How the Polar Code Protects the Environment

**Oil**
- Discharges: Discharge into the sea of oil or oily mixtures from any ship is prohibited.

**Structure**
- Double hull and double bottom required for all oil tankers, including those less than 5,000dwt (A/B ships constructed on or after 1 January 2017).

**Heavy Fuel Oil**
- Heavy fuel oil is banned in the Antarctic (under MARPOL). Ships are encouraged not to use or carry heavy fuel oil in the Arctic.

**Lubricants**
- Consider using non-toxic biodegradable lubricants or water-based systems in lubricated components outside the underwater hull with direct seawater interfaces.

**Garbage**
- **Plastics**: All disposal of plastics prohibited (under MARPOL).
- **Food Wastes I**: Discharge of food wastes onto the ice is prohibited.
- **Food Wastes II**: Food wastes which have been comminuted or ground (no greater than 25mm) can be discharged only when ship is not less than 12nm from the nearest land, nearest ice shelf, or nearest fast ice.
- **Animal Carcasses**: Discharge of animal carcasses is prohibited.
- **Cargo Residues**: Cargo residues, cleaning agents or additives in hold washing water may only be discharged if: they are not harmful to the marine environment; both departure and destination ports are within Arctic waters; and there are no adequate reception facilities at those ports. The same requirements apply to Antarctic area under MARPOL.

**Invasive Species**
- **Invasive Aquatic Species**: Measures to be taken to minimize the risk of invasive aquatic species through ships’ ballast water and biofouling.

**Sewage**
- **Discharges I**: No discharge of sewage in polar waters allowed (except under specific circumstances).
- **Treatment Plants**: Discharge is permitted if ship has an approved sewage treatment plant, and discharges treated sewage as far as practicable from the nearest land, any fast ice, ice shelf, or areas of specified ice concentration.
- **Discharges II**: Sewage not comminuted or disinfected can be discharged at a distance of more than 12nm from any ice shelf or fast ice. Comminuted and disinfected sewage can be discharged more than 3nm from any ice shelf or fast ice.

**Definitions**
- **Fast Ice**: Sea ice which forms and remains fast along the coast, where it is attached to the shore, to an ice wall, to an ice front, between shoals or grounded icebergs.
- **Ice Shelf**: A floating ice sheet of considerable thickness showing 2 to 50m or more above sea-level, attached to the coast.
- **Ship Categories**:
  - A: at least medium first-year ice
  - B: at least thin first-year ice
  - C: open waters/ice conditions less severe than A and B

**Background Info**
- The International Code for Ships Operating in Polar Waters will enter into force on 1 January 2017.
- It applies to ships operating in Arctic and Antarctic waters, additional to existing MARPOL requirements.
- It provides for safe ship operation and protects the environment by addressing the unique risks present in polar waters but not covered by other instruments.