

RCRA PERMITTING DESKBOOK

by

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About the Author

Susan M. McMichael, an attorney with Los Alamos National Security, LLC, has more than 20 years' experience as an environmental attorney and litigator. She has extensive experience in permitting and compliance under the Resource Conservation and Recovery Act (RCRA), and has consulted and represented governmental entities, industry groups, and Indian tribes. She is a former chair of the Western States Project and a representative on the RCRA Federal Facility Task Force of the National Association of Attorneys General. She earned her J.D. degree from the University of New Mexico and clerked for the U.S. Court of Appeals for the Tenth Circuit.

Acknowledgments

The *RCRA Permitting Deskbook* was born from a vision during my work with a group of state environmental enforcement attorneys, who recognized that hazardous and radioactive mixed waste management and compliance are inextricably linked by the RCRA permit. The deskbook was driven by the belief that all persons and facilities can benefit from a practical guide for interpreting RCRA's "cradle-to-grave" permit requirements. What I did not fully appreciate, however, was the enormous amount of effort it would take to accomplish this goal. This project would not have been possible without the support and encouragement from Dr. Alan Moghissi, Betty Love, and Wren Prather-Stroud of the Institute of Regulatory Science (RSI) and their excellent staff, Dr. Inés R. Triay of the U.S. Department of Energy (DOE), and the staff of the DOE Carlsbad office of the Waste Isolation Pilot Plant. Michele Gagnon and Paula Cotter from the National Association of Attorneys General were instrumental with early encouragement and support. I am indebted to those RCRA experts from across the country who reviewed drafts or selected chapters, and provided invaluable comments, including: Vernon Myers, Wayne Roepe, Jeff Gaines, Dan Schultheisz, and Ragani Joglekar (EPA); attorneys Deborah J. Schmall, Geoff Fettus, Paul Halajian, Gloria Barnes, and Elizabeth Rose; along with experts Connie Walker, June Dreith, Don Hancock, and Fred Dowsett. I deeply appreciate the moral support and suggestions from Steve Zappe and colleagues at the New Mexico Environment Department. I also gratefully acknowledge the following individuals for their helpful comments and assistance: Jody Plum, Bob Kehrman, Jack Ellvinger, Ellen Louderbough, Tuesday Kaasch, Aiden Kallas, and Victoria Parker. Special thanks to attorneys Julia Mullen and Pam Matthews, who provided significant legal research assistance and invaluable editorial comments and suggestions. Thanks to artist Chris Zappe, who prepared illustrations, along with Dawn Manges and Rachel Cowen for their assistance with selected figures. Tom and Kyle witnessed my long hours and provided unyielding support and strength.

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Acronyms

AEA	Atomic Energy Act
AEC	Atomic Energy Commission
AGS	Attorney General's Statement
AK	acceptable knowledge
ALARA	as low as reasonably achievable
ALR	action leakage rate
AOC	area of concern
ARAR	applicable or relevant and appropriate requirements
BIF	boiler and industrial furnace
CAA	Clean Air Act
CCP	commercial chemical products
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	conditionally exempt small quantity generator
CH	contact-handled transuranic waste
CQA	construction quality assurance
CROP	EPA consolidated rules of practice
CWA	Clean Water Act
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOJ	U.S. Department of Justice
DOT	U.S. Department of Transportation
DRE	destruction and removal-efficiency
DSW	Definition of Solid Waste Rule
EAB	EPA's Environmental Appeals Board
EC	emergency coordinator
EJ	environmental justice
EJSEAT	Environmental Justice Smart Enforcement Assessment Tool
EMS	environmental management system
ENU	elementary neutralization unit
EPA	U.S. Environmental Protection Agency
ERDA	Energy Research and Development Administration
FFCA	Federal Facility Compliance Act of 1992
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FWS	U.S. Fish and Wildlife Service
GAO	U.S. Government Accountability Office (formerly the U.S. General Accounting Office)
GTCC	greater than Class C waste
HAP	hazardous air pollutant
HLW	high-level waste
HSWA	Hazardous and Solid Waste Amendments of 1984
HWC	hazardous waste combustion unit
HWIR	Hazardous Waste Identification Rule
ICR	ignitable, corrosive, or reactive wastes
INL	Idaho National Laboratory
IPD	implicit price deflator
LCRS	leachate collection and removal system
LDR	land disposal restrictions
LDU	land disposal unit
LLMW	low-level mixed waste
LLRWPA	Low-Level Radioactive Waste Policy Act

LLW	low-level waste
LQG	large quantity generator
LOIS	loss of interim status
LTS	U.S. Department of Energy's long-term stewardship program
MACT	maximum achievable technology standards
MMR	Military Munitions Rule
MPRSA	Marine Protection, Research, and Sanctuaries Act of 1972
MSDS	material safety data sheets
MTRU	mixed transuranic waste
NAAG	National Association of Attorneys General
NARM	naturally occurring and/or accelerator-produced radioactive material
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIC	notice of intent to comply
NPDES	national pollutant discharge elimination system
NOD	notice of deficiency
NOID	notice of intent to deny
NRC	Nuclear Regulatory Commission
NRDC	Natural Resources Defense Council
NSPS	new source performance standards
NTS	Nevada Test Site
OB/OD	open burn/open detonation unit
OCR	EPA Office of Civil Rights
OECD	Organization for Economic Cooperation and Development
OIG	EPA Office of Inspector General
OSHA	Occupational Safety and Health Administration
OTA	U.S. Office of Technology Assessment
PIT	permit improvement team
POHC	principal organic constituents
POTW	publicly owned treatment works
PPM _W	parts per million by weight
QA/QC	quality assurance and quality control
RAP	remedial action plan
RCRA	Resource Conservation and Recovery Act of 1976
RD&D	research, development, and demonstration
RH	remote-handled transuranic waste
SAA	satellite accumulation area
SQG	small quantity generator
SPCC	spill prevention, control, and countermeasures plan
SSRA	site-specific risk assessment
StATS	state authorization tracking system
SWMU	solid waste management unit
TC	toxicity characteristics
TCLP	toxicity characteristic leaching procedure
TRU	transuranic waste
TSD _F	treatment, storage, and disposal facility
UXO	unexploded ordnance
VO	volatile organic
VOC	volatile organic compound
WAP	waste analysis plan
WIPP	Waste Isolation Pilot Plant
WPF	waste profile form
WWTU	waste water treatment unit

Preface

Most people are unsure of how to address the complicated issues associated with Resource Conservation and Recovery Act (RCRA) permitting, federal facilities, and hazardous and radioactive mixed waste. The sheer number of U.S. Environmental Protection Agency (EPA) rules alone (over 900) can be mind-boggling, with new rules being issued each year. In the last decade alone, EPA issued several major new rules that significantly impact RCRA permitting, including its Burden Reduction Initiative, which streamlined hundreds of RCRA permit requirements, and increased use conditional exemptions and exclusions from some or all of RCRA's permit requirements. Additionally, many facilities received permits at a time when EPA and state permitting authorities had little, if any, experience in permitting, and public participation was minimal. Since that time, most facilities have sought permit modifications based upon technological advancements and improvements in waste management operations. Other facilities have reached their five-year review and are in the process of permit renewal following the expiration of their 10-year permit term.

The *RCRA Permitting Deskbook* provides a comprehensive, up-to-date guide that addresses all aspects of RCRA permitting. Included also is a chapter on radioactive mixed waste that provides an historical overview of mixed waste regulation and the unique issues associated with facilities that manage this type of waste. The deskbook is intended to assist attorneys, governmental regulators, environmental managers, and citizen activities to better understand and navigate through RCRA permit requirements, permit modifications, permit reviews, and renewals. It is built upon more than a decade of experience and incorporates lessons learned and checklists to address common issues and mistakes in the permit process.