

From: [L'Heureux, Suzanne](#)
To: [Hajdu, Rob \[CEAA\]](#)
Cc: [Doucette, Paula: TC](#); [Chatwell, Ian: TC](#); [Hall, Ronald: TC](#); [Hubbard, Cindy](#); [Parkinson, Colin R: TC](#); [Beavis, Katherine: TC](#)
Subject: RE: TC Federal Authority Advice Record - Pacific Future Energy Refinery Project - Transport Canada's response
Date: July 21, 2016 12:08:19 PM
Attachments: [Minor Works Order as published in the Canada Gazette April 19 2014 \(2\).pdf](#)

Hi Rob,

As requested, please find Transport Canada's responses to the FAAR questions below.

1. Indicate whether the description of potential environmental effects presented in the Project Description is sufficient in characterizing project effects to the components of the environment, as defined under section 5 of CEAA 2012, that relate to your mandate, including whether these effects may be adverse.

- **TC Response:** Generally yes, although TC has one comment. The following 3 paragraphs were extracted from the proponent's Project Description:

"... our Project will create new opportunities for NEATBIT™ producers to access world markets, especially in Asia, the only market in the world with projected growth. We will also be opening up domestic markets for our products, offering the highest quality gasoline and diesel, anticipating future emissions requirements."

"The export of products is planned via a tolled process, whereby purchasers or offtakers will be responsible for the transport of product from the Refinery. By extension, this activity would benefit the Proponent and purchasers. It will be the responsibility of offtakers to obtain the necessary permits and approvals to construct the necessary infrastructure to enable export. PFEC would expect that a separate EA process would be required for an export project, in addition to acquiring an export licence from the National Energy Board (NEB)."

"Early third-party studies suggest a marine terminal could be situated along the Portland Inlet, in the event such a development were to secure the support of a host First Nation. If such a marine terminal were to be developed, we anticipate that two (one for gasoline and one for diesel) short (275 km) pipelines, developed in partnership with First Nations along the route, could be built to support the marine terminal's operations."

As per our conversation on July 6th, 2016, TC understands that the proponent is not proposing a method of exporting their product. TC is interested in knowing what the proponent is planning to do with their finished product. TC believes this information should be provided under Section 1.2 (Project Purpose and Rationale) since it mentions accessing world and domestic markets. How can this be achieved if the proponent is not clearly proposing a method of shipping/transporting their product to these markets? Should a marine terminal and/or a pipeline be proposed in the future, TC would potentially have expert advice to provide and/or a regulatory role.

2. Identify any *additional* potential adverse environmental effects of the Project that are not described in the Project Description and their linkage to components of the environment under federal jurisdiction (as defined under section 5 of CEAA 2012). Identify whether any potential adverse environmental effects are likely to be significant in nature.
 - **TC Response:** See above and below plus any CEAA section 5(2) effects would need to be analyzed as a result of the issuance of any of these Approvals/Permits/Authorizations. It is too early to predict the significance of these effects.
3. List the potential powers, duties, or functions that your department may issue to enable the Project to proceed, why they might be issued, and which project components and activities are related to the powers, duties, or functions.
 - **TC Response:** TC may need to issue a number of Approvals as a result of this project. Below is a draft

summary (These may change as the project matures.).

o Navigation Protection Act:

- TC-Navigation Protection Program may need to issue approvals under the Navigation Protection Act (NPA) for the discharge into Douglas Channel, which is a Scheduled Water under the NPA. A self-assessment of the project against the Minor Works Order (attached) for Outfalls should be conducted by the proponent to determine if a Notice to the Minister is required for this and any other works on scheduled navigable waters.
- Existing NWPA-Approved Works- TC-Navigation Protection Program may need to issue approvals under the NPA for the modification or replacement of potential existing *Navigable Waters Protection Act* (NWPA)-approved road bridges or other works (i.e. under the NWPA or any existing provincial bridge) on access roads. TC will need the proponent to list any existing NWPA-approved or BC Government –owned bridges that will be modified or replaced for the project so that TC can determine if the bridge owner wishes to opt out of the NPA or whether a Notice of Works is required.

o Transportation of Dangerous Goods Act – Emergency Response Assistance Plan(s):

- As with any construction and ongoing operation of this nature there will be the transportation of dangerous goods. Dangerous Goods must be handled, offered for transport and transported in accordance with the TC *Transportation of Dangerous Goods Act/Regulations*.
- Transport Canada will attend some types of incidents/accidents by rail and at times incidents/accidents on highways in conjunction with the province of BC.
<http://www.tc.gc.ca/eng/tdg/clear-part8-379.htm>
- There is a regulated Emergency Response Assistance Plan (ERAP) program (Part 7 of the TDG Regulations) that requires a company transporting certain types of DGs to have an ERAP before they can be transported. The ERAP must be approved by TC and the company must have received a registration number from TC before they are allowed to ship ERAP-able products. Anyone who handles, offers for transport, imports and/or transports DGs must comply with TDG regulations. This includes holding a valid TDG certificate, completing the appropriate documentation, using the proper means of containment, reporting any reportable spills and holding a valid ERAP when required.
<http://www.tc.gc.ca/eng/tdg/clear-part7-374.htm>.

o Canadian Aviation Regulations – Obstruction Clearance Permit:

- TC-Civil Aviation may need to issue Obstruction Clearance Permits in relation to the proposed oil refinery and flare systems/stacks associated with the Project. Also, should the proposed site involve the erection of cranes or towers that could pose a threat to aviation operations, the proponent will be required to submit an Aeronautical Obstruction Clearance Form for review and approval. As more detailed specifications for the project infrastructures are developed, they should be assessed for any marking/lighting requirements per Canadian Aviation Regulations (CAR) 601 - Division III - Marking and Lighting of Obstacles to Air Navigation and Standard 621 - Obstruction Marking and Lighting. The regulation can be accessed online at:
<http://www.tc.gc.ca/eng/acts-regulations/regulations-sor96-433.htm>.
- The standard can be accessed online at:
<http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-standard-standard621-3868.htm>
- An Aeronautical Assessment Form for Obstruction Marking and Lighting can be downloaded (http://wwwapps.tc.gc.ca/wwwdocs/Forms/26-0427E_1405-04_E.pdf) and submitted via email (pacAOCF@tc.gc.ca) or fax (1-855-618-6288).
- NavCanada would have to get information such as the location and height the obstructions to update their aeronautical charts. The Application form is available online (<http://www.navcanada.ca/EN/products-and-services/Pages/land-use->

[program.aspx](#)).

o Rail Safety

- Although not related to a specific power, duty or function, TC can also provide expert knowledge and advice related to this project around Rail Safety, should the project be scoped to include the transport of bitumen via rail.
- TC's Rail Safety Program is responsible for developing, implementing and promoting safety policy, regulations, standards and research. It also works with partners to make safety improvements at rail/road grade crossings. Regional inspectors monitor for compliance with the approved regulatory requirements, and enforce whenever non-compliance is identified. This work is undertaken under the auspices of the *Railway Safety Act*. While many complex activities make up the program, the Rail Safety Program works through regulation, outreach and oversight to achieve a national rail transportation system that Canadians recognize as safe and efficient.
- Local railway companies fall directly under the authority of the *Railway Safety Act* when operating on federally-regulated railway lines. This means that local railway companies are directly responsible for complying with the federal railway safety regime when on federally-regulated track. This will involve submitting railway safety rules that apply to their operations to Transport Canada for approval. Transport Canada will be responsible for monitoring their compliance to these rules by going directly to their company instead of their host railway company.
- It appears that the rail yard will be constructed for the purpose of unloading rail cars. Whether or not TC-Rail Safety has any involvement is dependent on who will be the owner of the trackage. If the owner is going to be CN, then the trackage will fall under federal regulation and they will likely have to file a Notice of Railway Works prior to construction. However, if the owner of the trackage is someone other than a federally regulated railway, then the trackage will fall under provincial jurisdiction, which according to the Project Description would be the case.

4. Identify the potential environmental effects, associated with that power, duty or function identified above, as described in subsection 5(2) of CEAA 2012. Please include in your response a description of the scope or extent (i.e. project activities addressed and components of the environment included) under this power, duty or function.

• TC Response:

In general, the following environmental effects (which include navigation) under CEAA 2012 s. 5 (2) should be taken into account:

A change, other than those referred to in paragraphs 5.(1)(a) and (b), that may be caused to the environment and that is directly linked or necessarily incidental to the potential issuance of the above approvals; and, an effect, other than those referred to in paragraph 5.(1)(c), of any changed referred to in paragraph 5.(2)(a) on

- Health and socio-economic conditions
- Physical and cultural heritage, or
- Any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.

Navigation as a VC would also be included under section 5(1)(c) of CEAA, 2012.

5. Has your department or agency already exercised the above-noted power or performed a duty or function to enable the proposed Project to proceed in whole or in part? If yes, please describe.

• TC Response: No.

If you need further explanation, just let me know.

Thanks,

<Original signed by>

Suzanne L'Heureux

Environmental Officer, Environmental Services
Transport Canada / Government of Canada
suzanne.lheureux@tc.gc.ca / Tel 604-836-9371

Agent de l'environnement, Services de l'environnement
Transports Canada / Gouvernement du Canada
suzanne.lheureux@tc.gc.ca / Tel 604-836-9371

From: Hajdu, Rob [CEAA] [<mailto:Rob.Hajdu@ceaa-acee.gc.ca>]
Sent: Thursday, June 30, 2016 3:24 PM
To: Chatwell, Ian
Cc: Environmental Assessment Pacific Region - Évaluation environnementale région du Pacifique
Subject: TC Federal Authority Advice Record - Pacific Future Energy Refinery Project

Dear Ian:

On June 27, 2016 the Canadian Environmental Assessment Agency (the Agency) accepted a project description for the Pacific Future Energy Refinery Project (the Project), proposed by Pacific Future Energy Corporation (the proponent). Please note that this letter is different from the one sent to you on May 18, 2016 for the Kitimat Clean Refinery Project.

The proponent is proposing the construction, operation, decommissioning and abandonment of a new oil refinery located approximately 32 kilometres north of Kitimat, British Columbia. The Project would include a refinery, a 50 metre wide access road, a rail yard, water withdrawal and discharge infrastructure, and a petroleum storage facility. The Project is expected to process approximately 200,000 barrels per day of NEATBIT™ (solid, undiluted bitumen) over a lifespan of at least 60 years.

The Project does not have a proposed method of exporting its product.

The Agency is now determining whether a federal environmental assessment (EA) of the Project is required. The 20-day comment period on the summary of the project description and the substitution request was announced today (Registry reference number 80127).

As per section 11 of the *Canadian Environmental Assessment Act, 2012* the Agency requests that you review the project description and complete and return the attached Federal Authority Advice Record by no later than July 21, 2016.

The file for the Project description is too large for emails so it is available here: <http://www.ceaa-acee.gc.ca/050/document-eng.cfm?document=114720>

For your information I've included the following links:

- News release: <http://www.ceaa-acee.gc.ca/050/document-eng.cfm?document=114718>
- Public notice: <http://www.ceaa-acee.gc.ca/050/document-eng.cfm?document=114717>
- Summary of the project description: <http://www.ceaa-acee.gc.ca/050/document-eng.cfm?document=114719>

Please let me know if you have any questions.

Regards,

Rob Hajdú

Project Manager

Canadian Environmental Assessment Agency / Government of Canada

rob.hajdu@canada.ca / Tel: 604-666-2601 / <contact information removed>

Gestionnaire de projets

Agence canadienne d'évaluation environnementale Environnement Canada / Gouvernement du Canada

rob.hajdu@canada.ca / Tel: 604-666-2601 / <contact information removed>

ppouliotte@ecrc.ca (email), or file a notice of objection that contains the reasons for the objection with the Manager, Environmental Response Systems, Marine Safety, Transport Canada, Place de Ville, Tower C, 10th Floor, 330 Sparks Street, Ottawa, Ontario K1A 0N8, 613-990-9414 (telephone), 613-993-8196 (fax), andre.laflamme@tc.gc.ca (email). All such representations must cite the *Canada Gazette*, Part I, the name of the response organization submitting the list of proposed fees, and the date of publication of the notice of proposed fees.

[16-1-o]

DEPARTMENT OF TRANSPORT

NAVIGABLE WATERS PROTECTION ACT

Order Amending the Minor Works and Waters (Navigable Waters Protection Act) Order

The Minister of Transport, pursuant to subsection 13(1) ([see footnote q](#)) of the *Navigable Waters Protection Act* ([see footnote h](#)), makes the annexed *Order Amending the Minor Works and Waters (Navigable Waters Protection Act) Order*.

Ottawa, March 31, 2014

LISA RAITT
Minister of Transport

ORDER AMENDING THE MINOR WORKS AND WATERS (NAVIGABLE WATERS PROTECTION ACT) ORDER AMENDMENTS

1. (1) The definitions “berm” and “high-water mark” in section 1 of the *Minor Works and Waters (Navigable Waters Protection Act) Order* ([see footnote 9](#)) are repealed.

(2) The definitions “petit quai” and “plan d’eau navigable cartographié” in section 1 of the French version of the Order are repealed.

(3) The definition “charted navigable waters” in section 1 of the English version of the Order is replaced by the following:

“charted navigable water”
« *eaux navigables cartographiées* »

“charted navigable water” means navigable waters for which navigation charts are produced by the Canadian Hydrographic Service or the National Oceanic and Atmospheric Administration.

(4) The marginal note to the definition “dock” in section 1 of the English version of the Order is amended by replacing “petit quai” with “quai”.

(5) Section 1 of the Order is amended by adding the following in alphabetical order:

“ice breaker”
« *brise-glace* »

“ice breaker” means a vessel that is specially constructed or modified for the purpose of navigating through ice.

“pipeline”
« *pipeline* »

“pipeline” includes a conduit that contains wires or pipes.

(6) Section 1 of the French version of the Order is amended by adding the following in alphabetical order:

« *eaux navigables cartographiées* »
“charted navigable water”

« *eaux navigables cartographiées* » Eaux navigables pour lesquelles des cartes de navigation sont produites par le Service hydrographique du Canada ou la National Oceanic and Atmospheric Administration.

« *quai* »
“dock”

« *quai* » S’entend notamment d’un môle ou d’une jetée.

2. The heading before section 2 and sections 2 to 14 of the Order are replaced by the following:

TERMS AND CONDITIONS

Imposed under paragraph 13(1)(b) of Act

2. Subsections 3(4) to (8), 4(3) to (6), 5(3) to (7), 6(3) to (9), 7(3) to (11), 8(3) to (11), 9(3) to (5), 11(4) to (8), 12(3) to (8) and 13(4) and (5) are terms and conditions imposed under paragraph 13(1)(b) of the Act.

CLASSES OF WORKS

EROSION-PROTECTION WORKS

Definitions

3. (1) The following definitions apply in this section.

"erosion-protection works"

« *ouvrages de protection contre l'érosion* »

"erosion-protection works" means shoreline-stabilization, riprap or bank-protection works.

"groyne" or "spur"

« *épi* » ou « *éperon* »

"groyne" or "spur" means a structure built out from the bank of a navigable water in a direction transverse to the current in order to prevent erosion of the bank.

"riprap"

« *enrochement* »

"riprap" means a layer of stones or rocks placed irregularly on a slope or a bank of a navigable water in order to protect the slope or bank against scouring or erosion.

"shoreline-stabilization"

« *stabilisation des rives* »

"shoreline-stabilization" means stones, rocks, concrete, logs or other common building materials, or living plants, placed in order to protect the shores of a navigable water from erosion.

Class established

(2) Erosion-protection works are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are integrated with and parallel to the existing or natural shoreline or bank;
- (b) the base of the works is 5 m or less from the high-water mark;
- (c) the vertical to horizontal slope of the works from the navigable water is greater than 33%;
- (d) the works are not associated with an existing or proposed structure, including a bridge, boom, dam or road, across the navigable water; and
- (e) the works do not include groynes, spurs or other devices to deflect the current.

Temporary works — class established

(3) Temporary works that are required for the construction or placement of works of the class established by subsection (2) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works

- (a) are in, on, over, under, through or across a navigation channel; or
- (b) cross more than halfway from one side of the navigable water to the other side.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (2) or (3), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site; and
- (b) in the case of a river, a stream, a creek or similar navigable water that, when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side, is of a width set out in column 1 of the table to this subsection, signs stating "Construction Ahead" and "Travaux de construction" that are legible from at least 50 m are in place, upstream and downstream from the work site, at the minimum distance set out in column 2.

TABLE

Column 1	Column 2
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Item	Width of Navigable Water	Minimum Distance
1.	Less than 10 m	25 m
2.	10 m or more but less than 20 m	50 m
3.	20 m or more but less than 50 m	100 m
4.	50 m or more	200 m

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (3), the owner of the works must ensure that

(a) if the works are on or over a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are

- (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
- (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and

(b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are

- (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
- (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (3) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(7) The owner of works of the class established by subsection (2) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (3); or
- (b) the removal of works of the class established by subsection (3).

Works in disrepair

(8) If works of the class established by subsection (2) become a danger to navigation because of disrepair, the owner of the works must immediately repair the works so that they are no longer a danger to navigation.

DOCKS AND BOATHOUSES

Class established

4. (1) Docks and boathouses are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are not within 5 m of the adjoining property lines at the ordinary high water mark;
- (b) the works are not within 10 m of a dock, boathouse or other structure that is in, on, over, through or across the navigable water and that is not owned by the owner of the works;
- (c) in the case of a charted navigable water, the works are not within 30 m of a navigation channel;
- (d) the works do not extend further in, on or over the navigable water than any other structure within 100 m of the works;
- (e) the works do not, when measured from the ordinary high-water mark, extend horizontally more than 30 m into, onto, over, through or across the navigable water;
- (f) the works do not cross more than halfway from one side of the navigable water to the other side;
- (g) the works are not associated with any other proposed works that are not of a class established by this Order; and
- (h) the works are not used for float planes or other aircraft equipped with floats.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works

- (a) are in, on, over, under, through or across a navigation channel; or
- (b) cross more than halfway from one side of the navigable water to the other side.

During construction or placement

(3) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

(a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site;

(b) if the works are on or over a navigable water, that the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are

- (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
- (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and

(c) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are

- (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
- (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(4) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(5) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2); or
- (b) the removal of works of the class established by subsection (2).

Works in disrepair

(6) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

BOAT RAMPS, SLIPWAYS AND LAUNCH RAMPS

Class established

5. (1) Boat ramps, slipways and launch ramps that are not marine railways are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are not within 5 m of the adjoining property lines at the ordinary high-water mark; and
- (b) the works are not associated with any other proposed works that are not of a class established by this Order.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works

- (a) are in, on, over, under, through or across a navigation channel; or
- (b) cross more than halfway from one side of the navigable water to the other side.

During construction or placement

(3) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site.

During construction or placement of temporary works

(4) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure that

- (a) if the works are on or over a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(5) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(6) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2); or
- (b) the removal of works of the class established by subsection (2).

Works in disrepair

(7) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

AERIAL CABLES — POWER AND TELECOMMUNICATION

Class established

6. (1) Aerial cables that are over or across a navigable water and that are only for power or telecommunication purposes, and the associated structures and equipment, are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the width of the navigable water at the site of the crossing is less than 30 m when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side;
- (b) the works are not over or across a lake or tidal waters;
- (c) the works are not over or across a canal that is accessible to the public;
- (d) the works do not include towers or poles within the area between the ordinary high-water marks on each side of the

navigable water; and

(e) the works meet the requirements of section 5.3.3.2 of *Overhead Systems*, CAN/CSAC22.3 No. 1-10, as amended from time to time.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, under, through or across a navigation channel.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

(a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site;

(b) in the case of a river, a stream, a creek or similar navigable water, that signs stating "Construction Ahead" and "Travaux de construction" that are legible from at least 50 m are in place 50 m upstream and downstream from the work site; and

(c) that any cables that are in, on, over, under, through or across the navigable water are not left unattended or unsupervised unless they meet the requirements referred to in paragraph (1)(e) or are lying on the bed of the water.

Removal of temporary works

(5) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Notification of Canadian Coast Guard on removal

(6) If works of the class established by subsection (2) are in a charted navigable water, on removal of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been removed.

Notification of Canadian Hydrographic Service on completion

(7) If works of the class established by subsection (1) are over or across a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify the Canadian Hydrographic Service that the works have been constructed or placed.

Maintenance

(8) The owner of works of the class established by subsection (1) must ensure that the works continue to meet the requirements referred to in paragraph (1)(e).

Works in disrepair

(9) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

(a) repair the works so that they are no longer a danger to navigation; or

(b) remove the works.

Effective date of amendments

(10) An amendment to one language version of section 5.3.3.2 of *Overhead Systems*, CAN/CSA-C22.3 No. 1-10, is not incorporated until the corresponding amendment is made to the other language version.

SUBMARINE CABLES — POWER AND TELECOMMUNICATION

Class established

7. (1) Submarine cables that are only for power or telecommunication purposes are established as a class of works for the purposes of subsection 5.1(1) of the Act if

(a) the works lie on or under the bed of the navigable water;

(b) the works do not extend vertically above the bed of the navigable water more than

- (i) in the case of a navigable water of less than 15 m in depth, when measured from the ordinary high-water mark, 5% of the depth of the water when measured from the ordinary high-water mark, or
- (ii) in any other case, 1 m;

- (c) the works are not across the entrance to any port, including any marina;
- (d) the works are not in a dredged channel or area with maintained depth; and
- (e) the works are not in an area that is identified as an anchorage area on a Canadian Hydrographic Service or National Oceanic and Atmospheric Administration chart.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, over, under, through or across a navigation channel.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure that vessels can navigate safely through the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site.

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure, that if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are

- (a) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length;
- (b) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length;
- (c) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length; or
- (d) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Notification of Canadian Hydrographic Service on completion

(7) If works of the class established by subsection (1) are over or across a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify the Canadian Hydrographic Service that the works have been constructed or placed.

Notification of Canadian Coast Guard on removal

(8) If works of the class established by subsection (2) are in a charted navigable water, on removal of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been removed.

Restoration of contours

(9) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2), or
- (b) the removal of works of the class established by subsection (2).

Re-laying works

(10) Subject to subsection (11), if works of the class established by subsection (1) no longer lie on or under the bed of the navigable water, the owner of the works must, as soon as feasible,

- (a) re-lay the works so that they lie on or under the bed; or
- (b) remove the works.

Dangers to navigation

(11) The owner must immediately take the action referred to in subsection (10) if the works become a danger to navigation because they no longer lie on or under the bed of the navigable water.

PIPELINES BURIED UNDER THE BED OF NAVIGABLE WATER

Class established

8. (1) Pipelines that are buried under the bed of a navigable water and that are built or placed using a trenched method are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the width of the navigable water at the site of the crossing is less than 50 m when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side; and
- (b) the construction or placement of the works is completed within two weeks after the day on which construction or placement of the works started.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works include or consist of cables that do not lie on the bed of the navigable water.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site; and
- (b) if the works are under a river, a stream, a creek or similar navigable water that, when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side, is of a width set out in column 1 of the table to this subsection, that signs stating "Construction Ahead" and "Travaux de construction" that are legible from at least 50 m are in place, upstream and downstream from the work site, at the minimum distance set out in column 2.

TABLE

	Column 1	Column 2
Item	Width of Navigable Water	Minimum Distance
1.	Less than 10 m	25 m
2.	10 m or more but less than 20 m	50 m
3.	20 m or more but less than 50 m	100 m

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure that

- (a) if the works are on, over or across a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than

3 m in length,

- (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Notification of Canadian Hydrographic Service on completion

(7) If works of the class established by subsection (1) are under the bed of a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify the Canadian Hydrographic Service that the works have been constructed or placed.

Notification of Canadian Coast Guard on removal

(8) If works of the class established by subsection (2) are in a charted navigable water, on removal of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been removed.

Restoration of contours

(9) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2); or
- (b) the removal of works of the class established by subsection (2).

Re-laying works

(10) Subject to subsection (11), if works of the class established by subsection (1) no longer lie on or under the bed of the navigable water, the owner of the works must, as soon as feasible,

- (a) re-lay the works so that they lie on or under the bed; or
- (b) remove the works.

Dangers to navigation

(11) The owner must immediately take the action referred to in subsection (10) if the works become a danger to navigation because they no longer lie on or under the bed of the navigable water.

PIPELINES AND POWER OR COMMUNICATION CABLES ATTACHED TO EXISTING WORKS

Class established

9. (1) Pipelines and cables that are attached to an existing work that was approved under the Act or is referred to in subsection 4(1) or (2) or section 8 of the Act, are established as a class of works for the purposes of subsection 5.1(1) of the Act if the works do not increase the interference with navigation caused by the existing work.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, under, through or across a navigation channel.

During construction or placement

(3) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site;
- (b) if the works are on, over or across a navigable water, that the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,

- (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and

(c) in the case of a river, a stream, a creek or similar navigable water, that signs stating "Construction Ahead" and "Travaux de construction" that are legible from at least 50 m are in place 50 m upstream and downstream from the work site.

Removal of temporary works

(4) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Works in disrepair

(5) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

WORKS WITHIN A BOOMED-OFF AREA UPSTREAM OR DOWNSTREAM OF AN EXISTING WORK FOR WATER CONTROL

Class established

10. Works within a boomed-off area upstream or downstream of an existing work for water control are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the existing work for water control was approved under the Act or is referred to in subsection 4(1) or (2) of the Act;
- (b) the boom was approved under the Act or is referred to in subsection 4(1) or (2) of the Act;
- (c) the works do not adversely affect the efficacy of the boom;
- (d) the works do not alter the level or flow of the navigable water;
- (e) the works are not related to rebuilding or alterations to the boom or the existing work for water control; and
- (f) the owner of the works is also the owner of the boom or the existing work for water control.

OUTFALLS AND WATER INTAKES

Definitions

11. (1) The following definitions apply in this section.

"crib"
« *encoffrement* »

"crib" means pieces of timber affixed together to form bays or cells that are filled with stones or concrete.

"headpond"
« *bassin d'amont* »

"headpond" means a reservoir of water created by the construction of a dam or weir.

"outfall"
« *émissaire* »

"outfall" does not include a diffuser-type outfall.

"weir"
« *déversoir* »

"weir" means a low dam or barrier that raises the level or diverts the flow of a navigable water.

Class established

(2) Outfalls and water intakes are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works do not include a crib or other outfall or intake structure, such as a fish screen, an anchor, a collar or a weight, that extends vertically above the bed of the navigable water more than
 - (i) in the case of a navigable water of less than 15 m in depth when measured from the ordinary high-water mark, 5% of the depth of the water when measured from the ordinary high-water mark, or

(ii) in any other case, 1 m;

- (b) the works do not alter the level or flow of the navigable water;
- (c) in the case of a charted navigable water, the works are not within 30 m of a navigation channel; and
- (d) the works are not associated with a dam, weir or headpond, including a proposed dam, weir or headpond.

Temporary works

(3) Temporary works that are required for the construction or placement of works of the class established by subsection (2) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, over, under, through or across a navigation channel.

During construction or placement

- (4) During the construction or placement of works of the class established by subsection (2) or (3), the owner of the works must ensure
- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site; and
 - (b) that no floating pipes are left unattended or unsupervised.

Removal of temporary works

(5) The owner of works of the class established by subsection (3) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(6) The owner of works of the class established by subsection (2) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (3); or
- (b) the removal of works of the class established by subsection (3).

Re-laying piping

(7) Subject to subsection (8), if the piping of works of the class established by subsection (2) no longer lies on the bed of the navigable water, the owner of the works must, as soon as feasible,

- (a) re-lay the piping so that it lies on the bed; or
- (b) remove the works.

Dangers to navigation

(8) The owner must immediately take the action referred to in subsection (7) if the piping becomes a danger to navigation because it no longer lies on the bed of the navigable water.

DREDGING

Class established

12. (1) Dredging is established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are done in order to maintain the width or depth of the navigable water;
- (b) all dredged materials are disposed of
 - (i) above the ordinary high-water mark, or
 - (ii) in water where the disposal is authorized by or under an Act of Parliament;
- (c) the works do not use any suction dredging that involves the use of floating or submerged pipes;
- (d) the works have no cables that cross on, over or through any portion of the navigable water; and
- (e) the works do not include blasting.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, over, under, through or across a navigation channel marked by the federal government, a provincial government or an agency of one of those governments.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site.

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure that

(a) if the works are on, over or across a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are

- (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
- (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and

(b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are

- (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
- (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
- (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
- (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Contouring

(7) The owner of works of the class established by subsection (1) must ensure that the bed of the navigable water is, on completion of the construction or placement of the works, contoured to prevent hazards to navigation.

Notification of Canadian Coast Guard on completion

(8) If works of the class established by subsection (1) or (2) are in a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been completed.

MOORING SYSTEMS

Definitions

13. (1) The following definitions apply in this section.

“length”
« *longueur* »

“length” means, in respect of a vessel, the distance between the fore and aft extremities of the vessel.

“mooring system”
« *système d’amarrage* »

“mooring system” means a system that is used to secure a vessel and that consists of an anchor that is set in or on the bed of a navigable water, a single anchor line, a single buoy and a mooring line to attach to a vessel.

“swing area”
« *aire d'évitage* »

“swing area” means the diameter of a circle created by the swinging of a vessel moored to a mooring system.

Class established

(2) Mooring systems are established as a class of works for the purposes of subsection 5.1(1) of the Act if

(a) the swing area of the works is not

- (i) within 20 m of a work, other than a pipeline or an aerial or submarine cable, that is not owned by the owner of the works,
- (ii) within 20 m of the swing area of another work of the class established by this subsection, or
- (iii) within 50 m of a marina, public launch-ramp or navigation channel;

(b) the works are not associated with an existing or proposed marina;

(c) the width of the navigable water is more than 100 m when measured from the ordinary high-water mark on one side of the water to the ordinary high-water mark on the other side; and

(d) the buoy has the following characteristics:

- (i) the name, address and telephone number of the owner of the works is displayed on it in a conspicuous location and in a legible manner,
- (ii) the part of the buoy that shows above the surface of the water is at least 15.25 cm wide and at least 30.5 cm high,
- (iii) the top third of the buoy is orange and the rest of it is white, and
- (iv) the buoy displays, on opposite sides, the capital letters “PRIV”, which are in black and are as large as is practicable for the size of the buoy.

Swing area

(3) For the purposes of subparagraphs (2)(a)(i) and (ii), the swing area of a vessel is considered to be the area set out in column 1 of the table to this subsection when the navigable water has the depth set out in column 2

- (a) at the higher high-water mean tidewater level, in the case of tidal waters; or
- (b) at the 10-year high-water level, in any other case.

TABLE

	Column 1	Column 2
Item	Swing Area	Depth of Navigable Water
1.	50 m	6 m or less
2.	70 m	More than 6 m but not more than 10 m
3.	80 m	More than 10 m but not more than 14 m
4.	100 m	More than 14 m

Buoys and anchors

(4) The owner of the works must

(a) ensure that

- (i) the buoy maintains the characteristics described in paragraph (2)(d) during the navigation season, and
- (ii) the anchor remains in the position in which it was set in or on the bed of the navigable water; and

(b) comply with any order made under section 5 of the *Private Buoy Regulations* in respect of the buoy.

Mooring of vessels and removal of works

(5) The owner of the works

- (a) must not moor, or permit the mooring of, a vessel that is more than 12 m in length to the works; and
- (b) must remove the works if

- (i) any part of the works is removed, or
- (ii) during any two-year period, no vessel has moored to the works.

COMING INTO FORCE

3. This Order comes into force on the day on which it is made.