Common Violations For Typical EPA Regulations

Clean Air Act (CAA)

Through the enforcement of the Clean Air Act (CAA), the US EPA seeks to protect and enhance the quality of the nation's air to promote public health and the environment. The CAA addresses permitting programs, criteria pollutants, hazardous air pollutants, mobile sources, acid rain control and global climate protection.

This law authorizes EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. Using science-based guidelines, USEPA has established permissible levels for criteria air pollutants including sulphur oxides (SOx), carbon monoxide (CO), lead (Pb), nitrogen oxides (NOx), ozone precursors and particulate matter (PM). Primary standards protect human health while secondary standards address agriculture, property and aesthetics.

Chemicals that cause serious health and environmental hazards when released to air are hazardous air pollutants (HAPs) or air toxics. EPA lists 189 HAPs and regulates them under the National Emissions Standards for Hazardous Air Pollutants (NESHAPs). EPA established emission standards based on Maximum Achievable Control Technology (MACT) by pollutant. HAPs include volatile organic chemicals, chemicals used as pesticides and herbicides, inorganic chemicals, and radionuclides.

Common violations and problems under CAA

For the most part, a US EPA air inspector will primarily be interested air conditioning and refrigeration, boilers, asbestos, and the title V operating permit. Common violations and problems include the following:

- Failure to use properly trained and accredited asbestos personnel
- Failure to notify EPA of asbestos removal projects and to keep required documentation/recordkeeping
- Failure to properly dispose of asbestos debris
- Failure to have CFC leak rate records for chillers and air conditioning units over 50 pounds of charge
- Failure to have EPA certified technicians for CFC containing air conditioning and refrigeration systems
- Failure to get boilers permitted with the state agency
- Failure to apply for Title V operating permit

Clean Water Act (CWA)

The Clean Water Act (CWA) is the primary federal statute regulating the protection of the nation's waters. The CWA established national programs for prevention, reduction, and elimination of pollution in navigable water and groundwater, including a water quality standards

program, a permit program for discharge and treatment of wastewater and storm water, and an oil pollution prevention program.

The US EPA protects water resources primarily through the regulatory program reinforcing the Clean Water Act (CWA). The CWA is designed to restore and maintain the chemical, physical and biological integrity of the nation's waters. The CWA seeks to eliminate the discharge of pollutants, including solid waste, biological materials, sewage, chemical wastes and radioactive materials, to surface waters through dredge and fill prohibitions and end-of-the-pipe effluent limits.

The water regulations establish two different permitting programs for wastewater discharges. Facilities that discharge directly to waters (i.e., rivers, lakes, oceans) of the U.S. are covered by the National Pollutant Discharge Elimination System (NPDES) Permitting program. These facilities are known as direct dischargers. Facilities that discharge to municipal wastewater treatment plants are covered by the Pretreatment Program. These facilities are known as indirect dischargers.

Another program to consider is the Municipal Separate Storm Sewer System (MS4). The term MS4 does not solely refer to municipally owned storm sewer systems, but rather is a term with a much broader application that can include, in addition to local jurisdictions, State departments of transportation, universities, local sewer districts, hospitals, military bases, and prisons. A MS4 also is not always just a system of underground pipes – it can include roads with drainage systems, gutters, and ditches.

Common violations and problems under CWA

Water inspectors will primarily be concerned with wastewater discharges, storm water discharges, and any aboveground or underground oil storage containers. Common violations and problems include the following:

- As a direct discharge, no or inadequate Storm Water Pollution Prevention Plan (SWPPP)
- No permit for or noncompliance with wastewater discharges
- Failure to know about local treatment plant sewer use regulations and possible prohibited discharges for indirect dischargers
- No or inadequate secondary containment of storage tanks
- Improper disposal down floor drains
- Failure to have Spill Prevention Control Countermeasure (SPCC) in place.

Typical records a US EPA inspector may ask to review under the CWA

- Industrial User permit (IU permit) for discharges to the local municipality's wastewater treatment plant (also called Pubicly Owned Treatment Works (POTW) (indirect discharge).
- Spill Prevention, Control, and Countermeasure (SPCC) Plan. The plan is to prevent any discharge of oil into or upon navigable waters of the United States or

- ad-joining shorelines.
- Industrial storm water permits under the National Pollution Discharge Elimination System (NPDES) program.
- NPDES construction storm water permits are also required for any construction activity greater than 1 acre.
- National Pollution Discharge Elimination System (NPDES) permit for discharging directly to a water body (direct discharge).

Emergency Planning & Community Right-To-Know Act (EPCRA)

This act, also known as Superfund Amendments and Reauthorization Act (SARA) Title III, was designed to promote emergency planning and preparedness at both the state and local level. It provides citizens, local governments, and local response authorities with information regarding the potential hazards in their community. EPCRA requires the use of emergency planning and designates state and local governments as recipients of information regarding certain chemicals used in the community. SARA Title III, better known as EPCRA, originated from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or better known as the Superfund law). Like EPCRA Section 304, CERCLA also has hazardous substance release reporting regulations under CERCLA Section 103; 40 CFR Part 302. Under CERCLA, the person in charge of a facility is required to report to the National Response Center (1-800-424-8802 or www.nrc.uscg.mil) "immediately upon knowledge of a reportable release" any environmental release of a listed hazardous substance that equals or exceeds a reportable quantity.

Common violations and problems under EPCRA

- Certain accidental chemical releases
- Chemicals are stored on site above threshold (e.g. heating oil, gasoline, etc.)

Typical records an inspector may ask to review under EPCRA

- Proof of notification for all environmental releases of a listed hazardous substance.
 "Failure to notify" violation will be sited if the National Response Center, State
 Hotline, and Local Emergency Planning Committee is not notified in a timely
 fashion.
- Emergency Response Plans
- Material Safety Data Sheets (MSDS)
- Tier I or Tier II inventory reporting forms. This inspection is done together with the MSDS. The inspector will look at what materials are stored and in what quantity and if they are subject to reporting requirements. The federal government prefers the more detailed Tier II inventory form.
- EPA Toxic Release Inventory form R for report on every chemical manufactured, processed, or used. Form R contains facility identification information and chemical specific information (toxic chemical identity; mixture component; activity and uses;

maximum amount of chemical on site during calendar year; quantity; transfers; discharges; on-site waste treatment; on-site energy recovery; on-site recycling; source reduction/recycling).

Federal Insecticide, Fungicide, Rodenticide Act (FIFRA)

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) provides for federal regulation of pesticide distribution, sale, and use.

Common violations and problems under FIFRA

- Misuse of registered pesticide product
- Use of unregistered product
- Lack of proper records concerning pest control application
- Failure to report pesticide poisoning incidents

Typical physical features to inspect for under FIFRA.

- Personnel protection equipment
- Pesticide application equipment
- Pesticide storage areas, including storage containers

Typical records an inspector may ask to review under FIFRA

- Records of pesticides purchased (purchase orders, inventory)
- Pesticide application records
- Description of the pest control program
- Certification status of pesticide applicators
- Pesticide disposal manifests
- Contract files
- Recent ventilation rating for pesticide fume hood and pesticide mixing/storage areas

Resource Conservation Recovery Act (RCRA)

The regulation of land-based waste management activity is achieved primarily through the Federal Resource Conservation and Recovery Act (RCRA). The primary goals of RCRA are to protect the environment and human health from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner. RCRA regulates the management of solid waste, hazardous waste, and underground storage tanks holding petroleum products or certain chemicals. Of concern is the hazard associated with the land disposal of untreated, infectious, or hazardous medical wastes.

<u>Solid Waste</u>: RCRA Subtitle D regulations focuses on state and local governments as the primary planning, regulating, and implementing entities for the management of nonhazardous solid waste, such as household garbage and nonhazardous industrial solid waste. US EPA provides state and local agencies with information, guidance, policy and regulations to help them

and the regulated community make sound decisions concerning waste issues. To promote the use of safer units for solid waste disposal, EPA developed Federal criteria for the proper design and operation of municipal solid waste landfills and other solid waste disposal facilities. Many states have adopted these criteria and have required upgrading or closure of all environmentally unsound disposal units.

<u>Hazardous Waste</u>: RCRA Subtitle C regulations first identify the criteria to determine which solid wastes are hazardous. They then establish various requirements for the three categories of hazardous waste handlers: 1) generators, 2) transporters, and 3) treatment, storage and disposal facilities (TSDFs). In addition, the Subtitle C regulations set technical standards for the design and safe operation of TSDFs. These standards are designed to minimize the release of hazardous waste into the environment. Furthermore, the regulations for TSDFs serve as a basis for developing and issuing the permits required by the RCRA for each facility. Permits are essential to making the Subtitle C regulatory program work, since it is through the permitting process that the US EPA or the state applies standards to TSDFs.

Common violations and problems under RCRA

- Failure to comply with hazardous waste generator regulations and lack of documentation
- Failure to comply with Underground Storage Tank regulations and lack of documentation
- Improper or lack of hazardous waste labeling
- Failure to have waste batteries/fluorescent lamps stored in proper universal waste containers and labeled
- No or infrequent weekly inspections of hazardous wastes storage/satellite areas
- Open containers of hazardous wastes
- Failure to have hazardous waste determinations on file for all wastes
- No or inadequate hazardous waste manifests
- Throwing hazardous wastes down the drain
- Failure to have procedure in place to ensure spent aerosol containers are empty before disposal as solid waste
- Improper management of expired paints, etc
- Lack of hazardous waste contingency plan
- Lack of or inadequate training of employees in hazardous waste management, handling, and emergency preparedness
- Failure to ensure that hazardous waste meets Land Disposal Restrictions
- Failure to upgrade or close underground storage tanks (USTs) by 12/22/98
- Malfunctioning leak detection systems on underground storage tanks
- Improper consolidation of wastes from nearby facilities

Areas where RCRA inspector is likely to visit

- Hazardous waste generations sites (x-ray, chemotherapy, morgue, pathology, act.)
- Waste storage areas
- Satellite accumulation points

- Vehicles used for transport
- Container storage areas
- Generation points
- Shop activities

Typical physical features to inspect under RCRA

- Universal waste storage area
- Used oil storage areas
- Vehicle maintenance facilities
- Battery storage areas
- Building maintenance and repair shops
- Laboratories
- Bulk storage tank farms
- Transfer terminals
- Secondary containment structures
- Tank peripheral piping, manifolds, filling and dispensing areas
- Dispenser pumps and check valves
- Tank sumps, man-way areas
- Leak detection equipment
- Overflow alarms or other audible and visual alarms, sight gauges
- Fill ports, catchment basins
- Oil/water separators
- Clean up equipment (e.g. absorbent materials, fuel recovery pumps, personal protective gear)

Typical records an inspector may ask to review under RCRA

- Notification of Hazardous Waste Activity (EPA ID No.)
- Hazardous waste manifests
- Manifest exception reports
- Biennial reports
- Inspection logs
- Land disposal restriction certifications
- Employee training documentation
- Hazardous substance spill control and contingency plan
- Material Safety Data Sheets (MSDSs)
- Inventory records
- Spill records Spill Prevention Control and Countermeasure (SPCC) Plans
- Emergency plan documents
- Placarding of hazardous waste and hazardous materials
- Permits, if issued
- Waste analysis plan(s)
- Operating record

- Universal waste transportation/shipping records
- Used oil analysis records
- Used oil transportation related documentation
- Underground Storage Tanks (UST) regarding leak detection performance and maintenance including the following.
- monitoring results over the last 12 months
- most recent tank tightness test(s)
- manual tank gauging records
- copies of performance claims provided by leak detection equipment manufacturers
- records of recent maintenance, repair and calibration of on-site leak detection equipment
- Records of required inspections and test of corrosion protection systems
- Records of repairs or upgrades of UST systems
- Site assessment results of closed USTs
- Results of AST integrity assessments, sampling, monitoring, inspection and repair work
- Notification forms and registration records for all in-service, temporarily outof service, and permanently closed tanks

Safe Drinking Water Act (SDWA)

The Safe Drinking Water Act (SDWA) protects public health by requiring public water systems to monitor for specified contaminants on a periodic basis and by mandating underground injection requirements for waste disposal into underground injection wells. It does this by directing US EPA to set maximum contaminant levels for regulated contaminants found in public water supply systems, establishing underground injection control and sole-source aquifer/wellhead protection programs, and prohibiting the use of lead pipes, solder, or flux in the installation and repair of any public water systems or any plumbing in a residential or nonresidential facility providing water for human consumption.

The Safe Drinking Water Act established the Underground Injection Control (UIC) Program to provide safeguards so that injection wells do not endanger current and future underground sources of drinking water. The most accessible fresh water is stored in shallow geological formations called aquifers and is the most vulnerable to contamination. These aquifers feed our lakes; provide recharge to our streams and rivers, particularly during dry periods; and serve as resources for 92 percent of public water systems in the United States. To assure that underground injection will not endanger drinking water sources, the SDWA provides that all underground injections are authorized by a permit. An injection well can constitute any bored, drilled or a driven shaft or a dug hole, where the depth is greater than the largest surface dimension that is used to discharge fluids underground as well as any on-site drainage systems, such as septic systems, cesspools, and storm water wells, that discharge fluids only a few feet underground.

A facility would be considered a non-transient non-community water system (i.e., a public water system) if it regularly serves at least 25 of the same persons 6 months per year from its own water source. The facility would thus be required to comply with SDWA monitoring and

reporting requirements.

Common violations and problems SDWA

• Safe Drinking Water Inspectors will primarily be concerned with any underground injection control wells at your facility.

Toxic Substance Control Act (TSCA)

The Toxic Substances Control Act (TSCA) protects human health and the environment by requiring the testing of certain potentially hazardous chemicals and establishing regulations that restrict the manufacturing, processing, and use of such chemicals.

Common violations and problems under TSCA

TSCA inspectors will primarily be interested in any PCBs and Lead-Based Paint and will most likely look at:

- Equipment, fluids, and other items used or stored at the facility containing PCBs. PCBs are most likely to be found in electrical equipment such as transformers, capacitors, and possibly fluorescent light ballasts (in older fixtures).
- Pipe, spray-on, duct, and troweled cementitious insulation and boiler lagging
- Ceiling and floor tiles
- Failure to notify residents of lead paint in building or lack of knowledge of any lead hazard.
- Failure to provide EPA's pamphlet, "Protect Your Family from Lead in Your Home" as required under 40 CFR Part 745.107(a)(1) http://www.epa.gov/lead/pubs/leadpdfe.pdf