Pacific Environment Friends of the Earth Japan Sakhalin Environment Watch

## Sakhalin II Project Oil and Gas Pipeline Project Dolinsky, Makarovsky and Nogliksky Districts of Sakhalin Region Photo Report from a Fact-Finding Mission May 30 – June 1, 2008

Introduction: From May 28 through June 2, 2008, representatives of Sakhalin Environment Watch, Friends of the Earth Japan and Pacific Environment conducted a fact-finding mission along the pipeline right of way for the Sakhalin-II oil and gas project. During the trip, these groups documented serious violations of public and private bank policies, and internationally accepted practice and Russian law. This photo report provides graphic evidence of these violations.

The evidence obtained during this fact-finding mission refutes claims by the project operator, Sakhalin Energy, that the pipeline route is being successfully restored following construction.

The fact-finding mission discovered numerous examples of missing and/or failed erosion measure devices, extensive erosion and mud slides on mountainsides and in river areas, and unsuccessful and/or missing recultivation measures.

The fact-finding mission also found that contractors are digging up many completed segments of the pipeline to repair problems; information about these problems has not been made public. Repairs of these pipeline segments are moving very slowly, are causing additional delays and are causing substantial, additional environmental damage. In some areas, the reclaimed sections of the right of way are being destroyed.

Locations in the report are listed from south to north, beginning with the pipeline's terminus and moving to its starting point. Locations along the pipeline (KP - kilometers of pipeline) are listed in a diminishing value.



**KP 445.6, Spread 4.** A stream of mud from the pipeline corridor as it enters the Duet River.



**KP 445.6, Spread 4.** Area on the pipeline corridor where a mud flow enters the stream (tributary of the Duet River). There is no culvert and vehicles move directly across the stream channel.



KP 445.6, Spread 4. A landslide on the left bank of the stream has reached the stream channel.



**KP 418.7, Spread 4.** A downstream slope on the Travyanaya River, north of a block valve (on the left). Pipeline construction was completed more than two years ago and recultivation measures were undertaken (stabilization of slopes, slope breakers, grass planting). Despite all those efforts, erosion continues along the slope on the pipeline corridor (on the right side of the pipeline right of way).



**KP 418.7, Spread 4.** A down stream slope near Travyanaya River. Erosion at the top of the slope where recultivation measures have failed. There are no traces of planted grass and topsoil was not replaced along the pipeline corridor. The absence of topsoil prevents the recovery of grass on the such steep slopes.



**KP 403.1, Spread 3.** Stream - right tributary of the Rudnaya River. There is active erosion on the slope, with a landslide at the top (to the right) that has affected forest lands beyond the pipeline right of way. There is no topsoil, slope breakers have not been installed and planted grass is absent.



**KP 403.1, Spread 3.** Stream - right tributary of the Rudnaya River. Silt fences do not work. Mud enters the water body.



**KP 403.1, Spread 3.** Stream - right tributary of the Rudnaya River. Deep erosion ditch on the right bank. There are no erosion prevention and control measures.



**KP 402.5, Spread 3.** Rudnaya River. There is a deep erosion ditch on the left bank. There are no erosion prevention and control measures. Black spots on the slope are ground water seepages. There presence demand that temporary or permanent erosion control measures be installed. Mud flows have damaged silt fences in several places.



**KP 400.9, Spread 3.** Stream – left tributary of the Vostochnaya River. There is a deep erosion ditch on the right bank. Antierosion slope breakers have failed. Topsoil was not replaced on the right of way slope and the attempt to plant grass has failed, resulting in stream sedimentation.



**KP 390, Spread 3.** Deep erosion ditch on the slope. There are no erosion prevention and control measures. The pipeline corridor at this location is a deep cut and a large volume of earth was excavated and removed, resulting in the formation of slopes along the edges of the pipeline right of way. There are active landslides at this location. Trees have fallen.



**KP 387.2, Spread 3.** Stream – left tributary of the Lazovaya River. Deep erosion ditch on the right bank. Slope breakers have failed. No topsoil was returned to the slope right of way.



**KP 386.4, Spread 3.** Stream – left tributary of the Lazovaya River. Very deep erosion ditch on the right bank. Slope breakers are absent as well as topsoil and planted grass. Silt fences fail to halt the flow of mud entering the stream.



**KP 384.7, Spread 3.** Zagrobka River. Generally well done slope breakers, but the topsoil that was returned and the grass that was planted (except along on the slopes near the edges of the pipeline corridor) have been completely destroyed by a recently built construction road. This section of the pipeline was allegedly complete. However, poor planning resulted in the construction of a new road.



**KP 384.7**, **Spread 3.** Zagrobka River. Earth from road construction destroyed the silt fences and enters the river channel.

![](_page_16_Picture_0.jpeg)

![](_page_16_Picture_1.jpeg)

**KP 384.7, Spread 3.** Zagrobka River. Slopes stabilization measures along the edges of the pipeline right of way have failed.

![](_page_17_Picture_0.jpeg)

**KP 381.9, Spread 3.** Stream – left tributary of the Lazovaya River. There are no erosion prevention and control measures. Two erosion ditches carry sediment directly into the stream. A new drainage ditch along the side of road will be the third erosion ditch installed to carry sediment away from streams during rain.

![](_page_18_Picture_0.jpeg)

**KP 364.2, Spread 3.** Varvarka River watershed. Holes from two landslides threaten to undermine the oil pipeline at this location.

![](_page_19_Picture_0.jpeg)

**KP 364.2, Spread 3.** Varvarka River watershed. A landslide zone that undermines the oil pipeline. Black spots on the hole's wall indicate ground water seepage, an obvious source of future landslides.

![](_page_20_Picture_0.jpeg)

**KP 364.2, Spread 3.** Varvarka River watershed. Massive landslides occurred along the pipeline corridor. Numerous trees were taken down by these landslides.

![](_page_21_Picture_0.jpeg)

**KP 362.5, Spread 3.** General view of the Varvarka River valley. The blue line marks a zone of old, massive landslides. The pipeline right of way now cuts the lower portion of the zone, greatly increasing the landslide risk across the entire zone. It is unlikely that the wire-wrapped (gabion) dam that is partly constructed along river banks will halt landslides during heavy summer rains. The concern at this locations is that landslides could destroy the oil pipeline during its exploitation.

![](_page_22_Picture_0.jpeg)

**KP 362.5, Spread 3.** Varvarka River. The pipeline corridor move along the bottom of the river valley. Two blue arrows show the direction of major, old landslides. Landslides threaten buried pipeline.

![](_page_23_Picture_0.jpeg)

**KP 362.5, Spread 3.** Varvarka River. The wire-wrapped (gabion) dam was built last autumn. However, gaps were left in the barrier for construction vehicles. Vehicle crossings result in serious water contamination and promotes ground creeping.

![](_page_24_Picture_0.jpeg)

**KP 362.5, Spread 3.** Varvarka River. Eroded soil continually washes into the river through the gap.

![](_page_25_Picture_0.jpeg)

**KP 361.4, Spread 3.** A pass between the Varvarka and Sosnovka River watersheds. Deep erosion ditches, no erosion control measures.

![](_page_26_Picture_0.jpeg)

**KP 348.7, Spread 3.** Krinka River (left channel). Mud flows on the left bank are continuous because of ground water seepage on the upper slope. Recently installed silt fences sink into the water saturated ground at this location.

![](_page_27_Picture_0.jpeg)

**KP 348.7, Spread 3.** Krinka River (left channel). A zone of ground water seepage on the slope. First attempt (after 4 years of continual construction at this location) to install some type drainage and to divert ground water flow across the slope.

![](_page_28_Picture_0.jpeg)

**KP 102.0, Spread 1 (Nogliki District).** Near a right tributary of the Bolshaya Veni River. General view of a mud flow area that is undermining a construction road corridor along the pipeline. No mud flow, land slides or erosion prevention measures have been taken.

![](_page_29_Picture_0.jpeg)

**KP 102.0, Spread 1 (Nogliki District).** Near a right tributary of the Bolshaya Veni River. Mud has entered the forest from the pipeline right of way.

![](_page_30_Picture_0.jpeg)

**KP 102.0, Spread 1 (Nogliki District).** Near a right tributary of the Bolshaya Veni River. The forest, approximately 50 meters to the side of the pipeline right of way, is flooded with mud.

![](_page_31_Picture_0.jpeg)

**KP 102.0, Spread 1 (Nogliki District).** Near a right tributary of the Bolshaya Veni River. Section of a massive mud flow viewed from the flooded forest.

![](_page_32_Picture_0.jpeg)

**KP 17.0, Spread 1 (Nogliki District).** Upstream of the Hoyambusibin River. General view of the pipeline right of way and of an abandoned access road. Deep, wide erosion canyon on the access road in the foreground.

Erosion canyon on the access road

Stream flooded with sediments

Pipeline corridor surface

Access road mound on the pipeline corridor surface

**KP 17.0, Spread 1 (Nogliki District).** Upstream of the Hoyambusibin River. General view of the pipeline section and abandoned access road from the opposite side of the pipeline right of way. The road mound was built after the pipeline was already in place.

![](_page_34_Picture_0.jpeg)

**KP 17.0, Spread 1 (Nogliki District).** Upstream of the Hoyambusibin River. General view of the stream flooded with sediments that have washed down from an eroded access road.

![](_page_35_Picture_0.jpeg)

**KP 17.0, Spread 1 (Nogliki District).** Upstream of the Hoyambusibin River. The stream is completely flooded with sediments that have washed down from an eroded access road. Ineffective silt fences are seen in the foreground.

![](_page_36_Picture_0.jpeg)

**KP 360.3, Spread 3.** Sosnovka River watershed. Four sections of pipeline recently excavated after testing showed various problems.

![](_page_37_Picture_0.jpeg)

**KP 360.3, Spread 3.** Sosnovka River watershed. Typical example. This section was placed in the trench and buried, but then dug up because of surface deformations discovered during testing; the cause of the problem are large, sharp stones.