



# Noise Abatement

Canada Shipping Act – Small Vessel  
Regulations  
Noise Bylaws

# Canada Shipping Act

## Small Vessel Regulations

### Definition

- "muffler" means an expansion chamber, within the exhaust line of the propulsion engine of a vessel, specifically designed to reduce engine noise but does not include a muffler cut-out, straight exhaust, gutted muffler, glass-pack muffler, by-pass or similar device

# Small Vessel Regulations

## Prohibitions

- Engines
- 37. (1) Subject to subsection (2), no person shall operate a power-driven vessel, and no person shall permit another person to operate such a vessel,
  - (a) unless it is equipped with a muffler that is in good working order and that is in operation at all times while the vessel is in use to prevent excessive or unusual noise; or
  - (b) if it is equipped with a muffler cut-out or by-pass, unless the muffler cut-out or by-pass is visibly disengaged in such a manner as to ensure that, while the vessel is in use, its exhaust gases are directed through the muffler or under water and that the muffler cut-out or by-pass cannot be engaged accidentally.

# Small Vessel Regulations

## Prohibitions

- (2) Subsection (1) does not apply in respect of any small vessel
- (a) that was constructed before January 1, 1960;
- (b) that is engaged in an official competition or in formal training or final preparation for an official competition;
- (c) that is powered by an outboard or an inboard/outboard drive system that is not equipped with a muffler, if the exhaust gases are directed under water through the propeller hub or below the cavitation plate;

# Small Vessel Regulations Prohibitions

- (d) that is operated five or more miles from shore;
  - (e) that derives its propulsion from an aircraft-type propeller operating in an air medium or from gas turbines; or
  - (f) that is not a pleasure craft and is equipped with a noise abatement mechanism that is in use when the small vessel is within five miles from shore.
- Fine = \$115.00

# Regional District of Central Okanagan – Noise Bylaw

- **Jurisdiction**
- In this bylaw, unless the context otherwise requires:
- (a) Regional District of Central Okanagan means the Electoral Areas of the Regional District of Central Okanagan and specifically includes the part of Okanagan Lake that lies within the boundaries of the Electoral Areas."
- **III MOTORBOATS**
- 1. No person shall launch a motorboat from any lands in the Regional District if that motorboat is equipped with an exhaust system that permits the exhaust gas from the engine to be expelled directly into the air without first passing through water unless the motorboat is equipped with a muffling device that ensures that the exhaust gases from the engine are cooled and expelled without excessive noise

# Regional District of Central Okanagan – Noise Bylaw

- 2. No person shall operate a motorboat in the Regional District if that motorboat is equipped with an exhaust system that permits the exhaust gases from the engine to be expelled directly into the air without first passing through water unless the motorboat is equipped with a muffling device that ensures that the exhaust gases from the engine are cooled and expelled without excessive noise.
- 3. No person shall operate any motorboat powered by an engine equipped with exhausting devices commonly described as dry stacks or dry headers.
- 4. No person shall operate a motorboat powered by an engine equipped with exhausting devices commonly described as water injected headers unless a properly operating muffler is installed thereto

# Regional District of Central Okanagan – Noise Bylaw

- 5. No person shall operate a motorboat powered by an engine equipped with exhausting devices commonly described as over-transom water cooled exhaust unless a properly operating muffler is installed thereto.
- 6. No person shall operate a motorboat so as to cause noise which disturbs the peace, rest, enjoyment, comfort or convenience of the neighbourhood or of persons in the vicinity.
- IV PENALTIES
- 1. Any person who violates the provisions of this Bylaw may, on summary conviction, be liable to the maximum penalty under the "Offense Act," plus the cost of prosecution, for each offense. The penalties imposed under this section are a supplement and not a substitute for any other remedy to an infraction of this Bylaw."



# MOTOR VEHICLE SAFETY ACT

## Federal

- **MOTOR VEHICLE SAFETY ACT**
- **Motor Vehicle Safety Regulations**
- **Noise Emissions (Standard 1106)**
- **Interpretation**
- **Exterior Sound Level**
- **Interior Sound Level**
- **Established by**
- **SCHEDULE V.1**
- **(Section 5)**
- **Noise Emissions (Standard 1106)**

# MOTOR VEHICLE SAFETY ACT

## Federal

- Exterior Sound Level
- 2. Every vehicle, other than a motorcycle or a vehicle referred to in section 4, shall be so constructed that
- (i) section 3 of *Test Method 1106-Noise Emission Tests* (August 2005), the exterior sound level does not exceed 83 dBA when a value of 2 dBA is subtracted from the highest average sound level recorded during the test, in the case of a bus with a GVWR of more than 4 536 kg (10,000 lb.),

# MOTOR VEHICLE SAFETY ACT

## Federal

- (ii) SAE Recommended Practice J986, *Sound Level for Passenger Cars and Light Trucks* (August 1994), or SAE Standard J1470, *Measurement of Noise Emitted by Accelerating Highway Vehicles* (March 1992), the exterior sound level does not exceed 83 dBA when a value of 2 dBA is subtracted from the highest average sound level recorded during the test, in the case of a heavy-duty vehicle with a GVWR of 4 536 kg (10,000 lb.) or less, and

# MOTOR VEHICLE SAFETY ACT

## Federal

- (iii) SAE Recommended Practice J986, *Sound Level for Passenger Cars and Light Trucks* (August 1994), or SAE Standard J1470, *Measurement of Noise Emitted by Accelerating Highway Vehicles* (March 1992), the exterior sound level does not exceed **80 dBA** when a value of 2 dBA is subtracted from the highest average sound level recorded during the test, in the case of a **light-duty vehicle**.

# BC Motor Vehicle Act Regulations

- Vehicle noise
- 27 A motor vehicle shall be equipped with an exhaust muffler which complies with section 7.03 of the regulations.
- The opinion of an inspector as to whether the engine and exhaust noise is greater than that made by other vehicles in good condition of comparable size, horsepower, piston displacement or compression ratio shall determine whether exhaust gases are expelled with excessive noise.
- When tested in an inspection station, the vehicle engine, any auxiliary engine and exhaust level shall not exceed Table 3 standards.

# BC Motor Vehicle Act Regulations

- Table 3
- Class of Vehicle Maximum Allowable Sound Pressure Level DBA
- Light duty 83
- Gasoline-driven heavy duty 88
- Motorcycles 91
- Diesel-driven heavy duty 93

# Boat Noise and State Boating Laws in the United States

In the interest of protecting public health, safety and welfare, all available research concludes that excessive noise has an adverse effect on people and that it should be abated or eliminated whenever and wherever possible. Regarding noise caused by recreational boating, research conducted by the U.S. Environmental Protection Agency (EPA) confirms studies conducted by law enforcement agencies and the boating industry that identify exhaust noise as the number one source of boat noise.

# Boat Noise and State Boating Laws in the United States

- Complaints about boat noise from inboard and outboard powered boats in the decades of the '60's and '70's were generally the result of after-market modifications by their owners. However, the advent of the "off-shore" performance boat in the '80's and '90's along with proliferation of personal watercraft resulted in a rapid increase in the number of complaints about boat noise. During these two decades, the size of a typical pleasure motorboat increased substantially while the maximum power of the engines increased by a factor of approximately 10. Consequently, the pass-by sound level for production line boats increased by as much as 20 dB. This four-fold increase in sound level energy was primarily due to the presence of offshore boats that were being sold with above-water straight-through exhaust systems.



# Boat Noise and State Boating Laws in the United States

- Research indicates that boats with above-water exhaust are up to four times louder than their under-water exhaust counterparts.
- Boat noise from exhaust is greatly reduced by routing exhaust gases beneath the surface of the water
- Many of the exhaust systems on the more powerful motorboats include provisions in their design whereby the operator can activate a “cutout”, which reroutes the exhaust to above-water and defeats the boat noise reductions otherwise achieved. (Silent Choice, Captains Call)

# Boat Noise and State Boating Laws in the United States

- Boat operators will use a cutout in order to realize less restriction on the exhaust system and greater performance (speed) from the boat. Despite technological advancements in exhaust system design to better muffle boat noise from exhaust systems, substantial concerns over boat noise continue to be expressed by sail boaters, canoers, kayakers, property owners and other parties interested in enjoying the peace and quiet of waterscapes.

# Noise Abatement

- Noise Bylaw signage posted at Boat Launches
- Increased fines – escalating fines for repeat offenders.
- Police authority to impound offending vessels.
- Decibel limits for exhaust noise
- Banning over transom exhaust?
- Boating Restrictions limiting speeds?