

Environmental Management Practices



Activity: Ship Air Emissions

EMP No. O-14

Description:

To reduce the discharge of pollutants to the air from operation of ships

Targeted Activities:

Ship operational air emissions



Development EMPs:

- Provide onshore power for vessels to reduce shipboard power use during loading/unloading activities
- Require vessels to shut down power plants if docked for more than six (6) hours
- Provide shore facilities with vapor recovery units (combustors)
- Consider limiting or eliminating loading/unloading during air quality alerts or advisory warnings

Operational EMPs:

- Encourage ship captains to reach safe distances offshore before achieving full power.
- Encourage use of vapor recovery systems for fueling activities
- Encourage use of lower volatile paints as discussed in EMP O-12
- Develop air quality management procedures for distribution to ship companies and captains.
- Encourage shippers to keep on-board engines in good working order to reduce emissions
- Encourage shippers to keep transfer equipment, e.g., cranes, forklifts, trucks, in good working condition to reduce emissions
- Encourage use of low-sulfur fuels in port
- Prohibit blowing tubes in port
- Require ship to keep fuel control systems in proper working order
- Set speed limits for maneuvering near shore
- Encourage alternative fuels and fuel mixtures

Potential Pollutants:

Nitrogen Oxides
Sulfur Dioxides
Particulates
Hazardous Air Pollutants

Target Environmental Media:

Air

US Regulatory Requirements & Guidance:

40 CFR 50 -99 Clean Air Act Regulations

Considerations:

- Providing onshore power supplies will be expensive
- Ships may need to be retrofitted to accept onshore power
- Restarting diesel engines may release significant levels of pollutants
- Education materials should be distributed to ship captains and companies to help in developing procedures to reduce emissions