
Work area restructuring.....	222

Back injury prevention.....	222
Pre-work stretching.....	223
Proper lifting technique.....	223
Back supports.....	224
Body mechanics.....	224
Summary.....	225
24 Employee assistance programs.....	227
What is an employee assistance program?.....	227
What does an employee assistance program involve?.....	228
What are the benefits of an employee assistance program?....	228
How do I make an employee assistance program work in my organization?.....	229
25 Behavioral safety.....	231
26 Accident investigations and corrective action.....	235
27 Auditing.....	239
Application to personnel.....	240
Effectiveness of training.....	240
Degree of legal compliance.....	240
Conducting safety audits.....	240

28 National Fire Protection Association	243
29 Dock safety	245
30 New-hire orientation	247
Appendix. Sample documents and resources	251
Certificate of completion (Hazard Communication Standard)	252
Hazard Communication Standard training log	253
Acknowledgement form (personal protective equipment)	254
Sample test for comprehension verification (Hazard Communication Standard)	255
Safety training summary	257
Internet web sites	258
Contents of a driver’s qualification file	259
Insurance endorsement — form MCS-90 from 49 CFR 387	260
Motor carrier surety bond for public liability — form MCS-82 from 49 CFR 387	263
Motor carrier identification report — form MCS-150 from 49 CFR 385	266
Sample OSHA directive	269
Department of Transportation regional offices	287
Occupational Safety and Health Administration regional offices	288
Spill report form F5800.1	290
Hazardous materials registration statement F5800.2	292
Hazardous waste manifest	294
Sample DOT accident register (49 CFR 390)	295
Accident analysis log	296
Index	299

section one

Introduction

What is our liability? Where do I look for regulatory information? What information do I include in the program? Who will do the training? How do I get the support of upper management as well as hourly employees? What will the implementation process cost the company? These are only a few of the questions being asked by professionals in the transportation industry who have realized the requirement to implement a safety program in their place of business. The road to regulatory compliance can be a long and complex journey. Though motor carriers will deal primarily with the Department of Transportation, other governmental agencies must also be considered. Additional organizations that touch transportation safety include the Environmental Protection Agency, the Occupational Safety and Health Administration, and the National Fire Protection Association. Other agencies may also be involved, depending on the specific type of business. It is critical to understand how to navigate the regulations of the agencies when establishing a safety program.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

chapter one

The creation of a safety program

Where do I look?

Any safety program begins with a look at the Code of Federal Regulations (CFRs). These are regulations published by different federal government agencies, such as the Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA). Each area of regulation is given a different numeric “title”, each title is broken down into specific topical areas called “parts”, and each part is further divided into “sections”. An example of this is “29 CFR 1910.1200”:

- “29” refers to Title 29, which contains regulations dealing with labor.
- “CFR” is the abbreviation for Code of Federal Regulations.
- “1910” is the part within Title 29 that deals with occupational safety and health.
- “.1200” is a section within Part 1910 that deals with a specific occupational safety and health issue (i.e., Hazard Communication).

These federal regulations will delineate the requirements that must be met with regard to any safety program. The Code of Federal Regulations can be obtained through a variety of avenues. Titles can be accessed through the government printing office at their web site (www.gpo.gov). CFRs may also be accessed by visiting individual government agency web sites, such as:

- www.osha.gov
- www.epa.gov
- www.dot.gov

If the capability to access CFRs through the Internet is not readily available at a given workplace, hard copies can be purchased by contacting the state office of the governmental agency involved or the U.S. Government Printing Office in the local area. Independent vendors, such as J.J. Keller and Government Institutes, also sell copies of the CFRs and/or CFR guides, while standards published by the National Fire Protection Association (NFPA) must be purchased directly from the NFPA. In each of the situations where vendors are involved, subscriptions are available which provide an initial copy of the CFRs and subsequent periodic updates. This will enable an employer to stay abreast of the most recent regulatory changes. The subscription services are generally available in both hard copy and CD-ROM formats.

The first step in creating a transportation safety program is knowing how to look in the right places. Due to the unique tasks involved in transportation, regulations published by the Department of Transportation will be the starting point. These regulations are listed as Title 49 in the Code of Federal Regulations. At the beginning of each title will be a table of contents. Scanning the table of contents will alert you to those items that may apply to your place of business. This process can be repeated with the OSHA, EPA, and NFPA regulations.

What do I include in a safety program?

Once all aspects of regulatory compliance have been identified, the second step will be to begin the creation process. A safety program is comprised of what is written on paper as company policy (the written program) and what is carried out in the workplace (program implementation).

The written program is an important piece of documentation that delineates how you comply with a particular regulatory requirement. Programs should be written clearly so that they are easily understood by a member of a given federal agency or an hourly employee on the production floor. In essence, a company safety program is comprised of many specific smaller programs. Throughout this text, we will identify many of the specific areas required to have an individual written program. First, however, we will examine the various components of a written safety compliance program.

Purpose

A good beginning for a written compliance program is a statement of purpose. This statement should be clear and concise as to what is hoped to be achieved as a result of implementing the procedures that will follow. The purpose in any written program will be to provide for the safety of each employee and to comply with a specific regulation or possibly a group of similar regulations. Using the example of Hazard Communication, the following is a sample statement of purpose:

This program is intended to satisfy the regulatory requirements of 29 CFR 1910.1200 with regard to Hazard Communication. The implementation of and adherence to this program should assist in lowering the probability of accidents related to the use of hazardous materials in the workplace.

Though brief, this statement clearly illustrates the intention of the written program.

Responsibilities delineated

The second section to be included in the written program is the delineation of responsibilities. At this point it is important to brainstorm each area of responsibility within the program. Those positions within the company (or contractors, if applicable) affected by the involved program should be listed. Beside each position, record in detail what will be expected of the individual with regard to the program. Responsibilities to consider would include:

- Program approval and support from upper management
- Modeling of safe behavior by line supervisors
- Auditing and revising the program
- Ordering equipment/merchandise necessary to implement or promote the program
- Training employees
- Coaching employees
- Disciplining those who are noncompliant
- Recognition

Training

Training is the third section to include in a written program. This section will specify the content of the training, the level of training that will be given to each employee, when the training will be conducted, and the intervals at which refreshers will be given. If tests are to be administered, details concerning the exam should also be included. Two pieces of documentation, or recordkeeping, that are useful to include are

1. Training log
2. Certificate of completion

Training logs are useful in that they provide an accurate list of those who received a given session of training. Training logs should include each student's name, the date the training was administered, and the name of the trainer. All entries on the training log should be handwritten in order to

support the authenticity of the document. The student should sign and date in the appropriate columns, and the trainer should also sign.

A certificate of completion is a document that each student should be given to review at the completion of the training session. The form should list the title of the training and the main points that were covered in the session. If the student agrees that the listed information was covered then he or she will sign and date the form. The instructor will also provide a signature and date to verify that the student was in attendance and passed, if applicable. Examples of both a certificate of completion and training log are included in the Appendix. This information should satisfy training documentation requirements; however, care should be taken when evaluating regulations to determine what precise information must be included in documentation. Hazardous materials training required by the Department of Transportation is one example of regulations that specify certain pieces of information that must be recorded.

Procedures

This section is the heart of a written program. Whereas the purpose section was short and to the point, this section will spell out in great detail the steps to be taken in achieving in-house compliance with a regulation. It is important to include how items for the program will be procured, how the various components of the program will be carried out, and how the various responsibilities will be executed.

Discipline/corrective action

Human error and volitional disobedience are two factors that should be considered with regard to any safety program that is to be implemented in a place of work. There will be those who have received required training yet selectively choose not to follow the program. Due to human error, there will also be those times when even the best employee will fall short of the demands of a given safety program. In either case, it is the responsibility of the employer to establish a plan of action that will be consistently administered to all employees who are in violation of the program. The phrase "corrective action" may be best suited for these situations, because the interaction between a supervisor and an employee when a safety violation has occurred should be positive. The employee should not feel that they have been "written up" or punished. It is important to sit down with the employee in a private area to explain what violation has occurred and what needs to happen in order for the person's performance to improve. This meeting should be documented and the documentation placed in the employee's file in the event of future violations.

In the event that an employee feels that he or she has been unjustly accused of a violation, an avenue should be left open for them to address the

situation with upper management. Unsafe acts resulting in the corrective action should either be verified by an eyewitness or determined by a documented investigation.

Audit

After a given safety program is implemented, a necessary step will be to analyze its effectiveness. It may be necessary to do this on a more frequent basis during the first year of implementation, such as each quarter or semi-annually. At the time of the program audit, both the positive and negative aspects of the impact of the program should be evaluated. Changes should be made to the program as a result of the evaluation if deficiencies are found. Changes may be more necessary during the first several months due to working the “bugs” out of the system. A statement should be made in the written program as to the frequency of audits throughout the implementation process.

Appendices

At the end of the written safety program, appendices should be attached that include various pieces of information relevant to the program, including:

- Training logs
- Copies of applicable standards
- Magazine articles
- Newspaper articles
- Copies of paperwork that accompany the program

Summary

In conclusion, a written program is designed to comply with a specific law and should include the following sections:

1. *Purpose:* What you plan to accomplish by implementing the program
2. *Responsibilities:* Duties to be carried out
3. *Training:* How, when, and at what intervals training will be conducted
4. *Procedures:* What the program is comprised of
5. *Discipline/corrective actions:* Action taken when violations occur
6. *Audit:* Evaluating and revising the program at specified intervals
7. *Appendices:* Other relevant information



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

section two

Hazardous materials

The issue of hazardous material handling provides one of the greatest areas of exposure to legal liability for any motor carrier. Of the two primary areas of discussion regarding the Department of Transportation (DOT) in this book — hazardous materials and federal motor carrier safety regulations — the topic of hazardous materials sometimes presents the most complex issues of regulatory compliance. This section will look exclusively at various DOT regulations found in 49 CFR Parts 100–180. Regulations are developed and maintained by the Research and Special Programs Administration (RSPA), a department of the DOT that provides research services and regulatory guidance in standards development and application. We will primarily examine:

- Part 107. Hazardous Materials Program Procedures
- Part 130. Oil Spill Prevention and Response Plans
- Part 171. General Information, Regulations, and Definitions
- Part 172. Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
- Part 173. Shippers — General Requirements for Shipments and Packagings
- Part 177. Carriage by Public Highway
- Part 178. Specifications for Packagings
- Part 180. Continuing Qualifications and Maintenance of Packagings

Parts of the hazardous materials regulations that are not covered in this section are those that pertain to some other form of transportation, such as by rail or vessel.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

chapter two

Definitions and applicable legislation

What is a hazardous material?

As defined in 49 CFR 171.8, a hazardous material is

... a substance or material, which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated. The term includes hazardous substances, hazardous waste, marine pollutants, and elevated-temperature materials as defined in this section, materials designated as hazardous under the provisions of 172.101 of this subchapter, and materials that meet the defining criteria for hazard classes and divisions in part 173 of this subchapter.

It is interesting to note that this definition includes two things about hazardous materials: what they are and what they include. In the first part of this definition, we come to understand that a hazardous material is anything that has been designated as such by the Department of Transportation, the three key points of consideration being an unreasonable risk to:

- Health
- Safety
- Property

The Department of Transportation is concerned with the health and safety of individuals, including drivers, warehouse workers, emergency response personnel, motorists, and pedestrians. The third item listed — property — demonstrates a concern for the environment as well as maintaining the integrity of privately owned property. We can see that this simple definition has a wide range of impact.

The second aspect of the definition (what the term “hazardous materials” includes) is extremely complex. As we progress through the balance of this section, it will become clear as to what is involved by the following:

- Hazardous substances
- Hazardous waste
- Marine pollutants
- Elevated-temperature materials
- Hazard classes
- Hazard divisions

Legislation and applicability

One issue of hazardous materials regulatory compliance hinges on specific hazardous materials topics becoming law, and 49 CFR 106 contains information as to how this occurs. A second issue pertaining to hazardous materials compliance is the applicability of these regulations. For this purpose, Part 107 of Title 49 serves as a launching pad for what will be spelled out in the regulations to follow. Part 107 contains all of the relevant procedures for the Department of Transportation’s hazardous materials program and includes:

- General provisions of the legislation
- Who is exempt
- Other legislation that preempts DOT hazardous materials regulations
- Regulatory enforcement
- Designation of approval and certification agencies for different types of packagings
- Registration of issues related to cargo tanks
- Registration of those who offer to transport or actually do transport hazardous materials
- Approvals, registrations, and submissions to carry hazardous materials

For assistance in complying with the hazardous materials regulations, the RSPA has a toll-free number (provided in Part 107.14): 1-800-467-4922, or they can be contacted in the Washington D.C., area at (202) 366-4488. These numbers are staffed from 9:00 a.m. to 4:00 p.m. EST, Monday through Friday, and an answering machine is available during evenings, weekends, and government holidays. Assistance may also be obtained through the Internet at www.hazmat.dot.gov/.

The DOT has outlined hazardous materials program issues in 49 CFR 107. Though it is not listed first in this regulation, a key requirement in the transportation of hazardous materials is becoming registered to do so. Part 107.601 outlines the requirements for submitting the registration form (5800.2), which is provided in the Appendix of this text. The form must be filled out annually to ensure that proper hazardous materials carrying status is maintained.

Section 107.1 identifies the hazardous materials responsibilities of three entities covered by the section:

- Research and Special Programs Administration
- Associate Administrator for Hazardous Materials Safety
- Office of Chief Council

Each of these three bodies is responsible in some way for ensuring that hazardous materials are being properly transported within the U.S. 49 CFR 107 identifies how they make this happen within the judicial system, and the regulation identifies procedures for such things as issuing subpoenas, hearings, and appeals. Of particular interest to an employer would be Subpart D of this regulation, which deals with the direct enforcement of hazardous materials regulations.

Section 107.305 addresses investigations to determine the level of hazardous materials compliance. Individuals conducting these inspections are properly referred to in any one of three ways:

1. Hazardous Materials Enforcement Specialists
2. Hazmat Inspectors
3. Inspectors

Throughout an inspection or investigation, these inspectors are permitted by this regulation to gather information in a number of ways. These methods may include:

- Interviews
- Statements
- Photocopying material
- Photography
- Audio-/videotaping

As with any investigation, confidentiality becomes a critical issue. Any information that is produced as a result of the investigation will be maintained in a confidential manner which allows employees to communicate freely with inspectors without fear of repercussions.

Employers who are being inspected have specific rights that may be exercised during the investigation. Employers may ask inspectors for