



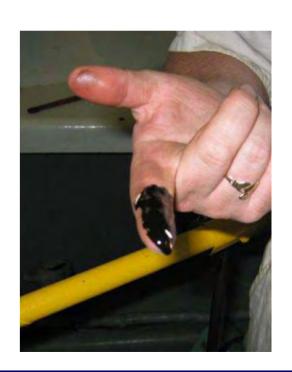
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History of US enforcement in US waters

- Since 1998, almost \$140m in criminal fines levied by US Courts against Shipping Companies found guilty of polluting US waters.
- Senior shipboard officers and high ranking shore side officials guilty of illegally polluting and/or concealing these activities have been incarcerated in US jails and subsequently deported.
- Additional restitution includes community service and probation with US Courts through supervised Environmental Compliance Programs (ECP) - lasting between 3 to 5 years.

Applicable environmental legislations

- MARPOL
- US Marine Environmental Protection Requirements
 - Ports and Safe Waterways Act (PWSA)
 - Act to Prevent Pollution from Ships (APPS)
 - Clean water Act (CWA)
 - Oil Pollution Act (OPA)
- International Environmental Legislation



US Department of Justice (DOJ) expectations

- Protect the environment
- Assure accurate ship records and verbal statements to Port Authorities
- Deter future criminal conduct
- Punish deliberate and intentional violations
- Create an even playing field where law abiding companies are

not disadvantaged



Standard ECP Plea Agreement with DOJ

- Corporate accountability
- Appointment of a Corporate Compliance Manager
- Environmental Compliance Program (ECP)
- Engineering equipment requirements
- Mandatory compliance audits



Proactive - Self-Assessment

Assessment of Environmental Management Systems

- Two-stage audit process
- Stage I: Understanding level of preparedness and adequacy.
- Stage II: Assessment and audit.
- Surveillance Audits : Post-audit process.

Proactive - EMS Standards

ISO 14001: 2004

- Develop your systems on the methodologies established in this standard
- Consider Certification through Worldwide accreditation body.

How to address compliance

- In order to have an effective Environmental Management Program, Shipping Companies must display -:
 - Top Level commitment and visible involvement.
 - Establish correct environmental procedures, policies & training.
 - Have an appropriate budget.
 - Employee Involvement

Commitment and communications

- Corporate commitment to environmental excellence.
- Establish clear environmental policies.
- Increase shore side accountability.
- Recognize waste streams and address minimization.
- Increased budget for Environmental Programs.
- Establish formal written policies and procedures.
- Conduct internal Audits (short and long term).

Commitment and communications

- Improved communication between shipboard and shore side management.
- Establish direct and anonymous lines of communication to Senior Management with regard to Environmental matters.
- Recognize employees who report violations.
- Zero tolerance for violators.



Equipment

- Upgrade to best available technology for OWS, OCM, MSD, INCINERATOR, etc.
- Install control devices on equipment (Tags)
- Operational testing of key equipment.
- Extensive Training.



Environmental Management System Manual

- Environmental Policy
- Organization, personnel and management
- Enforcement and regulatory requirements
- Vessel operation assessment, prevention and control
- Measurement of waste stream
- Environmental incidents, reporting and investigations
- Record maintenance system
- Environmental training, awareness and competence

Proactive : Environmental Training

- Conventional or customized environmental training courses
- Develop new environmental training courses
- Distant learning environmental courses
- Onboard training courses
- Established self-study environmental courses
- Fit for Purpose

ABS Consulting ECP Experience

- Conducted over 300 ECP audits
- ECP oversight from:
 - US Coast Guard (USCG)
 - US Department of Justice (DOJ)
 - US Probation Office (USPO)
 - Environmental Protection Agency (EPA)
 - US District Attorney for Florida, Washington, and California
- Environmental training and management systems consultancy services to shipping companies



