

Pengenalan Kepada Pencemaran Dari Aktiviti Perkapalan - Buangan Terjadual

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Definisi Buangan Terjadual



Apa-apa buangan yang termasuk dalam kategori buangan yang disenaraikan dalam Jadual Pertama, Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005.

Waste type collected from the ship



- Bilges: percolating water and oily waste water formed in machine and auxiliary machine sub tanks of vessels, cofferdams, warehouses or similar sections of the vessel.
- Slop: Including tank washing water formed due to washing of the cargo tanks of vessels, oily water wastes accumulated in slop tanks.
- Dirty Ballast: Ballast water that causes appearance of oil, oil derived stains or oil stains above water or at the coast line or that creates color changes above or under water or causes accumulation of solid materials/emulsion in suspension when released from the vessel to water.

Waste type collected from the ship



- Waste oil: Dirty oils that lost its nature after used by main machine and auxiliary machines in the vessel.
- Sludge: Sludge composed of residue and/or oily sediments formed in engine rooms, fuel tanks of vessels or cargo tanks of oil tankers.
- Solid sludge: Oil sludge solidified at the bottom of oil tank of the vessel.

Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005 - Jadual Pertama (Peraturan 2)



SW 3	Buangan yang mengandungi terutamanya jujuk organik yang mungkin mengandungi logam dan bahan tidak organik
SW 305	Minyak pelincir terpakai
SW 306	Minyak hidraulik terpakai
SW 307	Emulsi minyak mineral-air terpakai
SW 308	Enap cemar kapal tangki minyak
SW 309	Campuran minyak-air seperti air ballast
SW 310	Enap cemar dari tangki penyimpanan minyak mineral
SW 311	Buangan minyak atau enap cemar berminyak



- **Code:** SW305
- **Description:** Spent lubricating oil
- **Example of Waste:** Spent lubricating oil
- **Typical source:** Motor vehicles and compressor machines



- **Code:** SW306
- **Description:** Spent hydraulic oil
- **Example of Waste:** Spent hydraulic oil
- **Typical source:** Hydraulic equipment and machines



- **Code:** SW307
- **Description:** Spent mineral oil-water emulsion
- **Example of Waste:** Spent coolant or cutting fluids
- **Typical source:** Metals cutting/shaping process



- **Code:** SW308
- **Description:** Oil tanker sludges
- **Example of Waste:** Tank bottom sludge from crude oil tanker
- **Typical source:** Crude oil tanker



- **Code:** SW309
- **Description:** Oil-water mixture such as ballast water
- **Example of Waste:** Ballast water
- **Typical source:** Ballast tank of ship



- **Code:** SW310
- **Description:** Sludge from mineral oil storage tank
- **Example of Waste:** Oil sludge
- **Typical source:** Crude oil tank in petroleum refinery

Ballast Water

The discharge of ballast water and sediments by ships is governed globally under the [Ballast Water Management Convention](#), since its entry into force in September 2017.

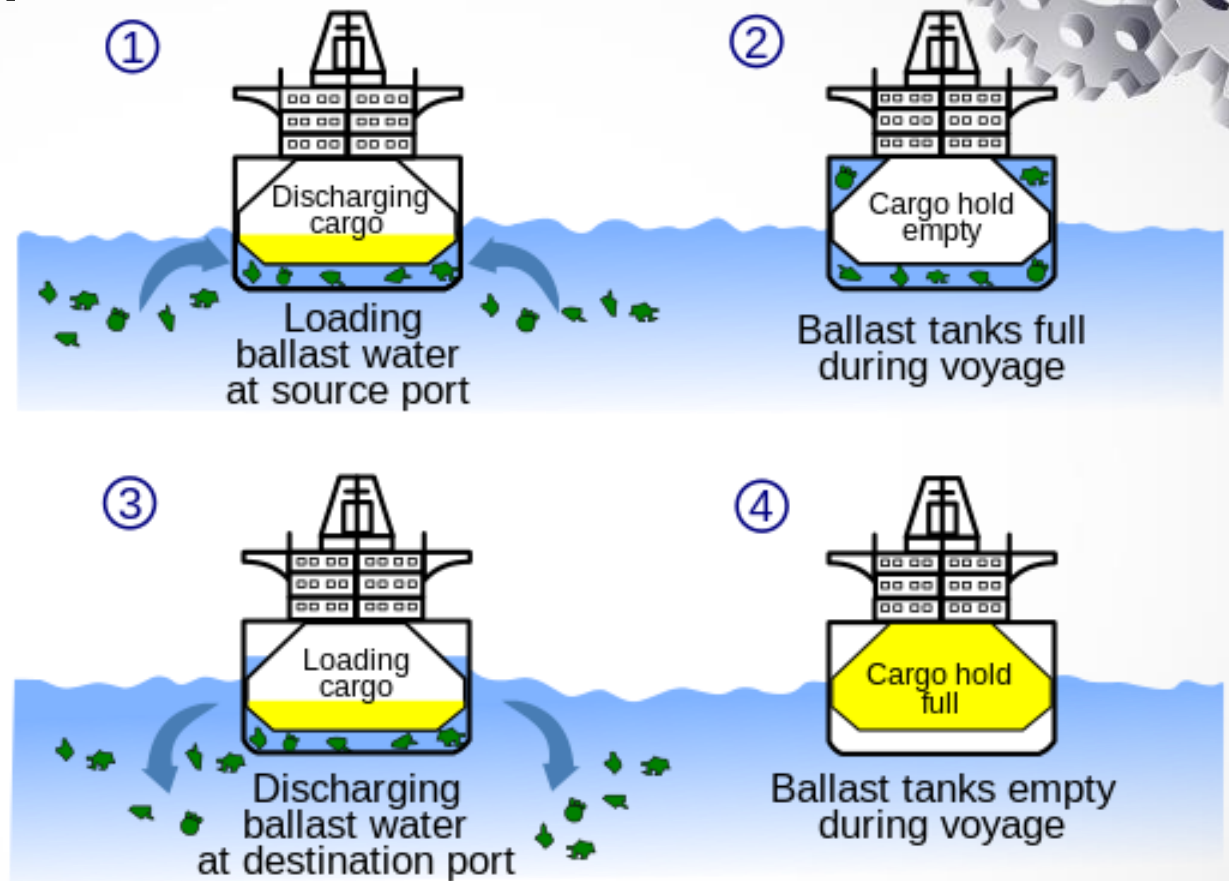


Diagram showing the water pollution of the seas from untreated ballast water discharges



- **Code:** SW311
- **Description:** Waste of oil or oily sludge
- **Example of Waste:** Oily sludge
- **Typical source:** Maintenance or cleaning activities of oily wastes

Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005 - Jadual Pertama (Peraturan 2)



SW 4	Buangan yang mungkin mengandungi organik sama ada juzuk tidak organik atau organik
SW 408	Tanah, puing atau bahan tercemar yang terhasil daripada pembersihan tumpahan bahan kimia, minyak mineral atau buangan terjadual
SW 409	Bekas, beg atau kelengkapan yang dilupuskan yang dicemari dengan bahan kimia, racun makhluk perosak, minyak mineral atau buangan terjadual
SW 410	Kain buruk, plastic, kertas atau turas yang dicemari dengan buangan terjadual



● **Code:** SW408

● **Description:**

Contaminated soil, debris or matter resulting from clean-up of a spill of chemical, mineral oil or scheduled wastes

● **Example of Waste:**

Contaminated soils

● **Typical source:**

Cleaning-up of a spill of scheduled wastes





- **Code:** SW409
- **Description:** Disposed containers, bags or equipment contaminated with chemicals, pesticides, mineral oil or scheduled wastes
- **Example of Waste:** Empty paint containers
- **Typical source:** Painting shop in vehicle manufacturing plants





- **Code:** SW410
- **Description:** Rags, plastics, papers or filters contaminated with scheduled wastes
- **Example of Waste:** Used latex gloves
- **Typical source:** Factory production line, laboratory, etc..



Notis Arahan dibawah Seksyen 31 & Seksyen 37, AKAS 1974



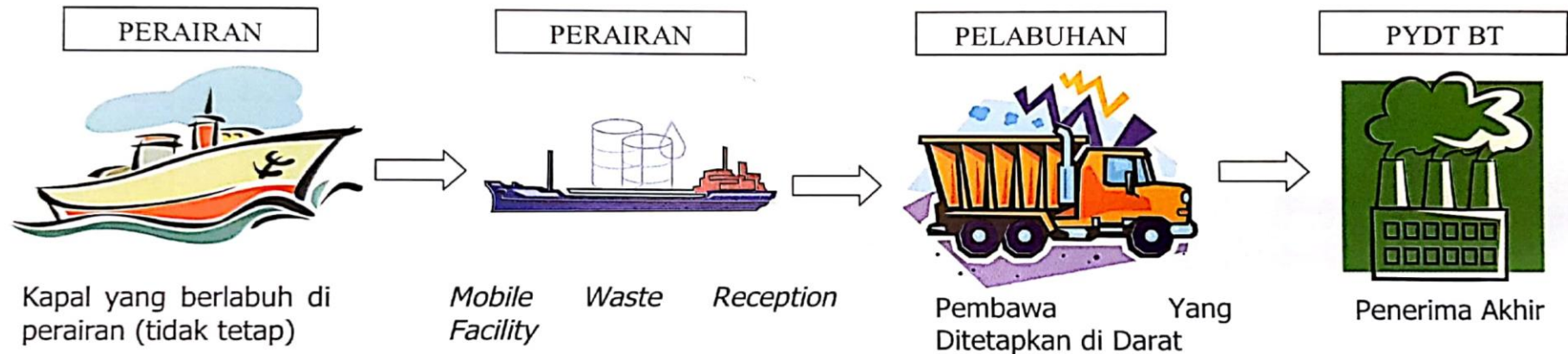
- JAS Negeri hendaklah mengarahkan pihak yang bertanggungjawab untuk melupuskan buangan terjadual ke premis yang ditetapkan mengikut tatacara dan prosedur yang betul.

Definisi

- Lesen : Lesen yang disebut dalam Seksyen 18 Akta.
- Pembawa yang ditetapkan : Mana-mana kenderaan atau kapal daripada apa-apa perihalan yang ditetapkan oleh Perintah Kualiti Alam Sekeliling (Pembawa Yang Ditetapkan) (Buangan Terjadual) 2005.
- Premis yang ditetapkan : Premis yang ditetapkan oleh Perintah Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Kemudahan Pengolahan dan Pelupusan Buangan Terjadual) 1989.
- Kontraktor : Mana-mana orang yang dilesenkan oleh Ketua Pengarah di bawah subseksyen 18(1A).
- Fitness Form : Surat ulasan yang dikeluarkan Jabatan Laut Malaysia selepas pemeriksaan atas kapal dijalankan.



Mobile Waste Reception Facility



- Pengendali kapal akan memaklumkan kepada JLM 48 jam sebelum melakukan apa-apa aktiviti pengendalian buangan terjadual di atas kapal. Maklumat yang akan dikemukakan adalah masa dan lokasi aktiviti, dan kuantiti yang terlibat dalam aktiviti. (Contoh aktiviti : desludging)

- Dilesenkan di bawah PYDT BT
- Pengendali kemudahan/agen kapal bertindak sebagai pengeluar buangan. Borang TWG hendaklah dikemukakan di bawah nama PYDT yang dilesenkan.
- Bertanggungjawab mengemukakan Notifikasi, Inventori, Nota Konsainan)
- Untuk tujuan perlesenan, permohonan pemeriksaan oleh JLM perlu dikemukakan oleh PYDT BT
- Lokasi operasi *Ship To Ship* (STS) ditetapkan oleh JLM

- Dilesenkan di bawah PYDT BT
- Mengangkut BT dari *Mobile Waste Reception Facility*
- Lokasi operasi STL ditetapkan oleh Penguasa Pelabuhan.

Mengumpul buangan terjadual dari kapal-kapal yang berlabuh di perairan dan mengangkut buangan terjadual tersebut ke pelabuhan

Adequate Port Reception (ADF)



- The development of adequate port reception facilities for generated waste and cargo residues, together with the establishment of systems which provide incentives for ship to use these facilities.
- The aim of substantially reducing discharges of ship-generated waste and cargo residues into the sea.



Terima Kasih!