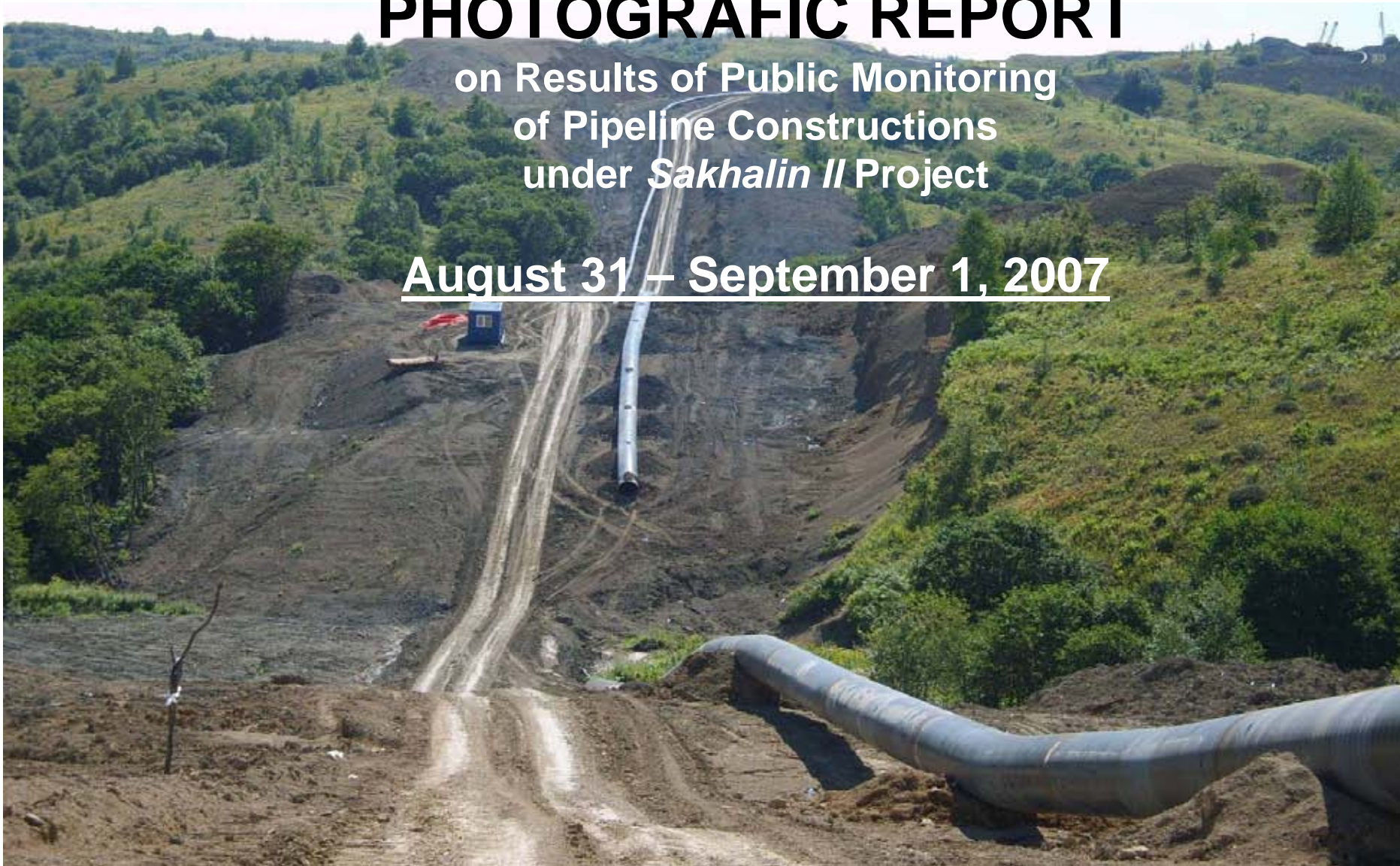


PHOTOGRAPHIC REPORT

on Results of Public Monitoring
of Pipeline Constructions
under *Sakhalin II* Project

August 31 – September 1, 2007



Prepared by *Sakhalin Environment Watch* Nongovernmental Organization
www.sakhalin.environment.ru



PK 411.2. A section of the route to the north from the crossing over the upper reach of the Vulkanka River. Makarov District.

The area of the landslide occurrences over the pipeline route is marked with a white line. The slipped soil is partially covering the service drive. *September 1, 2007.*



PK 403.7 A typical soil storage site over the pipeline route outside the right-of-way, in the landslide hazardous section (further north from the Pugachyovo Village, in the Vostochnaya River Basin), Makarov Region.

Those spoil banks should have had been removed by November 1, 2006 pursuant to the directive of September 18, 2006 issued by the Federal Service for Supervision of Natural Resource Usage, with the parcels of land occupied thereby reclaimed. Instead of this, the soil is left in place and landslides are being developed on the bank. *September 1, 2007*



PK 388.6. A section of the route in the Verkhnyaya River Basin. Makarov District.

The mud flow which came down from the spoil bank onto the adjacent parcel of forest at the edge of the route about a year ago. No measures associated with the clearing of the forest reserves and elimination of the violation have not since been taken. The trees overburdened with soil (in the background) have already died since then. *September 1, 2007.*



PK 504.7. A section of the route to the north from the Ay River. Dolinsk District. (the principal site of the inspection conducted in October 2006 by the Committee of the Ministry of Natural Resources of the Russian Federation). The situation here has but gone from bad to worse, in spite of the fact that on August 8, 2007 an inspection was conducted here by the Federal Service for Supervision of Natural Resource Usage in Sakhalin Region and directives were issued regarding the elimination of the violations. The mud flow continues in development making the trench over the installed pipes deeper and carrying the bulks of soil into the stream, a tributary of the Ay River, flowing beneath the hillside. *August 31, 2007.*



PK 504.3. A section of the crossing over the Podgornaya River (the left tributary of the Ay River). Dolinsk District.

In that section, an inspection of the Federal Service for Supervision of Natural Resource Usage (the Committee was chaired by Mr. O.L. Mitvol, Deputy Manager of the Service) was conducted on September 15, 2007. It has been almost a year since the directive was issued, and over one and a half year since the completion of the construction, yet the remediation has not been conducted so far. As a result, erosion processes have been aggressively developed on the hillside leading to the river pollution. The main erosion drainages lines on the hillside coincide with the tracing ruts of the service access road along the route, which should have had been backfilled as far back as a year ago. *August 31, 2007.*



PK 504.3. A section of the crossing over the Podgornaya River. Dolinsk District.

(The same site as the one on the preceding slide). It can be well seen that the interim measures of the water bodies protection are inefficient and are not protecting the river from the pollution with the soil being washed down from the route.

August 31, 2007.



PK 460.2. A section of the route crossing over the Krasnaya River (the right bank). Dolinsk District.
The active gully and the outwash tail of the soil to the riverbed – right over the bank protection structures – may well be seen in the foreground. *August 31, 2007.*



PK 460.5. A route section in the southern backland of the Krasnaya River. Dolinsk District.

The mud flow continues in development over the already installed pipelines, threatening with the damage thereto (the left image). In addition thereto, by contrast to July, gullies have already occurred as a consequence of the erosion processes.

August 31, 2007.





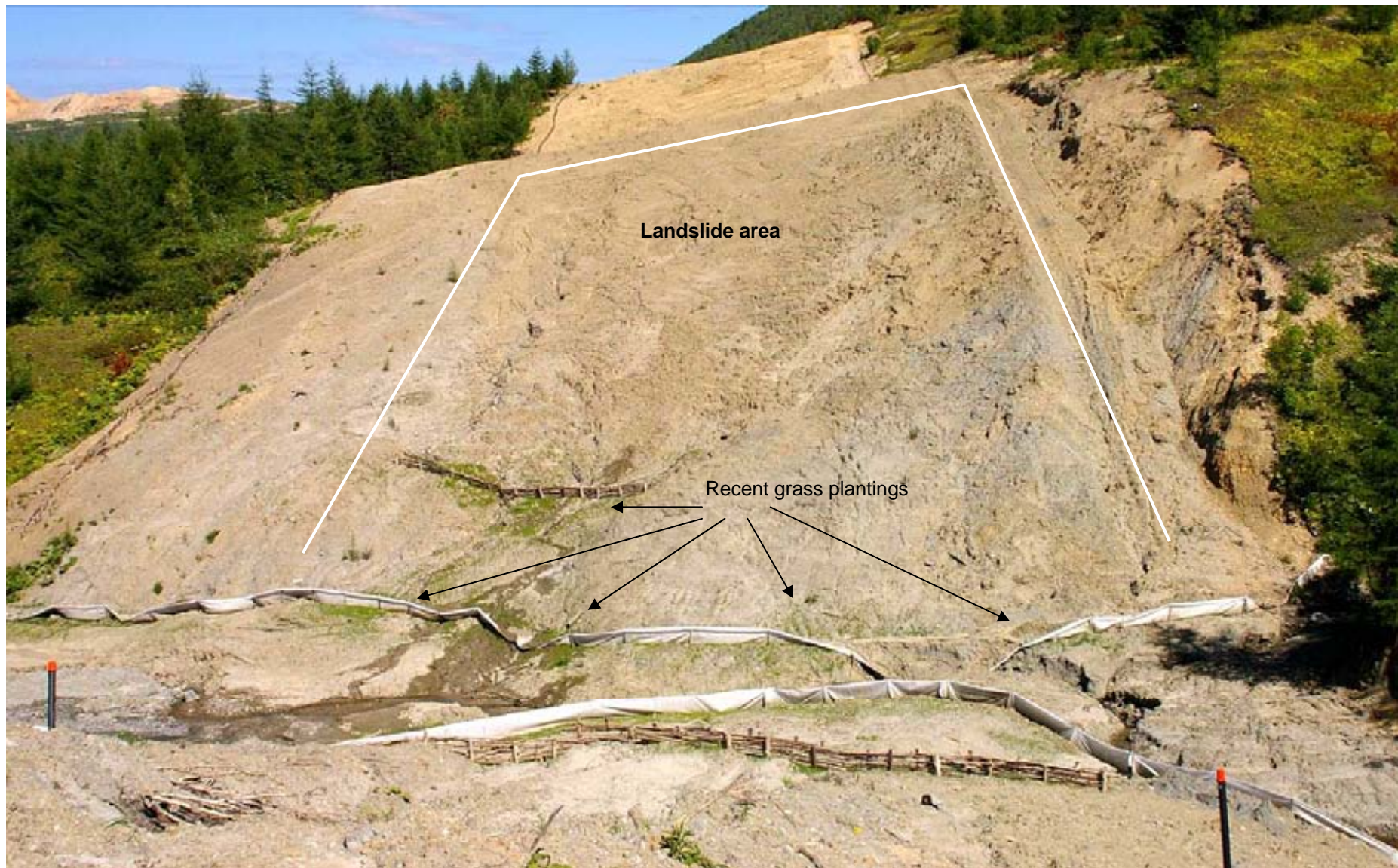
PK 460.7. A route section to the south from the Krasnaya River (the right bank). Dolinsk District.

The operator should have had conducted a complete work package associated with the continuous remediation here as early as a year ago, strengthening the slopes with various geotechnical means, restoring the fertile soil layer, planting perennial grasses etc. Instead of this, the geotextile mud filters remain the sole environmental action here, being helpless in preventing the erosion and soil slip processes. *August 31, 2007.*



PK 461.0. The landslide on the left bank of the right tributary of the Krasnaya River, which came down in June 2007. Dolinsk District.

At the moment, the mass of the landslide is being eroded by the stream and stream waters flowing down the slope. Moreover, the growth of gullies has already been starting here. The 'know-how' in the form of a short hurdle across the landslide, which has already come down, is taking no effect at all. The traces of the recently planted grass may be seen as narrow strips along the stream banks and beside the hurdle, which are slowing down neither the erosion processes, nor the landslide ones. *August 31, 2007.*



PK 461.0. The landslide area on the left bank of the right tributary of the Krasnaya River. Dolinsk District. (the very site as the one on the preceding slide, yet on the opposite bank of the stream). It is well seen that the recent local plantings of grass are having no effect upon the landslide processes. Clots of soil continue in sliding down into the stream. While floods, the process becomes much more large-scale. Down the slope, phreatic discharges may be seen being one of the primary causes of the soil liquefaction. *August 31, 2007.*



PK 461.6. Another right tributary of the Krasnaya River located 600 meters southward, the left bank of the stream. Dolinsk District.

There are absolutely no protective measures whatsoever here, not even cosmetic ones. The concentric lines of the areas, where clots of soil are torn off, mark the landslide formation areas varying in their scale. An erosion scour runs across the embankment of the temporary service drive having no culvert facility. The tracing ruts have been gradually becoming gullies. *August 31, 2007.*



PK 461.6. The right tributary of the Krasnaya River, the right bank of the stream. Dolinsk District (the very site as the one on the preceding slide). Again, no protective measures at all. The landslide areas are marked with black lines. It is well seen that the situation is typical and is reoccurring. The soil sliding down into the stream is being continuously eroded; many tons of the muddy sediment have been polluting the spawning areas lying downstream. *August 31, 2007.*



PK 462.6. A section of the route in the crossover point over the left tributary of the Baklanovka River (flows into the Sea of Okhotsk). Dolinsk District. Again, the typical situation where landslides of various scales are being formed. The line marks the former streambed which is now completely overwhelmed with the sediment drifted down. The need for urgent remediation work is obvious. *August 31, 2007.*



PK 462.6. A section of the crossing over the left tributary of the Baklanovka River. Dolinsk District (the same site as the one on the preceding slide). A massive landslide blocked the riverbed having completely disturbed the hydrologic characteristics thereof. The trees in the stream floodplain are dying as a consequence. *August 31, 2007.*



PK 462.6. A section of the crossing over the left tributary of the Baklanovka River. Dolinsk Region (the same site as the one on the preceding slide). A huge landslide from the bank-side of the stream, which completely submerge the flood plain of the stream. The former streambed is marked with a line. The dark spots upon the slope are phreatic discharges inducing landslide processes. Under such conditions, it will be extremely difficult to stop the formation of landslides. It is crucial to promptly make and implement major engineering solution regarding the control over the landslides. *August 31, 2007.*