14 April 2010
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To: Western Gray Whale Advisory Panel

From: Pacific Environment
WWF Russia
Sakhalin Environment Watch

Re: DMNG Program

Dear WGWAP Members:

We are writing to express serious concern about the new Dalmorneftegeophysica Program for Geological and Geophysical Work in the Aquifers of the Russian Far East and the Eastern Arctic Seas of the Russian Federation (DMNG Program) in the Period Up to 2020.

As the DMNG Program map illustrates below, the areas covered by the proposed DMNG Program are vast and expansive. They extend from the edges of Japanese and US territorial waters, and include areas in and near the Western Gray Whales’ near-shore feeding grounds and migration route, and along the Khabarovsk, Magadan, and Kamchatka coasts and Kuril Islands. We believe this poses a serious threat of negative impact to the critically endangered Western Gray Whales, and to other marine life.

The DMNG Program contains descriptions of the seasonal conditions for each marine zone, pointing out that many of the planned areas are covered by sea ice throughout the year, except for a short time in the late summer. While the document does not specify a time of year for conducting testing, we are concerned that this indicates DMNG Program intentions to conduct testing in the summer – during the season of Western Gray Whale feeding and migration, and possibly during the presence of other migratory marine life.

The attached DMNG Program includes what it refers to as preliminary Environmental Impact Assessment (EIA) documentation, which contains a number of statements that are of concern to us. For example, the DMNG Program claims that the company has developed measures that will prevent or minimize potential negative impact on whales as seismic work is being conducted, however these measures are not disclosed.

Also, the DMNG Program document states that large scale congregation of marine mammals is not expected within the area of seismic testing. In an
apparent contradiction, the document indicates that, in the area where the planned seismic work will take place, cetaceans prevalent during the planned spring/summer work period are the Beluga, and common and white fin porpoises, and during the summer and autumn period, fin whales, Minke whales, and orcas can also be encountered. The document then reveals that there is insufficient knowledge of some parts of the seismic work area, and that during the period of work there is a definite chance that other marine mammals will appear, including those listed in the Red Data Book of the Russian Federation list of endangered species (sea lions, northern fur seals, Western Gray Whales, and others). Yet, the document states, without substantiation, that “[i]t is possible that individual cetaceans and pinnipeds will experience a negative sound impact, but it will be brief, with no injury to the animals. The most likely behavioral reaction will be to move to a safe distance to avoid the negative impact. As a whole, the impact of seismic work on marine mammals is rated insignificant-to-weak.”

The document predicts that “[a]ccording to preliminary estimates, the overall harm to aquatic bioresources from a loss of fish stocks due the destruction of zooplankton, benthos, pelagic eggs and larvae fodder over 11 years of geolog-geophysical work is 3141.261 tons in kind (including from carrying out of 2D and 3D seismic exploration the damage amounts to 3135.75 tons, and with electromagnetic survey – 5.51 tons.” This prediction is confusing, lacks clarity, and is made without any supporting evidence.

Overall, the DMNG Program document and preliminary EIA is an incomplete, vague, and unsubstantiated portrayal of environmental impacts and mitigation measures that would be wholly inadequate even if conducted in any one of the proposed testing areas. We find it inexplicable and unacceptable that such an undeveloped EIA is being used for all the proposed testing areas in such a vast expanse of ocean.

Previously, BP-Rosneft used another DMNG EIA as a rationale for not conducting their own EIA. We are concerned that this preliminary EIA material, which acknowledges the lack of sufficient knowledge to adequately predict and mitigate impacts, could be used in a similar manner to allow project operators to circumvent necessary assessments in the future.

DMNG has announced a 30-day period for public discussion of the DMNG Program and associated preliminary EIA, beginning April 1st, 2010. This is the only documentation that will be subjected to a public hearing during this period. After April 30th the company will submit the DMNG Program, including the EIA to authorities (Rostekhnadzor) to receive environmental approval.

The WGWAP is the preeminent scientific body tasked with Western Gray Whale conservation. We urge the WGWAP to submit a letter of concern to DMNG during or shortly after the upcoming WGWAP-8 meeting, so that it reaches DMNG before the 30 day period ends. We also urge the WGWAP to develop a
broader strategy to address the potential impacts of the DMNG Program and to
determine its credibility, use and misuse.

Sincerely,

Pnina Levermore
Russia Program Director
Pacific Environment

Doug Norlen
Policy Director
Pacific Environment

Aleksey Knizhnikov
Oil and Gas Officer
WWF Russia

Dmitry Lisitsyn
Chairman
Sakhalin Environment Watch

Attachments: Dalmorneftegeophysica Program for Geological and Geophysical
Work in the Aquifers of the Russian Far East and the Eastern Arctic
Seas of the Russian Federation in the Period Up to 2020

Unofficial Translation of Selected Excerpts of the
Dalmorneftegeophysica Program for Geological and Geophysical
Work in the Aquifers of the Russian Far East and the Eastern Arctic
Seas of the Russian Federation in the Period Up to 2020
Map of the Proposed Seismic Testing Areas

Source: DMNG, 2010
Map of the Western Gray Whale Range

Source: IUCN
8. Primary results of the impact assessment

8.7 Impact on the air
The impact on the air is based on the discharge of burned fuel from ships, and in this case it is typical for the operation of ships.

According to the results of the impact assessment, the average amount of 3B emissions is 249.2 tons/year. In total, the maximum total amount of pollutants released in any one site will not exceed 10.9 т/с.

According to the results of simulated field surface concentration of 3B, a permissible level of impact on the air in populated areas is at a distance of 350 meters from the source.

The anticipated impact on the air resulting from carrying out the work is considered insignificant.

The main measures for minimizing the impact on the air are:

- Using fuel that meets the requirements of Government Standards (ГОСТ) and MARPOL 73/78.
- Providing quality maintenance and control of the fuel equipment
- Adjusting the fuel equipment to reduce seepage
- Daily visual inspection of flue gases

8.8 Impact on the marine environment
The main factors impacting the marine environment as a result of this work are the physical presence of ships, sea water intake, and discharge of sewage from the ships.

The average annual volume of freshwater used can reach 1.63 thousand m$^3$, seawater – 3.06 million m$^3$.

Household and fecal waste water will be made harmless at wastewater treatment plants. Drainage and storm sewage from open deck areas, as well as the regulatory net technical water from the ships’ cooling systems will be subject to being dumped into the water without purification. All possible oil-contaminated drainage will be collected in special recycling containers in accordance with the requirements of environmental law.
The Impact Assessment showed that in accident-free work, the impact on the marine environment will be insignificant.

The main measures for minimizing the impact on the marine environment are:

- Treatment of household and fecal waste water and oil-contaminated waste water at wastewater treatment plants that meet Registry requirements and are certified by the appropriate departments. Alternatively, collection of contaminated wastewater in special recycling reservoirs for transfer to onshore facilities
- Provision of high-quality maintenance of the water consumption and wastewater systems
- Control of the wastewater treatment system
- Control of the volume of wastewater discharge
- Maintaining order and prevention of oil spills on deck
- Discharge of oil waste beyond the territorial seas of the Russian Federation must meet the requirements of MARPOL 73/78, while respecting the following conditions:
  - The ship is traveling at a speed not less than 4 узлов
  - The oil content of the spill does not exceed 110 ч/мillion
  - Throughout the duration of the spill, there is a system of monitoring, registering, and managing the collection of the oily waste
- Use cooling equipment that employs a dual-circuit cooling system which avoids the contamination of sea water
- Observation of the water system (control of water consumption and sanitation).

8.9 Impact on the marine biota
The specter of impact on various groups of sea organisms during the process of seismic surveys is broad. The main impact turns out to be from the functioning of pneumatic elastic waves.

Within a radius of 5 m from the site of excitation of the elastic waves, immobile organisms (plankton, fish eggs and larvae) will experience an irreversible negative impact (the death of a certain portion of them within the range of impacts is unavoidable), while more evolved (fish, mollusks, and marine mammals) are capable of fleeing the unfavorable area.

Hydrobiontes, which have a uniform density of tissue and no air cavities, are particularly able to withstand the strong impact of elastic waves. Based on written data, it is reasonable to assume that extended broad seismic surveys can disburse schools of fish. However, implementation of planned mitigating measures will reduce the negative impact of seismic surveys on fish fauna. So for example, the gradually increasing in the strength of the pnevmoistochnikov (from a gentle start) will allow the fish to flee the area of seismic surveying before the sound signals reach their maximum strength. In areas of salmon spawning migration in transit zones (shallow strips directly adjacent to the shoreline of marine waters), the use of electro-emitters with relatively low levels of acoustic impact, such as “Yenisei” VEM-50 is recommended.
The conduct of seismic work and its associated impact of elastic waves on the fish fauna will be localized and temporary. Therefore, it will not have a significant impact on the population of fish and their stock.

Within the area of seismic, large scale inclination of marine mammals is not expected. Among the cetaceans that inhabit the area of the planned seismic work, the most numerous are the Beluga – at the end of spring and beginning of summer, when the work will be taking place – harbor whitefin porpoises. Besides these, during the summer and autumn period fin whales, minke, and orcas can also be encountered. At the same time, there is insufficient knowledge of some parts of the seismic work area, and it is possible that during the period that the work is being carried out there is definite chance that other marine mammals will be appear, including those listed in the Red Book (sea lions, northern fur seals, western gray whales, and others). It is possible that individual cetaceans and pinnipeds will experience a negative sound impact, but it will be brief, with no injury to the animals. The most likely behavioral reaction will be to move to a safe distance to avoid the negative impact. As a whole, the impact of seismic work on marine mammals is rated insignificant-to-weak.

It is expected that the measures taken to reduce impact will lower the possibility of significant or moderate impact on marine mammals, if it should occur, to a level of moderate to weak.

The impact of seismic work on aquatic bioresources of the overall population of local biological communities is considered to be insignificant or weak (mostly as a consequence of the loss of plankton and benthos fodder), and is medium-term. In the event of a loss of fish eggs and larvae, such as local, the impact is not significant, particularly considering the high mortality resulting from natural causes, and is long-term (considering that the period for replenishing of commercial stock of fish eggs and larvae is basically from 3-4 years). The direct impact of electric fields on commercial fish fauna and marine mammals, as the locals, are insignificant and medium-term.

According to preliminary estimates, the overall harm to aquatic bioresources from a loss of fish stocks due the destruction of zooplankton, benthos, pelagic eggs and larvae fodder over 11 years of geolo-geophysical work is 3141.261 tons in kind, including from the carrying out of 2D and 3D seismic exploration the damage amounts to 3135.75 tons, and with electromagnetic survey – 5.51 tons.

Under the planned work in concrete locations and in more precise time frames it will be necessary to conduct qualifying calculations of the damage, taking into account the technology used, the power of the PI being used, and technical tools. This damage will be fully compensated by the disbursement of funds for the construction of fish farms before work begins.

In order to prevent or minimize a potential negative impact on marine life, DMNG has developed a “program for observation of Cetaceans”, and a “program of activities to reduce the potential for negative impact on whales during the conducting of seismic
survey work in the Aquifers of the Far East and East Arctic seas.” The programs include organizational procedures, precautionary and active steps including the cessation of work in the event that marine mammals are detected within the established safety zones.

8.10 Impact on the environment, waste treatment
In carrying out the Programs, waste, and methods to deal with it will be tied to the use of the ships. Operations of waste on the boats are conducted in accordance with the Ship’s Plan of Operations with Garbage and registered in the appropriate journal. All technical systems are inspected yearly under an examination by a corresponding organ at the port where the ship is registered.

According to the results of the Impact Study, the amount of waste created on the ships would average 79.7 tons per year.

Ships’ waste is subject to selective collection, and it is turned over to organizations that are licensed in waste management. In accordance with the MARPOL 73/78 Convention, food waste may be sorted and tossed into the sea:
- At a distance of at least 3 miles from the shore and crushed to a size of not more than 25 mm in non-special districts
- At a distance of 12 miles from the shore

Waste from the seismic work area is not expected to have an impact on the environment.