

Far Eastern Oil Pipelines

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During the meeting with the President of Russia Natural Resources Minister Yuri Trutnev in August, 29, 2007 it was noted that “the current programme of geological exploration was effectively drafted: last year Russia explored more gas, oil, copper and gold reserves. But there were exposed individual drawbacks. There are problems in some provinces such as East Siberia, including the East Siberian – Pacific Ocean oil pipeline project.” The president stressed that “the pipe line to the Pacific Coast would be no doubt built.”

What are the challenges the inhabitants of South Yakutia can face: the first may be considered as social one, the second is environmental, the third is ethnic.

An oil window is open for the countries of Asia-Pacific region. No doubt trade of natural resources remains our major export and prime point of economic growth, and excavating Siberian and Yakutian “black gold” are proceeding extensively. The oil pipeline will stretch over 3,900 kilometers, and carrying capacity will be 50 million tons of oil a year. And amid eight regions through which the pipeline will run is our Republic – Sakha (Yakutia).

The pipeline will pass through territories which have complex geological structure, including permafrost, mountains, forests, lakes and rivers, and all these factors make it comparable to constructing world famous projects: Prudo Bay – Anchorage pipeline in Alaska, pipeline through the bottom of the Baltic Sea.

At present the Transneft company has come close to constructing the pipeline on the territory of Nerungri area in Yakutia. It was announced that more than 300 wagons were unloaded at Nerungri and Nagorny railway stations and the flow of cargoes is on the rise. The number of workers was promised to include about 5000 workers from our Republic. But euphoria was premature. In fact for the Yakutian government it became impossible to persuade the head of the pipeline construction to employ yakut citizens. The Transneft guarantees employment of only 200 republic inhabitants who will be sent to Tomsk college to begin training in the field of oil pipe constructing. Meanwhile 1200 Chinese workers were engaged in construction of the pipeline. As reported there are about 47000 of unemployed in Republic and no wonder that people of Yakut towns expressed disagreement to involvement of foreign labour resources and all these facts lead to social tensions.

The tensions started to aggravate after arson the so called Chinese wooden hostel and street fights amid Nerungry youngsters and Chinese workers. The town authorities organized the

discussions in the hope that in the nearest future there would be taken steps towards the rehabilitation of hazardous situation primarily based on labour misconception. The oil pipe line is considered to be one of the main breadwinners for the town budget as a consequence for the inhabitants. But our specialists' activities in the field of pipe line constructing are plunging and in this case one can observe much disaster in it.

As reported the company "Krasnodarstroytransgas" condemned the Chinese company "China Petroleum Pipeline Bureau" in breaking the delivery terms of the strategic export route between Tynda and Aldan which resulted in halt of pipeline constructing.

Chinese workers were planned to construct 170 km of the pipeline branch but in reality only 120 km was stretched for the period from February to August. The main reason for cancellation of the project treaty was a strong backlog from the construction schedule. The head of Nerungry "Krasnodarstroytransgas" branch

Mister Peter Shtyfel confirmed the notice to have been handed down to Chinese part, however the final decision to cancel the project treaty between the companies should be accepted by the customer of the Far East Pacific Ocean construction "Transneft". Mister Styfel stated that the site work has been stopped meanwhile the Chinese are busy with elimination of errors including shift settlement arrangement. Vice-President "Transneft" company Sergei Grigoriev announced that "the Chinese do not follow the accepted duties, for instance they do not arrange their settlements, technical devices have not been arrived, they create only problems".

The next challenge concerning the Chinese contractor runs as following: their visa has run out, 200 workers are supposed to leave for Motherland in case they do not have visa. Factually only 400 workers out of 852 have the legal right to work at the Far East Pacific Ocean project construction. Anyway the contract has not been thought to be transferred to another company instead of China Petroleum Pipeline Bureau. As a matter of fact the company "Krasnodarstroytransgas" has a significant shortage in skilled workers in the field of oil construction. Meanwhile the most of Russian companies can not meet the "Transneft" demand.

Thus the construction of the pipeline is in urgent need of qualified specialists and the issue of ecology and security of operation of facilities of the future pipeline system has become a great concern for the inhabitants of the nearest settlements to the pipeline.

It is universally known that the problem that typically accompanies oil field development and its use is oil spills from damaged pipelines. This is a global-scale challenge requiring a coordinated response from the living community and authorities. In South Yakutia the problem is growing extremely important in the context of large pipeline construction in woodlands, animal kingdoms, green belts.

Recently ecological organizations heard reports by executives of the pipeline project, the “Transneft company and other structures concerning ecology and safety of future pipeline system operation.

As it was mentioned before the pipe line stretching occupies the most complex territories of the Southern Yakutia from geological point of view and seismic one. Let us regard the seismic investigations made by the scientific researchers of the Technical Institute in Nerungry who studied the pipeline site including earthquake epicenters in the south of Sakha Republic. It is vividly seen that the stripe of 200 kilometers can be considered the earthquake epicenters taking place within Stanovoi mountain ridge and Aldan-Uchursk plateau. For the last 40 years (1964 - 2006) more than 16000 of earthquake shocks were registered through instrumental observing. The estimated average recurrence runs as follows: the earthquake shocks of 6.0 points on the Richter scale can occur once in 10 years, 6.0 – 7.0 points once in 30 years, 7 points once in 100, 8.0 points once in 280 years, 9.0 points once in 800 years. South Yakutia earthquake data taking place in the XIX century were introduced for the first time by Mushketov and Orlov in “Russian Empire Earthquake Catalogue” (1893). These events were censored in Yakutsk (2 -4 points): wooden houses squeaked, candle flame moved, icon lamps swung. “The USSR Earthquake Atlas” (1962) mentions the earthquakes in 1937 and 1939, two shocks in 1958 along the river Olekma with the magnitude of 9.0 points on the Richter scale. During the following 60 years the region constantly ran the danger of immense earthquakes (23 October, 1964 6.0 – 7.0 points; 18 January, 1967, 9.0 – 10 points; 14 June, 1971, 7.0 – 8.0 points; 9 August, 1972, 6.0 points; 1 March, 1985, 6.0 points; 16 January, 1987, 5.0 points; 20 April, 1989, 8.0 points; 4 January, 1999, 5.0 points. After some calculations the average earthquake point forecast for the Far Eastern Oil Pipeline site is 8.0 – 10.0 points on the Richter scale and the radii of it is expected to be the length of the Uzhno-Yakutsk breaking where the pipeline rout is stretched.

The technogenic earthquake can result in oil spill from ruptured pipelines which in its turn is a global-scale challenge requiring a coordinated response from the local and governmental authorities and international community. The longer the constructed pipeline the more growing the problem is in the context of environmental protection, and more variable and wide ranging the pollution sources and environmental hazards. In particular there arises the problem of protection and ecological safety of underground water streams, exploitation of nature, cutting down forests. It seems fair to call people involving into pipeline erecting as creatures that ignore the needs of future generations and think about nature as an infinite availability of resources. If we plant a tree it takes a generation to grow it and if the seed appears to be in the ground it takes more than one generation before the tree is in use again. And if the ground is poisoned with spilled oil the countless number of generations could wait for tree

emergence. Who is likely to lose under such grave circumstances? Everyone in such a case can be called a loser, even a common forest visitor. But mostly the users of the forest: the reindeer herders, local people, hunters, and the wildlife that depend on the forest cover.

On the area close to the pipeline construction evenk people lives whose traditional livelihoods are dealt with taiga, which feeds and dresses them: reindeer herding, fishing, hunting, berry picking. Such livelihoods are of great importance for they support the settlements and national societies, there culture and lives. The first evenk settlements appeared in Nerungry district long ago and this process started from Amur region. The Russians became acquainted with this people in the 17th century when the first Russian travelers began to develop new lands. At present the number of evenk people in Nerungry district namely in the settlements of Iyengra and Khatymy is 871 and it is them to have preserved their national language, customs, culture and traditions in reindeer herding. Reindeers influences immensely on evenk traditions, culture, sayings and mode life objects. As evenk proverb says “The reindeer is alive so far the man is also alive” and thus confirmed the status and function of this gracious animal: feeding, giving clothes and it is a means of transportation.

Of course a success of reindeer herding depends mostly on the local food sources which is based on reindeer moss and lichen, mushrooms and birch and willow foliage, sedge and cereals. For the herd of 40 – 50 reindeers it is necessary 300 or 400 hectares of pasture. And due to the statistics the contemporary number of reindeers in Iengra farm is 2718. The target of the local herders is to find the rational and balanced herding area with great amount of lichen and moss and to support availability of herding areas. Lichens are not absolutely necessary for reindeer but analysis of reindeer feeding proved the idea of overwhelming preference for lichens over other food sources especially in winter feeding period.

In this case the pipeline can become an artificial boarder and even an obstacle for feeding and arranging pastures of lichens for the numerous herds of reindeers. This can lead to the negative impact on the landscape and if the feeding intensive in one and the same herding site it can cause a decline in the preferred species of food for the herds and the result may be unpredictable: the high rate of calves death, starvation amid the adult reindeers, because of the poor gazing the underweight mother deer gives a birth to a underweight calf that has an extremely low resistance. And the evenks can be deprived of their ever existing tradition of reindeer herding and the detrimental pursuit of consuming strong beverages and drug addiction may occur.

The further construction of the pipeline on the area of reindeer herding also means an increase in waste staff and litter in previously clean and unspoiled places. Litter left is a great

challenge for environment and local people as decomposition of it takes quite a prolonged period; rubbish remains unchanged for decades or more under North climate circumstances.

Presence of industrial devices along the pipeline also means air pollution if not controlled and waste problems and what is more machine engine noise frightening the fauna of surrounding area. Devices with internal combustion engine can give off different pollutants: partly burnt gasoline, carbon monoxide, nitrogen oxide, sulfur oxides. Such emission can undoubtedly be harmful to particular species that are sensitive to disturbance especially to reindeers during spring calving season.

Currently there should be taken steps to reduce stress on the local landscapes, litter should be burnt in specially organized fireplaces, transport devices without pollution controls should be outlawed, or additional emission control on constructing devices should be installed. All these measures can significantly reduce atmospheric pollution in the constructing area.

Various methods of storing the spilled oil in case of technogenic disasters should be worked out in the frame of North climate circumstances. The working forces should be environment conscience and environment educated and the role of local mass media can be hardly overestimated. It is a must for the issues to publish articles devoted to the preservation of ecosystems in our district, to foresee the ill-effects of unrestricted forest industrialization and intrusion, facts of extermination of wildlife, and expression of hopes the smell of clean fresh air, the good taste of pure water, existence and preserving of the traditional livelihoods is not a disappearing blessing.