

COMPLIANCE BASED ENVIRONMENTAL MANAGEMENT SYSTEMS AS INJUNCTIVE RELIEF AND SUPPLEMENTAL MANAGEMENT SYSTEMS

Prepared by Bertram C. Frey, Acting Regional Counsel U.S. EPA Region 5
2004 Illinois Environmental Conference, October 7, 2004

KEY:

AYes@ or ANo@	Item is addressed explicitly in the administrative order, consent decree, or plea agreement
APresumably@	Item is not addressed explicitly, but can be inferred to a high degree of certainty from the language of the administrative order, consent decree, or plea agreement
ANot Specified@	Item is not addressed in the administrative order, consent decree, or plea agreement.
“N/A”	Not Applicable

Acronyms:

ACEM@	Continuous Emissions Monitor
ACOM@	Continuous Opacity Monitor
AEMS@	Environmental Management System
ANESHAP@	National Emission Standard for Hazardous Air Pollutants
ASEP@	Supplemental Environmental Project.
@NEIC@	National Enforcement Investigation Center
@NPDES@	National Pollutant Discharge Elimination System

Environmental laws addressed:

Clean Air Act (**ACAA@**), 42 U.S.C. ' 7401 *et seq.* (2004);
Clean Water Act (**ACWA@**), 33 U.S.C. ' 121 *et seq.* (2004);
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (**ACERCLA@**), 42 U.S.C. ' 9601 *et seq.* (2004);
Emergency Response and Community Right-To-Know Act of 1986 (**AEPCRA@**), 42 U.S.C. ' 11001 *et seq.* (2004);
Endangered Species Act of 1973 (**AESA@**), 16 U.S.C. ' 1531 *et seq.* (2004);
Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. ' 136 *et seq.* (2004);
Resource Conservation and Recovery Act (**ARCRA@**), 42 U.S.C. ' 321, *et seq.* (2004);
Toxic Substances Control Act (**ATSCA@**), 15 U.S.C.. ' 2601, *et seq.* (2004).

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees, Orders and Settlements

Decree or Order	U.S. v. ALCOA ¹	U.S. v. ASARCO Inc.	U.S. v. Boston Sand and Gravel Co. ²	U.S. v. Boyang Ltd., et al. ³ (Plea Agreement)	U.S. v. B.P. Exploration (Alaska) Inc. (Plea Agreement)	U.S. v. Carnival Corp. ⁴ (Plea Agreement)
Court	U.S. District Court for the Northern District of Indiana, Hammond Division at Lafayette	U.S. District Court for the District of Montana and the District of Arizona	U.S. District Court for the District of Massachusetts	U.S. District Court for the District of Alaska	U.S. District Court for the District of Alaska	U.S. District Court for the Southern District of Florida
Civil Action No.	4:99cv61 AS	CV-98-3-H-CCL	02-10999-JLT	A02-072 CR (JKS) (criminal)	A99-0141 CR (criminal)	02-20350 CR-Moore (criminal)
Date Entered	March 28, 2002	May 5, 1998	August 13, 2002	October 23, 2002	September 23, 1999	April 17, 2002
Violations Alleged	CWA	RCRA, CWA	CWA	Marpol Protocol ⁵	CERCLA	CWA, Marpol Protocol ⁶
Specific Reference to EMS	Yes	Yes	Yes	Yes	Yes	No ⁷

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees, Orders and Settlements						
Decree or Order	U.S. v. ALCOA	U.S. v. ASARCO Inc.	U.S. v. Boston Sand and Gravel Co.	U.S. v. Boyang Ltd., et al. (Plea Agreement)	U.S. v. B.P. Exploration (Alaska) Inc. (Plea Agreement)	U.S. v. Carnival Corp. (Plea Agreement)
Provision Requiring ISO 14001 Certification	Yes	No	No	No ⁸	No	No
Provision Requiring ISO 14001 Implementation	Yes	No	No	No	Yes	No
Environmental Metrics Reporting	Not specified	Yes	No	No	No	Yes ⁹
Technology Transfer	Not specified	Yes	No	No	No	No
Consultant Requirements	Not specified	Yes	No	Yes ¹⁰	Yes	Yes
Third-Party Audit	Yes ¹¹	Yes	Yes	Yes	Yes	Yes
EMS Plan Approval	Yes	Yes	Yes	Yes	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees, Orders and Settlements

Decree or Order	U.S. v. ALCOA	U.S. v. ASARCO Inc.	U.S. v. Boston Sand and Gravel Co.	U.S. v. Boyang Ltd., et al. (Plea Agreement)	U.S. v. B.P. Exploration (Alaska) Inc. (Plea Agreement)	U.S. v. Carnival Corp. (Plea Agreement)
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes ¹² b) Not specified ¹³	a) Yes b) Yes	a) Yes b) Yes	a) Yes b) Yes	a) Yes b) Yes	a) Yes b) Yes
Organization, Personnel and Oversight of EMS	Not specified ¹⁴	Presumably yes	Yes	Yes	Yes	Yes
Accountability and Responsibility	Not specified	Yes	Yes	Yes	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees, Orders and Settlements						
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Yes b) Not specified ¹⁵ c) Not specified ¹⁶	a) Yes b) Not specified c) Yes	a) Yes b) Yes c) Yes	a) Yes b) Yes c) Yes	a) Yes b) Yes c) Yes	a) Yes b) No c) Yes
Decree or Order	U.S. v. ALCOA	U.S. v. ASARCO Inc.	U.S. v. Boston Sand and Gravel Co.	U.S. v. Boyang Ltd., et al. (Plea Agreement)	U.S. v. B.P. Exploration (Alaska) Inc. (Plea Agreement)	U.S. v. Carnival Corp. (Plea Agreement)
Environment Incident and Non-compliance Investigation	Not specified ¹⁷	Yes	Yes	Yes	Yes	Yes
Environmental Training, Awareness and Competence	Yes ¹⁸	Yes ¹⁹	Yes	Yes	Yes	Yes
Planning for Environmental Matters	Yes ²⁰	Presumably yes	Yes	Yes	Yes	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees, Orders and Settlements						
Maintenance of Records and Documentation and EMS Data Protocols	Yes	Yes	Yes	Yes	Yes	Yes
Pollution Prevention	Yes	Yes	Yes	Yes	Yes	Yes
Decree or Order	U.S. v. ALCOA	U.S. v. ASARCO Inc.	U.S. v. Boston Sand and Gravel Co.	U.S. v. Boyang Ltd., et al. (Plea Agreement)	U.S. v. B.P. Exploration (Alaska) Inc. (Plea Agreement)	U.S. v. Carnival Corp. (Plea Agreement)
Continuing Program Evaluation	Yes ²¹	Yes	Yes	Yes	Yes	Yes
Public Involvement/Community Outreach	No ²²	The defendant shall share the training protocol and lessons learned with other businesses and organizations through seminars.	Yes	No	Yes	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees, Orders, and Settlement

Decree or Order	U.S. and Timothy R.E. Keeney, Comm'r of Env'tl. Protection of the State of Connecticut v. The Dexter Corp.	U.S. v. Doyon Drilling (Plea agreement)	U.S. v. Eastman Kodak Company ²³	U.S. and State of Texas v. Encycle/ASARCO, Inc. ²⁴	U.S. v. FMC Corp.	U.S., et al. v. Franklin Smelting & Refining Corp. ²⁵
Court	U.S. District Court for the District Connecticut	U.S. District Court for the District of Alaska	U.S. District Court for the Western District of New York	U.S. District Court for the Southern District of Texas	U.S. District Court for the District of Idaho	U.S. District Court for the Eastern District of Pennsylvania
Civil Action No.	H-89-393	A98-082 CR (JKS) (criminal)	94-Civ-6503T	H-99-1136	d98-0406-E-BLW	CAA 97-0821
Date Entered	November 13, 1992	April 29, 1995	March 10, 1995	April 15, 1999	July 13, 1999	April 1, 1997
Violations Alleged	RCRA, CWA	RCRA, CERCLA ²⁶	RCRA, CERCLA	RCRA, CWA	RCRA	CAA
Specific Reference to EMS	No	No	No ²⁷	Yes	No	No ²⁸

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees, Orders, and Settlement

Decree or Order	U.S. and Timothy R.E. Keeney, Commr of Env'tl. Protection of the State of Connecticut v. The Dexter Corp.	U.S. v. Doyon Drilling (Plea agreement)	U.S. v. Eastman Kodak Company	U.S. and State of Texas v. Encycle/ASARCO, Inc.	U.S. v. FMC Corp.	U.S., et al. v. Franklin Smelting & Refining Corp.
Provision Requiring ISO 14001 Certification	No	No	No	Yes	No	No
Provision Requiring ISO 14001 Implementation	No	No	No	Yes	Yes	No
Environmental Metrics Reporting	No	No	Yes	Yes	No	Not specified
Technology Transfer	No	No	Not specified	Yes	No	Not specified
Consultant Requirements	Yes	Yes	Yes	Yes	Yes	Yes
Third-Party Audit	Yes	Yes	No	Yes	Yes	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees, Orders, and Settlement

Decree or Order	U.S. and Timothy R.E. Keeney, Comm'r of Env'tl. Protection of the State of Connecticut v. The Dexter Corp.	U.S. v. Doyon Drilling (Plea agreement)	U.S. v. Eastman Kodak Company	U.S. and State of Texas v. Encycle/ASARCO, Inc.	U.S. v. FMC Corp.	U.S., et al. v. Franklin Smelting & Refining Corp.
EMS Plan Approval	Yes	Yes	Yes	Yes	Yes	Yes
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Not specified b) Not specified	a) No b) No	a) Not specified b) Not specified	a) Yes b) Yes	a) Yes b) Yes	a) Not specified b) Yes ²⁹
Organization, Personnel and Oversight of EMS	Not specified	Yes	Not specified	Not specified	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees, Orders, and Settlement						
Accountability and Responsibility	Yes	Yes	Yes ³⁰	Yes	Yes ³¹	Yes
Decree or Order	U.S. and Timothy R.E. Keeney, Comm-r of Env'tl. Protection of the State of Connecticut v. The Dexter Corp.	U.S. v. Doyon Drilling (Plea agreement)	U.S. v. Eastman Kodak Company	U.S. and State of Texas v. Encycle/ASARCO, Inc.	U.S. v. FMC Corp.	U.S., et al. v. Franklin Smelting & Refining Corp.
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Yes b) Not specified c) Yes	a) Yes b) No c) Yes	a) Not specified b) Not specified c) Not specified	a) Yes b) Not specified c) Yes	a) Yes b) Not specified c) Yes	a) Yes b) Yes c) Not specified
Assessment, Prevention and Control	Yes	Yes	Yes	Yes	Yes ³²	Yes
Environment Incident and Non-compliance Investigation	Yes	Not specified	Not specified	Yes	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees, Orders, and Settlement						
Environmental Training, Awareness and Competence	Not specified	Yes	Yes ³³	Yes	Yes	Yes
Planning for Environmental Matters	Yes	No	Yes	Presumably yes	Yes ³⁴	Not specified
Decree or Order	U.S. and Timothy R.E. Keeney, Comm'r of Env'tl. Protection of the State of Connecticut v. The Dexter Corp.	U.S. v. Doyon Drilling (Plea agreement)	U.S. v. Eastman Kodak Company	U.S. and State of Texas v. Encycle/ASARCO, Inc.	U.S. v. FMC Corp.	U.S., et al. v. Franklin Smelting & Refining Corp.
Maintenance of Records and Documentation and EMS Data Protocols	Yes ³⁵	Yes	Yes	Yes	Yes ³⁶	Yes
Pollution Prevention	Not specified	Yes	Yes	Yes	Yes	Yes
Continuing Program Evaluation	Not specified	Yes	Not specified	Yes (audits)	Yes	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees, Orders, and Settlement						
Public Involvement/ Community Outreach	Not specified	No	Not specified	Yes	Yes ³⁷	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System							
A. Federal Court Decrees, Orders, and Settlements							
Decree or Order	U.S. v. HCI- Chemtech (Plea agreement)	U.S. v. Henry County Public Service Authority ³⁸ (Plea agreement)	U.S. v. John Morrell & Co.	U.S. v. Koppers Industries, Inc. ³⁹	U.S. v. Lancaster Synthesis, Inc. (Plea Agreement)	U.S. v. MAC= Radiator & Repair ⁴⁰ (Plea Agreement)	U.S. v. Massachusetts Institute of Technology ⁴¹
Court	U.S. District Court for the Western District of Missouri	U.S. District Court for the Western District of Virginia	U.S. District Court for the District of South Dakota	U.S. District Court for the Northern District of Alabama	U.S. District Court for the Southern District of Ohio	U.S. District Court for the District of Idaho	U.S. District Court for the District of Massachusetts

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System							
A. Federal Court Decrees, Orders, and Settlements							
Civil Action No.	96-00156-01-CR-W-2 (criminal)	98-84-R (criminal)	96-4011	CV-03-C-0097S	CR-1-99-085 (criminal)	CR01-204-001-S (criminal)	01-CV-10646-JLT
Date Entered	October 30, 1997	November 17, 1998	February 11, 1998	April 17, 2003	September 30, 1999	April 15, 2002	April 18, 2001
Violations Alleged	CWA, CERCLA	CWA	CWA	CWA, RCRA	RCRA	CERCLA	CAA
Specific Reference to EMS	Yes ⁴³	No ⁴⁴	Yes	Yes	No	No ⁴⁵	Yes ⁴⁶
I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System							
A. Federal Court Decrees, Orders, and Settlements							
Decree or Order	U.S. v. HCI-Chemtech (Plea agreement)	U.S. v. Henry County Public Service Authority (Plea agreement)	U.S. v. John Morrell & Co.	U.S. v. Koppers Industries, Inc.	U.S. v. Lancaster Synthesis, Inc. (Plea Agreement)	U.S. v. MAC's Radiator & Repair (Plea Agreement)	U.S. v. Massachusetts Institute of Technology

Provision Requiring ISO 14001 Certification	No	No	No	Not specified ⁴⁷	No	No	No
Provision Requiring ISO 14001 Implementation	No	No	No	Yes	No	No	No, but the EMS includes other ISO requirements ⁴⁸
Environmental Metrics Reporting	Yes	No	No	Yes ⁴⁹	No	No	Not specified
Technology Transfer	Yes	No	No	No	No	No	Not specified
Consultant Requirements	Yes	Yes	Yes	Not specified	No	No ⁵⁰	Yes
Third-Party Audit	Yes	Yes	Yes	Yes ⁵¹	Yes	Yes	Not specified ⁵²
EMS Plan Approval	Yes	No ⁵³	Yes	Yes	No ⁵⁴	Yes ⁵⁵	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System							
A. Federal Court Decrees, Orders, and Settlements							
Decree or Order	U.S. v. HCI-Chemtech (Plea agreement)	U.S. v. Henry County Public Service Authority (Plea agreement)	U.S. v. John Morrell & Co.	U.S. v. Koppers Industries, Inc.	U.S. v. Lancaster Synthesis, Inc. (Plea Agreement)	U.S. v. MAC's Radiator & Repair (Plea Agreement)	U.S. v. Massachusetts Institute of Technology
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Not specified b) Yes ⁵⁶	a) Yes b) No	a) Not specified b) Yes	a) Yes b) Yes	a) Not specified b) Not specified	a) Yes ⁵⁷ b) Yes ⁵⁸	a) Yes b) Not specified, but the EMS applies to the entire MIT campus
Organization, Personnel and Oversight of EMS	Yes ⁵⁹	Yes	Not specified	Yes	Yes	Yes	Yes
Accountability and Responsibility	Yes ⁶⁰	Yes	Yes	Yes	Not specified	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees Orders and Settlements

Decree or Order	U.S. v. HCI-Chemtech (Plea agreement)	U.S. v. Henry County Public Service Authority (Plea agreement)	U.S. v. John Morrell & Co.	U.S. v. Koppers Industries, Inc.	U.S. v. Lancaster Synthesis, Inc. (Plea Agreement)	U.S. v. MAC's Radiator & Repair (Plea Agreement)	U.S. v. Massachusetts Institute of Technology
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Not specified b) Not specified c) Yes	a) Yes b) No c) No	a) Not specified b) Not specified c) Not specified	a) Yes b) Yes c) Yes	a) Yes ⁶¹ b) No c) No	a) Yes b) No c) No	a) Yes b) Yes c) Yes
Assessment, Prevention and Control	Yes ⁶²	Not specified	No specified	Yes	Yes	Not specified	Yes
Environment Incident and Non-compliance Investigation	Not specified	Yes ⁶³	Yes	Yes	No	Not specified	Yes
Environmental Training, Awareness and Competence	Yes ⁶⁴	Yes	Yes	Yes	Not specified	Yes	Yes ⁶⁵

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees, Orders, and Settlements

Decree or Order	U.S. v. HCI-Chemtech (Plea agreement)	U.S. v. Henry County Public Service Authority (Plea agreement)	U.S. v. John Morrell & Co.	U.S. v. Koppers Industries, Inc.	U.S. v. Lancaster Synthesis, Inc. (Plea Agreement)	U.S. v. MAC's Radiator & Repair (Plea Agreement)	U.S. v. Massachusetts Institute of Technology
Planning for Environmental Matters	Yes ⁶⁶	No	Not specified	Yes	No	No	Yes
Maintenance of Records and Documentation and EMS Data Protocols	Yes ⁶⁷	Not specified	Yes	Yes	Not specified	Not specified	Yes
Pollution Prevention	Not specified	No	Not specified	Yes	Yes	No	Yes
Continuing Program Evaluation	Not specified	Yes	Presumably yes?	Yes	No	No ⁶⁸	Yes
Public Involvement/Community Outreach	Not specified	Yes ⁶⁹	Not specified	Not specified ⁷⁰	No	No	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Morton International, Inc. ⁷¹	U.S. v. National Railroad Passenger Corp. ⁷²	U.S., State of New Mexico, State of Montana v. Navajo Refining Co., Montana Refining Co. ⁷³	U.S. v. Nucor Corporation, Inc. ⁷⁴	U.S. v. Rehrig International, Inc. (Plea Agreement) ⁷⁵
Court	U.S. District Court for the Western District of Michigan	U.S. District Court for the District of Massachusetts	U.S. District Court for the District of New Mexico	U.S. District Court for the District of South Carolina	U.S. District Court for the Eastern District of Virginia
Civil Action No.	1:00CV501	01-11121-RWZ	01-1422 LH/LCS	CAA 4-00:3945-24	CR 3:01 M228 (criminal)
Date Entered	July 20, 2000	September 19, 2001	March 5, 2002	June 21, 2001	June 20, 2001
Violations Alleged	CWA	CWA	CAA, New Mexico Air Quality Control Act, Montana Clean Air Act	CAA, CWA, RCRA, EPCRA	CWA
Specific Reference to EMS	No, but contains some elements	Yes ⁷⁶	Yes ⁷⁷	Yes	Yes
Provision Requiring ISO 14001 Certification	No	No	No	No	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System					
A. Federal Court Decrees and Orders					
Provision Requiring ISO 14001 Implementation	No	No, but the EMS includes other ISO requirements ⁷⁸	No	No	No
Env't'l Metrics Reporting	Not specified	Yes	No	Yes	No
Decree or Order	U.S. v. Morton International, Inc.	U.S. v. National Railroad Passenger Corp.	U.S., State of New Mexico, State of Montana v. Navajo Refining Co., Montana Refining Co.	U.S. v. Nucor Corporation, Inc.	U.S. v. Rehrig International, Inc. (Plea Agreement)
Technology Transfer	Not specified	Not specified	No	Not specified	No
Consultant Requirements	Not specified	Yes ⁷⁹	Yes	Yes	No
Third-Party Audit	Not specified	No ⁸⁰	Yes	Not specified	Yes
EMS Plan Approval	Yes	Yes	No ⁸¹	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System					
A. Federal Court Decrees and Orders					
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Not specified b) Yes, an improved operation procedures manual	a) Yes b) Not specified	a) Yes b) Not specified	a) Yes b) Yes	a) Yes ⁸² b) Yes ⁸³
Organization, Personnel and Oversight of EMS	Not specified	Yes	Yes ⁸⁴	Yes	Yes
Decree or Order	U.S. v. Morton International, Inc.	U.S. v. National Railroad Passenger Corp.	U.S., State of New Mexico, State of Montana v. Navajo Refining Co., Montana Refining Co.	U.S. v. Nucor Corporation, Inc.	U.S. v. Rehrig International, Inc. (Plea Agreement)
Accountability and Responsibility	Not specified	Yes	Not specified	Yes	Yes
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Not specified b) Not specified c) Not specified	a) Yes b) Yes c) Yes	a) Yes b) Not specified c) Not specified	a) Yes b) Yes c) Yes	a) Not specified b) No c) No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System					
A. Federal Court Decrees and Orders					
Assessment, Prevention and Control	Not specified	Yes	Yes	Yes	Not specified
Environment Incident and Non-compliance Investigation	Not specified	Yes	Not specified	Yes	Not specified
Environmental Training, Awareness and Competence	Yes ⁸⁵	Yes	Yes	Yes	Yes
Decree or Order	U.S. v. Morton International, Inc.	U.S. v. National Railroad Passenger Corp.	U.S., State of New Mexico, State of Montana v. Navajo Refining Co., Montana Refining Co.	U.S. v. Nucor Corporation, Inc.	U.S. v. Rehrig International, Inc. (Plea Agreement)
Planning for Environmental Matters	Not specified	Yes	Yes	Yes	No
Maintenance of Records and Documentation and EMS Data Protocols	Yes	Yes	Yes	Yes	Not specified
Pollution Prevention	Yes ⁸⁶	Yes	Not specified	Yes	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System					
A. Federal Court Decrees and Orders					
Continuing Program Evaluation	Not specified	Yes	Not specified	Yes	No ⁸⁷
Public Involvement/ Community Outreach	Not specified	Yes	Not specified ⁸⁸	Yes	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Ta Tong Marine Co., Ltd. (Plea Agreement) ⁸⁹	U.S. v. Trident Seafoods Corp.	U.S. v. Trustees of Boston University	U.S. and the State of Arizona v. TRW Vehicle Safety Systems, Inc. ⁹⁰	U.S. v. Tyson Foods ⁹¹ (Plea Agreement)	U.S. and Timothy R.E. Keeney, Comm'r of the Dept of Envtl. Protection of the State of Connecticut v. United Technologies Corporation
Court	U.S. District Court for the Western District of Washington	U.S. District Court for the District of Alaska	U.S. District Court for the District of Massachusetts	U.S. District Court for the District of Arizona	U.S. District Court for the Western District of Missouri	U.S. District Court of Connecticut
Civil Action No.	CR03-5171 JET (criminal)	A97-0093CV(HRH)	97-12261-PBS	01-0095 PHX VAM	01-0175-00	H-90-715 (JAC)
Date Entered	July 18, 2003	February 24, 1998	December 9, 1997	March 7, 2001	June 25, 2003	August 23, 1993
Violations Alleged	Marpol, CWA	CWA	CWA, RCRA	RCRA	CWA	RCRA, CWA
Specific Reference to EMS	Yes	Yes	Yes	No, but contains some elements	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Ta Tong Marine Co., Ltd. (Plea Agreement)	U.S. v. Trident Seafoods Corp.	U.S. v. Trustees of Boston University	U.S. and the State of Arizona v. TRW Vehicle Safety Systems, Inc.	U.S. v. Tyson Foods (Plea Agreement)	U.S. and Timothy R.E. Keeney, Comm'r of the Dept of Env'tl. Protection of the State of Connecticut v. United Technologies Corporation
Provision Requiring ISO 14001 Certification	No	No	No	No	No	No
Provision Requiring ISO 14001 Implementation	No ⁹²	No	No	No	No	No
Environmental Metrics Reporting	Yes ⁹³	No	No	Not specified	No	No
Technology Transfer	No	No	No	Not specified	No	No
Consultant Requirements	Yes	Yes	Yes	Not specified	No	Yes
Third-Party Audit	Yes ⁹⁴	Yes	Yes	Not specified	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees and Orders						
Decree or Order	U.S. v. Ta Tong Marine Co., Ltd. (Plea Agreement)	U.S. v. Trident Seafoods Corp.	U.S. v. Trustees of Boston University	U.S. and the State of Arizona v. TRW Vehicle Safety Systems, Inc.	U.S. v. Tyson Foods (Plea Agreement)	U.S. and Timothy R.E. Keeney, Comm'r of the Dept of Env'tl. Protection of the State of Connecticut v. United Technologies Corporation
EMS Plan Approval	Yes	Yes	Yes	Yes ⁹⁵	Yes	Yes
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes b) Not specified	a) Not specified b) Not specified	a) Not specified b) Not specified	a) Not specified Yes ⁹⁶	a) Not specified b) Yes	a) Not specified b) Not specified
Organization, Personnel and Oversight of EMS	Yes	Not specified	Yes	Yes ⁹⁷	Not specified	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees and Orders						
Decree or Order	U.S. v. Ta Tong Marine Co., Ltd. (Plea Agreement)	U.S. v. Trident Seafoods Corp.	U.S. v. Trustees of Boston University	U.S. and the State of Arizona v. TRW Vehicle Safety Systems, Inc.	U.S. v. Tyson Foods (Plea Agreement)	U.S. and Timothy R.E. Keeney, Comm'r of the Dept of Env'tl. Protection of the State of Connecticut v. United Technologies Corporation
Accountability and Responsibility	Yes	Not specified	Yes	Not specified	Not specified	Yes
Environmental Requirements: a) Communication b) Interpretation	a) Yes b) Yes c) Yes	a) Yes b) Not specified c) Not specified	a) Not specified b) Not specified c) Not specified	a) Not specified b) Not specified c) Not specified	a) Yes b) No c) Yes	a) Not specified b) Not specified c) Yes
Assessment, Prevention and Control	Yes	Not specified	Yes	Not specified	Not specified	Yes
Environment Incident and Non-compliance Investigation	Yes	Yes	Yes	Yes ⁹⁸	No	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Ta Tong Marine Co., Ltd. (Plea Agreement)	U.S. v. Trident Seafoods Corp.	U.S. v. Trustees of Boston University	U.S. and the State of Arizona v. TRW Vehicle Safety Systems, Inc.	U.S. v. Tyson Foods (Plea Agreement)	U.S. and Timothy R.E. Keeney, Comm'r of the Dept of Env'tl. Protection of the State of Connecticut v. United Technologies Corporation
Environmental Training, Awareness and Competence	Yes	Not specified	Yes	Not specified	Yes	Yes
Planning for Environmental Matters	Yes	Not specified	Not specified	Not specified	No	Not specified
Maintenance of Records and Documentation and EMS Data Protocols	Yes	Yes	Not specified	Yes	Yes	Not specified
Pollution Prevention	Yes	Not specified	Not specified	Not specified	No	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Ta Tong Marine Co., Ltd. (Plea Agreement)	U.S. v. Trident Seafoods Corp.	U.S. v. Trustees of Boston University	U.S. and the State of Arizona v. TRW Vehicle Safety Systems, Inc.	U.S. v. Tyson Foods (Plea Agreement)	U.S. and Timothy R.E. Keeney, Comm'r of the Dept of Env'tl. Protection of the State of Connecticut v. United Technologies Corporation
Continuing Program Evaluation	Yes	Yes (audits)	Not specified	Not specified	No	Not specified
Public Involvement/Community Outreach	No	Not specified	Not specified	Not specified	No	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Unix Line Pte. Ltd. ⁹⁹ (Plea Agreement)	U.S. v. USX Corporation	U.S. v. Wal-Mart Stores, Inc, et al. ¹⁰⁰	U.S. v. Weirton Steel Corp.	U.S. v. Willamette Industries, Inc. ¹⁰¹	U.S. and NRDC v. Wheeling-Pittsburgh Steel Corporation (Allenport facility)
Court	U.S. District Court for the Western District of Washington	U.S. District Court for the Northern District of Indiana	U.S. District Court for the Western District of Arkansas, Fayetteville Division	U.S. District Court for the Northern District of West Virginia	U.S. District Court for the District of Oregon	U.S. District Court for the Western District of Pennsylvania
Civil Action No.	CR02-6064 RBL	2:98CV 465JM	CWA, 01-5115	5:96-CV-171	CV-00-1001-HA	89-237 S
Date Entered	May 30, 2003	January 26, 1999	August 2, 2001	October 31, 1996	November 2, 2000	November 4, 1992
Violations Alleged	CWA	CWA, RCRA	CWA	CAA, CWA, RCRA	CAA	CWA
Specific Reference to EMS	Yes	Yes	No, but to a Storm Water Management Plan which contains some feature of an EMS	Yes	Yes ¹⁰²	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Unix Line Pte. Ltd. (Plea Agreement)	U.S. v. USX Corporation	U.S. v. Wal-Mart Stores, Inc, et al.	U.S. v. Weirton Steel Corp.	U.S. v. Willamette Industries, Inc.	U.S. and NRDC v. Wheeling-Pittsburgh Steel Corporation (Allenport facility)
Provision Requiring ISO 14001 Certification	No	No	No	No	No	No
Provision Requiring ISO 14001 Implementation	No ¹⁰³	No	No	No	No	No
Environmental Metrics Reporting	Yes ¹⁰⁴	Yes	Yes ¹⁰⁵	No	Yes ¹⁰⁶	No
Technology Transfer	No	No	Not specified	No	Not specified	No
Consultant Requirements	Yes	No	Yes	Yes	Yes	Yes
Third-Party Audit	Yes ¹⁰⁷	No	Yes ¹⁰⁸	Yes	Yes	Yes
EMS Plan Approval	Yes	No	Yes	Yes	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Unix Line Pte. Ltd. (Plea Agreement)	U.S. v. USX Corporation	U.S. v. Wal-Mart Stores, Inc, et al.	U.S. v. Weirton Steel Corp.	U.S. v. Willamette Industries, Inc.	U.S. and NRDC v. Wheeling-Pittsburgh Steel Corporation (Allenport facility)
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes b) Not specified	a) Not specified b) Not specified	a) Not specified b) Yes ¹⁰⁹	a) Yes b) Yes	a) Not specified ¹¹⁰ b) Not specified	a) Yes b) Not specified
Organization, Personnel and Oversight of EMS	Yes	Yes	Yes ¹¹¹	Yes	Not specified	Not specified
Accountability and Responsibility	Yes	Yes ¹¹²	Yes ¹¹³	Yes	No ¹¹⁴	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees and Orders						
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Yes b) Yes c) Yes	a) Yes b) Not specified c) Yes	a) Yes ¹¹⁵ b) Not specified c) Not specified	a) Yes b) Yes c) Yes	Not specified	a) Yes b) Not specified c) Not specified
Decree or Order	U.S. v. Unix Line Pte. Ltd. (Plea Agreement)	U.S. v. USX Corporation	U.S. v. Wal-Mart Stores, Inc, et al.	U.S. v. Weirton Steel Corp.	U.S. v. Willamette Industries, Inc.	U.S. and NRDC v. Wheeling-Pittsburgh Steel Corporation (Allenport facility)
Assessment, Prevention and Control	Yes	Yes	Not specified	Yes	Not specified	Not specified
Environment Incident and Non-compliance Investigation	Yes	Yes	Not specified	Yes	Not specified	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Unix Line Pte. Ltd. (Plea Agreement)	U.S. v. USX Corporation	U.S. v. Wal-Mart Stores, Inc, et al.	U.S. v. Weirton Steel Corp.	U.S. v. Willamette Industries, Inc.	U.S. and NRDC v. Wheeling-Pittsburgh Steel Corporation (Allenport facility)
Planning for Environmental Matters	Yes	Yes	Not specified	Yes	Not specified	Not specified
Maintenance of Records and Documentation and EMS Data Protocols	Yes	Yes no EMS data protocols	Not specified	Yes no EMS data protocol	Not specified	Not specified
Pollution Prevention	Yes	Not specified	Not specified	Yes	Not specified	Not specified
Continuing Program Evaluation	Yes	Yes ¹¹⁷	Yes ¹¹⁸	Yes	Not specified	Not specified
Public Involvement/Community Outreach	No	Yes	Not specified	Not specified	Not specified	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Wheeling-Pittsburgh Steel Corporation (Steubenville, Mingo Junction and Yorkville facilities)	U.S.X. Corp.				
Court	United States District Court for the Southern District of Ohio, Eastern Division	U.S. District Court for the Northern District of Indiana, Hammond Division				
Civil Action No.	C288-598	2:99CV0536JM				
Date Entered	July 16, 1991	September 18, 2000				
Violations Alleged	CWA	CAA				
Specific Reference to EMS	Yes	No ¹¹⁹				
Provision Requiring ISO 14001 Certification	No	No				

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Wheeling-Pittsburgh Steel Corporation (Steubenville, Mingo Junction and Yorkville facilities)	U.S.X. Corp.				
Provision Requiring ISO 14001 Implementation	No	No				
Environmental Metrics Reporting	No	Yes ¹²⁰				
Technology Transfer	No	Not specified				
Consultant Requirements	No	Yes				
Third-Party Audit	Yes	No				
EMS Plan Approval	Yes	Yes ¹²¹				

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees and Orders						
Decree or Order	U.S. v. Wheeling-Pittsburgh Steel Corporation (Steubenville, Mingo Junction and Yorkville facilities)	U.S.X. Corp.				
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes b) Not specified	a) Not specified b) Not specified				
Organization, Personnel and Oversight of EMS	Not specified	Not specified				
Accountability and Responsibility	Yes	No				

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

A. Federal Court Decrees and Orders

Decree or Order	U.S. v. Wheeling-Pittsburgh Steel Corporation (Steubenville, Mingo Junction and Yorkville facilities)	U.S.X. Corp.				
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Yes b) Not specified c) Not specified	Not specified				
Assessment, Prevention and Control	Not specified	Not specified				
Environment Incident and Non-compliance Investigation	Not specified	Not specified				

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System						
A. Federal Court Decrees and Orders						
Environmental Training, Awareness and Competence	Not specified	Not specified				
Decree or Order	U.S. v. Wheeling-Pittsburgh Steel Corporation	U.S.X. Corp.				
Planning for Environmental Matters	Not specified	Not specified				
Maintenance of Records and Documentation and EMS Data Protocols	Not specified	Not specified				
Pollution Prevention	Not specified	Not specified				
Continuing Program Evaluation	Not specified	Not specified				
Public Involvement/Community Outreach	Not specified	Not specified				

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

B. Federal Administrative Orders and Agreements

Order or Agreement	In the Matter of Cambridge Plating Co., Inc.¹²²	In the Matter of Chem-Security Systems, Inc.	MOA between U.S. and U.S. Dep't of Energy (Brookhaven Nat'l Lab.)	In the Matter of Firewall Forward, Inc.¹²³	In the Matter of City of New Bedford, Massachusetts	In the Matter of Safety-Keen Corp.	In the Matter of University of Missouri, Rolla Campus¹²⁴
Court	N/A	U.S EPA region 10	(on file with authors)	N/A	N/A	N/A	N/A
Civil Action No.	RCRA-01-2002-0005; AAA-02-0007; CWA 02-04	1085-06-08-3008P	(on file with authors)	RCRA-8-99-07	CWA 01-2002-0059	MM-HQ-2000-0005	VII-96-H-0010
Date Entered/ Issued	November 28, 2001	July 2, 1985	March 23, 1998	September 24, 1999	November 5, 2003	August 25, 2000	November 13, 1998
Violations Alleged	RCRA, CAA, CWA	RCRA	RCRA	RCRA	CWA	RCRA, TSCA	RCRA
Specific Reference to EMS	Yes ¹²⁵	No, but to a compliance management system	Yes	Yes ¹²⁶	Yes ¹²⁷	Yes	Yes ¹²⁸

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

B. Federal Administrative Orders and Agreements

Order or Agreement	In the Matter of Cambridge Plating Co., Inc.	In the Matter of Chem-Security Systems, Inc.	MOA between U.S. and U.S. Dep't of Energy (Brookhaven Nat'l Lab.)	In the Matter of Firewall Forward, Inc.	In the Matter of City of New Bedford, Massachusetts	In the Matter of Safety-Keen Corp.	In the Matter of University of Missouri, Rolla Campus
Provision Requiring ISO 14001 Certification	No ¹²⁹	No	No	No	No	No	Yes
Provision Requiring ISO 14001 Implementation	No	No	Yes	No, but the EMS is generally based on ISO 14001	Not specified	Not specified ¹³⁰	Yes
Environmental Metrics Reporting	Not specified	No	No	Presumably yes ¹³¹	Yes ¹³²	No	Not addressed
Technology Transfer	Not specified	No	No	Yes ¹³³	No	No	No
Consultant Requirements	Yes	No	No	Not specified	No	Yes	Not addressed
Third-Party Audit	Yes	No	Yes	Yes	Yes ¹³⁴	Yes	Not specified ¹³⁵
EMS Plan Approval	Yes	No	No	Yes	No	Yes	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

B. Federal Administrative Orders and Agreements

Order or Agreement	In the Matter of Cambridge Plating Co., Inc.	In the Matter of Chem-Security Systems, Inc.	MOA between U.S. and U.S. Dep't of Energy (Brookhaven Nat'l Lab.)	In the Matter of Firewall Forward, Inc.	In the Matter of City of New Bedford, Massachusetts	In the Matter of Safety-Keen Corp.	In the Matter of University of Missouri, Rolla Campus
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes b) Not specified	a) Not specified b) Not specified	a) Yes b) Not specified	a) Yes b) Not specified	a) Yes ¹³⁶ b) Yes ¹³⁷	a) Yes ¹³⁸ b) Not specified	a) Yes b) Yes ¹³⁹
Organization, Personnel and Oversight of EMS	Yes ¹⁴⁰	No	Yes	Yes ¹⁴¹	Yes ¹⁴²	Yes ¹⁴³	Yes ¹⁴⁴
Accountability and Responsibility	Yes ¹⁴⁵	Yes	Yes	Not specified	Yes ¹⁴⁶	Yes ¹⁴⁷	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System							
B. Federal Administrative Orders and Agreements							
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Yes b) Yes c) Yes ¹⁴⁸	a) Yes b) Not specified c) Yes	a) Yes b) not specified c) Yes	a) Not specified b) Not specified c) Not specified	Yes ¹⁴⁹	a) Yes ¹⁵⁰ b) Yes ¹⁵¹ c) Yes ¹⁵²	a) Yes ¹⁵³ b) Yes ¹⁵³ c) Yes ¹⁵⁴
Order or Agreement	In the Matter of Cambridge Plating Co., Inc.	In the Matter of Chem-Security Systems, Inc.	MOA between U.S. and U.S. Dep-t of Energy (Brookhaven Nat-l Lab.)	In the Matter of Firewall Forward, Inc.	In the Matter of City of New Bedford, Massachusetts	In the Matter of Safety-Keen Corp.	In the Matter of University of Missouri, Rolla Campus
Assessment, Prevention and Control	Yes ¹⁵⁵	Yes	Yes	Presumably yes	Yes ¹⁵⁶	Yes ¹⁵⁷	Yes
Environment Incident and Non-compliance Investigation	Yes ¹⁵⁸	Yes ¹⁵⁹	Yes	Not specified	Yes ¹⁶⁰	Yes ¹⁶¹	Not specified
Environmental Training, Awareness and Competence	Yes	Not specified	Yes	Yes	Yes ¹⁶²	Yes ¹⁶³	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

B. Federal Administrative Orders and Agreements

Planning for Environmental Matters	Yes ¹⁶⁴	Not specified	Yes	Not specified	Yes ¹⁶⁵	Yes ¹⁶⁶	Yes
Maintenance of Records and Documentation and EMS Data Protocols	Yes ¹⁶⁷	Presumably yes	Presumably yes	Yes	Yes ¹⁶⁸	Yes ¹⁶⁹	Yes
Pollution Prevention	Yes ¹⁷⁰	Not specified	Yes	Yes	Yes ¹⁷¹	Yes ¹⁷²	Not addressed
Order or Agreement	In the Matter of Cambridge Plating Co., Inc.	In the Matter of Chem-Security Systems, Inc.	MOA between U.S. and U.S. Dept of Energy (Brookhaven Nat'l Lab.)	In the Matter of Firewall Forward, Inc.	In the Matter of City of New Bedford, Massachusetts	In the Matter of Safety-Keen Corp.	In the Matter of University of Missouri, Rolla Campus
Continuing Program Evaluation	Yes ¹⁷³	Yes	Yes	Yes	Yes ¹⁷⁴	Yes ¹⁷⁵	Yes
Public Involvement/Community Outreach	Yes	Not specified	Yes	Presumably yes ¹⁷⁶	Yes ¹⁷⁷	Yes ¹⁷⁸	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

C. State Court Decrees and Orders

Decree or Order	State of Arizona v. Arizona Water Company	State of California v. San Diego Farah Partners and Behram Baxter	The Department of Natural Resources and Environmental Control v. Nanticoke Homes, Inc.	Commissioner of the Department of Environment v. Reliance Electric-Highland
Court	Superior Court of Arizona for the County of Coconino	Superior Court of California for the County of San Diego	Superior Court for the State of Delaware in	Indiana Department of Environmental Management
Civil Action No.	CV98-0038		98M-02-072JOH	Cause No. H-13028
Date Entered	January 23, 1998	June 1999	February 12, 1998	January 16, 1998
Violations Alleged	Violations of rules of the Arizona Department of Environmental Quality governing the discharge of pollutants into the waters of the State of Arizona.	Violation of local Health and Safety Code section pertaining to hazardous waste or air contamination, conduction building demolition without obtaining all necessary permits, sign offs, and authorizations from all health and safety agencies, and depositing waste in violation of federal, state or local law	Delaware Code Chapters 60 (air quality), 63 (hazardous waste), and 74 (underground storage tanks) Delaware Air Pollution Control, Hazardous Waste, and UST Regulations.	Violations of 40 CFR 262.11, 40 CFR Part 264 and 270, 40 CFR 268.50(a)(1), 329 IAC 3.1-15-4, 329 IAC 3.1-15-8, 40 CFR 265.31 governing the operation and storage of solid waste.

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
C. State Court Decrees and Orders				
Specific Reference to EMS	Yes	Yes	Yes	Yes ¹⁷⁹
Decree or Order	State of Arizona v. Arizona Water Company	State of California v. San Diego Farah Partners and Behram Baxter	The Department of Natural Resources and Environmental Control v. Nanticoke Homes, Inc.	Commissioner of the Department of Environment v. Reliance Electric-Highland
Provision Requiring ISO 14001 Certification	No	Yes	No	Yes
Provision Requiring ISO 14001 Implementation	No	No	Yes	Yes
Environmental Metrics Reporting	No	No	No	Yes
Technology Transfer	No	Yes	No	Yes
Consultant Requirements	No	No	Yes	No
Third-Party Audit	No	Yes	No	No
EMS Plan Approval	No	Yes	No	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
C. State Court Decrees and Orders				
Decree or Order	State of Arizona v. Arizona Water Company	State of California v. San Diego Farah Partners and Behram Baxter	The Department of Natural Resources and Environmental Control v. Nanticoke Homes, Inc.	Commissioner of the Department of Environment v. Reliance Electric-Highland
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes ¹⁸⁰ b) Not specified	a) Not specified b) Not specified	a) Presumably yes b) Not specified	a) Defendant shall develop an environmental policy for its facility b) Not specified
Organization, Personnel and Oversight of EMS	Yes ¹⁸¹	Not specified	Presumably yes	Yes ¹⁸²
Accountability and Responsibility	Yes ¹⁸³	Not specified	Yes	Yes ¹⁸⁴
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Yes ¹⁸⁵ b) Not specified c) Yes	a) Not specified b) Not specified c) Not specified	a) Not specified b) Not specified c) Yes	a) Yes ¹⁸⁶ b) Not specified c) Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
C. State Court Decrees and Orders				
Assessment, Prevention and Control	Yes ¹⁸⁷	Not specified	Yes	Yes ¹⁸⁸
Decree or Order	State of Arizona v. Arizona Water Company	State of California v. San Diego Farah Partners and Behram Baxter	The Department of Natural Resources and Environmental Control v. Nanticoke Homes, Inc.	Commissioner of the Department of Environment v. Reliance Electric-Highland
Environment Incident and Non-compliance Investigation	Yes ¹⁸⁹	Not specified	Yes	Yes
Environmental Training, Awareness and Competence	Yes	Yes	\$25,000 shall be paid to provide information to the Management Consultant or to train and educate hourly workers.	Train employees to increase awareness and competency
Planning for Environmental Matters	Not specified	Not specified	Not specified	Yes ¹⁹⁰

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
C. State Court Decrees and Orders				
Maintenance of Records and Documentation and EMS Data Protocols	Not specified	Not specified	Yes, Defendant is to preserve all records for at least five years after entry of the Consent Order.	Yes ¹⁹¹
Pollution Prevention	Not specified	Not specified	Yes	Not specified
Continuing Program Evaluation	Yes, unannounced internal inspections	Not specified	Not specified	Not specified
Decree or Order	State of Arizona v. Arizona Water Company	State of California v. San Diego Farah Partners and Behram Baxter	The Department of Natural Resources and Environmental Control v. Nanticoke Homes, Inc.	Commissioner of the Department of Environment v. Reliance Electric-Highland
Public Involvement/Community Outreach	Not specified	Yes	Pay \$40,000 to support and fund the Department of Natural Resources and Environmental Control Clean Air Act and Public Outreach Program.	Yes ¹⁹²

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

D. State Administrative Orders

Order	Donsco, Inc.	In the matter of: General Motors Corporation Wilmington Assembly Plant	Hussey Copper Ltd.	Keystone Cement Company
Agency	Commonwealth of Pennsylvania Dept of Env'tl. Protection	State of Delaware Dept of Natural Resources and Env'tl. Control	Commonwealth of Pennsylvania Dept of Env'tl. Protection	Commonwealth of Pennsylvania Department of Environmental Protection
Docket No.	(not present on order)	(not present on order)	5-97015	(not present on order)
Date Entered	April 15, 1998	June 16, 1998	November 17, 1997	July 10, 1998
Violations Alleged	Pennsylvania Air Pollution Control Act, Pennsylvania Clean Streams Law, Pennsylvania Solid Waste Management Act, Pennsylvania Administrative Code, Pennsylvania Storage Tank and Spill Prevention Act	Delaware Code Chapter 60 Delaware Air pollution Control Regulations	Pennsylvania Solid Waste Management Act, Pennsylvania Clean Streams Law, Pennsylvania Administrative Code	Pennsylvania Air Pollution Control Act, Pennsylvania Clean Streams Law, Pennsylvania Solid Waste Management Act, Pennsylvania Administrative Code, Pennsylvania Environmental Quality Board Regulations
Specific Reference to EMS	Yes	Yes ¹⁹³	Yes	Yes

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
D. State Administrative Orders				
Provision Requiring ISO 14001 Certification	No	Yes	No	No
Order	Donsco, Inc.	In the matter of: General Motors Corporation Wilmington Assembly Plant	Hussey Copper Ltd.	Keystone Cement Company
Provision Requiring ISO 14001 Implementation	No	No	No	No
Environmental Metrics Reporting	No	No	No	No
Technology Transfer	No	No	No	No
Consultant Requirements	Yes	No	Yes	Yes
Third-Party Audits	No	No	No	No

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
D. State Administrative Orders				
EMS Plan Approval	Yes	no	Yes	Yes
Order	Donsco, Inc.	In the matter of: General Motors Corporation Wilmington Assembly Plant	Hussey Copper Ltd.	Keystone Cement Company
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Yes b) Yes ¹⁹⁴	a) Not specified b)Yes ¹⁹⁵	a) Yes ¹⁹⁶ b) Yes ¹⁹⁷	a) Not specified b) Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

D. State Administrative Orders

Organization, Personnel and Oversight of EMS	Presumably yes	Yes ¹⁹⁸	Presumably yes ¹⁹⁹	Yes
Accountability and Responsibility	Yes ²⁰⁰	Yes	Yes ²⁰¹	Yes
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Not specified b) Not specified c) Yes	a) Yes b) Not specified c) Yes	a) Not specified b) Not specified c) Yes	a) Yes, a process for establishing internal and external communication on environmental management issues. b) Not specified c) Yes
Order	Donsco, Inc.	In the matter of: General Motors Corporation Wilmington Assembly Plant	Hussey Copper Ltd.	Keystone Cement Company
Assessment, Prevention and Control	Assessment of manufacturing process and operations and pollution prevention opportunities for all sources of waste generation.	Presumably yes	Assessment of manufacturing process and operations and pollution prevention opportunities for all sources of waste generation.	Not specified

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System				
D. State Administrative Orders				
Environment Incident and Non-compliance Investigation	Yes ²⁰²	Not specified	Not specified	Yes ²⁰³
Environmental Training, Awareness and Competence	Yes ²⁰⁴	Not specified	Establishment of an Environmental Action Program (AEAP®) which will include employee training.	Yes, training program to ensure that all employees are capable of performing their environmental responsibilities.
Planning for Environmental Matters	Yes	Not specified	Not specified	Not specified
Order	Donsco, Inc.	In the matter of: General Motors Corporation Wilmington Assembly Plant	Hussey Copper Ltd.	Keystone Cement Company

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

D. State Administrative Orders

Maintenance of Records and Documentation and EMS Data Protocols	Yes	Not specified	Not specified	Yes, maintenance of EMS documentation that describes Keystone's EMS and procedures to update documentation.
Pollution Prevention	Yes	Yes	Yes ²⁰⁵	Not specified
Continuing Program Evaluation	Not specified	Not specified	Not specified	Not specified
Public Involvement/Community Outreach	Yes ²⁰⁶	Yes ²⁰⁷	Yes ²⁰⁸	Yes, communicating environmental management issues to neighbors, community groups, and local officials.

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System			
E. Canadian Court Orders			
Order	Her Majesty the Queen v. Coretec	Her Majesty the Queen v. Prospec Chemicals LTD	
Court	In the Ontario Court (Provincial Division) Toronto Region	The Provincial Court of Alberta, Judicial District of Fort Saskatchewan	
Civil Action No.	(not present on decree)	51141166P10101/P10102	
Date Entered	August 18, 1998	January 25, 1996	
Violations Alleged	Canadian Environmental Protection Act	Environmental Protection and Enhancement Act	
Specific Reference to EMS	Yes ²⁰⁹	Yes	
Provision Requiring ISO 14001 Certification	Yes	Yes	
Provision Requiring ISO 14001 Implementation	No	No	
Environmental Metrics Reporting	No	No	
Technology Transfer	No	No	
Consultant Requirements	No	No	

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System			
E. Canadian Court Orders			
Third-Party Audit	No	No	
EMS Plan Approval	No	No	
Management Policies and Procedures: a) Corporate Environmental Policy b) Site Specific Environmental Policies and Standards	a) Defendant shall establish an environmental policy b) Not specified	a) Not specified b) Not specified	
Organization, Personnel and Oversight of EMS	Not specified	Not specified	
Accountability and Responsibility	Yes	Not specified	
Environmental Requirements: a) Communication b) Interpretation c) Substantive	a) Not specified b) Not specified c) Yes	a) Not specified b) Not specified c) Not specified	
Assessment, Prevention and Control	Yes	Not specified	
Environment Incident and Non-compliance Investigation	Not specified	Not specified	

I. Federal, State and Canadian Decrees, Orders and Settlements Requiring Features of a Compliance Based Environmental Management System

E. Canadian Court Orders

Environmental Training, Awareness and Competence	Yes (related to training) neighboring facilities)	Not specified	
Planning for Environmental Matters	Not specified	Not specified	
Maintenance of Records and Documentation and EMS Data Protocols	Not specified	Not specified	
Pollution Prevention	Yes (related to providing programs for neighboring facilities)	Yes	
Continuing Program Evaluation	Not specified	Not specified	
Public Involvement/ Community Outreach	Yes ²¹⁰	Not specified	

II. Federal and State Consent Decrees Requiring an Audit of an EMS

Consent Decree	U.S. v. Archer Daniels Midland	U.S. and State of Louisiana v. Browning-Ferris Industries, Chemical Services, Inc., and Cecos International, Inc.	U.S. and State of Louisiana v. Browning-Ferris Industries, Chemical Services, Inc., and Cecos International, Inc
Court	U.S. District Court for the Southern District of Iowa	U.S. District Court for the Middle District of Louisiana	U.S. District Court for the Western District of Louisiana
Date Entered	September 7, 1994	October 18, 1988	March 12, 1990
Civil Action No.	4-94-CV-10436	87-317 Section B	88-0718-LC
Statute Violated	CAA	RCRA, Louisiana Environmental Quality Act	RCRA, Louisiana Environmental Quality Act
Type of Audit: a) Laboratory b) Field c) Facility d) Compliance e) of an EMS	a) Not specified b) Not specified c) Presumably yes d) Presumably yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes
Frequency of Audits	Not specified	Not specified	Second audit one year after submission of first audit report
Reporting Requirement as part of Audit	Yes	Yes	Yes
Requires an EMS	No	No	No

II. Federal and State Consent Decrees Requiring an Audit of an EMS			
Consent Decree	U.S. v. Archer Daniels Midland	U.S. and State of Louisiana v. Browning-Ferris Industries, Chemical Services, Inc., and Cecos International, Inc.	U.S. and State of Louisiana v. Browning-Ferris Industries, Chemical Services, Inc., and Cecos International, Inc
Auditing as part of EMS	N/A	Yes	Yes

II. Federal and State Consent Decrees Requiring an Audit of an EMS			
Consent Decree	U.S. v. E. I. DuPont de Nemours & Co.	U.S. and State of Texas v. Encycle/Texas, Inc., and ASARCO, Inc.	U.S. v. FMC Corp. (Pocatello Plant)
Court	U.S. District Court for the District of New Jersey	U.S. District Court, Southern District of Texas	U.S. District Court, District of Idaho
Date Entered	May 21, 1991	April 15, 1999	July 13, 1999
Civil Action No.	91-768	H-99-1136	98-0406-E-BLW
Statute Violated	RCRA	RCRA, CWA, Texas Health and Safety and Water Codes	RCRA
Type of Audit: a) Laboratory b) Field c) Facility d) Compliance e) of an EMS	a) Not specified b) Yes c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes
Frequency of Audits	Not specified	Annual EMS and compliance audits for 5 years	Currently conducts Aperiodic@ audits; must complete a management system audit within 18 months of the date the Pocatello Plant EMS is fully implemented.
Reporting Required as part of Audit	Yes	Yes	Not specified
Requires an EMS	No	Yes	Yes

II. Federal and State Consent Decrees Requiring an Audit of an EMS			
Auditing part of EMS	Yes	Yes	Yes

II. Consent Decrees Requiring an Audit of an EMS			
Consent Decree	U.S. v. John Morrell & Co. (Partial Consent Decree)	U.S. v. John Morrell & Co. (2nd Partial Consent Decree)	U.S. v. Ketchikan Pulp Co.
Court	U.S. District Court for the District of South Dakota	U.S. District Court for the District of South Dakota	U.S. District Court for the District of Alaska
Date Entered	April 26, 1996	February 11, 1998	September 19, 1995
Civil Action No.	96-4011	96-4011	A92-587-CV-(JKS)
Statute Violated	CWA	CWA	CWA, CAA
Type of Audit: a) Laboratory b) Field c) Facility d) Compliance e) of an EMS	a) Not specified b) Not specified c) Yes d) Not specified e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes
Frequency of Audits	Not specified	Not specified	Not specified
Reporting Requirement as part of Audit	Yes	Yes	Yes
Requires an EMS	No	Yes	No
Auditing as part of EMS	N/A	Presumably yes	Not specified

II. Consent Decrees Requiring an Audit of an EMS			
Consent Decrees	U.S. v. Rhone-Poulenc Ag. Co., and Union Carbide Chemical and Plastics Co., Inc.	U.S. v. Trident Seafoods Corp.	U.S. and Timothy R.E. Keeney, Commissioner of Environmental Protection of the State of Connecticut v. United Technologies, Inc.
Court	U.S. District Court for the Southern District of West Virginia	U.S. District Court, District of Alaska	U.S. District Court, District of Connecticut
Date Entered	December 19, 1991	February 24, 1998	August 23, 1993
Civil Action No.	2:90-0929	A97-0093CV (HRH)	H-90-715 (JAC)
Statute Violated	CWA	CWA	RCRA, CWA, Connecticut Water Pollution Control Act
Type of Audit: a) Laboratory b) Field c) Facility d) Compliance e) of an EMS	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes
Frequency of Audits	Not specified	Audits every other year	Annually for three years
Reporting as part of Audit	Yes	Yes	Yes

II. Consent Decrees Requiring an Audit of an EMS			
Requires an EMS	No	Yes	Yes
Auditing as part of EMS	Not specified	Yes	Yes
Consent Decrees	U.S. v. USX Corporation (Gary Works)	U.S. and Natural Resources Defense Council, Inc. v. Wheeling-Pittsburgh Steel Corp. (Allenport Facility)	U.S. v. Wheeling-Pittsburgh Steel Corp. (Steubenville, Mingo Junction, and Yorkville facilities)
Court	U.S. District Court, Northern District of Indiana	U.S. District Court, Western District of Pennsylvania	U.S. District Court, Southern District of Ohio, Eastern Division
Date Entered	January 26, 1999	November 4, 1992	July 16, 1991
Civil Action No.	2: 98-CV-465 JM	89-237 S	C288-598
Statute Violated	CWA	CWA	CWA
Type of Audit: a) Laboratory b) Field c) Facility d) Compliance e) of an EMS	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes	a) Not specified b) Not specified c) Yes d) Yes e) Yes
Frequency of Audits	Annually	Every other year	Every other year
Reporting part of Audit	Yes	Yes	Yes
Requires an EMS	Yes	Yes	Yes

II. Consent Decrees Requiring an Audit of an EMS			
Auditing part of EMS	Yes	Yes	Yes

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1. In March 2002, Alcoa and EPA entered into a consent decree in connection with Alcoa's alleged violations of the CWA. The consent decree calls for Alcoa to take various corrective measures, submit quarterly compliance reports, pay a \$550,000 civil penalty, perform various SEPs, and create an EMS. Instead of following the provisions recommended by NEIC's Compliance Focused Environmental Management System - Enforcement Agreement Guidance, the required EMS must follow ISO 14001 requirements. Alcoa was required to obtain ISO 14001 certification by March 31, 2003, failing that, Alcoa was required to pay a stipulated penalty of \$40,000, in addition to other penalties required by the decree.
 2. In August 2002, Boston Sand and Gravel Co. and the EPA entered into a consent decree in connection with Boston Sand's alleged violations of the Clean Water Act. The consent decree calls for Boston Sand to pay a civil penalty of \$897,983 to the federal government, complete and operate a SEP requiring wastewater recycling, engage a third-party auditor, and develop and implement an EMS. In conjunction with the development and implementation of its EMS, Boston Sand agreed to draft an "Environmental Management System Manual" and submit it to EPA for approval. The manual must address each of the provisions recommended by the NEIC Compliance-Focused EMS - Enforcement Agreement Guidance, including: environmental policy; organization, personnel, and oversight of EMS; accountability and responsibility; environmental requirements; assessment, prevention, and control; environmental incident and noncompliance investigations; environmental training, awareness, and competence; environmental planning and organizational decision-making; maintenance of records and documentation; a pollution prevention program; continuing program evaluation and improvement; and public involvement/community outreach. Boston Sand agreed to engage an independent environmental auditing firm to conduct a comprehensive review and evaluation of the EMS and take appropriate corrective measures based on the results of that audit, separate from facility compliance audits which were also required by the consent decree.
 3. Boyang Maritime Kyeong Shin Deep Sea Fisheries Company, Boyang, Trans-Ports International Inc., and Oswego ("Boyang") pleaded guilty to being part of a wide-ranging conspiracy designed to hide routine discharges of oil sludge and oil contaminated bilge waste directly into the ocean from their fleet of ships. They agreed to pay a \$5,000,000 fine, \$1,000,000 of which is to be paid to the National Fish and Wildlife Foundation. Boyang was sentenced to five years of organizational probation. They also agreed to set aside \$500,000 in escrow which will be used to implement a court-monitored comprehensive EMS that references eleven of the twelve key elements listed in the NEIC policy, including: (i) management policies and procedures, (ii) organization, personnel, and oversight of EMS, (iii) accountability and responsibility, (iv) environmental requirements, (v) assessment, prevention, and control, (vi) environmental incident and noncompliance investigation, (vii) environmental training, awareness, and competence, (viii) environmental planning and organizational decision-making, (ix) maintenance of records and documentation, (x) pollution prevention program, and (xi) continuing program evaluation and improvement. The ship's captain and two chief engineers have been convicted and sentenced to jail.

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4. In April 2002, Carnival Corp. entered into a plea agreement whereby Carnival admitted it discharged oil-contaminated waste into the sea and falsely represented that the waste had been discharged using pollution prevention equipment. The court imposed an \$18,000,000 fine on Carnival, \$9,000,000 of which will be paid by Carnival to fund environmental projects. Carnival was sentenced to a five year probationary period during which they were required to implement and enforce a world-wide environmental compliance plan which will include executive organizational changes, a toll-free environmental violation reporting system, a comprehensive training program, and the retention of an independent consultant who would participate in Carnival's environmental assessment and audit programs to monitor compliance with environmental laws.
 5. Boyang entered a guilty plea for violation of 33 C.F.R. ' 151.25 (a) and (h) which govern oil pollution from ships pursuant to the environmental protection provisions of the Antarctic Treaty (Marpol Protocol), specifically for the failure to maintain an Oil Record Book.
 6. Carnival Corporation pleaded guilty to falsifying information in an oil record book regarding the discharge of oil-contaminated bilge waste into the sea without the use of pollution prevention equipment in violation of Marpol.
 7. The plea agreement refers to an Environmental Compliance Plan (AECP@).
 8. Although Boyang is not required to implement ISO 14001 or obtain certification, the court-appointed monitor and the independent auditor must meet qualification requirements of ISO 9000 and ISO 14012.
 9. Carnival's Environmental Compliance Manual discusses the relationship between an employee's performance of his or her environmental responsibilities and his or her overall performance evaluation. Individual and corporate consequences for violating environmental regulations and procedures include remedial training, suspension, terminations, and civil and criminal liability.
 10. Boyang Ltd et al. must pay all expenses for a court-appointed monitor.
 11. A third party audit is required to achieve ISO 14001 certification.
 12. The EMS manual must include rationales and intended goals for the required changes and describe how each activity or program will be formalized and integrated into operations. An environmental policy is required for ISO 14001 certification.
 13. Although the consent decree itself does not specifically address this item, ISO 14001 implementation requires site-specific policies and standards, and Alcoa's continuance letter to U.S. EPA, dated April 30, 2002, includes a Lafayette Operation Environmental Policy@ and Standards.

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14. Although the consent decree itself does not specifically address this item, Alcoa's EMS manual, which was submitted to U.S. EPA as an appendix to a compliance letter, dated April 30, 2002, does.
 15. Although the consent decree itself does not specifically address this item, Alcoa's EMS manual, which was submitted to U.S. EPA as an appendix to a compliance letter, dated April 30, 2002, does.
 16. *Id.*
 17. *Id.*
 18. *Id.*
 19. A training program is required for ISO 14001 certification.
 20. ASARCO shall develop and implement an Employee Training Program.
 21. Environmental planning is required for ISO 14001 certification.
 22. The EMS manual must contain a description of how a comprehensive EMS plan will be continuously evaluated and improved.
 23. ISO 14001 certification requires that the organization only *consider* processes for external communication.
 24. In March 1995, Eastman Kodak Company entered into a consent decree with U.S. EPA in connection with Eastman Kodak's alleged violations of RCRA. The consent decree called for Eastman Kodak to pay a civil penalty of \$5,000,000, complete certain SEPs with an aggregate value of about \$12,000,000, bring its facilities into compliance according to an agreed upon schedule, and to develop, augment, and implement a comprehensive EMS. The EMS provisions are not specified in the consent decree, but it does entitle EPA to review the manual upon request and to confer with Kodak about the contents.
 25. Chapter 361 of the Texas Health and Safety Code, Texas Health and Safety Code Ann. ' ' 361.001 *et seq.*, and Chapter 7 of the Texas Water Code, Texas Water Code Ann. ' ' 7.001 *et seq.*, and the rules and regulations promulgated pursuant to those statutes
 26. In April 1997, Franklin Smelting & Refining Corporation (*Franklin*) and U.S. EPA entered into a consent decree in connection with Franklin's alleged violations of the CAA. In addition to undertaking various compliance measures and requiring Franklin to pay a total civil penalty

of \$50,000, the decree requires Franklin to: hire an environmental manager and environmental deputies with prescribed responsibilities and authority; maintain a standard operating manual that describes processes for prevention, reduction, or control of emissions, inspection and maintenance procedures, reporting protocols, and management and training requirements. Amendments to the standard operating manual are subject to EPA approval.

27. Doyon Drilling agreed to plead guilty to violating the CWA. The agreement was filed simultaneously with a deferred prosecution agreement between Doyon Drilling and the United States, deferring charges for violation of RCRA and CERCLA contingent on Doyon Drilling's compliance with both agreements.

28. There is, however, reference to an environmental management program.

29. There is reference to a Compliance Management System and an environmental manager. The bulk of the EMS is the installment of this manager, the introduction of record keeping criteria, and the development of a training program.

30. Maintenance of a detailed standard operating manual at its facilities is required.

31. A responsible corporate official must verify, in a signed statement, compliance with the consent decree and acknowledge possible penalties. These statements are common in consent decrees not using more elaborate or specific EMS requirements.

32. FMC responsibilities include that FMC shall reimburse the United States for past response costs, and FMC shall have sole responsibility of all oversight and future response costs which are not inconsistent with the National Contingency Plan. FMC must also perform the remedial design (RD) and remedial action (RA) at the site. In addition to this FMC must also: i) submit a summary of all work in FMC's possession, or knowledge pertaining to environmental investigations at the Facilities, including history of the Facilities; ii) within 30 days after enacting the decree, FMC shall submit a RD work plan to the EPA; iii) within 60 days after the RD work plan is approved, FMC shall submit a preliminary or 30% RD for approval by EPA; iv) at the time the 30% RD is submitted, FMC shall submit a Health and Safety Plan for all RD activities; v) within 45 days after receipt of the EPA approval of the 30% of the RD, FMC shall submit an intermediate or 60% RD for EPA approval; vi) within 45 days after receipt of EPA approval of the 60% RD, FMC shall submit the final RD to the EPA; vii) at the time the RA work plan is submitted, defendant shall submit a Health and Safety Plan for all field activities required by the RA; viii) FMC shall submit a quality assurance project plan in which the defendant uses quality assurance, quality control and chain of custody procedures for sample collection and analysis; ix) FMC shall submit written monthly progress reports to the EPA describing all activities pursuant to this decree undertaken during the preceding month and planned for the next month; x) in addition to written monthly reports, EPA may require periodic, progress briefings by FMC; and, xi) within 45 days after EPA approval

of the final RD, defendant shall submit a work plan for performance of the RA at the site; xii) Bechtel Environmental, Inc. will act as supervising contractor to direct and supervise work performed on the site; xiii) EPA shall review the RA program at the Site at least every 5 years after initiation of action to ensure that human health and the environment are protected; xiv) until EPA certifies that the RA has been completed, FMC shall conduct studies, investigations, or other activities as EPA deems necessary to conduct program reviews; xv) the final quality assurance project plan shall designate a quality assurance official to supervise all quality assurance activities during both the design and action phases.

33. FMC shall submit a Quality Assurance project plan (AQAPP) which shall comply with EPA's Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (QAM-005/80), Data Quality Objective Guidance (EPA/540/G87/003). FMC shall ensure that its laboratories analyze all samples submitted by EPA for quality in accordance with QAPP and allow EPA permitted access. At the request of EPA, FMC shall permit EPA to split or take duplicates of any samples collected by FMC in the course of implementing the decree. EPA shall have access at all reasonable times to the Site, and any property to which access is required, for conducting activities authorized by or related to implementation of this Decree, including without limitation: a) monitoring the work; b) verifying any data or information submitted to EPA; c) obtaining samples; d) assessing the need for, planning or implementing additional response actions at or near the Site; and (e) inspecting and copying records, contracts or other documents related to or necessary to assess compliance with the Decree.

34. Kodak must develop a training program to maximize compliance. The training must include hazardous waste management procedures relevant to specific positions. Record of the training must be kept until facility closure.

35. FMC shall take all appropriate action to prevent, abate or minimize release of hazardous substance, pollutant, contaminant or endangerment which threatens a release or presents an imminent and substantial endangerment to the public health or welfare or the environment in accordance with all applicable provisions of the Health and Safety plan and the Contingency Plan submitted as part of the final RD.

36. Dexter shall retain at least one legible copy of all records, documents, reports or plans required by its NPDES permit or which relate to its performance under its CWA compliance program, as noted in the decree, and any underlying research or data, including computer tapes, which Dexter relied on in preparing such records, documents, reports or plans for a period of five years from the date of such a record, document, report, plan or underlying research or data, or until termination of the decree, whichever is later. In addition to any state or federal requirements relating to record retention, Dexter shall retain at least one copy of all records, documents, reports, or plans which relate to its performance under its RCRA compliance program, as noted in the decree, and any underlying research or data, including computer tapes, which Dexter relied on in preparing such records, documents, reports or plans, for a period of ten years from the date of such record, document, report, plan or underlying research and data, or until termination of the decree, whichever is later.

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37. FMC shall preserve records for ten years after EPA certification of completion of work.
38. Cooperate with EPA by providing information to the public regarding the work to be performed in accordance with the decree; participate in the preparation of such information and in public meetings
39. In November 1998, the Henry County Public Service Authority (HCPSA) entered into a plea agreement with the United States for violations of the CWA. The agreement imposed a \$100,000 fine, placed HCPSA on probation for three years, and required HCPSA to spend at least \$900,000 on community service projects. As a condition of probation, HCPSA agreed to update its environmental compliance program such that it would become mandatory for all employees to read the HCPSA compliance manual, a noncompliance reporting system for employees would be implemented, an environmental compliance manager (with specific responsibilities and authority) would be hired, and an independent consultant would be retained.
40. In April 2003, Koppers Industries, Inc. (AKoppers®) and U.S. EPA entered into a consent decree in connection with Koppers' alleged violations of the CWA and RCRA. In addition to requiring Koppers to pay a civil penalty of \$2,900,000, the decree requires Koppers to implement a corporate-wide EMS, conduct both compliance audits and EMS audits.
41. In April 2002, MAC's Radiator and Repair pleaded guilty to criminal violation of CERCLA. MAC's agreed to pay a fine of \$90,000, with a credit of up to \$50,000 for expenses incurred for environmental response costs arising from its releases of hazardous waste. MAC's was placed on probation for one year, a condition of which was to establish and maintain an environmental compliance program requiring the creation of a compliance manual, certain organizational changes, an employee training program, and the retention of an independent auditor.
42. In addition to an EMS, the consent decree requires a civil penalty of \$150,000, RCRA compliance, and three SEPs. MIT is also incorporating pollution prevention plans, protocols for designing Agreen® buildings, and other provisions. These projects are voluntary and not enforceable, but they were taken into account in reaching the settlement.
43. Based on an initial review and evaluation of current operations, Chemtech shall prepare a written Comprehensive EMS in compliance with the RDP program for each of the Facilities.
44. The plea agreement refers to an environmental compliance plan.
45. The plea agreement refers to an environmental compliance program.

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46. Rather than describe the details of the EMS, the decree requires that the EMS will address the twelve elements that were laid out in the original article and in EPA's Compliance-Focused Environment Management System Enforcement Agreement Guidance.@
47. All EMS auditors, however, shall be certified to conduct ISO 14001 registration audits.
48. A third party consultant must conduct an environmental review in accordance with ISO 14011 guidelines.
49. Managers are to track safety health and environmental performance as a part of individual performance reviews.
50. The plea agreement requires that MAC's Radiator and Repair hire an independent environmental auditor to perform a single audit on the six month anniversary of the plea.
51. The consent decree requires Koppers to engage separate third party auditors to audit its EMS and facility compliance. The compliance auditors must meet ISO 14012 requirements, but do not have to be certified.
52. An independent auditor must consult the EMS plan itself, but auditing is not a requirement of the EMS.
53. While the agreement does not require HCPSA to obtain approval of their program, they must submit evidence of the program to Probation Office and the United States.
54. The U.S. shall approve the qualifications of the designated Health, Safety and Environment employee at each Lancaster facility. EPA shall approve auditors and the scope of audits.
55. MAC's Radiator must provide a draft of the environmental compliance manual to EPA for its review and comments. The final draft, incorporating EPA comments, will be submitted to U.S. Attorney's Office and the probation office.
56. A detailed description of facility specific strategy must be outlined in the work plan.
57. The plea agreement requires the inclusion of language in the environmental compliance manual about the importance of accuracy and honesty in reporting spills, releases, emissions, or other pollutant discharges to regulatory agencies. The manual will also detail how employees can report noncompliance without fear of retribution.
58. The development of a compliance manual is required.

59. One year after the initial implementation of the EMS, Chemtech shall provide to EPA and MDNR in writing: i) the name, affiliation and address of an independent third party auditor selected to perform a Comprehensive EMS Review and Evaluation pursuant to the RDP program at each Facility; ii) how the selected third party consultant satisfied the independence, proficiency and accreditation set forth in the RDP; and, iii) a schedule for conducting the review. Within 90 days after submitting the aforesaid information, the independent third party auditor shall complete the Comprehensive EMS Review and Evaluation and submit a Comprehensive EMS Review and Evaluation Report to Chemtech, EPA, MDNR, and the Probation Office. This report shall include: the results of the auditor's review and evaluation of each Facility EMS relating to Chemtech and any contractor operations, and the auditor's recommendations for improvements in the Comprehensive EMS.

60. HCI Chemtech responsibilities include: i) within 60 days of the effective date of the compliance agreement, HCI Chemtech shall submit a summary of all work in Chemtech's possession, or knowledge pertaining to environmental investigations at the facilities; ii) upon request of the EPA or Missouri Department of Natural Resources (MDNR), Chemtech shall provide a copy of any report, analytical report or other document cited in the summary; iii) if additional actions are necessary, within 60 days from this determination, Chemtech shall prepare a work plan to carry out the additional activities at each of the facilities; iv) within 30 days of the effective date of the compliance agreement, Chemtech shall provide to EPA and MDNR, in writing, the name, affiliation, and address to the individual(s) selected by Chemtech to conduct the initial EMS Review and Evaluation and how such individual satisfies proficiency criteria; v) within 30 days of receipt of comments from EPA and MDNR on manual, defendant shall submit to EPA and MDNR a supplement to the manual or written response addressing comments; vi) Chemtech shall submit monthly status reports regarding implementation to EPA and MDNR; vii) one year after initial implementation of the EMS, defendant shall provide EPA and MDNR in writing; (a) the name, affiliation and address of an independent third party auditor to perform a Comprehensive EMS Review and Evaluation; (b) how the selected third party consultant satisfies the independence proficiency and accreditation; (c) a schedule for conducting the review; (d) within 90 days after submitting the aforesaid information, the independent third party auditor shall complete the Comprehensive EMS Review and Evaluation and submit a Comprehensive EMS Review and Evaluation report to defendant, EPA, MDNR and the Probation Office; (e) Chemtech will report all spills and accidents involving a hazardous substance to EPA and MDNR during probation period. For spillage less than required under local, state or federal requirements, the information will be included in monthly reports; (f) based on the Initial Review and Evaluation results and other information, defendant shall prepare a written Comprehensive EMS; (g) within 270 days of the effective date of the compliance agreement, defendant shall complete the preparation of an EMS manual; (h) Defendant shall submit the manual to the third party auditor set forth in the RDP process for review and comment within 30 days of its completion. Within 10 days after approval by the auditor, the manual shall be submitted to EPA and MDNR for comment and approval.

61. Lancaster is required to provide a direct line of communication between Lancaster's Health, Safety, and Environment employees and its highest level of management present in the U.S.

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62. Chemtech must adopt Corporate and Compliance Monitoring programs in conjunction with the Missouri Department of Natural Resources (MDNR) and the U.S. EPA. If after one year from the effective date of the compliance agreement, EPA and MDNR determine that defendant is not making a substantial effort to comply with agreement, EPA and MDNR may seek a Court order for remote site monitoring. Defendant shall, for all soil, wastewater and groundwater samples which are collected pursuant to the agreement, collect duplicate samples for EPA and MDNR. Employees, agents, and contractors of EPA and MDNR shall have site access to inspect and verify compliance with the provisions of the agreement. Access shall include, but not limited to, the following: i) inspecting and copying records, files, photographs, operating loss, contracts, and other documents relating to the agreement; ii) reviewing the status of activities being conducted pursuant to the agreement; iii) collecting samples or conducting tests as EPA determines necessary or desirable to monitor compliance with the terms of the agreement or to protect human health, welfare, or the environment; iv) using sound, optical or other types of recording equipment to record activities which have been or are being conducted pursuant to the agreement; v) verifying data and other information submitted by defendant pursuant to the agreement.
63. The plea agreement only describes reporting procedures.
64. Health and Safety Plan/Contingency Plan shall address all training required for defendant=s employees, visitors or contractors.
65. The decree describes, in detail, the two phase training and record keeping program implementation necessary for RCRA compliance. This is separate from the EMS training requirement, which is only briefly outlined.
66. *See endnote 8.*
67. Mac's Radiatio5 shall maintain an accurate inventory of all products and wastes.
68. The plea agreement requires MAC=s Radiator to hire an independent environmental auditor to perform a single audit on the six month anniversary of the agreement.
69. HCPSA will spend at least \$900,000 on approved community service projects in connection with their operations in and around the Smith River.
70. Koppers= Safety, Health & Environmental Policy includes a commitment to communicating potential risks both internally and externally. Also, pollution prevention opportunities, neighbor/stakeholder concerns and customer concerns are factors that will be used to determine the significance of a hazard.

71. Morton International sends its low-chloride wastewater to a treatment plant which then releases the effluent into Manistee Lake. Morton allegedly discharged pollutants in excess of its NPDES discharge permit. The decree includes a \$75,500 civil penalty, two SEPs, and additional projects set forth in the Plan of Action Progress Report.

72. The U.S. alleged that Amtrak violated its NPDES permits, discharged storm water without a permit, violated the Storm Water Multi-Sector General Permit for Industrial Activities, failed to prepare, review, and amend its Spill Prevention Control and Countermeasure Plans, violated requirements imposed by the Narragansett Bay Commission's pretreatment program, and discharged oil into Fort Point Channel. The resulting consent decree requires Amtrak to pay a civil penalty of \$500,000 and complete two SEPs: a culvert project and a transformer retrofill project to cost \$900,000. Amtrak must also conduct an internal compliance audit and continue to implement its recently revised EMS.

73. In March 2002, a consent decree between the U.S., the State of New Mexico, the State of Montana and defendants Navajo and Montana Refining was entered by the U.S. District Court for the District of New Mexico in connection with the defendants' alleged violations of the CAA, the New Mexico Air Quality Control Act, and the Montana Clean Air Act. Under the decree, the defendants agreed to complete numerous affirmative relief emission reduction projects, pay civil penalties totaling \$400,000. The decree also requires Navajo to engage an independent consultant who will conduct audits of its current EMS, make recommendations for improvement and specify a schedule for implementation of those improvements. On an annual basis during implementation and after the implementation is complete, the independent consultant will evaluate the implementation process and continue to make recommendations for improvement, which Navajo is also required to implement.

74. Nucor owns 14 steel mills and fabrication plants in various states and allegedly violated a broad range of environmental regulations. The decree gives a detailed account of how Nucor is to come into compliance with each of the violated statutes. Nucor must also spend at least \$4 million in SEP completion and pay a \$9 million civil penalty. As with the Amtrak and MIT decrees, the decree requires an EMS that includes the recommended elements.

75. In June 2001, Rehrig International Inc. (Rehrig) pleaded guilty to charges of CWA violations. Rehrig was sentenced to a fine of \$200,000 and probation for eighteen months. The plea agreement also requires Rehrig to devote 400 employee hours to community service projects, to donate \$10,000 to the James River Advisory Counsel, to spend no less than \$290,000 on water reuse programs and wastewater plan upgrades, and to develop and implement an environmental compliance program and an EMS. The compliance program was required to consist of, at a minimum: an environmental compliance manual (to be approved by the probation office) covering relevant regulations, management procedures, agency notification requirements; a system through which employees can report noncompliance without fear of retribution; a designated employee whose responsibility it is to manage Rehrig's EMS. The plea agreement also required Rehrig to have an independent environmental consultant conduct a one-time environmental audit of its facility.

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76. Amtrak had updated its EMS as recently as February 2001. The existing EMS creates a corporate environmental policy, specifically assigns implementation responsibility, includes accountability within the corporation, enhances compliance resources, develops an environmental information system, requires environmental audits, describes a training program, implements a corporate goals program, and evaluates emergency preparedness and response. The EMS looks to assessments, prevention, and control, and also develops environmental manuals, standards, and a metrics system. Even though many of the requirements are already included in this EMS, the consent decree requires the review and implementation of this EMS in light of specific elements. These elements are exactly those in this chart, rows AManagement Policies and Procedures@through APublic Involvement/Community Outreach.@
77. The EMS enhancement requirements only apply to Navajo Refining Co.
78. The third party consultant must satisfy the independency and proficiency criteria; the review must be conducted in accordance with ISO 14010.
79. The requirement includes providing a schedule for conducting the review. The consultant must review and evaluate the systems, policies, and procedures proposed in the EMS manual.
80. Amtrak will use, however, an enhanced corporate auditing procedure.
81. The New Mexico Environment Department must approve of the independent consultant who will conduct a baseline assessment of the EMS already in place, make specific recommendations for improvement and specify a schedule for implementation.
82. Rehrig's environmental compliance manual must discuss dealings with regulatory inspectors and personnel and the importance of accuracy, timeliness and honesty in reporting to regulatory agencies.
83. Rehrig must develop an environmental compliance manual for its specific facility.
84. The independent consultant's evaluation will include review of environmental compliance officer programs.
85. Morton must Aimprove training programs.@
86. Morton must conduct numerous investigations, including investigations into optimum pH set point for reducing toxicity and into alternative materials.

87. The plea agreement requires Rehrig to hire an independent environmental consultant to conduct a one time environmental audit of its Chesterfield County facility.

88. Although the decree does not specifically address the issue of public involvement or community outreach, it does state that the independent consultant should evaluate in-plant and community emergency plans.

89. In July 2003, Ta Tong Marine Co. Ltd. entered into a plea agreement whereby it pleaded guilty to charges that it falsified documents and failed to maintain an Oil Record Book, in violation of the Marpol treaty. Ta Tong Marine agreed to pay fines totaling \$750,000, was placed on organizational probation for a four year period. The terms of probation require Ta Tong Marine to develop, adopt, implement, and fund a comprehensive EMS, designate a corporate compliance manager, hire an independent environmental consultant, and create an EMS manual. An attachment to the plea agreement details the topics the EMS manual should address (closely modeled on NEIC's ACompliance-Focused Environmental Management System - Enforcement Agreement Guidance®) including: environmental policy; organization, personnel, and oversight of EMS; accountability and responsibility; environmental requirements; assessment, prevention, and control; environmental incident and noncompliance investigations; environmental training, awareness, and competence; environmental planning and organizational decision-making; maintenance of records and documentation; pollution prevention program; and continuing program evaluation and improvement.

90. TRW Vehicle Safety Systems, a manufacturer of airbags, allegedly delivered sodium azide containing wastes to a management facility in violation of RCRA and Arizona law. The consent decree includes a civil penalty of \$2,835,000 and several SEPs.

91. In June 2003, Tyson Foods Inc. (ATyson) entered into a plea agreement with the U.S. whereby Tyson pleaded guilty to violations of the CWA. The agreement requires Tyson to pay a fine of \$5,500,000 to the U.S., \$1,000,000 to the Pettis County School Fund, and \$1,000,000 to the Missouri Natural Resources Protection Fund, and to be placed on probation for three years. The agreement also requires Tyson to perform a Amulti-media third party environmental audit@of its Sedalia Complex, and institute an enhanced EMS at its Sedalia Complex. The enhanced EMS must include procedures for identification of requirements under environmental laws, compliance with those requirements, training, communications, record and document control, and management monitoring and review. The enhanced environmental management system shall be subject to EPA approval.

92. All audits will be conducted in accordance with the principles set forth in ISO 9000 and ISO 14011, using 14012 as supplemental guidance.

93. According to the guidelines set forth for the development of Ta Tong's compliance manual, the manual must detail how compliance with

environmental policies is a positive factor and failure to comply is a negative factor in all employee performance evaluations.

94. The plea agreement requires Ta Tong to schedule a third party audit focused on its EMS to insure its continuing suitability, adequacy, and effectiveness. Ta Tong is also required to schedule compliance audits by the EMS consultant.

95. Primary responsibility for much of the oversight falls on the Arizona Department of Environmental Quality, but the EPA may exercise the same rights.

96. Various work plans were to be established to achieve compliance of explicit standards at a specific facility.

97. A written procedure manual must specifically identify the employees by position title or description that is required to conduct inspections. A specifically identified supervisor or manager must verify the inspection. Any violation must be reported to the environmental manager and other appropriate personnel.

98. Any events that may adversely affect human health or the environment must be reported and appropriate actions must be taken to prevent or abate emergency situations or threats.

99. In May 2003, Unix Line Pte. Ltd. and Springs Navigation entered into an agreement whereby both entities pleaded guilty to charges that they falsified documents and discharged oil into navigable waters in violation of the CWA. Both parties agreed to pay fines totaling \$750,000 and were placed on probation for a period of four years with the condition that they would develop, adopt, implement, and fund an EMS. The EMS terms require that each defendant designate a corporate compliance manager, hire an independent environmental consultant, and create an EMS manual. The manual must address topics recommended by the NEIC **A**Compliance-Focused Environmental Management System - Enforcement Agreement Guidance@including: environmental policy; organization, personnel, and oversight of EMS; accountability and responsibility; environmental requirements; assessment, prevention, and control; environmental incident and noncompliance investigations; environmental training, awareness, and competence; environmental planning and organizational decision-making; maintenance of records and documentation; pollution prevention program; and continuing program evaluation and improvement.

100. The U.S. alleged that Wal-Mart and numerous general contractors violated the CWA, including several construction storm water general permits. This consent decree requires that they pay \$1 million for past violations and implement a storm water management plan for future compliance.

101. The consent decree required Willamette to pay civil penalties of \$11 million, implement a compliance program, and follow regimented

record keeping and reporting. The EMS was seen as only a facet of the compliance program. Pollution control technology, permits, parametric monitoring, environmental audits, and four SEPs were also presented as part of a larger compliance program rather than separate requirements.

102. Unlike other recent consent decrees, Willamette's EMS need not be reviewed in light of stated elements. Rather, Willamette need only prepare any needed enhancements, with the purpose of compliance with relevant statutes, regulations, and permits. The specific modifications were left to Willamette, subject to EPA approval.

103. All audits will be conducted in accordance with the principles set forth in ISO 9000 and ISO 14011, using 14012 as supplemental guidance.

104. According to the guidelines set forth for the development of Unix Line Pte.'s compliance manual, the manual must detail how compliance with environmental policies is a positive factor and failure to comply is a negative factor in all employee performance evaluations.

105. Wal-Mart was to submit samples and analysis at new construction sites for a one year period.

106. The decree requires parametric monitoring and reporting, but it does not consider it a part of the EMS.

107. The plea agreement requires Unix Line Pte. to schedule a third party audit focused on its EMS to insure its continuing suitability, adequacy, an effectiveness. Unix Line Pte. is also required to schedule compliance audits by the EMS consultant.

108. Wal-Mart's inspections were to be audited by a third-party consultant for one year.

109. The plan provides for regular site inspections, reports, and corrections.

110. But, the decree required defendant to complete development of its EMS manual.

111. Wal-Mart must designate a storm water coordinator and must require all its general contractors to do likewise.

112. USX perform an analysis of the current EMS at Gary Works. The analysis shall include at a minimum: review and analysis of internal controls, standards, policies, operational unit organization, and personnel responsibilities; identification of current and past environmental management practices and/or organization that may affect the evaluation of implementation of defendant's more comprehensive EMS; identification of all company and on-site contractor activities that are regulated under federal and state environmental statutes and regulations;

evaluation of procedures and strategies; Within 60 days of the effective date of the decree, USX shall complete a review and evaluation of the current EMS based on a number of substantive criteria. USX shall develop a comprehensive EMS for Gary Works based on analysis results and ten key elements. Within 120 days of the effective date of this decree, USX shall document the proposed system and any implementation schedule in EMS Manual and then submit the manual to EPA for review and comment. Defendant shall submit status reports to EPA regarding EMS implementation on a quarterly basis, beginning no later than 30 days from receipt of EPA's comments on the manual. The 10 elements shall include: i) management policies and procedures; ii) organization personnel and oversight of EMS; iii) accountability and responsibility; iv) environmental requirements; v) assessment, prevention, and control; vi) environmental incident and non-compliance investigations; vii) environmental education and training; viii) annual planning for environmental matters; ix) maintenance of records and documentation; and, x) continuing program evaluation.

113. The general contractor must pay Wal-Mart \$5000 if it fails to accurately certify that it has discussed the environmental requirements with sub-contractors, all necessary controls are in place, and a permit is correctly obtained and displayed. The Wal-Mart storm water coordinator is responsible for coordinating oversight of storm water compliance.®

114. The Vice President for the Building Materials Group must certify that the reported information is correct. Although this places the individual responsible, the penalty for a violation goes to the company as a whole.

115. Wal-Mart must create a videotape on storm water control best management practices to be distributed to all general contractors on Wal-Mart owned sites. Wal-Mart must also review a checklist of issues and documents with the general contractors and conduct an annual seminar on storm water permit requirements.

116. The EMS Manual shall identify specific education and training programs for plant personnel, as well as documenting training provided.

117. USX shall implement a training program pursuant to the environmental trust fund. See stipulated penalties.

118. A Wal-Mart designee must meet with the EPA at least once every calendar quarter to discuss the program and its effects on compliance.

119. USX was ordered to supplement the Gary Works EMS to include an Environmental Management Practice (EMP) for the prioritization of risk for the remaining polychlorinated biphenyl (PCB) containing transformer located at Gary Works. The evaluation of risk was to consider, at a minimum, risk to the environment, particularly risk of a release into the Grand Calumet River or Lake Michigan, as well as risks to personnel, and equipment. USX was further ordered to submit the EMP in writing to U.S. EPA within sixty (60) days from the date of the consent decree.

This EMP was to contain a schedule for removing selected transformers containing a total of not less than 45,000 pounds of PBS. Such PC transformers, if replaced, should be replaced by non-PCB containing transformers. The completion of this SEP was not to extend beyond September 30, 2002.

120. Within thirty (30) days of the date on which the SEP is completed, but not later than 30 days after the replacement date for the last transformer, USX must provide the U.S. EPA a SEP Report containing the following: transformer identification, description of physical location of transformer, total contents of dielectric fluid, PC concentration of dielectric fluid, total pounds of PCBs removed, type of fluid used in replacement transformer, if any, date transformer removed, copies of manifests for PCB disposal and an accounting, certified by the appropriate officer of Settling Defendant of all costs incurred for the purpose of implementing the SEP, including the EMP referenced above. Such accounting must include copies of the receipts, purchase orders, or other verification of the expenditure for the implementation of the SEP.

121. The U.S. EPA must implement the SEP described in this Consent Decree, not the broader EMS.

122. This settlement comes as a result of a compliance evaluation inspection performed on April 4 and 5, 2000, at which the EPA determined that Cambridge Plating was violating numerous requirements. These included: illegal storage of hazardous waste, uncontrolled emissions, failure to inspect and correctly label storage tanks, lack of records regarding employee training, and failure to minimize the possibility of groundwater contamination by not maintaining the basement floor as an adequate barrier.

123. Firewall Forward operated an aircraft parts cleaning process for which it generated small amounts of hazardous waste and stored oil. Alleged RCRA violations included lack of worker training and an emergency coordinator as well as notification and registration of its storage tanks, performance of weekly tank gauging, maintenance of release detection records, and demonstration of financial responsibility. Because Firewall Forward voluntarily disclosed, the terms of the settlement required only \$2,609.38 in civil penalties and completion of one SEP. This SEP is the implementation of an EMS.

124. In November 1998, the University of Missouri - Rolla Campus (AUM@), signed an administrative consent order in connection with allegations of RCRA violations. The order requires UM to pay a civil penalty of \$176,119. The penalty was reduced to \$20,000 in recognition of UM's timely development and implementation of an environmental management system (considered a supplemental environmental project) with the purpose of receiving ISO 14001 certification. The estimated total cost of the EMS was \$867,000. The EMS was to be implemented in five phases, addressing environmental policy planning, implementation and operation, auditing a corrective action procedures, management review, and the ISO 14001 certification audit.

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125. The consent agreement notes that it is to be a multi-media EMS, so as not to result in a mere transfer of problems from one media to another. This EMS is, at a minimum, to include the twelve elements from EPA guidance documents and the original article.
126. The agreement approaches the EMS as a SEP rather than as an independent concept. Accordingly, a total of \$13,160 was budgeted for the EMS.
127. The EMS is required as part of a SEP.
128. The EMS is to follow ISO 14001 specifications.
129. While certification is not required, the agreement does require that the EMS shall, along with other documents, use ISO 14001 and 14004 standards as guidance.
130. In conjunction with Safety-Kleen's proposal for a consultant auditor who will conduct an environmental compliance audit of the facility, Safety-Keen shall provide EPA with the auditor's qualifications, including satisfaction of the proficiency criteria described in ISO 14012 A Guidelines for Environmental Auditing - Qualification Criteria for Environmental Auditors.@
131. The tracking of key environmental performance metrics, along with several other aspects of the EMS, are not necessarily required but are stated as anticipated benefits.
132. The City shall set numerical targets for energy consumption and waste generation reductions, measure its progress against the targets and prepare a report which it shall make publicly available. The City is responsible to make a good faith effort to reduce its energy consumption and waste generation under its EMS, but is not liable for achieving specific results.
133. The results of this project will be advertised and promoted by and through FF's customers, stakeholders and other businesses so they will become aware of the environmental and business benefits of an EMS approach for small business.
134. The Independent Third-Party Auditor must meet the qualification requirements of ISO 19011 and have the expertise and competence in the regulatory programs under federal and state environmental laws. The Auditor must be capable of exercising independent judgment and must disclose any other contractual relationships with the City.
135. University of Missouri must undergo an ISO 14001 certification audit, but the decree does not specify who will conduct the audit.

136. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

137. The EMS is specified for two facilities, the Quittances Water Treatment Facility, and the New Bedford Department of Public Infrastructure office and garage.

138. The policy, upon which the EMS is based, must clearly communicate management commitment to achieving compliance with applicable federal, state, and local environmental statutes, regulations, enforceable agreements, and permits and continuous improvement in environmental performance. The policy should also state management's intent to provide adequate personnel and other resources for the EMS.

139. The decree addresses the University of Missouri's Rolla Campus and, thus, the policy will address the environmental concerns and legal requirements unique to that site.

140. To fulfill this element, the EMS must include, Aan organization chart and position descriptions covering all personnel having environmental program and regulatory compliance responsibilities, including the company's General Manager and the company's environmental Compliance Director.@ It must also include procedures for communication of information and how Cambridge Plating will receive and address concerns. In addition, the EMS must list other companies (such as tenants) for which Cambridge Plating has assumed responsibility.

141. The EMS must include implementation and operational facets, an ongoing checking and corrective action function, and a management review process.

142. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused EMS - Enforcement Agreement Guidance.

143. The EMS must describe, organizationally, how the EMS is implemented and maintained; include organization charts that identify units, line management, and other individuals having environmental performance and regulatory compliance responsibilities; identify and define duties, roles, responsibilities, and authorities of key environmental program personnel in implementing and sustaining the EMS (e.g., could include position descriptions and performance standards for all environmental department personnel, and excerpts from others having specific environmental programs and regulatory compliance responsibilities); and include ongoing means of communicating environmental issues and information to all organization personnel, on-site service providers, and contractors, and for receiving and addressing their concerns.

144. Prior to undergoing an ISO 14001 certification audit of its EMS, University of Missouri must Adefine the structure and responsibilities of the

EMS program, and develop a process for reporting performance of the EMS to management, and develop procedures for management review of the EMS.

145. The EMS must list the person responsible for each compliance measure. Furthermore, the EMS must include incentives and consequences for manager and employee performance.

146. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

147. The EMS should specify accountability and responsibilities of organization's management, on-site service providers, and contractors for environmental protection practices, assuring compliance, required reporting to regulatory agencies, and corrective actions implemented in their area(s) of responsibility; describe incentive programs for managers and employees to perform in accordance with compliance policies, standards and procedures; and describe potential consequences for departure from specified operating procedures, including liability for civil/ administrative penalties imposed as a result of noncompliance.

148. Cambridge Plating must identify and describe all applicable federal, state, and local environmental requirements.

149. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

150. The EMS must describe the process for identifying, interpreting , and effectively communicating environmental requirements to affected organization personnel, on-site service providers, and contractors, and ensure that facility activities conform to those requirements. It must also specify procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporate those changes into the EMS.

151. The EMS must describe the process for identifying, interpreting , and effectively communicating environmental requirements to affected organization personnel, on-site service providers, and contractors, and ensure that facility activities conform to those requirements. It must also specify procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporate those changes into the EMS.

152. The EMS must describe the process for identifying, interpreting , and effectively communicating environmental requirements to affected organization personnel, on-site service providers, and contractors, and ensure that facility activities conform to those requirements. It must also

specify procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporate those changes into the EMS.

153. The agreement requires University of Missouri to develop procedures for identifying and correcting nonconformance.

154. The agreement requires University of Missouri to develop procedures to establish environmental objectives and targets.

155. This element must include an inventory of sources, a compliance strategy; identification of all monitoring and standard operating procedures; and plans for prevention due to deterioration, malfunction, or operator error.

156. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

157. The EMS must identify an ongoing process for assessing operations, describe monitoring and measurements, describe the process for identifying operations where documented standard operating practices (SOPs) are needed, and describe a system for conducting and documenting routine, objective, self-inspections.

158. The EMS must include a system for tracking and verifying corrective and preventive actions.

159. EMS Manual shall provide for at least an annual evaluation of the EMS, including incorporating the results of the assessment into program improvements and updating the manual.

160. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

161. The EMS must describe standard procedures for internal and external reporting, establish procedures for investigation and correction of potential violations, describe a system for tracking potential violations. All these procedures should specify how they will be self-tested.

162. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

163. The EMS must identify specific education and training required for organization personnel, ensure that employees are aware of the

environmental policies and procedures and that employees are competent in terms of their education and experience.

164. In particular, the EMS must include procedures for assessing environmental requirements prior to any changes in operations.

165. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

166. The EMS must describe how environmental planning will be integrated into organizational decision-making. It requires establishing written targets, objectives, and action plans.

167. The EMS must include the location of and person responsible for the records.

168. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

169. The EMS must identify the types of records developed in support of the EMS and requires specific data management systems for any internal waste tracking, environmental data, and hazardous waste determinations.

170. The prevention measures shall include reducing water discharges and air emissions, reducing, reusing, and recycling waste, reducing noise and odor, and reducing tonics use.

171. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

172. The EMS must describe an internal program for preventing, reducing, recycling, reusing, and minimizing waste and emissions, including procedures to encourage material substitutions. Also, mechanisms for identifying candidate material to be addressed by program and tracking progress must be included.

173. Management must conduct annual evaluations; an independent auditor must conduct annual audits. Regular internal meetings are required to prevent problems between audits. This and other requirements not already required for compliance are in effect until December 2006.

174. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most

recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

175. The EMS must describe a program for periodic (at least annual) evaluation of the EMS, and must describe a program for ongoing evaluation of facility compliance with environmental requirements, and should specify periodic compliance audits by an independent auditor. Audit results should be reported to upper management.

176. An anticipated benefit of the EMS is that the results will be advertised and promoted by and through Firewall Forward's customers, stakeholders, and other businesses so they will become aware of the environmental and business benefits of an EMS approach for small business.

177. The City must develop a Comprehensive EMS prepared in accordance with, and including, the twelve key elements presented in the most recent edition of EPA's Compliance-Focused Environmental Management System - Enforcement Agreement Guidance.

178. The EMS must describe a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

179. Reliance shall develop and implement a comprehensive ISO 14001 environmental management system and become ISO 14001 certified. Defendant shall be solely responsible for the proper design and implementation of the ISO 14001 environmental management system Pilot SEP. Defendant shall write a corporate policy statement regarding compliance with all environmental regulations. This will be included as a permanent part of the employee policy handbook distributed to all employees. A policy communicated to all employees assuring them that appropriate actions will be taken by management in response to valid concerns.

180. Executive level environmental compliance officer regarding potential violations of environmental regulations

181. The appointment of a company-wide environmental compliance officer at the executive level charged with the responsibility for assuring environmental compliance.

182. Defendant shall create an effective organizational structure and assign responsibility to its employees.

183. Regular company-wide periodic environmental compliance audits conducted by qualified employees

184. Reliance shall develop an environmental management program; identify environmental aspects, legal and other applicable requirements; develop an environmental management system audit program; and, institute management review of the EMS.

185. The establishment of a direct line of communication to the executive level compliance officer allowing any employee to contact the officer directly about possible environmental violations or with other questions concerning company environmental compliance

186. Reliance shall develop mechanisms for both internal and external communications.

187. Institution of company-wide policies to discipline employees for non-compliance with environmental regulations, and to recognize employees for actions taken to improve defendant's environmental compliance and performance. The initiation of periodic unannounced inspections by the compliance officer or his designee conducted for the purpose of enforcing company policies regarding environmental compliance.

188. Reliance shall develop a monitoring and measuring program; institute procedures for operational control; and, implement a non-conformance and corrective/preventive action plan.

189. The establishment of a company-wide formal environmental compliance training program with annual updated environmental compliance training. The program will include: environmental compliance awareness training and job specific environmental compliance training.

190. Reliance shall develop an emergency preparedness and response program.

191. Reliance shall prepare environmental management system documentation; initiate procedures for document control; and, develop and maintain its operating records.

192. Reliance shall solicit the input of a community-based stakeholder workgroup consisting of local industries; representatives from local or regional environmental groups; community leaders; concerned citizens and neighbors; local or state environmental agencies; and, higher education institutions. Defendant shall organize the workgroup and hold a meeting at least once during the ISO 14000 process in order to discuss and critique the ISO implementation process. Workgroup shall have sufficient opportunity to tour defendant's facility and make recommendations on defendant's environmental management system. As necessary, the workgroup shall share information with other industries and trade associations. Defendant shall share information related to the implementation of its ISO 140001 Pilot SEP. Defendant is not required but is strongly encouraged to share information related to local, state, or federal enforcement actions.

193. General Motors (AGM®) Wilmington shall obtain ISO 14001 certification. GM Wilmington agrees to review and consider the use of EPA's Data Protocols for Environmental Management Systems, but is under no obligation to incorporate these protocols as part of their ISO 14001 program.

194. Donsco shall submit a plan approval application to modify the Air Permit; Individual Storm Water Permit Application for its discharge of storm water from the facility; storm water management plan providing a schedule for the removal storm water drains adjacent to major process areas where spills can readily occur; and, a revised Preparedness, Prevention, and Contingency Plan which shall incorporate tank management procedures and provisions for decontaminating equipment used in the tank containment area and tank, and tank management

195. GM Wilmington shall issue a plant-specific environmental statement within twelve months after the effective date of the decree and annually thereafter for two years. This statement shall be in written form and provide an overview of environmental performance and regulatory compliance for the Wilmington Assembly Plant. This statement shall include on-site releases to the environment pursuant to SARA Title III, date reported in accordance with the Pollution Prevention Act, pollution prevention initiatives, and any violations or items of non-compliance at the GM Wilmington Plant that are cited by EPA, DNREC, or any other violations which are required to be reported by law, as well as measures undertaken by the plant to correct them. The statement shall also include the name, work address and telephone number of an individual at the Plant who will serve as a point of contact to receive and respond to any questions about the statement or the environmental performance or regulatory compliance at the facility.

196. A statement committing to environmental compliance, pollution prevention and continued waste minimization

197. A schedule for management's review of the results of the EMS and procedure for making changes based on management's review in order to comply with the mandate of the corporate environmental policy.

198. Personnel shall receive and respond to questions regarding environmental or regulatory compliance at the facility.

199. As noted in the Consent Order, the term EMS means that part of Hussey's overall management responsible for maintaining the company's environmental policy, including the organizational structure and planning activities associated with developing and implementing the environmental policy.

200. Pursuant to Donsco's application to modify the Air Permit, Donsco shall complete the installation and startup of the New Furnace and the New Control System within twenty-four months of the date the Department completes its review and issues its final decision of application.

201. Hussey Copper shall enter into a contract with an environmental consultant to assist in developing an EMS plan for the facility.

202. On or before thirty days from the execution date of the Consent Order, Donsco shall submit a plan to address any Cupola, Cupola Cooling System, and Cupola Control System failures which may occur prior to the installation and startup of the New Furnace and New Control System.

The plan shall include, but not be limited to: a description of the steps that will be taken to minimize emissions from the Cupola in the event of a failure; procedures for notification of the Department; development of an employee training and awareness plan; and, a comprehensive preventive maintenance plan.

203. Keystone shall identify potential emergencies and develop procedures for preventing and responding to said emergencies. Keystone shall describe how it will monitor and measure its EMS, and in the event that deficiencies are identified with the EMS, Keystone shall describe measures to be taken to correct such deficiencies.

204. Establishment of an Environmental Action Program which will include employee training.

205. An evaluation of the technical and economic feasibility of each pollution prevention opportunity; establishment and schedule of implementation of pollution prevention objectives and targets; and, establishment of an Environmental Action Program which shall include schedules to achieve pollution prevention objectives and targets.

206. As stipulated in the Consent Order, Donsco shall make a set payment to the Commonwealth of Pennsylvania Solid Waste Abatement Fund, the Commonwealth of Pennsylvania Clean Water Fund and the Commonwealth of Pennsylvania Clean Air Fund.

207. The plant-specific environmental statement shall be published in the Wilmington News Journal in the Sunday and subsequent Wednesday editions. The statement shall also be sent, concurrently with submission of the notice for publication via U.S. Mail, to the Department, state and local elected officials representing the electoral district within which the Plant is located, as well as any other individuals or entities in Delaware that have expressed interest in environmental issues associated with the Plant. GM Wilmington shall contribute funds towards a Whole Basin Management fund or other SEPs.

208. As stipulated in the Consent Order, Hussey shall make a set payment to the Commonwealth of Pennsylvania Solid Waste Abatement Fund and the Commonwealth of Pennsylvania Clean Water Fund.

209. Establish and maintain an EMS consistent with the Canadian Standards Association publication entitled **A**Environmental Management Systems - Specification with Guidance for Use (CAN/CSA-ISO 14001-98)@date September 1998.

210. Pursuant to decree, defendant shall pay stipulated amount to the Toronto and Region Conservation Authority for the aid of the environmental education and awareness of children residents in its area of jurisdiction, in particular: **A**The Yellow Fish Road,@a community outreach program that helps children protect community streams and educate their neighbors, and **A**Watershed on Wheels,@an environmental conservation education

program that travels into the community.
