Canadian Northern Economic Development Agency
Agence canadienne de développement économique du Nord
ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᐊᓂ ᑮᓇᐅᔭᓕᐅᕐᓂᕐᒧᑦ ᐱᕗᓪᓕᐊᔾᓕᑎᒋᕖᒃ

September 20th, 2013

Sophia Granchinho
Senior Technical Advisor
Nunavut Impact Review Board
PO Box 1360
Cambridge Bay, NU
X0B 0C0

Via email: info@nirb.ca

RE: NIRB 09DN018: Notice of Part 4 Screening for Department of National Defence's Clarification and Resubmission of its "Nanisivik Naval Facility" Project proposal.

Dear Ms Granchinho,

Thank you for your letter dated of August 30th 2013, requesting comments from federal departments on the Notice of Part 4 Screening of the "Nanisivik Naval Facility" Project proposal. I am responding on behalf of the federal departments including Aboriginal Affairs and Northern Development Canada, Environment Canada, Fisheries and Oceans Canada, Natural Resources Canada and Transport Canada.

As requested, I am pleased to provide the NIRB with the requested comments from the federal departments (See attached annexes 1 through 5).

A contact list from federal departments for the Nanisivik Naval Facility Project is also attached (see attached annex 6).

We look forward to participating in future stages of the review of this proposed Project.

Sincerely,

Matthew Spence
Director General
Northern Projects Management Office

cc: Erika Marteleira, Aboriginal Affairs and Northern Development Canada
Loretta Ransom, Environment Canada
Elizabeth Patreau, Fisheries and Oceans Canada
Kathleen Cavallaro, Natural Resources Canada
Meighan Andrews, Transport Canada
Tineka Simmons, Northern Projects Management Office

Enclosed (6): Annex 1: Aboriginal Affairs and Northern Development Canada
Annex 2: Transport Canada
Annex 3: Department of Fisheries and Oceans Canada
Annex 4: Environment Canada
Annex 6: Natural Resources Canada
Annex 6: Contact List of Federal Departments for the "Nanisivik Naval Facility" Project

Canada

Aboriginal Affairs and Northern Development Canada
Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

Your file - Votre référence
09DN018
Our file - Notre référence
740463

September 20, 2013

Sophia Granchinho
Technical Advisor
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU, X0B 0C0
Via electronic mail to: info@nirb.ca

Re: Notice of Part 4 Screening for Department of National Defence's Clarification and Resubmission of its "Nanisivik Naval Facility" project proposal

Ms. Granchinho,

On August 30, 2013 the Nunavut Impact Review Board (NIRB) invited parties to comment on the Part 4 Screening of the Department of National Defence's (DND) "Nanisivik Naval Facility" project proposal. Aboriginal Affairs and Northern Development Canada (AANDC) appreciates the opportunity to provide comments, and offers the following as it pertains to the NIRB's request:

Any matter of importance to the party related to the proposed project.

Section 2.14 of the Department of National Defense's project proposal[1] states that "*...the Project is focused solely on infrastructure,...*". AANDC takes the view that shipping is an inherent component of this project and should be included as a project activity in the Part 4 screening of the proposed work. While AANDC has little information about the future use of the proposed facility, the shipping activity associated with the establishment and continued operation of any port facility has the potential to cause significant adverse eco-systemic and socio-economic effects. The NIRB has the ability to consider shipping activity associated with Project Proposals (NLCA s. 12.12.2). However, in the context of this proposed project, the NIRB might find it advisable to take an approach that differs from other projects. Unlike a port designed to support a single activity or set of initiatives (e.g., supply and outhaul associated with a single identifiable

[1] Canada. Department of National Defence. Stantec. *Nanisivik Naval Facility: Project Specific Information Requirements*. Stantec Consulting. Aug 26 2013. 6.0 Cumulative Effects, p 2.29

Canada

mining project), it may be difficult for DND to forecast future shipping with precision. Moreover, there may be national security justifications for less detailed information than in other cases.

AANDC looks forward to working with the NIRB and the Department of National Defence throughout the regulatory process related to this project. Should you have any questions, please contact James Neary at (867) 975-4567 or by e-mail at james.neary@aandc-aadnc.gc.ca.

Sincerely,

[Original signed by]

Mark Yetman
A/Manager, Impact Assessment

Canada

Transport Canada / Transports Canada

Programs, Environmental Services
P.O. Box 8550
3rd Floor, 344 Edmonton Street
Winnipeg, Manitoba
R3C 0P6

Your file Votre reference
09DN018

Our file Notre reference
7075-70-1-157

September 20, 2013

Sophia Granchinho
Senior Technical Advisor
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU, X0B 0C0

RE: Notice of Part 4 Screening for Department of National Defence's Clarification and Resubmission of its "Nanisivik Naval Facility" project proposal

Dear Ms. Granchinho:

On August 30, 2013 Transport Canada (TC) received correspondence from the Nunavut Impact Review Board (NIRB) requesting parties to provide comments on the revised Nanisivik Naval Facility project proposal pursuant to a Part 4 screening.

After reviewing the summary list of main project activities and components, Transport Canada's understanding of the proposed project is as follows:

The proposed Department of National Defence (DND) Nanisivik Naval Facility would be located approximately 33 kilometres (km) northeast of the hamlet of Arctic Bay, in the North Baffin region. The primary objective of the proposed project is to provide a "berthing & refueling facility" for the Arctic Offshore Patrol Ships (AOPS) and the Canadian Coast Guard (CCG) during the navigable season each year. This facility may also be used to receive, marshal, hold and distribute cargo and goods from commercial sea vessels and to provide appropriate shelter, work areas and amenities for personnel during the navigable season of the year only.

Transport Canada offers the following comments on the proposed naval facility with respect to our interests and mandate:

Marine Safety and Security

Vessels

All commercial vessels transiting through and operating in Canadian Arctic waters are required to comply with the *Arctic Waters Pollution Prevention Act (*AWPPA) the *Canada Shipping Act, 2001* (CSA 2001), *Marine Liability Act* and respective enabling regulations. The Department of National Defence vessels are exempt from requirements of the CSA 2001 and AWPPA.

Fuel Transfer and Storage

Transport Canada, Marine Safety and Security (TCMSS) is the lead federal regulatory agency responsible for the National Marine Oil Spill Preparedness and Response Regime. Part 8 of the CSA 2001 and its associated regulations and standards govern the regime, which is built upon the polluter-pay principle. Part 8 and its regulations require oil handling facilities (OHFs) that load or unload oil from vessels to have emergency plans. An Oil Pollution Emergency Plan (OPEP) is a regulatory requirement and must be reviewed by TCMSS prior to commencement of the Project. The Department of National Defence OHF at the proposed Nanisivik Naval Facility is exempt from requirements of the CSA 2001.

Marine Security

The Nanisivik Marine Facility is required to comply with Marine Transportation Security Regulations (MTSR) Part 3, once vessels captured in Part 2 interface with a marine facility. The International Convention for the Safety of Life at Sea (SOLAS) is an international maritime safety treaty, which ensures that ships flagged by signatory States comply with minimum safety standards in construction, equipment and operation. Flag States are responsible for ensuring that ships under their flag comply with its requirements.

Part 2, of the Marine Transportation Security Regulations further defines SOLAS and Non-SOLAS as,

> *"SOLAS ship" is a vessel that:*
>
> *a) is 500 tons gross tonnage or more or is carrying more than 12 passengers; and*
> *b) is engaged on a voyage from a port in one country to a port in another country.*
>
> *"Non-SOLAS ship" is a vessel that is not a SOLAS ship, is engaged on a voyage from a port in one country to a port in another country and:*
> *a) is more than 100 tons gross tonnage, other than a towing vessel;*
> *b) carries more than 12 passengers; or*
> *c) is a towing vessel engaged in towing a barge astern or alongside or pushing ahead, if the barge is carrying certain dangerous cargoes.*

Therefore, should Foreign Flagged Safety of Life at Sea (SOLAS) and non-SOLAS vessels interface with the Nanisivik marine facility, the operator is required to comply with Part 3 of the Marine Transportation Security Regulations.

MTSR – Part 2 applies to: APPLICATION

201. (1) This Part applies to vessels in Canada, and Canadian ships outside Canada, that are SOLAS ships or non-SOLAS ships.

MTSR – Part 3 applies to: APPLICATION

301. (1) In this section, "offshore facility" means a marine facility in a maritime zone of Canada as described in Part I of the *Oceans Act* and includes a drilling unit and platform.

(2) This Part applies to marine facilities, other than offshore facilities, that interface with vessels to which Part 2 applies.

The *Navigable Waters Protection Act* (NWPA) ensures the public's right to navigate Canada's waters without obstruction. In order to minimize the impact to navigation, TC ensures that works constructed in navigable waterways are reviewed and regulated for works built in, on, over, under, through or across navigable water in Canada prior to construction of work(s). The proponent, DND will need to inform TC of any design, construction, and operational changes accordingly, and may need to submit formal applications to the NWPP for specific works, in order to obtain NWPP's approval, promulgation, or exemption for each work.

Transportation of Dangerous Goods

Transport Canada references the following document which would require a revision to accurately reflect our mandate;

Nanisivik Naval Facility
Project Specific Information Requirements
Revision 3 – July 2013, page 2.13
Table 2-3 Applicable Legislation, Regulations and Guidelines
4th row - Legislation/Regulation Guideline

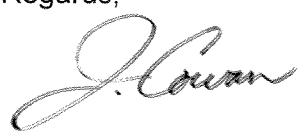
Transportation of Dangerous Goods Act. 1992 – Transportation of Dangerous Goods Regulations

Approval, Permit or Authorization
"Permit may be required for transportation (S.31)" should be removed and column left blank.

Based upon the review of project activities and components associated with the departmental mandate, Transport Canada is of the opinion that the proposed project is not likely to cause public concern and any potential adverse affects could be mitigated with adherence to the current Acts and Regulations cited.

Transport Canada appreciates the opportunity to comment on the revised Nanisivik Naval Facility based upon our understanding of the supporting documents submitted by the Proponent. Should you have any questions regarding Transport Canada's comments concerning this project, please contact me via email at john.cowan@tc.gc.ca or by telephone at (204) 983-1139.

Regards,



John Cowan
Environmental Services

Fisheries and Oceans Canada | Pêches et Océans Canada

Eastern Arctic Area
Central and Arctic Region
P.O. Box 358
Iqaluit, NU
X0A 0H0

Région Arctique de L'est
Région du Centre et de l'Arctique
C.P.358
Iqaluit, NU
X0A 0H0

September 11th, 2013

Your file *Votre référence*
13UN006

Our file *Notre référence*
12-HCAA-CA7-00020

Sophia Granchinho
Senior Technical Advisor
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU
X0B 0C0

Dear Ms. Granchinho:

Subject: DFO Comments, Notice of Part 4 Screening for Department of National Defence's Clarification and Resubmission of its "Nanisivik Naval Facility" Project Proposal.

As noted in DFO's June 20, 2013 email to NIRB, DFO is pleased to recommend mitigation measures in support of the NIRB Screening for the Nanasivik Naval Facility Project.

On June 20, 2013, DND provided DFO with draft mitigation measures. DFO recently reviewed the July 2013 Stantec report which provided a few additional mitigation measures in support of preventing impacts to fish and fish habitat (including marine mammals). DFO has added suggestions to measures 6, and 13 below and additional measures regarding marine mammals.

Mitigation Measures provided by DND/Stantec included:

1. The work area shall be appropriately isolated from the rest of the waterbody prior to starting work.
   a) Common techniques for isolation include installing sediment fencing or draping a sediment curtain/filter fabric over a support fence to contain any suspended sediment to the work area.

      i. If sediment fencing is used, the bottom of the fence should be weighted down
      ii. If a sediment curtain/filter fabric is used, it should be suitably weighted down or anchored

b) Whatever isolation technique is selected, it shall be regularly inspected and maintained as required to ensure effectiveness throughout the project.

2. The shoreline stabilization works will attempt to follow the natural shape and contour of the shoreline to the greatest extent possible.

3. Every reasonable effort will be made to minimize the duration of works taking place in the waterbody.

4. Where possible, in-water work will be scheduled when conditions are calm and the potential for precipitation is low to minimize any sediment migrating from the site during in-water work activities

5. All materials (e.g., gravel, cobble and rocks) used for shoreline stabilization shall be clean and free of fine sediments and contaminants. All material used for stabilizing the disturbed areas will not introduce additional sediment into fish habitat.

6. All sand, gravel, rock/cobble used during the project will be obtained from an appropriate location that will not result in erosion of disturbed sediments into any water body. No materials are to be taken from below the OHWM of any waterbody, and shall be appropriately sized to resist displacement by ice and wave action.

7. During construction and until a stable shoreline is re-established, effective sediment and erosion control measures will be used to prevent sediment laden runoff from entering fish habitat.

8. All debris from construction will be removed from the site upon completion of the project.

9. Areas used for stockpiling construction materials or other equipment storage will be back from the edge of the waterbody and if possible, in areas which have already been disturbed or are devoid of vegetation.

10. Appropriate precautions will be taken to ensure that deleterious substances do not enter any waterbody:

11. Equipment operating near any fish bearing waters will be properly maintained, in sound mechanical condition and free of any fuel, oil, hydraulic fluid or coolant leaks.

12. Cleaning, fuelling and servicing of equipment should be conducted in an area from which spills or wash water will not enter fish habitat.

.../3

13. Any spilled materials will be cleaned up as soon as possible and disposed of in an environmentally safe manner. Spilled material will not be left where it may enter any fish habitat. Spill kits will be kept on site.

Stantec provided some additional mention of mitigation regarding marine mammals by creating a 500m buffer zone and reducing vessel speed to 10-14 knots. In addition, DFO would like to include the following:

Section 7 of the Marine Mammal Regulations (Fisheries Act) prohibits the disturbance of marine mammals. Generally, disturbance is interpreted as disruption to an animal's normal life processes, resulting from intentional human activities (e.g., to pursue, accompany, overtake, encircle, approach, hunt, disperse, drive or herd individuals or groups of marine mammals). This applies equally to divers, kayaks, motor boats and aircraft. Disturbance response thresholds vary amoung individual species, and locations.

DFO provides the following advice to guide your activities:
-Aircraft should maintain a minimum altitude of 500m over marine mammals.
-Watercraft should keep a lookout for marine mammals, and avoid them. If marine mammals are encountered, and remain in the area, effort should be made to avoid them and slowly navigate around their location at a reduced speed and maintain a distance. Do not accelerate within 400m of them.
-Do not approach closer than 100m at any time

Upon review of the July 2013 Stantec report, DFO understands there is potential for DND to construct new roads whereby mention of 1m culverts is the potential watercourse crossing design. DFO would like to ensure that where DND installs culverts for a new road(s) that fish passage is provided for and not impeded by the new crossings, and that sediment and erosion controls are in place during construction.

Should you have any questions or comments, please contact me directly by telephone at (867) 979-8019, or by e-mail at Elizabeth.Patreau@dfo-mpo.gc.ca.

Yours sincerely,

Elizabeth Patreau
Senior Fish Habitat Biologist

c.c.: Marek Janowicz-Manager Oil and Gas Projects.

Environment Canada Environnement Canada

Prairie and Northern Region
Environmental Protection Operations (EPO) Directorate
5019 52nd Street, 4th Floor
Yellowknife, NT X1A 2P7

September 20, 2013

EC File No.: 6300 000 001 /001
NIRB File No.: 09DN018

Sophia Granchinho
Senior Technical Advisor
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

Via Email at info@nirb.ca

Attention: Ms. Granchinho

RE: 09DN018 - Notice of Part 4 Screening for Department of National Defence's Clarification and Resubmission of its "Nanisivik Naval Facility" project proposal

Environment Canada (EC) has reviewed the supplemental information provided by the Department of National Defense (DND), on June 28, 2013, in response to NIRB's request for clarification on deficiencies identified in DND's original proposal, and the information provided in the updated project proposal submitted to NIRB on August 19, 2013.

EC understands the DND is proposing to develop the Nanisivik Naval Facility located approximately 33 kilometres (km) northeast of the hamlet of Arctic Bay, in the North Baffin region. The primary objective of the proposed project is to provide a "berthing & refueling facility" for the Arctic Offshore Patrol Ships (AOPS) and the Canadian Coast Guard (CCG) during the navigable season each year. The facility would have fuel supply capacity for one (1) operating season. The facility may also be used to receive, marshal, hold and distribute cargo and goods from commercial sea vessels and to provide appropriate shelter, work areas and amenities for personnel during the navigable season of the year only. The construction program is proposed to commence in 2014 with the facility then becoming fully operational by 2016. The proposed facility has been designed for an anticipated life of at least 40 years, with the intention that it be manned and operated from June through October, and unmanned from November to June each year.

EC has reviewed the information submitted to the NIRB regarding the above-mentioned project and has previously submitted comments, on October 17, 2011 (attached), on mitigation measures as well as other matter of importance to the project proposal as requested by the NIRB. EC's specialist advice is provided pursuant to EC's mandated responsibilities arising from the *Canadian Environmental Protection Act, 1999* (CEPA), the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act* (MBCA) and the *Species at Risk Act* (SARA). Also, our letter, dated March 22, 2012 (attached) indicated we did not have any further comments with respect to the reduction in the project scope. After reviewing the supplemental information provided by DND on June 28, 2013 and August 19, 2013 to the NIRB, we do not have further comments.

EC's comments provided on October 10, 2011 still apply and EC is satisfied with DND's response to our comments and recommendations.

EC would like to provide updated information on Species at Risk in the vicinity of the project, specifically that the Red Knot (*islandica* subspecies, a shorebird) was designated as a species of Special Concern by COSEWIC in April 2007, and was added to Schedule 1 of SARA in April 2012. The Red Knot (*islandica* subspecies) breeding range overlaps with the location of the proposed project area. Although the major threats to Red Knot relate to habitat degradation in the wintering areas and decreases in food resources during spring migration, the proponent should ensure that extra precautions are taken to avoid any disturbance to the Red Knot or its habitat during the breeding season.

Red Knots nest on barren habitats (often less than 5% vegetation) such as windswept ridges, slopes or plateaus. Nest sites are usually in dry, south-facing locations, **<500 m from wetlands or lake edges**, where the young are led after hatching. Nests are simple scrapes on the ground in small patches of vegetation. Nesting will occur in June with hatching in early July.

If an active Red Knot nest is encountered during project activities, or observations of Red Knot in the area suggest that a nest could be nearby, the proponent should avoid all activities in the area until nesting is complete (i.e., likely only resume activities in the area until after mid-July). Setbacks of 300 m for pedestrians/ATVs and 500 m for industrial activities are recommended to protect Red Knot nests. **EC recommends that all industrial activities should be avoided within 500 m of wetlands providing suitable nesting/foraging habitat for Red Knot.**

Proponents should contact the CWS for further advice on how to identify and protect habitat for Red Knot. Additionally, the Canadian Wildlife Service of EC is interested in observations of birds, especially observations of birds identified as Species at Risk (e.g., Ivory Gull and Red Knot) or of species occurring outside their known ranges. Proponents are encouraged to submit their observations to eBird Canada (http://ebird.org/content/canada). Observations submitted to eBird are immediately available to anyone interested in birds in the north. Observations can also be sent to the NWT/NU Bird Checklist program:

NWT/NU Bird Checklist Survey
Canadian Wildlife Service, Environment Canada
5019 - 52 Street, 4th Floor
P.O. Box 2310
Yellowknife NT, X1A 2P7
Phone: 867.669.4771
Email: NWTChecklist@ec.gc.ca

Please contact the Canadian Wildlife Service for blank checklist forms.

If there are any further modifications to the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me at (867) 669-4744 or loretta.ransom@ec.gc.ca with any questions concerning the above points.

Sincerely,

Loretta Ransom

Loretta Ransom
Senior Environmental Assessment Coordinator, EPO

cc:

Dave Fox (A/Head, Environmental Assessment North, EPO)
Paula Smith (Environmental Assessment Coordinator, CWS)

Attachments:

October 17, 2011 EC Letter of Comment to NIRB
March 22, 2012 EC Letter of Comment to NIRB

Environment Canada Environnement Canada

Environmental Assessment North
Environmental Protection Operations (EPO)
Qimugjuk Building 969
P.O. Box 1870
Iqaluit, NU X0A 0H0
Tel: (867) 975-4631
Fax: (867) 975-4645

17 October 2011

EC file: 4704 004 029
NIRB file: 09DN018

Sophia Granchinho
Technical Advisor
Nunavut Impact Review Board
29 Mitik, PO Box 1360
Cambridge Bay, NU X0B 0C0

Via email: info@nirb.ca

RE: Notice of Part 4 Screening for the Department of National Defence's "Nanisivik Naval Facility" project proposal

Environment Canada (EC) has reviewed the information submitted with the above-mentioned project proposal to the Nunavut Impact Review Board (NIRB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Department of National Defence is proposing to establish a deep-water refuelling and supply station at Nanisivik for the Arctic Offshore Patrol Ships (AOPS), Canadian Coast Guard, and other government ships during the navigable season through the Northwest Passage. Project activities include the establishment of a construction camp between 2012 and 2015; use of existing dock facilities during construction; upgrading of berthing/wharf infrastructure; construction of a helicopter landing area; construction of a Shore Support Building, and a Cargo Storage and Marshalling Area; construction of bulk fuel storage facilities; upgrading existing roads and development of new access roads; use of the Arctic Bay airport during construction to transport personnel to the facility; use of the all-weather road between Arctic Bay and the facility during construction and operation to transport personnel and materials and potentially medical, police, and community services; potential use of borrow sites for rock and aggregate; water withdrawal from East Twin Lake to provide water for the facility; generation of waste; chemical and hazardous material storage; and potential use of a project management office in Arctic Bay.

Upon review of the supporting documents for this project proposal, EC provides the following comments and recommendations for the NIRB's consideration:

General

- The proponent shall not deposit, nor permit the deposit of chemicals, sediment, wastes, or fuels associated with the project into any water body. According to the *Fisheries Act*, Section 36 (3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.

- In Section 3.3.2 Disposal at Sea, EC notes that the project description includes a substantial amount of in-water work but does not indicate dredging will occur. However, if disposal at sea activities are to occur a permit for such works must be obtained from EC prior to any such activities.
- In Section 5.2.3 Aquatic Species (Fish and Marine Mammals) and Habitat, EC suggests that, prior to pile driving for the wharf upgrades, bubble curtains be installed to prevent impacts rather than after impacts occur should noise levels be expected to be greater than 150 dB at 10m from the pile driving activities.

Quarrying

- It is recommended that an undisturbed buffer zone of at least 100 metres be maintained between any quarrying that may occur and the normal high water mark of any water body.
- Suitable erosion control measures shall be implemented. The proponent shall not deposit nor permit the deposit of sediment into any fish bearing waters. Stream bank disturbances must be minimized and all disturbed areas stabilized upon completion of the project
- The proponent shall ensure that silt fences/curtains are installed down gradient of any quarrying activities.
- No disturbance of the stream bed or banks of any definable watercourse is permitted; clearing adjacent to streams/lakes should be done without disturbing the organic layer.
- EC recommends that an Abandonment and Restoration Plan be prepared for the proposed quarry sites. This Plan should communicate the proponent's reclamation objectives and procedures for the area affected by excavation activities.
- The Proponent shall ensure that quarry activities do not result in the contamination of groundwater. Excavation and/or removal of material from the quarry should only take place to within one metre of the high water mark above the ground water table.

Appendix C: Waste Management Plan

- Under Section 3.1, Domestic Wastewater Treatment, EC recommends the proponent apply the *Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments (1976).*
- Section 36(3) of the *Fisheries Act* prohibits any person from depositing or permitting the deposit of a deleterious substance of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water. The deposit of a deleterious substance to water frequented by fish constitutes a violation of the *Fisheries Act,* whether or not the receiving water itself is made deleterious by the deposit, except where federal regulations under subsection 36(5) of the Act, or other Governor in Council regulations, permit the discharge of the deleterious substance to levels set out in the regulations.
- It is important to be aware that On March 20, 2010, the Government of Canada published, in *Canada Gazette,* Part I, proposed *Wastewater Systems Effluent Regulations* under the *Fisheries Act*. The North, including the Territory of Nunavut, is excluded from this proposed regulation for a 5-year period for research on factors that affect performance of wastewater facilities in northern conditions. Within the lifetime of this project, wastewater effluent regulations applicable to this system can be expected. In the meantime, effluent quality requirements in existing authorizations including Subsection 36(3) of the Fisheries Act which prohibits any person from depositing or permitting the deposit of a deleterious substance of any type in water frequented by fish will continue to apply.
- Oily Wastewater - EC recommends that all oily wastewater transferred from vessels or collected on-site be treated separately from the domestic wastewater treatment. EC supports the proponents plans for off-site treatment and disposal.
- The burning of waste products releases numerous contaminants to the air, many of them persistent, bio-accumulative and toxic (e.g. polycyclic aromatic hydrocarbons - PAH's –

heavy metals, chlorinated organics – dioxins and furans). These contaminants can result in harmful impacts to human and wildlife health through direct inhalation and they can also be deposited to land and water, where they bio-accumulate through food chains affecting wildlife and country foods. Therefore, burning should only be considered after all other alternatives for waste disposal have been explored and the devices used for incineration meet the emission limits established under the CCME Canada-wide Standards (CWS) for Dioxins and Furans and the CWS for Mercury Emissions. The Government of Canada, the Governments of the Northwest Territories, Nunavut and the Yukon are signatories to these standards and are required to implement them according to their respective jurisdictional responsibilities.

- EC recommends the use of an approved incinerator for the disposal of combustible camp wastes. EC has developed a Technical Document for Batch Waste Incineration, and is available at the following web link:
  http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1
  The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting. This information should be incorporated into an incineration management plan for the facility. EC would like the opportunity to review this plan prior to implementation.
- Solid wastes that are conditionally suitable for burning are paper products, paperboard packaging and untreated wood. EC is concerned with possible side effects of dioxin and furan emissions which can occur due to the incineration of certain wood structures and therefore requests that only clean wood, which has not been coated with preservative chemicals or paint, be considered for incineration.
- A waste manifest form shall accompany all hazardous waste in transit and all parties will be properly registered as per the Environmental Protections Service (EPS) of the Department of Sustainable Development of the Government of Nunavut.
- The Plan states that hazardous waste will be transported from to off-site facilities for disposal. Under the *Canadian Environmental Protection Act* (CEPA 1999) and the Interprovincial Movement of Hazardous Wastes Regulations, the transportation of hazardous waste between territories and to provinces requires that the proponent completes movement documents. The Government of Nunavut only regulates waste in Nunavut and has no authority outside of Nunavut. An approved movement document must be completed.

Appendix D: Spill Contingency Plan

- Under Section 7.0 Emergency Contacts, EC's contact information should be updated to: Environment Canada Enforcement Offer (867) 975-4644.
- A spill kit, including shovels, barrels, absorbents, etc. should be readily available at all locations where fuel is being stored or transferred in order to provide immediate response in the event of a spill and should accommodate 110% of the capacity of the largest fuel storage container.
- EC recommends that a copy of the Plan be posted at any location where these products are stored and at each fuel cache and refuel station, accessible to on-site crew members.
- Spills are to be documented and reported to the NWT/NU 24 hour Spill Line at (867)920-8130. EC recommends that all releases of harmful substances, regardless of quantity, are immediately reported where the release:
  - is near or into a water body;
  - is near or into a designated sensitive environment or sensitive wildlife habitat;
  - poses an imminent threat to human health or safety; or,
  - poses an imminent threat to a listed species at risk or its critical habitat.
- Please note the new CEPA *Storage Tank System for Petroleum Products and Allied Petroleum Products Regulations* that came into force on June 12, 2008. These regulations apply to both outside, aboveground and underground storage tank systems (including the piping and other tank associated equipment) under federal jurisdiction containing petroleum

NWT/NU Bird Checklist program.

NWT/NU Bird Checklist Survey
Canadian Wildlife Service, Environment Canada
5019 - 52 Street, 4th Floor
P.O. Box 2310
Yellowknife NT, X1A 2P7
Phone: 867.669.4771
Email: NWTChecklist@ec.gc.ca

Blank checklist survey forms are available at:
http://www.ec.gc.ca/reom-mbs/default.asp?lang=En&n=D19D8726-1

If there are any modifications to the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at Paula.C.Smith@ec.gc.ca.

Yours truly,

Paula C. Smith
Environmental Assessment Coordinator

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Ron Bujold (Environmental Assessment Technician, EPO, Yellowknife, NT)
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and allied petroleum products that have a capacity greater than 230 litres. This includes tanks located on federal or Aboriginal lands. Exceptions are pressurized tanks, mobile tanks, tanks regulated by the National Energy Board, and outdoor, aboveground storage tank systems that have a total combined capacity of 2500 litres or less and are connected to a heating appliance or emergency generator. All storage tank system owners must identify their tank systems to EC and installation of new systems must comply with the regulation's design requirements. Further information on these regulations can be found at www.ec.gc.ca/st-rs.

Appendix E: Emergency Response Plan

- In Section 2.0, the EMP states that the proponent is going to rely on Arctic Bay for ancillary emergency response assistance. Has the proponent discussed the requirements and possible demands of this project on community services?
- Under Section 3.0 Potential Emergencies, the list of potential emergencies does not include air or ship emergencies or disasters.
- EC recommends that the plan should include an examination and discussion of the ways in which allowances have been made to adjust emergency response to extreme weather events.

Appendix F: Wildlife Mitigation and Monitoring Plan / Wildlife and Species at Risk

- Section 6 (a) of the *Migratory Birds Regulations* states that no one shall disturb or destroy the nests or eggs of migratory birds. Although the proposed Nanisivik Naval Facility will be built on a previously disturbed site, nesting habitat for migratory birds may nonetheless exist within the project boundaries. The best mitigation measure to ensure compliance is to conduct activities with a risk of disturbing or destroying nests or eggs outside of the migratory bird nesting season. High risk activities include disturbance of large amounts of habitat during the nesting season or conducting activities in areas with large concentrations of nesting birds.

  Other mitigation measures may help reduce the risk of accidental disturbance or destruction of nests or eggs during the nesting season, but will not necessarily completely eliminate the risk. Flushing nesting birds also increases the risk of predation of the eggs or young, or may cause the parent bird to abandon its nest. If project activities are conducted during the nesting season, areas should be checked for nests before work begins and all crew members should be trained on how to recognize signs that a bird might be nesting in the area. If an active nest is found, the area should be avoided until nesting is completed (i.e. the young have left the vicinity of the nest).

  In the northern Arctic region of the Northwest Territories and Nunavut, migratory birds may be found incubating eggs from May 31 until August 4, and young birds can be present in the nest until August 28.
- EC recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, and glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.
- Section 5.1 of the *Migratory Birds Convention Act* prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- Marine birds are vulnerable to oil spills and to pollution of their feeding areas. Environment Canada recommends that the proponent consider what steps would be taken to protect wildlife (including marine birds) in the event of a spill. This information could be incorporated into an existing emergency response and/or spill response plan. This could include specific measures to keep wildlife out of a contaminated area, equipment available to

do this, what measures would be taken if animals do come in contact with the spill, and when such procedures should be used. Having this information outlined not only benefits wildlife, but also gives clear direction to the field crew on what to do in a spill situation if wildlife is nearby.

- In order to reduce aircraft disturbance to migratory birds, Environment Canada recommends the following:
    - Fly at times when few birds are present (e.g., early spring, late fall, winter)
    - If flights cannot be scheduled when few birds are present, plan flight paths that minimize flights over habitat likely to have birds and maintain a minimum flight altitude of 650 m (2100 feet).
    - Minimize flights during periods when birds are particularly sensitive to disturbance such as migration, nesting, and moulting.
    - Plan flight paths to avoid known concentrations of birds (e.g., bird colonies, moulting areas) by a lateral distance of at least 1.5 km. If avoidance is not possible, maintain a minimum flight altitude of 1100 m (3500 feet) over areas where birds are known to concentrate.
    - Avoid the seaward side of seabird colonies and areas used by flocks of migrating waterfowl by 3 km.
    - Avoid excessive hovering or circling over areas likely to have birds.
    - Inform pilots of these recommendations and areas known to have birds.
- The following comments are pursuant to the *Species at Risk Act* (SARA), which came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that species on other Schedules of SARA and under consideration for listing on SARA, including those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), be considered during an environmental assessment in a similar manner.

  EC notes that the proponent incorrectly identified Ivory Gull as a species of Special Concern on Schedule 1 of SARA in their project description and wildlife management plan. The designation for Ivory Gull on Schedule 1 of SARA was elevated to **Endangered** in 2009, and the recovery strategy for this species is expected to be available on the SARA registry in 2012. The proponent should be aware of the location of historical and active Ivory Gull breeding colonies found on the Brodeur Peninsula. The closest colony to the project site is roughly 50 km away. Polar Bear will likely be added to Schedule 1 of SARA as a species of Special Concern in November 2011.

  The Table below lists terrestrial species that may be encountered in the project area that have been assessed by COSEWIC as well as their current listing on Schedules 1-3 of SARA (and designation if different from that of COSEWIC). Project impacts could include species disturbance and attraction to operations.

Terrestrial Species at Risk [1]	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility [2]
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Peregrine Falcon	Special Concern (*anatum-tundrius*	Schedule 3 – Special Concern (*tundrius)*	Government of Nunavut

	complex[3])		
Red Knot (*rufa* subspecies)	Endangered	Pending	EC
Red Knot (*islandica* subspecies)	Special Concern	Pending	EC
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western population)	Special Concern	Pending	Government of Nunavut

[1] The Department of Fisheries and Oceans has responsibility for aquatic species.
[2] Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.
[3] The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was listed by COSEWIC as Special Concern.

  - For any Species at Risk that could be encountered or affected by the project, the proponent should note any potential adverse effects of the project to the species, its habitat, and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the Species at Risk registry at www.sararegistry.gc.ca for information on specific species.
  - If Species at Risk are encountered or affected, the primary mitigation measure should be avoidance. The proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.
  - Monitoring should be undertaken by the proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.
  - For species primarily managed by the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.
  - Mitigation and monitoring measures must be taken in a way that is consistent with applicable recovery strategies and action/management plans.
- All mitigation measures identified by the proponent, and the additional measures suggested herein, should be strictly adhered to in conducting project activities. This will require awareness on the part of the proponents' representatives (including contractors) conducting operations in the field. Environment Canada recommends that all field operations staff be made aware of the proponents' commitments to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
- Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds and Species at Risk, but will not necessarily ensure that the proponent remains in compliance with the *Migratory Birds Convention Act*, *Migratory Birds Regulations*, and the *Species at Risk Act*. The proponent must ensure they remain in compliance during all phases and in all undertakings related to the project.
- The Canadian Wildlife Service of Environment Canada is interested in observations of birds, especially observations of birds identified as Species at Risk (e.g., Ivory Gull, Ross's Gull, and Red Knot). Observations can be reported through the

Environment Canada Environnement Canada

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22 March 2012

EC file: 4704 004 029
NIRB file: 09DN018

Sophia Granchinho
Technical Advisor
Nunavut Impact Review Board
29 Mitik, PO Box 1360
Cambridge Bay, NU X0B 0C0

Via email: info@nirb.ca

RE: Request Comments Re Department of National Defence's Proposed Revised Scope of the "Nanisivik Naval Facility" project proposal and its Response to Parties' Comments

Environment Canada (EC) previously reviewed the information submitted to the Nunavut Impact Review Board (NIRB) regarding the above-mentioned project proposal. The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Department of National Defence is proposing to establish a deep-water refuelling and supply station at Nanisivik for the Arctic Offshore Patrol Ships (AOPS), Canadian Coast Guard, and other government ships during the navigable season through the Northwest Passage. Project activities include the establishment of a construction camp between 2012 and 2015; use of existing dock facilities during construction; upgrading of berthing/wharf infrastructure; construction of a helicopter landing area; construction of a Shore Support Building, and a Cargo Storage and Marshalling Area; construction of bulk fuel storage facilities; upgrading existing roads and development of new access roads; use of the Arctic Bay airport during construction to transport personnel to the facility; use of the all-weather road between Arctic Bay and the facility during construction and operation to transport personnel and materials and potentially medical, police, and community services; potential use of borrow sites for rock and aggregate; water withdrawal from East Twin Lake to provide water for the facility; generation of waste; chemical and hazardous material storage; and potential use of a project management office in Arctic Bay.

The DND recently indicated to the NIRB that after completing a review of the infrastructure requirement of the Nanisivik Naval Facility it is planning to reduce the functionality of the site while keeping the intent of the facility the same (i.e. reducing the scope of the project).

At this time EC does not have any comment further to those provided on 10 October 2011. Although the scope of the project has been reduced, comments provided by EC would still be relevant. If there are any modifications to the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at Paula.C.Smith@ec.gc.ca.

Yours truly,

Paula C. Smith
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Environmental Assessment-North, EPO, Yellowknife, NT)
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September 20, 2013

Sophia Granchinho
Technical Advisor
Nunavut Impact Review Board
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NIRB File#: 13UN006
NRCan File#: NT-090

Via email: info@nirb.ca, sgranchinho@nirb.ca

Re: Natural Resources Canada's Comments regarding the Nunavut Impact Review Board's Notice of Part 4 Screening for Department of National Defence's Clarification and Resubmission of its "Nanisivik Naval Facility" project proposal

On August 30, 2013 the Nunavut Impact Review Board (NIRB) invited parties to comment on the Part 4 Screening for the Department of National Defence's "Nanisivik Naval Facility" project proposal. Natural Resources Canada (NRCan) appreciates the opportunity to provide comments.

Based on the information in the revised Project Specific Information Requirements document (July 2013) and supporting documents, NRCan understands that the department is not anticipated to have regulatory responsibilities for the project.

In response to the specific questions posed by the NIRB, NRCan conducted a preliminary assessment of the revised "*Nanisivik Naval Facility Project Specific Information Requirements*". We have no new or substantive information to provide to the NIRB in relation to this project proposal.

If you have any questions regarding the foregoing please contact Kathleen Cavallaro at (613) 996 0055 or via email at Kathleen.Cavallaro@nrcan.gc.ca.

Sincerely,

Original Signed by

John Clarke
Director, Environmental Assessment SPI
Natural Resources Canada

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