

A Review of Violations of Russian Environmental Legislation by the Company “Sakhalin Energy Investment Company Ltd” and its Contractors and Subcontractors During the Implementation of the Second Phase of the “Sakhalin-2” Project

Prepared by the Regional Public Organization “Sakhalin Environment Watch,” April 2006.

Executive Summary

Analysis of the Feasibility Study for construction for phase 2 of the “Sakhalin-2” project, the Addendum to the EIS (November 2005), required recommendations of the expert commission of the Government Environmental Impact Review, permits, materials of state and public inspections, and environmental legislation **shows** that work on construction of objects of phase 2 of the “Sakhalin-2” project by the company “Sakhalin Energy” are being carried out with significant deviations from the approved project documentation, with the introduction of changes to approved documentations, and with gross violations of current environmental legislation of the Russian Federation:

1. “Sakhalin Energy” is violating the requirements of federal legislation that forbid the construction of pipelines through spawning beds and the crossing of headwaters of rivers using trench methods.
2. “Sakhalin Energy” is violating the Federal Law “On environmental impact reviews,” the Federal Law “On protection of the environment,” and the conditions of the Conclusion of the Government Environmental Impact Review for phase 2 of the “Sakhalin-2” project by building pipelines with significant deviations from approved project documentation.
3. “Sakhalin Energy” is grossly violating the Federal Law “On environmental impact reviews” and conditions of the Conclusion of the Government Environmental Impact Review for phase 2 of the “Sakhalin-2” project by building pipelines through rivers using Horizontal Directional Drilling (HDD) without a positive conclusion of the Government Environmental Impact Review and in some instances with a negative conclusion of the Government Environmental Impact Review.
4. “Sakhalin Energy” is grossly violating construction norms and rules requiring the construction of pipelines above ground when crossing tectonic faults.
5. “Sakhalin Energy” is building the mooring for offloading LNG in Aniva Bay with significant deviations from approved project documentation, which is a violation of the Federal Law “On environmental impact reviews.”
6. “Sakhalin Energy” built and started exploiting a mooring for offloading equipment without a positive conclusion of a Governmental Environmental Impact Review, which was established by a court and is a violation of the Federal Law “On environmental impact reviews,” the Federal Law “On protection of the Environment,” and the Procedure for carrying out a Governmental Environmental Impact Review.
7. “Sakhalin Energy” reduced the Sanitary Protection Zone around the LNG plant in comparison with the area foreseen in the Feasibility Study and approved by the Conclusion of the Governmental Environmental Impact Review, which is a violation of legislation about environmental impact reviews.
8. “Sakhalin Energy” did not discuss the location of the site for dumping of spoil into Aniva Bay with citizens and public organizations, which is a violation of the Federal Law “On protection of the Environment” and the Statute about the evaluation of impacts of planned commercial and other activity on the environment in the Russian Federation.
9. A large number of other violations of legislation by both the company “Sakhalin Energy” itself and by its contractors and subcontractors exist: illegal logging during unpermitted rerouting of the pipeline (a criminal case has been launched on this); illegal siting of sewage infrastructure within the riparian buffer zone of the Val River; the import of several thousand tons of a dangerous poisonous chemical – ethylene glycol – onto the island without the permission of authorities for its use, including in riparian buffer zones; the contraband import into Russia (on Sakhalin) of equipment with high levels of radiation (a criminal case has

been launched on this); the planned discharge of more than 500,000 cubic meters of effluent into Aniva Bay along the routes of migrating salmonid fish; multiple violations of medicinal and sanitary-hygienic norms and requirements and work safety, which have been exposed by a multidisciplinary inspection by federal and regional government inspection agencies.

Introduction

The primary normative legal acts, which create the basis for environmental legislation of the Russian Federation, are the Federal Laws (FL) “On the Protection of the Environment” and “On Environmental Impact Reviews (*ekspertiza*).” In addition a large amount of other laws, codes, decrees, rules, standards, etc. exist, a significant amount of which are not directly related to protection of the environment, however they include conservation requirements such as, for example, construction norms and laws (SNiP).

The legislation of the Russian Federation in the area of environmental impact reviews mandates a certain procedure for the approval of project documentation prior to the beginning of any activity that is able to create impacts on the environment. Besides agreements with government oversight agencies, the developer of the project is required to carry out an evaluation of impacts to the environment, which includes a discussion of project decisions and their alternatives with the public. Then the developer is required to send all project materials (the developed project, agreement of government agencies, materials of the discussions with the public) to the required government environmental impact review (GEE). The review is organized by the Ministry of Natural Resources of the Russian Federation and is carried out by contracted outside experts. The FL “On Environmental Impact Reviews” and normative legal acts adopted in accordance with it regulate this process.¹

The government environmental impact review, in reviewing project materials, establishes the accordance of the proposed activity with the requirements of legislation in the sphere of protection of the environment and makes conclusions about the allowance of the impact of the project on the environment and about the possibility of its implementation. A review of the GEE can be either positive, or negative (p. 5, article 18, FL “On EIRs”). A positive conclusion of the GEE is one of the required conditions of financing and realizing the project. The legal consequence of a negative conclusion of the GEE is a ban on carrying out the project in the proposed form. However, the law allows the project developer to send the project for a repeat impact review under the conditions that the project has been reconfigured, taking the comments of the experts into consideration.

The conclusion of the government environmental impact review of the materials of the Feasibility Study (TEO) of the complex development of the Piltun-Astokhsky and Lunsky licensed areas (Phase 2 of the Sakhalin-2 project), which is accepted to consider positive, was approved July 15 2003 by a decree of the Ministry of Natural Resources of the RF, No. 600. The **object** of the state environmental impact review was the TEO materials.

The TEO materials of phase 2 of the “Sakhalin-2” project from the beginning included project decisions that violate the requirements of environmental legislation of the RF. This is proven not only by the text of the GEE conclusion itself², but also in p. 1 of the final conclusions, where it is shown that the materials of the TEO **basically** comply with the requirements of the legislative acts of the RF. “Basically” in the Russian language means – although to a large degree, not fully, but partly.

Besides that, the TEO materials did not include full information about the baseline condition of the environment, which did not allow the experts of the GEE to determine the compliance of project

¹ Process for carrying out a government environmental impact review (registered in the Ministry of Justice of the RF July 28 1997, N. 1359), the Statute about the order for carrying out a governmental environmental impact review (approved by a Decree of the Government of the RF on June 11 1996, N. 698).

² Citations for specific pages of the Conclusion will be given further in the text of the Review.

decisions with the legislation of the RF and to make an objective conclusion about the impact of the project on the environment, which is also noted repeatedly in the text of the Conclusion.

Article 18 of the FL “On environmental impact reviews” and point 20 of the Statute on the order for carrying out a GEE requires that a positive conclusion of a GEE include as a required element a conclusion about the possibility of implementing the object of the review. Based on developed practices, such a conclusion always exists in all GEE conclusions. However, in the Conclusion of the GEE on the TEO of phase 2 of the “Sakhalin-2” project, such a conclusion **is absent**, which creates doubt overall about the positive nature of the given conclusion.

In accordance with the Federal Law “On environmental impact reviews” (article 18, p. 5, art. 30, part 1), the implementation of the object of the government environmental impact review must be carried out in strict compliance with the documentation that has received a positive review. Otherwise (in the case of deviating from the approved documentation or making changes to it), the positive conclusion of the GEE **loses its legal status**.

Analysis of the TEO for construction for phase 2 of the “Sakhalin-2” project, addendum to EIA (November 2005) and the required recommendations of the expert commission of the GEE and environmental legislation shows that the company “Sakhalin Energy” is carrying out work on the construction of objects for phase 2 of the “Sakhalin-2” project with significant deviations from the approved project documentation. In this way, according to the FL “On EIRs,” the conclusion of the GEE for phase 2 of the “Sakhalin-2” project loses its legal force and further construction and exploitation of objects on the “Sakhalin-2” project are **illegal**.

To bring the activities of the company “Sakhalin Energy” into compliance with the law, it is necessary to develop a new project (or a series of separate projects) for the objects that are being constructed with deviations from approved project documentation or with changes made to it, to carry out a revised environmental impact assessment, and to carry out a revised government environmental impact review.

Besides the direct violation of legislation about environmental impact reviews, construction on the project is being carried out with gross violations of other environmental laws, norms, and rules, a review of which is provided below.

The text is divided into four parts: Violations during 1) construction of pipelines; 2) the LNG plant; 3) while carrying out the environmental impact assessment; and 4) other. The names of violated normative legal acts are listed in cursive; quotations from them, which include the violated norms, are framed in boxes.

I. Violations of the legislation of the RF during construction of on-shore pipelines.

1) The company “Sakhalin Energy” is violating the requirements of federal legislation that forbid the construction of the pipeline through spawning beds and the crossing of the headwaters of rivers by trenching.

“Requirements for the prevention of the death of objects of the animal world during the carrying out of production processes, and also during the exploitation of transportation thoroughfares, pipelines, communications lines, and electric transmission lines,” approved by the Decree of the Government of the RF of August 13 1996, No. 997, establishes:

Point 29. In the case of crossing rivers, the pipeline is dug and fixed (to prevent rising to the surface). In crossing headwaters of rivers and streams with a pipeline an overpass is constructed. Pipelines should not cross spawning grounds and wintering holes.
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The company “Sakhalin Energy” **in** violation of the highlighted Requirements is constructing trenched crossings of pipelines on **102 aquatic objects** directly through spawning grounds of salmonid species of fish and is crossing the headwaters of spawning rivers and streams by trenching, instead of constructing an overpass **over** watercourses.

The government environmental impact review **did not evaluate** the impact to spawning grounds from the laying of pipelines, **did not establish** the compliance of project decisions of the trench-laying of pipelines through spawning grounds and headwaters of rivers with the legislation of the RF and **did not approve** of this. This is proven by the *Conclusion of the GEE*, where in part 3 it is noted:

"Project decisions for the construction of crossings through aquatic barriers are absent. The proposed approach – designed according to standard schemes – **contradicts** the requirements of active normative-technical documentation” (p. 30).

Experts showed in part 4.5, “Marine and land bioresources” in points 4 and 5:

"parts dedicated to the baseline description of fish resources are superficially developed, which makes difficult the objective evaluation of the impact of proposed activities on fish. ... Evaluations of damage to fisheries resources from the construction of crossings through watercourses are not supported by data of examinations of ranges of crossings with the goal of revealing the presence and density of spawning beds of salmonid fish” (p. 51).

Further in p. 8 of Recommendations and Proposals, the experts recommended

"to carry out ecological-fisheries examinations of a range of crossings of onshore pipelines through aquatic barriers with the goal of determining technical decisions that will provide a minimization of impact from the construction of crossings on production of salmon” (p. 52).

In p. 3 of the Final Conclusions of the Conclusion of the GEE experts directly prescribed:

"Considering the uniqueness of natural conditions of the construction and the particular technical complexity of a series of objects of the TEO, during the development of working documentation it is necessary to fulfill detailed designs of project decisions for crossings across aquatic barriers, active tectonic faults with taking into consideration the development of dangerous geological processes on the construction sites (earthquakes, landslides, settling, avalanches, dilution of soils), in the reservoir parks of the liquefied natural gas plant and the oil export terminal. **It is necessary to agree upon** the noted project decisions with government environmental agencies of the MNR of Russia for Sakhalin Region” (p. 66).

In this way, the government environmental impact review required the company to carry out additional examinations of rivers, determine the technical decisions (detailed design of project decisions) for the construction of crossings and agree upon them in the established order. The experts directly showed that there was not information in the project materials about whether there were spawning beds in the range of crossings across rivers.

According to point 5 of the Final Conclusions of the Conclusion of the GEE:

"Recommendations and proposals that are made in the current conclusion must be taken into consideration during the implementation of the TEO of the complex development of the Piltun-Astokhsky and Lunsky licensed areas (phase 2 of the “Sakhalin 2” project)” (p. 66).

During additional examinations by the company “Sakhalin Energy” **spawning beds of salmonids were revealed on 102 rivers in the range of trench crossings.** Following the prescription of the GEE, the company “Sakhalin Energy” was required to further develop and approve particular technical decisions for the crossing of such rivers. Since the government environmental impact

review could not evaluate the project decisions for the construction of crossings over rivers and their impact to the environment according to the materials of the TEO, the company “Sakhalin Energy” was supposed to formulate the developed technical decisions in a separate project (a working project) and, in compliance with articles 11, 18 of FL “on EIRs,” to agree upon them with government agencies, going again through the EIA process (including public consultations) and send all materials for a **required repeat government environmental impact review**. Based on these requirements, the company fulfilled only one – it agreed upon technical decisions with government oversight agencies. In this way, the construction of trenched crossings of the pipelines through 102 rivers directly through spawning beds of salmonid species without a positive conclusion of the GEE for a project with new technical decisions for the construction of crossings is a **violation of legislation of the RF and the conditions of the Conclusion of the GEE**.

Article 3 of the FL “On the protection of the environment” establishes one of the primary principles of protection of the environment:

“Providing for a decrease of negative impact of commercial and other activity on the environment in accordance with the norms in the sphere of protection of the environment, which are possible to achieve on the basis of using best available technologies taking into consideration economic and social factors.”

Implementing its project on the territory of the Russian Federation, the company needs to base its activities, among other things, on this statute of a Russian federal law. The policy of the Company should be oriented not toward the compensation of damage caused from the activity of laying a pipeline, but on the **prevention** of negative impact and its consequences as such, adopting in this best available technologies and providing for the compliance with active norms, the most important requirement of which in the given case is the ban on crossing spawning beds by pipelines.

Russian legislation, naturally, allows for the obvious fact that any commercial activity will inevitably create harm. But this harm is allowed to be created only under the condition that it is **impossible** to prevent it with environmental conservation activities. In the situation with fisheries resources, a special Methodology³ which directly establishes that in relation to fisheries resources, it is allowable to cause, evaluate and compensate only **non-preventable** damage.

In actuality the approach of the Company to laying the pipeline is based on completely ignoring the principal position of Russian legislation about the primary approach of **prevention** of harm, and damage as its consequence, and not the compensation of already caused harm. Therefore all citations by “Sakhalin Energy” that the Company has calculated damage caused to fisheries resources and has compensated it in the amount of \$11 million (and in this way “bought” itself “the right to damage”) is completely untenable and can not serve as a justification for the gross violation of legislation and the resulting consequences – significant damage, primarily to the spawning beds of salmonids.

2) The Company “Sakhalin Energy” is violating the FL “On environmental impact reviews,” the FL “On the protection of the environment,” the conditions of the Conclusion of the GEE for phase 2 of the “Sakhalin-2” project by building pipelines with significant deviations from approved project documentation.

FL “On the protection of the environment”:

Article 37. Requirements in the area of protection of the environment **during construction** and reconstruction of buildings, **installations and other objects**

1. Construction and reconstruction of buildings, installations and other projects must be carried out **based on approved projects, which have a positive conclusion of a government environmental impact**

³ Temporary methodology for the evaluation of damage caused to fisheries resources as a result of construction, reconstruction, and expansion of enterprises, infrastructure, and other objects and carrying out various types of work in fisheries management waterways.

review, with compliance of requirements in the area of protection of the environment, and also sanitary and construction requirements, norms and rules.

2. **Construction** and reconstruction of buildings, **installations and other objects is forbidden** until the approval of projects and until allocation of land plots in nature, and also **changes to approved projects** that damage requirements in the area of protection of the environment.

...

FL “On environmental impact reviews”

Article 18. Conclusion of the government environmental impact review

A positive conclusion of the government environmental impact review **loses legal force** in the event that:

... implementation of the object of the government environmental impact review **with deviations from documentation** that has received a positive conclusion of a government environmental impact review, and (or) in the event of the introduction of **changes** in the noted documentation;...

Article 30. Types of violations of legislation of the Russian Federation about environmental impact reviews

Violations of the legislation of the Russian Federation about environmental impact reviews **by the developer of the documentation**, subject to environmental impact review, and by interested parties are:

...7) the implementation of commercial and other activity **not in accordance with the documentation**, which received a positive conclusion of a government environmental impact review.

In violation of article 37 of the FL “On protection of the environment,” article 18 and article 30 of the FL “On environmental impact reviews,” which requires the implementation of activity in strict accordance with the approved project documentation, “Sakhalin Energy” is constructing onshore pipelines with significant **deviations from this documentation** (TEO):

A). “Sakhalin Energy” carried out **54 re-routings** of the approved route of onshore pipelines⁴ In many instances, the re-routing was carried out already after the clearing of the strip of the allocated initial route and the removal of the fertile soil layer, and the new route was cleared right next to the already existing one. In this way, additional damage was caused to the environment which was not calculated and evaluated since, with rare exclusions, these re-routings were not composed into separate projects and there were no governmental environmental impact reviews for these.

B). According to project materials, the construction of pipelines across waterways must be carried out **simultaneously-consecutively** during one winter season (first the oil pipeline, then the gas pipeline). However, “Sakhalin Energy” is carrying out the construction of crossings of the pipelines with an interval **from a few months to more than a year**⁵, and in this way, damage to riverine ecosystems is caused, at a minimum, twice. The majority of crossed rivers are spawning rivers for several species of Pacific salmon and are designated as the highest fisheries management category; the causing of additional damage to rivers from non-simultaneous construction was not evaluated or approved by the governmental environmental impact review.

B). TEO materials **did not contain project decisions for the construction of temporary bridges** across waterways along the route of the pipelines. Their construction was only understood in context, not more. Besides, bridges have actually been constructed or are being constructed at the current time across more than 1,000 waterways. However the impact from construction of bridges was not evaluated, and the damage to fisheries resources was not calculated and compensated. According to the opinion of specialists, compensation for such damage can reach 5-6 million U.S. dollars. The absence of the evaluation and approval of a government environmental impact review for such a massive impact on riverine ecosystems is a gross violation of environmental legislation.

C). Multiple inspections by territorial directorates of Rosprirodnadzor and Rosselkhoznadzor have noted instances of **unsanctioned** placement of wastes of topsoil in water protection zones,

⁴ Addendum to EIA, chapter 13, November 2005.

⁵ See table http://www.sakhalinenergy.com/environment/rivers/riv_list.asp

unorganized flow of water polluted with suspended solids into the channel of rivers and streams, the construction of a series of crossings were carried out during the period of salmonids approaching to spawn. Inspections noted multiple violations of conditions of licenses for water use and the use of forbidden methods for the construction of bridges on the route. Public inspections by the Regional Public Organization “Sakhalin Environment Watch” revealed that the concentration of suspended solids, in spite of approved project decisions, **does not decrease** to total allowable concentrations at 500 meters from the range of the crossing. In the majority of cases, a train of cloudy water saturated with suspended particles is carried **for many kilometers** from the range of the crossing (Travyanaya, Ozernaya, Severnaya Khandasa, El’nya, Manui rivers, and many others).

3) The Company “Sakhalin Energy” is grossly violating the FL “On environmental impact reviews” and the conditions for the Conclusion of the GEE of phase 2 of the “Sakhalin-2” project, building pipelines through rivers using the horizontal directional drilling method (HDD) without a positive conclusion of the GEE, and in several instances with a negative conclusion of the GEE.

Decrees No. 496 and No. 497 from the Directorate of Rosprirodnadzor for Sakhalin Region on October 5 2004 approved **negative** conclusions of the GEE for work projects for the construction of pipeline crossings using the method of horizontal directional drilling across the Firsovka and Naiba rivers. Analogical projects for the construction of pipeline crossings across the remaining 4 rivers⁶ did not go through a government environmental impact review at the regional level at all. Nonetheless, pipeline crossings using HDD methods are already constructed through some of the rivers, which is a violation of the FL “On environmental impact reviews”:

Article 18. Conclusion of the government environmental impact review
5. ... A positive conclusion of the government environmental impact review is one of the **required** conditions for financing and **implementation** of the object of the government environmental impact review.
...
A legal consequence of the **negative** conclusion of a government environmental impact review is a **ban** on implementing the object of the government environmental impact review.

A violation of art. 18 of the FL “On environmental impact reviews,” in particular the construction of pipeline crossings across the Firsovka River using HDD methods with a **negative** conclusion of a regional GEE led to the **next violation** of environmental legislation.

Statute on water protection zones for aquatic objects and their coastal protection strips, approved by Decree of the Government of the RF No. 1404 from November 23, 1996:

6. Within the limits of water protection zones **it is forbidden:**
... placing ... **sites of storage and burial of industrial, household, and agricultural wastes**, ... stockpiles of waste water...

Conclusion of the GEE, Part 3, “Evaluation of project decisions and measures for providing for ecological security”:

"In using the method of directional drilling it is worthwhile to additionally provide for activities **excluding** the discharge of bentonite muds into waterways and their shoreline areas **in the water protection zone**" (p. 31).

In violation of the Decree of the Government of the RF No. 1404 and the conditions of the Conclusion of the GEE, the company “Sakhalin Energy” sited drilling wastes (primarily bentonite muds and cuttings) with a volume of approximately 5,500 cubic meters, created as a result of drilling a well under the bottom of the river, in 2 basins directly within the water protection zone of the Firsovka River 200-250 meters from shore. The risk of a washout of the walls of the basins and the entering of the mass of wastes directly into the channel of the Firsovka River is high during the

⁶ Two HDD crossings have been constructed across the Tym’.

period of active snowmelt and further during the rain period. The water protection zone of this river is 1,000 meters.

4) The company “Sakhalin Energy” is grossly violating construction norms and rules that require it to construct the pipeline above the ground when crossing tectonic faults.

Construction norms and rules (SNiP) 2.05.06-85 “Thoroughfare pipelines”:*

p. 5.37 “...on sites of crossing of active tectonic faults by the route of the pipeline it is necessary to utilize **above ground** laying.”

“Rules for safety of systems of gas distribution and gas use”⁷

p. 6.7.3. “The laying of gas pipelines through natural and artificial barriers, and also on areas of **tectonic faults**, as a rule, is follows to stipulate [that it be] **above ground**. In choosing the route it follows to **avoid** areas with slopes, unstable, soaked and swelled soils, crossings of mining developments, **active tectonic faults**, dangerous settling and sliding slopes, and also sites, where the development of karst processes or seismicity which is higher than 9.0.”

However, “Sakhalin Energy,” in violation of the indicated norms, is building pipelines through 21 active tectonic faults **underground**, using trench laying. The company legalized the given approach for crossing active faults, having developed and agreed upon special technical conditions for design (STUP). Experts remarked on this in the *Conclusion of the GEE for Phase 2 of the project “Sakhalin-2”*:

“The necessity for developing STUP 1000-S-90-01-S-1501-00 **contradicts** the requirements of p. 3.3. SNiP 11-01-95⁸. In its content CTYП 1000-S-90-01-S-1501-00 **significantly reduces the level of technical requirements of pipelines** in comparison with the existing SNiP 2.05.06.-85, ONTP 51-1-85, RD 153-39.4-113-01, SP 34-116-97. Requirements of foreign norms in the indicated STUP are not specified, only citations are given, the norms and requirements themselves are not identified, **which makes their evaluation impossible**” (pp. 29-30).

In this way, the Government environmental impact review also proved that the Company, having developed its own design norms, **violated the requirements** of specialized Russian legislation, **having lowered** the very level of standards that are applied to the project.

II. Violations of legislation during the construction of the LNG plant in the village of Prigorodnoe.

1) The Company “Sakhalin Energy” is building a mooring for offloading LNG in Aniva Bay with significant changes to the approved project documentation, which is a violation of the FL “On environmental impact reviews.”

FL “On environmental impact reviews”:

Article 18, p. 5: “A positive conclusion of the government environmental impact review **loses legal force** in the event that:

...

... implementation of the object of the government environmental impact review **with deviations from documentation** that has received a positive conclusion of a government environmental impact review, and (or) in the event of the **introduction of changes** in the noted documentation;...

⁷ Approved by the Decree of the Federal mining and industrial inspectorate of Russia on March 18, 2003, No. 9; registered in the Ministry of Justice of the Russian Federation on April 4, 2003, registration No. 4376.

⁸ Instructions about the order of developing, agreeing, approving and the content of design documentation for the construction of enterprises, buildings, and installations. Approved by a decree of Ministry of Construction of Russia on June 30, 1995, No. 18-64.

Article 30. Types of violations of legislation of the Russian Federation about environmental impact reviews
Violations of the legislation of the Russian Federation about environmental impact reviews **by the developer of the documentation**, subject to environmental impact review, and by interested parties are:
...7) the implementation of commercial and other activity **not in accordance with the documentation**, which received a positive conclusion of a government environmental impact review.

The Company “Sakhalin Energy” introduced **significant changes** in design decisions for the construction of the mooring for offloading LNG, [changes] which did not go through government environmental impact review:

A). **Dates changed** for carrying out dredging work – instead of the approved period in the TEO from July 15, 2004 through January 15, 2005, the company carried out work during the period of October 10, 2004-April 30, 2005 and from September 21, 2005-December 6, 2005.

I.e. instead of a one-time impact over the course of 6 months, negative impacts in Aniva Bay were created over the course of two fall-spring seasons.

B). **The number of boats**, working at dredging and dumping of spoil, **grew sharply**. Instead of one grabber dredger with a barge and one rotary suction dredger with a barge, dredging and dumping was carried out by three dredgers with barges and tugboats. Besides that, a large cutter suction dredger was brought in for dredging, which was not foreseen at all in the TEO. Inspections by government oversight agencies show that the number of boats participating in construction reached 19.

Approvals by appropriate government agencies were provided for these given changes to the approved project documentation. However, approvals by government agencies for other conditions for natural resource use do not replace the government environmental impact review. In accordance with article 18 p. 5 of the FL “On environmental impact reviews”:

A positive conclusion of the GEE loses legal force in the event that:
... **changes in the conditions of natural resource use** by the federal agency of executive power in the area of protection of the environment.

Article 11 of the FL “On environmental impact reviews”:

Subject to required governmental environmental impact review, carried out on a federal level, are:

... objects of government environmental impact review carried out in the current article and **earlier** having received a positive conclusion of the governmental environmental impact review, in the event that:

... 2) **changes of the conditions of natural resource use** by the specially authorized government agency in the sphere of protection of the natural environment;

Having given permissions for carrying out dredging work for different dates with a larger amount of boats than was foreseen in the project design materials that received a positive conclusion of the GEE, government agencies by this action **changed the conditions of natural resource use**. In this situation, the conclusion of the GEE **loses legal force**, as is directly stipulated in the law.

In this way, the company “Sakhalin Energy,” having introduced changes into the approved project design documentation, should have not only agreed upon these changes with government agencies, but also send the changed project for a repeated government environmental impact review. But in violation of the FL “On environmental impact reviews,” this was not done.

2) Construction of the mooring for offloading of equipment without a positive conclusion of the GEE is a violation of the FL “On environmental impact reviews,” the FL “On the protection of the environment,” and the Regulation for carrying out a GEE.

Regulation for carrying out a GEE⁹

5.4. A positive conclusion of the government environmental impact review, approved in the established order, loses legal force:

- in accordance with p. 5 article 18 of the Federal Law "On environmental impact reviews";
- in case of **recognizing it as invalid by a decision of a court** or arbitration court.

FL "On environmental impact reviews":

Article 18 p. 5: "... A positive conclusion of the government environmental impact review is one of the required conditions for **financing and implementing** an object of the government environmental impact review."

FL "On protection of the environment":

Article 37. Requirements in the area of protection of the environment **during the construction and reconstruction** of buildings, constructions, installations, and other objects

1. Construction and reconstruction of buildings, constructions, installations, and other objects must be carried out on approved projects **that have a positive conclusion of a government environmental impact review**, with the compliance of requirements in the area of protection of the environment and also sanitary and construction requirements, norms, and rules.

On January 17, 2005 a Yuzhno-Sakhalinsk city court **recognized** the conclusion of the GEE for materials of the work project "Temporary installation for offloading of materials in Aniva Bay" **as invalid** from the moment of its approval. The decision of the court became active on July 26, 3005 and since that moment, the conclusion of the GEE on the moorage for offloading equipment lost its legal force. On the basis of the FL "On environmental impact reviews," the company "Sakhalin Energy" should have sent project design materials, amended with taking into consideration the decision of the court, for a repeat government environmental impact review. However, this was not done and the finishing of the construction of the mooring and its introduction into exploitation was carried out without a positive conclusion of the GEE.

In the given situation, the facts of this significant violation of legislation during the implementation of the "Sakhalin-2" project are definitively proven by the entrance of the decision of the court into legal force.

3) The decreasing of the sanitary-protection zone around the LNG plant in comparison with that stipulated in the TEO, approved by the conclusion of the GEE<, is a violation of legislation on environmental impact reviews.

In accordance with legislation, the sanitary-protection zone (SPZ) is established for the limiting of harmful impacts of industry on the population, and in this regard at its borders all unfavorable factors must comply with safe norms, and within it the residence of people is not allowed.

The SPZ around the LNG plant and the oil export terminal in the approved TEO was established in the size of 3.5 km from the border of these objects. Materials for justifying the SPZ specifically in the size of 3.5 km were reviewed and approved by the expert commission, which is directly stated in *chapter 4.3 "Protection of atmospheric air" in the Conclusion of the GEE:*

"The size of the SPZ in the starting period is 2.1 km from the border of the industrial area of the LNG and OET, and in the exploitation period with consideration of discharges from ships – **3.5 km**. Taking into consideration the recreation zone the necessary area of the SPZ **can be increased**.

...

LNG plant and OET: An analysis of production as sources of pollution of the atmosphere is provided in the project. The amounts of discharges of polluting elements are justified. The joint impact of LNG, OET, and

⁹ Approved by a Decree of the State Committee of Ecology of the RF No. 280 on June 17, 1997.

mooring sources, including ship engines, are taken into consideration. The size of the SPZ is proposed to be equal to 3.5 km. The chapter can be recognized as **in compliance** with active norms” (pp. 39, 41).

However, in 2005, “Sakhalin Energy” announced the size of the sanitary-protection zone of the LNG plant and OET with a radius of 1 kilometer from the sources of discharges on the basis of a letter from the deputy Head government doctor of the RF S.I. Ivanova from July 16, 2002.

This document was received before the GEE was carried out, but the company “Sakhalin Energy” did not include it in the materials for TEO construction of phase 2 of the “Sakhalin-2” project and did not present it for government environmental impact review, although it was required to do this. Accordingly, these documents were not evaluated by the expert commission of the GEE. Factually, the company misled the expert commission, having planned harmful discharges in the project, significantly increasing the level for which a sanitary zone of 1 km would have been enough, which was already at that time established. Discharges were planned with such intensity that only at a distance of 3.5 km (and in no way less) air could be considered to be in compliance with norms. Specifically therefore, knowing that the sanitary zone was already established with a size of 1 km, the Company presented to the GEE commission calculations of the distribution of harmful discharges at 3.5 km. Now the Company itself in accordance with the TEO, over the entire life of exploitation, will discharge into the atmosphere harmful discharges, which will only reach a safe concentration at a distance of 3.5 km. The Company used this scheme for the minimization of protective measures while conserving significant atmospheric impacts in order to avoid the relocation of the dacha [community garden] village, located at a distance of only 1.2 km from the plant.

The change of the sanitary-protection zone from 3.5 km to 1 km is a significant change in the project documentation which received a positive conclusion of the GEE and in accordance with art. 30 of the FL “On environmental impact reviews” is a violation of legislation.

III. Violations while carrying out the environmental impact assessment.

The absence of discussions of the location site of the point of dumping spoil with citizens and public organizations is a violation of the FL “On protection of the environment” and the Decree about evaluation of impact of proposed commercial and other activity on the environment in the RF.

FL “On protection of the environment”:

Article 3. Fundamental principles of protection of the environment

Commercial and other activity of agencies of government authority of the RF, agencies of government authority of the subjects of the RF, agencies of local self-government, and legal and physical entities causing impact to the environment must be carried out on the basis of the following principles:

- the presumption of ecological danger of planned commercial and other activity;
- the requirement of an **evaluation of impact on the environment** in adopting decisions about carrying out commercial and other activity;
- **the requirement of participation** in activity to protect the environment of agencies of government authority of the Russian Federation, agencies of government authority of the subjects of the Russian Federation, agencies of local self-government, **public** and other non-commercial associations, and legal and physical entities;
- observance of the right of each to the receipt of accurate information about the condition of the environment, and also **participation of citizens in the adoption of decisions regarding their rights to a favorable environment**, in accordance with legislation;
- **participation of citizens, public** and other non-commercial associations in the decision of issues of protection of the environment.

Statute about the evaluation of impact of planned commercial and other activity on the environment in the RF:

Chapter II. Fundamental principles of evaluation of impact on the environment

2.4. In carrying out evaluation of impacts to the environment the developer (executor) is required to review **alternative variants** of accomplishing the goal of the planned commercial and other activity.

...

2.5 Providing for **public participation** in the preparation and discussion of materials on the evaluation of impacts to the environment of planned commercial and other activity, which are the object of environmental impact review as an **inseparable** part of the process of carrying out evaluation of impacts to the environment (principle of openness, participation of public organizations (associations), taking into consideration public opinion in carrying out the environmental impact review).

...

2.7 The developer is required to provide all participants in the process of evaluating impacts to the environment the opportunity to receive **full and accurate information** in a timely manner (principle of accuracy and fullness of information provided for environmental impact review).

In the framework of preparing the TEO the company “Sakhalin Energy” in November 2001 published “Materials for the preliminary evaluation of impacts to the environment, project “Sakhalin-2,” Phase 2,” which served as the basis for discussion of the project with citizens at public hearings in November-December 2001. Materials of the given public hearings were entered into the content of the TEO materials provided for government environmental impact review in 2003, and which received a positive conclusion from the expert commission of the GEE.

However, the materials of the preliminary EIA – the only project document about which discussions with the public were held – **did not contain** data about the scale of dredging work, about the volume of removed and dumped spoil during the construction of the LNG mooring, and about the point for dumping of soil in Aniva Bay. Furthermore, in the materials of the preliminary EIA regarding the utilization of the removed spoil it is stated: **“the place, appropriate for burial, will be determined later.”**

In this way, neither a place for discharge of spoil, nor its alternatives, were presented for discussion by the public during the carrying out of official public hearings by the company “Sakhalin Energy.” In this very way, Sakhalin Islanders were deprived of the opportunity to impact the decision made about placing the area for dumping of spoil in Aniva Bay, and their right to participate in adopting environmentally significant decisions was violated.

When the location for discharge of spoil in the central part of Aniva Bay became known to citizens, fishing companies and public organizations, many appeals, resolutions, petitions and other documents expressing the categorical opinion of inhabitants of Sakhalin Region against discharge of spoil in any part of Aniva Bay were sent to the company “Sakhalin Energy,” government agencies, and the government of the RF. Local inhabitants repeatedly carried out actions next to the LNG plant in which fishermen, ecologists, and local authorities participated with the demand to halt discharge of spoil into Aniva Bay and to transport it beyond the borders of the bay into deepwater areas of the Sea of Okhotsk. However, the company “Sakhalin Energy,” violating the most important principles of protection of the environment and evaluations of impact, completely ignored the opinion of citizens and public organizations and discharged all the spoil into the central part of Aniva Bay.

IV. Other violations of legislation identified during the realization of the project

1. On April 14, 2005, the Sakhalin environmental prosecutor launched a criminal case against a subcontractor of “Sakhalin Energy” – the company “Lizingstroimash” – for the illegal logging of a significant forest area during unagreed upon and unpermitted re-routing of the pipeline in Porechensky forestry unit of Makarovsky Forest District. The prosecutor acknowledged that there was enough data showing criminal action to launch a criminal case, as specified by part 3, article

260, “Illegal cutting of trees and bushes” in the Criminal Code of the Russian Federation. Investigation is currently ongoing in the given case.

2. In 2003 in the village of Val of Nogliki District (northern Sakhalin), “Sakhalin Energy” built a temporary village for pipeline construction workers (camp). The company located sewage infrastructure for effluent from this village in the riparian buffer zone of the Val River, at a distance of about 80 meters from the shore of the river. Meanwhile, this is directly forbidden by Russian legislation, since the riparian buffer zone of the Val River is 1000 meters.

The Statute about riparian buffer zones of water objects and their coastal protection strips, approved by Decree of the Government of the Russian Federation No. 1404 on November 23, 1996:

6. Within riparian buffer zones ... the location ... of accumulations of effluent waters **is forbidden.**

Sewage infrastructure is included in the understanding of “accumulations of effluent water”; accordingly, the Company should not have located them closer than 1000 meters from the shore of the Val River. As a result of this violation, since 2003 to the current time, sewage waters from the settlement, in which about 800 people live, are flowing directly into the Val River, which has an extremely important significance for widespread spawning beds for salmon.¹⁰ Such pollution encourages the growth of disease, dangerous parasites in salmonid and other species of fish, which is especially dangerous for the inhabitants of the village of Val, since a significant part of its population is made up of native peoples, for whom their traditional food is raw fish.

3. In summer and fall of 2004, the Administration of Sakhalin Region together with federal inspection and control agencies carried out a multidisciplinary inspection of compliance with legislation during the realization of the “Sakhalin-2” project, during which they identified numerous violations, discussed by the citation below:

Order of the Administration of Sakhalin Region No. 446-pa from August 10, 2004 “On measures for compliance with legislation of the Russian Federation by legal entities participating the implementation of the “Sakhalin-1” and Sakhalin-2” projects:

Violations of medical-profilactic service in the area of prevention of infectious diseases: medical inspection of foreign citizens, immunization of working personnel, organization of actions in case of registering infectious diseases in the area of clinic work on sites, and keeping documentation are not being carried out, along with other violations.

On questions of sanitary-hygiene oversight it has been established: Absence of bath-laundry facilities; work on cafeterias is not completed. Issues of utilization of wastes, including toxic wastes, have not been decided. During inspections of the work of cafeterias, violations of the sanitary-anti-epidemic regime, the technology for preparation of prepared products, the conditions and dates for storage and utilization of products, and the absence of control from the operators over compliance with sanitary requirements were identified.

On issues of the state of work conditions, insufficient control over the parameters of factors of the production environment, over the provision and use of means for individual protection, over the compliance of work and rest regimes..., in the use of sources of ionizing radiation and potentially dangerous chemical and biological substances and the organization of medicinal observations of personnel.

In the “Sakhalin-2” project a system for informing agencies of government control about instances of violations of environmental legislation does not work. From the start of work, messages about violations (spills, leaks, other pollution of the environment) during the conduct of work are not transmitted to agencies of government control for the management of natural resources of the Ministry of Natural Resources of Russia for Sakhalin Region. Recommendations of the government environmental impact review for location of wastes are not fulfilled. One of the violations of the organizational-legal order is the unwarranted exploitation of objects. Acts of acceptance are not formulated in a timely manner and use a past date.

4. In the period of January-March 2006, OOO “Starstroi,” the general contractor for construction of on-shore pipelines, imported into Sakhalin several thousand tons of dangerous liquid – ethylene

¹⁰ Sewage infrastructure for effluent waters from the village of Val itself are located in the watershed of the River Askasai, a tributary of the Val, beyond the limits of its riparian buffer zone.

glycol¹¹ – in 200-liter barrels. This poisonous chemical-antifreeze was meant for carrying out winter hydrotests (pressure tests) of areas of the pipeline built on river crossings. However, the use of ethylene glycol is not provided for in the project documentation of the Feasibility Study for construction, which received a positive conclusion of the Government Environmental Impact Review. Accordingly, the environmental impact review did not evaluate the degree of negative impact and danger of irregular situations associated with pollution by this dangerous substance. Issues of its safe transportation and utilization after use were not resolved. There are no specially equipped warehouses for the storage of this dangerous substance at the disposal of the subcontractors for pipeline construction. It is especially important to note that **use of ethylene glycol is forbidden by the instructions of the general contractor for construction, OOO “Starstroi,” itself, developed for companies-subcontractors.**

The Company “Sakhalin Energy” and its contractors and contractors have to this date not received permission from Russian government agencies for the use of ethylene glycol; however, it is known to us from reliable sources that in February-March 2006, it was already used for testing of pipeline on crossings over the rivers Vazi, Nabil, and Chachma in Nogliksky Dsistrict. At a minimum on the River Chachma (a right-hand tributary of the river Tym’), a flooding of an area of the pipeline occurred within the riparian buffer zone of the river, which is a gross violation of the Statute on riparian buffer zones (see the exact name of the Statute above).

5. On November 20, 2004, a 20-foot container was imported from Lybia (the exporter was the South Korean firm “All Nations”) to Korsakov customs, addressed to the company CTSD, the general contractor for construction of the LNG plant. Alarms went off at the customs warehouse, showing that some kind of radioactive source was located in the container. An inspection showed that this was 13 defectoscopes, provided for control over the quality of welded joints, and ionizing radiation gives off the radioactive material iridium-192, the primary component part of defectoscopes. The level of radiation exceeded the background levels by 200 times. The company “All Nations” did not have a license for dealing with radioactive cargo and special permissions for their import into Russian territory. In customs documents, these devices were shown as usual (non-radioactive) cargo.

The Sakhalin Transportation Prosecutor launched a criminal case on this incident according to part 2, article 188 of the Criminal Code of the Russian Federation (“contraband of radiation sources, attended by falsified use of documents”). The head of the company “All Nations” Kim Jong Ho was arrested, and the devices were sent beyond the borders of Russia. At the current time investigation is ongoing into the given case. It is necessary to note that the apparatus which is able to detect radioactive cargo, thanks to which this cargo was detected, has been set up only at Korsakov customs. However, cargo for the “Sakhalin-2” project is coming in through other customs points as well, and the largest part is going through Kholmsk customs, which does not have such apparatus.

6. In the Feasibility Study for construction, which went through Government Environmental Impact Review, “Sakhalin Energy” planned to discharge 532,940 cubic meters of effluent waters yearly into Aniva Bay from the LNG terminal and the oil export terminal. Besides that, the mouth of the extremely important spawning river Mereya¹² is located immediately close to the plant, and migration routes of spawning salmon pass through the surrounding waters. **Existing Russian legislation** (“Rules for protection of coastal waters of seas from pollution” 1984, point 4.7) **forbids the discharge of any effluent waters, including treated, along the migration routes of fish.**

Conclusion

The implementation of Phase 2 of the “Sakhalin-2” project, which is already entering its concluding

¹¹ Ethylene glycol is a persistent pollutant, which conserves its toxic characteristics for a long time in the environment.

¹² The overall number of juvenile salmon from all rivers entering Aniva Bay is 300 million per year; of this amount, the Mereya River provides 170 million.

stage, is continually accompanied by numerous systemic and episodic violations of the legislation of the Russian Federation. A significant portion of these violations were “planned” even during the design stage; i.e., they became a consequence of certain design decisions adopted in contradiction to existing norms and rules, such as, for example, trench crossings of the pipelines through spawning grounds of salmon or underground crossings across active tectonic faults. A whole complex of violations of legislation on environmental impact reviews is associated with gross miscalculations during the design stage, with the inability to follow earlier designed plans, and with underestimating the complexities of natural conditions of Sakhalin. Many violations are a consequence of weak control of the project operator over numerous contractors and subcontractors.

The complexity, division, and complicity of the Russian legal system plays a certain role in the situation with systemic violations that has developed. However, absolutely the same problems, and even to a large extent, are inherent to the “Sakhalin-2” project itself. It is being carried out by a huge number of people and companies that have been brought together from all over the world, talking in different languages and often having a vague understanding of Russian legislation. This is truly a very complex, divided project, complicated in many relations. It is obvious that “Sakhalin Energy” did not take many of these complexities into consideration and is weakly controlling its own project at the current time.

Regarding compliance with legislation, the company “Sakhalin Energy” fully relies upon the permissions, approvals, agreements, licenses, etc. given out by government oversight agencies. However, analysis of the legal situation with the implementation of the “Sakhalin-2” project shows that in actuality this does not guarantee accordance with the law and permissions are given out in part for activity that is obviously and directly illegal. Sometimes this leads to the revocation of these very permissions which the Company cites (as has occurred with the annulment by a court of the conclusion of the government environmental impact review for the mooring for offloading equipment in Aniva Bay).

Several violations have a directly criminal character of ecological crimes and come under the jurisdiction of the Criminal Code of the Russian Federation, which is demonstrated by launched criminal cases.

A significant amount of the violations are no longer reparable, since about 70% of the overall volume of project construction has already been completed.

Materials used:

1. Codes, laws, statutes, rules, GOST (government standards), SNiPs (construction norms and rules), SanPins (Sanitary norms and rules) and other normative-legal acts of the Russian Federation (citations provided in the text).
2. Addendum to the Environmental Impact Assessment (“Sakhalin Energy Investment Company,” phase 2 of the “Sakhalin-2” project, November 2005).
3. Materials from the Feasibility Study (TEO) for complex development of the Piltun-Astokh and Lunsky licensed areas (phase 2 of the “Sakhalin-2” project), agreed upon with government agencies in 2003.
4. Conclusion of the expert commission of the Government Environmental Impact Review of materials of the Feasibility Study (TEO) for complex development of the Piltun-Astokh and Lunsky licensed areas (phase 2 of the “Sakhalin-2” project), approved by decree of the Ministry of Natural Resources of the Russian Federation No. 600 on July 15, 2003.
5. Act No. 1 from May 13, 2005 of the inspection of construction of crossings across spawning rivers during construction of main pipelines of the company “Sakhalin Energy Investment Company, Ltd” on the project Sakhalin-2.
6. Act No. 26 from May 24, 2005 of the inspection for compliance with requirements of legislation in the area of natural resource use and protection of the environment.
7. Letter of the company “Sakhalin Energy Investment Company Ltd.” from April 21, 2005 No. 2005-OUT-Y-01-00082.

8. Order of the Administration of Sakhalin Region No. 446-pa from September 10, 2004 “On measures for compliance with legislation of the Russian Federation by legal entities participating in the implementation of the “Sakhalin-1” and “Sakhalin-2” projects.
9. Materials of field inspections by the Regional public organization “Sakhalin Environment Watch” during 2003-2006.
10. Decision of the Yuzhno-Sakhalinsk city court on January 17, 2005 (case No. 2-3550).
11. Appeals determination of the court collegium for civil affairs of the Sakhalin Regional Court on July 26, 2005 (case No. 33-1154).
12. Act of inspection of the Directorate “Rosprirodnadzor” (Russian Environmental Inspectorate) for Sakhalin Region on November 18-19, 2004.
13. Act of inspection of the Directorate “Sakhalinrybvod” (Sakhalin Fisheries Agency) on July 15, 2005.
14. Protocol on legal violations by Sakhalin Special Marine Inspection Service on July 13-14, 2004.
15. Act of inspection of the Service for Government Inspection of the Ministry of Natural Affairs of Nogliki District on July 23, 2004.