



# Lenders' Independent Environmental Consultant Site Visit Report: May 2009 Sakhalin II (Phase 2) Project

Report to Sakhalin II (Phase 2) Project Finance Parties

Restricted – Commercial AEAT/ENV/R/2815 August 2009

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## **List of Abbreviations**

BAP	Biodiversity Action Plan
BG	Biodiversity Group
BVS	Block Valve Station
CLO	Community Liaison Officer
CTA	Common Terms Agreement
GP	Grievance Procedure
HSESAP	Health, Safety, Environmental and Social Action Plan
IEC	Independent Environmental Consultant
IP	Indigenous Peoples
NGO	Non-Governmental Organisation
OPF	Onshore Processing Facility
OSRP	Oil Spill Response Plan
PCCI	PCCI, Inc. – the Lenders' oil spill consultants
PCDP	Public Consultation and Disclosure Plan
PCDR	Public Consultation and Disclosure Report
PMD	Project Maintenance Depot
RAP	Resettlement Action Plan
RDB	Red Data Book
RemAP	Remedial Action Plan
RF	Russian Federation
RFSU	Ready For Start-Up
RoW	Right of Way
SCMH	Social Compliance Monitoring Handbook
SD	Sustainable Development
SI	Social Investment
SIA	Social Impact Assessment
SIMDP	Sakhalin Indigenous Minorities Development Plan
SPT	Social Performance Team
SPZ	Sanitary Protection Zone
STD	Sexually Transmitted Disease
ToR	Terms of Reference
WGWAP	Western Gray Whale Advisory Panel
WPZ	Water Protection Zone
WUL	Water Use Licence

### **Executive Summary**

AEA is the Independent Environmental Consultant (IEC) acting on behalf of the Senior Lenders to the Sakhalin II Phase 2 project (the 'Project'). Under the Terms of Reference (ToR) of our engagement as the IEC, AEA and lender representatives undertake periodic site monitoring visits to the Project.

This report presents the findings of the monitoring visit undertaken between 11<sup>th</sup> and 19<sup>th</sup> May 2009. The focus of the site visit was twofold: field-based social and environmental monitoring, with additional office discussions on oil spill response plans, camp decommissioning and HSESAP structure and reporting.

#### SOCIAL MONITORING

The independent social monitoring aimed to review the progress made by Sakhalin Energy Investment Company Ltd. (Sakhalin Energy) with respect to its social obligations, primarily in the following key areas:

- Stakeholder engagement
- Grievance management
- Compliance management
- Implementation of social commitments

A number of survey methods were employed to assess Sakhalin Energy's social performance, including analysis of the available documentation and internal systems and procedures, as well as conducting face-to-face interviews with responsible parties within the Company, local government representatives, community members, and contractor companies. Site and field visits served as a means of verifying the information presented in various Sakhalin Energy reports.

AEA acknowledges the achievements that Sakhalin Energy has made in its implementation of the social component throughout and upon finalisation of the Project's construction phase. The following positive aspects are worth noting:

- Effectively operating network of Community Liaison Officers
- A wide range of public engagement activities
- Public availability of information
- Robust grievance procedure
- Effective management of contractors' social compliance

A number of areas have been identified that require further attention, including:

- Maintaining timely updates of public documentation
- Optimising the structure of the Project's library on the Sakhalin Energy public website to ensure straightforward access to social-related documents
- Ensuring that the grievance telephone hotline is functional at all times
- Improving accessibility of summaries of targeted Social Impact Assessments on the public website
- Outlining minimum social investment commitments for the operational phase

#### ENVIRONMENTAL MONITORING

The independent environmental monitoring focussed on key risk areas such as steep slopes and sensitive rivers and their condition after the 2009 spring thaw. Sites were identified by AEA on the basis of experience gained during previous field monitoring visits.

The progress made on reinstatement of the pipeline RoW was assessed, in particular the progress made against the Remediation Action Plan (RemAP) for Rivers, Erosion Control and Reinstatement &

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Wetlands, which was developed by Sakhalin Energy in response to non-compliance issues previously raised by AEA during the construction period.

Focus remained on the quality of reinstatement works, in particular:

- Temporary erosion controls
- Permanent reinstatement of the RoW (including wetlands)
- Reinstatement of riverbanks
- Bridge removal / replacement

Overall, a favourable impression was gained of the quality of erosion control and reinstatement works in place at the time of the May site visit. Of particular note:

- Drainage controls designs found to be of a generally good standard, although some areas for improvement (relatively minor and generally associated with maintenance) were identified.
- Surface stabilisation good use of geotextile fabric was identified at a number of sites, and evidence of significant seeding was observed, although the extent of re-vegetation varied significantly along the RoW (reflecting the timing of the visit and the lack of topsoil in some areas).
- Slope stabilisation and contouring some good examples identified in areas previously highlighted by AEA as 'risk areas', although continued monitoring and maintenance of the more challenging slopes (predominantly located in Section 3B) will be required.
- *Riverbanks reinstatement* permanent reinstatement works **not yet complete**. Approximately 60 bridges still need to be removed, some of which will be replaced with permanent bridges. AEA strongly advises Sakhalin Energy to implement a realistic plan and timescale allowing for the completion of all bridge removal / replacement and associated reinstatement by the end of 2009.
- Wetland reinstatement AEA acknowledges efforts made by Sakhalin Energy in avoiding causing new disturbance to naturally revegetated wetland areas when removing the running track and reinstating the area.

#### **OTHER ITEMS**

#### Oil Spill Response Plans

A meeting was held to between AEA and Sakhalin Energy's oil spill expert to discuss the Company's Oil Spill Response Plans (OSRPs) and disclosure of these documents as per HSESAP commitments.

PCCI, the Lenders' independent oil spill consultant, has now reviewed final versions of the Company's asset-specific OSRPs. PCCI notes that the OPF and Onshore Prigorodnoye plans still assume 100% secondary containment 100% of the time and therefore do not contain measures for reacting to an incident in which a spill breaches the facility containment. International best practice requires this to be analysed in a worst-case scenario. AEA recommends the plans be revised to accommodate international best practice procedures.

Discussions are ongoing regarding the content and structure of documents to be disclosed on Sakhalin Energy's external website.

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## 1 Introduction

AEA Technology (AEA) is the Independent Environmental Consultant (IEC) acting on behalf of the lenders to the Sakhalin II Phase 2 project (the 'Project'). Under the Terms of Reference (ToR) of our engagement as the IEC, AEA and Senior Lender representatives undertake periodic site monitoring visits to the Project. This report presents the findings of the monitoring visit undertaken between 11<sup>th</sup> and 19<sup>th</sup> May 2009. The focus of the site visit was twofold:

#### SOCIAL MONITORING

Independent social monitoring was undertaken, which aimed to review the progress made by Sakhalin Energy with respect to its social obligations, primarily in the following key areas:

- Stakeholder engagement
- Grievance management
- Compliance management
- Implementation of social commitments

In order to assess the Company's social performance, a number of survey methods were employed during the monitoring visit, including analysis of the available documentation and internal systems and procedures, as well as conducting face-to-face interviews with responsible parties within the Company, local government representatives, community members, and contractor companies. Site and field visits, including personal interviews served as means of verifying the information presented in Sakhalin Energy reports.

#### **ENVIRONMENTAL MONITORING – ONSHORE PIPELINE**

The progress made on reinstatement of the pipeline RoW was assessed by inspecting a range of locations along the onshore pipeline RoW. Sites were identified by AEA on the basis of experience gained during previous field monitoring visits, with a particular focus on key risk areas such as steep slopes and sensitive rivers and their condition after the 2009 spring thaw. In particular, progress was assessed against the Remediation Action Plan (RemAP) for Rivers, Erosion Control and Reinstatement & Wetlands developed by Sakhalin Energy Investment Company Ltd. (Sakhalin Energy) in response to non-compliance issues previously raised by AEA during the construction period<sup>1</sup>. This focus is reflected in the specific locations identified on the pipeline RoW across construction Sections 3 and 4.

The full list of locations visited by the pipelines team is provided in Appendix 4.

In addition, the May 2009 site visit also addressed:

- OSRPs
- BAP Development
- WGWAP Commitments
- HSESAP Structure and Reporting

<sup>&</sup>lt;sup>1</sup> Sakhalin II Phase 2 Project Health, Safety, Environmental and Social Review; Independent Environmental Consultant Final Report – Agency Lenders; September 2007. Available from the Sakhalin Energy Investment Company Ltd. website: <u>http://www.sakhalinenergy.com/en/library.asp?p=lib\_sel\_iecddr2007</u>

## 2 Social Monitoring

### 2.1 Social Monitoring Methodology

#### 2.1.1 Monitoring Techniques

Social monitoring was carried out by the following means:

- Review of Company's relevant documentation, including the Sakhalin Energy public website<sup>2</sup> and notices/announcements in the local media
- Meetings with key personnel at the headquarters in Yuzhno-Sakhalinsk and Community Liaison Officers (CLOs) in a number of localities across the island
- Site visits to a selection of project facilities and camps, including sites operated by contractors;
- Field visits to affected communities across the island
- Meetings with complainants who have lodged grievances via the Company's Public Grievance Procedure
- Contacting free hotline<sup>3</sup> operated by Sakhalin Energy to receive queries and complaints from the communities within Sakhalin Island.

Site and field visit techniques included visual observations (e.g. of the posting of relevant information such as public grievance leaflets, Workers' Code of Conduct, the Policy on Hunting, Gathering, Fishing, the Drugs and Alcohol Policy etc. at the contractor sites and in affected communities, quality of residential facilities and catering), as well as interviews with a range of stakeholders in order that findings could be triangulated. The main stakeholders targeted included:

- CLOs
- Local administrations
- Contractor site supervisors
- 'Catch interviews'<sup>4</sup> with local residents (informal discussions based on a semi-structured questionnaires).

A full list of stakeholders interviewed during the office meetings and site visits is provided in Appendix 2.

#### 2.1.2 Key Monitoring Areas

The monitoring activities were aimed to capture the Project's performance in the following key areas:

- Stakeholder engagement
- Grievance management Compliance management
- Implementation of social commitments

Review of the Company's progress in **stakeholder engagement** examined a range of community liaison activities implemented by Sakhalin Energy as per the PCDP, other relevant documents (e.g. Stakeholder Engagement Plan for Korsakov) as well as the HSESAP commitments. This aspect was mainly analysed through the discussions with the CLOs and other key personnel involved in the design, implementation and supervision of the stakeholder engagement process, as well as local government representatives and community members.

<sup>&</sup>lt;sup>2</sup> www.sakhalinenergy.ru (in Russian) and www.sakhalinenergy.com (in English)

<sup>&</sup>lt;sup>3</sup> The number is +7 4242 662400.

<sup>&</sup>lt;sup>4</sup> Such interviews are based on a random selection of interviewees from the general public present in a particular location at a given time. The interviews are not aimed to be specifically gender- or age-sampled.

Assessment of the Company's performance with respect to **grievance management** included reviews of the recent Grievance Resolution reports (Q4 2008 and Q1 2009), accessing FOUNTAIN system<sup>5</sup> and analysing how grievances are lodged, tracked and acted upon through the system, meetings with the complainants and interviews with the heads of contractor companies.

Progress in the **management of contractor compliance** was verified through the site visits and faceto-face interviews with the site supervisors.

**Implementation of social commitments** was assessed based on the information obtained through discussions with the local administrations, heads of contractor organisations and Sakhalin Energy's staff as well as from the visits to local communities.

The monitoring findings in the aforementioned key areas are presented in the following sections.

# 2.2 Stakeholder Engagement (PCDP/ Community Liaison)

Engagement with the public and dissemination of the project-related information are implemented by a variety of means, including regular community meetings, CLO daily activities in the communities and regular open hours in the designated CLO offices, focus-group and individual discussions with the affected public, round tables and workshops, etc. Surveys of public opinion and/ or expert opinion are conducted annually in order to ascertain a prevailing attitude of the affected communities towards the Project.

Relevant information is also made publicly available both in Russian and English on the Sakhalin Energy website, in designated information centres based in the local libraries, printed media, via e-mail notifications to NGOs, as well as posters and bulletin boards in the places of public gathering in the communities (**Photo 1**). Overall, the Company demonstrates a highly satisfactory level of stakeholder engagement activities, which has resulted in achieving a constructive relationship with the local communities.

#### 2.2.1 CLO Network

Discussions with the CLOs about their responsibilities and activities demonstrated the great extent of their dedication and commitment, also acknowledged by some community members with whom 'catch' interviews were conducted. Feedback from the public, local government executives and contractors indicated that the CLO team are well trained, closely involved in various activities initiated in their assigned communities, have maintained effective interaction and developed productive cooperation with the residents, contractors and local administrations. The latter specifically recognised the CLOs' role and assistance in communicating concerns, requests and suggestions to the Company as well as the level of CLOs' initiative in the socially orientated deeds such as engagement with the local schools, hospitals, libraries and cultural centres. CLOs' participation in the educational and community/ charity programmes instigated by Sakhalin Energy was also widely acknowledged.

The Indigenous People's (IP) CLO continues active engagement with the indigenous communities, primarily in the areas of the IP's conglomeration, also known as 'compact settlements'<sup>6</sup>, such as Val area. Another important aspect of the IP CLOs' activity is raising public awareness of the SIMDP and facilitating implementation of the commitments outlined in the SIMDP.

During construction, CLOs have assisted local communities with accessing information on available employment opportunities (e.g. by providing contact details of contractor, subcontractor and service companies, exchanging information on available skills and vacancies with local employment agencies, and rendering mini-trainings on CV compilation). Following the sizeable demobilisation that preceded

<sup>&</sup>lt;sup>5</sup> The Company's system for recording, tracking and prompting action parties on: grievances; resettlement claims; social incidents, and social non-compliances.

<sup>&</sup>lt;sup>6</sup> Permanent or temporary settlements formed by the indigenous peoples in their traditional habitats

the commencement of operational phase, the Project's manpower demand is now significantly lower but the CLOs are still willing to provide assistance with the employment search to the extent feasible (**Photo 2**).

CLO open hours are being held as specified in the PDCP and HSESAP (**Photo 3**). While the uptake of these open hours by community members varied in different communities, they continue serving a useful function as community members use the CLO open hours to express their concerns, access information about social investment grant opportunities, job vacancies, seek assistance in development of their CVs and grant applications and, in some cases, assistance with lodging grievances. Sakhalin Energy intends to continue drawing on the success of the CLO network further during operations. At the operational stage, four CLO offices will be functioning in Korsakov, Poronaisk, Nogliki and Val.

After demobilising Contractor CLOs in advance of the operations phase, Sakhalin Energy's CLOs will act as primary liaison conduits between the Company, contractor organisations and the public. It was ascertained during the site visits that the contact between the Company's CLO and the contractors had already been established and the close interaction was maintained.

AEA recognises the contribution of the CLO activities and initiatives to the Company's overall performance in the community liaison and recommends that the CLO network remain operational at further stages of the Project.

#### 2.2.2 Availability of Public Information

As indicated in the previous section, Sakhalin Energy employs a broad range of methods stipulated in the PCDP in order to ensure that relevant information is readily available and accessible to the public. The disseminated information mainly includes updates on the Project, Sakhalin Energy's policies and procedures (primarily, Public Grievance Procedure), safety awareness as well as the location and availability of CLOs (**Photo 4**).

#### **Public Awareness**

Although during the 'catch' interviews many respondents stated that they were unaware of Company's CLOs or contact details, visual surveys and meetings with the local administration staff revealed that relevant information and contact details are posted publicly, grievance leaflets are available in administration offices (**Photo 5**), cultural centres, libraries and other places such as post offices and shops, as well as in the staff areas (notice boards in the administrative sector and canteens) of contractor sites. Some residents mentioned that they would contact the local administration if they had a concern or problem related to the Company's activities. However, the local administration heads<sup>7</sup> noted during the interviews that over the last years they received no direct grievances from the public in relation to Sakhalin Energy's activities (except at the very beginning of the construction stage when the CLO network had not been yet established) and that the affected communities had manifold opportunities to express their concerns and complaints at the numerous public meetings held throughout the construction period.

Furthermore, all local administration executives interviewed during the site visits had copies of the public grievance leaflet in their offices and were in close contact with the designated CLOs. In addition, announcements of community meetings, the Company's social activities and relevant contact details have been periodically published in local media. Thus, while the interviewed community members may not be immediately aware of how to contact the Company, effective measures have been in place to ensure that the affected public would be able to contact the company if they wished or needed to.

NGO engagement is being carried out in line with HSESAP agreements and evidence was given of correspondence with local NGOs and site visits by NGO representatives on request.

<sup>&</sup>lt;sup>7</sup> Namely, the Heads of Nogliki and Gastello Administrations

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During operations, Sakhalin Energy intends to use Information Centres based in the local libraries to provide continuous access to relevant materials and to address enquiries from the public (**Photo 6** and **Photos 7**). The Centres also provide access to computers and thereby to the Company's public website. Four Information Centres have already been established in Troitskoye, Gastello, Molodezhnoe and Kholmsk, and further 16 centres are planned to open later in 2009.

Recognising the effectiveness of the methods employed for distributing information, AEA considers that Sakhalin Energy should maintain this visibility into the operational phase.

#### **Public Website**

Project-related information and relevant documentation are readily accessible from Sakhalin Energy's public website. AEA recognises the extent of public disclosure that the Company has undertaken to date and the attained level of information availability, but notes that posting of the social-related information on the Company's website needs to be revisited in order to simplify the document search and to ensure that documents can be more easily located. This may entail some restructuring of the current categories of the 'Library' section of the website, and optimising the hyperlinks from the library to documents posted in other areas (e.g. the 'Community' section of the web-site). Enhancement of the navigational features of the website will allow the public to more easily locate relevant documents.

#### **Update of Public Documentation**

Of great importance is ensuring that documents placed on the Sakhalin Energy's public website are kept up to date at all times. At the time of this monitoring visit, the PCDP<sup>8</sup>, grievance reporting and Social Monitoring Programme<sup>9</sup> for Operations were either not the most recent or were unavailable on the web-site at all. AEA acknowledges that the delays in posting the up-to-date documents have been the result of Sakhalin Energy's internal restructuring and the Company's awaiting the feedback from Lenders and the IEC. Sakhalin Energy staff also explained that the delays in updating these documents do not affect the actual implementation of the Social Performance Team's work (including the PCDP-based activities), which is progressing as planned.

Whilst recognising the current circumstance, AEA advises that efforts need to be made to avoid such delays in the future and to ensure that public documentation is timely updated for the benefit of transparency and effective communication with the interested stakeholders outside the Company.

#### 2.2.3 Community Meetings

Community meetings are being held in the affected communities as specified in the PCDP, including two meetings a year in each listed community. In most cases the community meetings in spring 2009 were well attended<sup>10</sup> as these were used to publicise the Company's community awareness programme on safety rules along the RoW and other project facilities for the Project's operational phase. However, previous meetings convened for general project update purposes, i.e. the autumn 2008 meetings, were poorly attended in some communities. Given that announcements of the meetings had been broadly distributed using a variety of means (including placing notices in the local printed media, in the places of public gathering and CLO offices, and distributing personal invitations), the lower public attendance was not a result of insufficient awareness. CLOs and local administration staff explained that the public interest toward the Project is now generally on the wane. This is accounted for by the limited effects that are currently experienced in most communities due to the completion of construction activities and the decreased manpower demand (demobilisation) that has resulted in the insignificant employment opportunities and the Project's minimal impacts manifested locally. On the other hand, community meetings in some communities continue to be well attended, e.g. in Korsakov and Dolinsk.

<sup>&</sup>lt;sup>8</sup> The updated PCDP for 2009 and PCDR (as of December 2008) were published on Sakhalin Energy website in June 2009, after finalisation of the documentation reviews.
<sup>9</sup> The Summary of Social Impact Monitoring Programme that is currently available on the Sakhalin Energy public website is

<sup>&</sup>lt;sup>9</sup> The Summary of Social Impact Monitoring Programme that is currently available on the Sakhalin Energy public website is dated December 2007. The Social Impact Monitoring Programme for the Operation Phase will be placed on the website as part of Annex C by the end of 2009.

of Annex C by the end of 2009. <sup>10</sup> Except for a public meeting in Gastello area where it coincided with the seeding season and therefore resulted in a lower attendance

Taking into account the fading public attendance, Sakhalin Energy has proposed that the HSESAP commitment for mandatory biannual community meetings should be revisited. AEA agrees that going forward in the operational phase, the six-monthly frequency of the community meetings no longer needs to be mandatory. However, given that a number of concerns still prevail in certain locations and that some issues related to the completion of construction works may transpire, AEA therefore recommends that the periodicity of community meetings should remain semi-annual until Project Completion<sup>11</sup>. From the time of Completion, this frequency should no longer be mandatory but rather decided upon as appropriate, either where CLOs and local communities/administration deem them useful in maintaining an effective relationship with the Company (as in Dolinsk and Korsakov) or where the meetings are specifically requested by communities to deal with an identified issue.

#### 2.2.4 Stakeholder Engagement in Korsakov

The community of Korsakov, situated west of the LNG/OET site, has had a problematic relationship with the Project in the past. From around 2004, the community and the Mayor's Office raised a range of issues with Sakhalin Energy such as the delayed compensation for the beach at Prigorodnoye (which was linked to disagreements amongst interested parties about what this compensation should constitute, leading to delays in approval for the compensation by the Mayor's office), the allegation of the misuse of Set Aside funds<sup>12</sup> by construction contractors; and some road safety and maintenance issues and complaints related to the non-use of the Korsakov landfill. In 2005, striving to address these issues, the Company developed a 'step change' in their relations with Korsakov citizens and produced a series of Korsakov stakeholder engagement plans encompassing initiatives such as communication efforts through media; specific efforts to deal with a number of community concerns including road conditions, road safety, the beach offset (park upgrade), local employment and impacts on fishing enterprises.

The findings of this monitoring visit indicate that the stakeholder engagement effort in Korsakov has been successful. The Park upgrade in compensation for the siting of the LNG plant by Prigorodnoye beach has been completed, and in addition the remainder of the Infrastructure Upgrade Fund for Korsakov may be used to contribute towards the construction of a public swimming pool, along with federal/ oblast funds. The current Mayor of Korsakov and grant recipients visited during the site visits, are highly appreciative of the Social Investment initiatives supported by the Company, and none of the residents with whom catch interviews were conducted had any specific local grievances or complaints about the Company's activities.

The Dacha residents from the 'Stroitel' Dacha association, which is the closest dacha cooperative to the LNG site at Prigorodnoye, continue to express concerns about the proximity of the site and its impact on their dachas. These residents are concerned about the environmental impact of the flaring on the local environment and thereby on their health and the produce of their dachas. They also alleged that the compensation for the loss in value of their dachas and the market evaluation of their dachas for the 'waiver' packages, which was designed to allow those dacha residents who wished to move to a dacha of similar quality in another location close to Korsakov, was inadequate to cover the costs of acquiring replacement dachas of similar quality.

AEA wishes to examine the data and methodology that is being employed to monitor the impact of flaring on the air quality at the Dachas in order to confirm Sakhalin Energy's assertion that air quality at the Dachas is still within acceptable levels.

AEA has reviewed the market evaluation of Dachas that was undertaken by an independent locally recruited agency 'GAKS' (a brief summary of the evaluation methodology is provided in Appendix 3).

AEA considers the compensation offer proposed by Sakhalin Energy to the affected Prigorodnoye Dacha owners, including the 50% loss of value, to be adequate. The dissatisfaction with the proposed 'waiver' package expressed by some Dacha owners is mainly based on the supposition that the offered sum was insufficient to purchase alternative dachas in other areas of Korsakov and

<sup>&</sup>lt;sup>11</sup> This is expected to occur around June/July 2010 if all environmental and social commitments have been reached.

<sup>&</sup>lt;sup>12</sup> Contractor Set Aside Funds for sustainable development (SD funds) were available at the construction phase to invest in sustainable projects identified by communities impacted by the Project. Sakhalin Energy does not intend to maintain those funds at the operations stage, as this was only a construction phase commitment.

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particularly, in the most prestigious location called *Vtoraya Pyad'*. Dachas in the Vtoraya Pyad' area enjoy easier access, better transportation arrangements and utility supply, and a higher amenity value as compared with the Prigorodnoye dachas. At the time of the research (2006), the prices of dachas in Vtoraya Pyad' were 10.5% higher than in Korsakov district on average and reportedly 50% higher as compared with Prigorodnoye dachas.

Sakhalin Energy has evidence that those dacha residents who did opt to take the waiver package were able to acquire dachas of similar or better standard with the waiver package compensation and even in some cases to keep a surplus. Furthermore, some of the 28 owners who accepted the package managed to purchase dachas in the upmarket Vtoraya Pyad' location.

Sakhalin Energy considers that dissatisfaction of some dacha residents with the waiver package and their assertion that they are suffering from the impact of flaring is because the dacha community wish to receive the full resettlement compensation for which they would be eligible if the sanitary protection zone for the LNG had been set at 3.5 km rather than 1 km (as the resettlement compensation is significantly larger than the waiver package).

Despite the continued discontentment of some dacha residents at the compensation package offered and the consequent disagreements between them and Sakhalin Energy, AEA considers that the Company and local CLOs are making best efforts to maintain a good relationship and are continuing to engage openly with the affected community. This relationship may be tested in the nearest future as the Company had also made a Social Investment fund of USD 50,000 available for projects to improve the quality of life at the Stroitel dachas. However, the dacha residents have so far refrained from making any proposals for the use of this fund since it was made available in 2005, on the basis that they prefer to be resettled. Sakhalin Energy has stated that as it needs to account for the use of these funds, this opportunity will be withdrawn if no project proposals have been made by July 1<sup>st</sup> 2009 (**Box 1**).

#### Box 1 Excerpt from letter to the Stroitel Dachas Cooperative sent by Sakhalin Energy in December 2008

"We hereby remind that in 2005 the Company offered financing of a purpose-oriented social investment programme aimed at the improvement of life quality in Stroitel dacha cooperative. The intention is that this programme should be developed and implemented based on suggestions made by the cooperative represented by its authorised person or an initiative group (at the discretion of Stroitel members)...In order to invoke and speed up the process you are requested to submit corresponding proposals before 1st July 2009 (in view of the fact that this season begins in spring and you can discuss this issue at a meeting). In case it is necessary and desirable, specialists of the Company are still willing to provide assistance in their development. If the Company receives no such proposals before the date specified above, it saves the right to view this as Stroitel's denial of the Company's offer to finance the aforesaid purpose-oriented programme."

AEA suggests that if Sakhalin Energy receives any investment requests from the dacha community after the investment fund has lapsed (provided that the Stroitel community has been fully informed of the lapse date), such requests should still be considered on an individual basis.

### 2.3 Grievance Management

#### 2.3.1 Grievance Procedure

All grievances from the public and contractors are effectively managed through the Community **Grievance Procedure (GP)**, which is strictly confidential<sup>13</sup>. Grievances are processed through the 'Fountain' database<sup>14</sup>, which serves as an incident tracking and grievance rectification tool. The Fountain system has been well adapted to the Company's needs, allowing:

 <sup>&</sup>lt;sup>13</sup> In case a breach of law is identified, essential information may need to be passed on to the relevant authorities.
 <sup>14</sup> The Fountain System was introduced in 2005-06 and began to be used for grievance management in 2007. All grievances that predated the commissioning of the Fountain are archived either on paper, or in Excel spreadsheets or in Live Link format.

- Incorporation of the score according to the 'methodology matrix' through which Sakhalin Energy rates the materiality of grievances or other social incidents,
- Identification of whether complainants or resettlement claimants are vulnerable according to the company's criteria and therefore require expedited attention, and
- Distinguishing between closed out and resolved grievances, and resolution agreed but pending implementation grievances.

Through the Fountain system, responsible action parties (also defined as grievance owners and identified by Grievance Committee) are automatically notified<sup>15</sup> and regularly prompted about the progress in grievance resolution as per the grievance management deadlines (according to the steps illustrated in **Box 2**). Social Performance Team tracks all HSE incidents logged through the Fountain in order to identify cases with potential social consequences.

The Company ensures that all feasible means of resolution are applied to settle a grievance. Thanks to such an approach the number of grievances that remain unresolved beyond the targeted resolution dates has been reduced (for more details on grievance statistics please see **Box 3** overleaf). It has also been demonstrated that the majority of these failures to meet target resolution dates are outside the control of the Company (e.g. due to seasonal access restrictions for investigations, grievances lodged anonymously or without correct contact details, meaning that no letter of satisfaction could be signed, or grievances that did not result from the Company's activities or were found to be unsubstantiated, in which case the complainant was usually not willing to sign a letter of satisfaction).

#### Box 2 STEPS IN THE GRIEVANCE MANAGEMENT PROCESS

- Step 1 Receiving a complaint
- **Step 2** Assessment and Action Party & CLO allocation
- Step 3 Acknowledge grievance
- Step 4 Investigate, resolve, communicate
- Step 5 Reporting progress
- Step 6 Close-out
- Step 7 Follow-up

A number of grievances that were not resolved to the satisfaction of the complainant were submitted to the Company's Business Integrity Committee (BIC) and closed out. These incidents have been assessed either by the RAP Monitor (in the case that they related to resettlement) or by AEA, and in all cases the decision of the BIC was found to be reasonable and it was not considered that further 3<sup>rd</sup> party mediation was required.

A number of employment related grievances against project contractors<sup>16</sup> were also closed out. In an attempt to resolve such grievances Sakhalin Energy requested respective contractors to investigate the labour related complaints. However, where the contractors identified the grievances as unsubstantiated, Sakhalin Energy was not in a position to fully investigate and confirm the facts given that the RF legislation does not provide for mechanisms that would enable the Company to exert direct leverage over the grievance resolution by a contractor firm. Thus, when Sakhalin Energy communicates with the contractor in order to resolve submitted grievances, the ultimate discretion rests with the management of the contractor company. However, in such cases complainants have access to investigation by the local Labour Inspectorate<sup>17</sup>, which is a neutral government agency and provides its services free of cost. A number of complainants whose grievance against a contractor could not be upheld using the Sakhalin Energy grievance mechanism have initiated this process.

<sup>&</sup>lt;sup>15</sup> Line Manager of the Action Party also receives notification of a grievance

<sup>&</sup>lt;sup>16</sup> Most frequently, the grievances were related to improper salary calculation, non-payment of salary and inadequately drafted employment contracts. <sup>17</sup> State Labour Inspectorate is an entity of the Russian Federal Service for Labour & Employment. The Inspectorate oversees

<sup>&</sup>lt;sup>17</sup> State Labour Inspectorate is an entity of the Russian Federal Service for Labour & Employment. The Inspectorate oversees and controls compliance with the Labour law, investigates circumstances and causes of breaches and contraventions of the law, as well as prescribes measures to rectify violations.

A summary of 2008 grievance statistics can be seen in **Box 3**.

Box 3 Grievance Statistics as of 2008

#### Received – 56 grievances

25% fewer than in previous year, due primarily to completion of major construction works and related temporary community inconveniences and also timely identification of potential issues of concern and their effective resolution.

Finalised – 41 from 56

- ✓ Of these, 38 grievances (93%) were resolved within the time period stipulated in Grievance Procedure (less than 45 working days),
- ✓ 13 grievances were addressed within 20 working days.

> Status of the 15 grievances not finalised as of the end of 2008

- ✓ Appropriate measures were taken but response from complainant was not yet received (4 grievances);
- ✓ Agreement was reached with complainants on practical dates and resolution actions to be taken in 2009 as due to objective cause (for example, weather conditions) measures could not be initiated in 2008 (4 grievances);
- ✓ Pending final decision on grievance resolution (4 grievances) or were in the process of investigation as were received by the end of year (3 grievances).
- Statements of satisfaction signed 30 grievances (73% from 41)
  - ✓ As for other grievances all practical measures were taken, however either a complainant did not express his/her opinion regarding them or grievances were anonymous and in such cases no sighed statements of satisfaction could be obtained.

#### 2.3.2 Public Grievance Leaflet

In order to further strengthen public awareness of the grievance procedure, Sakhalin Energy continues distributing Public Grievance Leaflet which was specifically developed to explain how a grievance can be lodged, a chain of actions that follow the receipt of a grievance, confidentiality provisions, and also provides a form that should be used to submit a grievance. The explanation provided in the leaflet is readily intelligible and gives sufficient information enabling a complainant to fill in the grievance form single-handedly. If necessary, CLOs will assist a complainant with completing the form. CLOs are closely involved throughout the grievance management process and in most cases act as a main link between the complainant and action parties, both within Sakhalin Energy and the involved contractor companies. Public Grievance Leaflets are distributed in the communities by placing them in the local libraries, administration offices, on notice boards in public places (post offices, shops) as well as at public meetings, through regular publications in the local newspapers and by mailing to individual addresses<sup>18</sup>. Grievance forms are also available on the contractor sites. (**Photo 8**)

AEA noted a new legal text (**Box 4**) that has been added to the Grievance Leaflet. This text is a disclaimer asking complainants to sign their approval for information related to their grievance to be shared with third parties as part of the investigation. AEA considers this text to be conveyed in a dense legal language, which could be off-putting to those wishing to lodge grievances.

AEA therefore suggest that this text should be re-phrased in a more straightforward language.

<sup>&</sup>lt;sup>18</sup> According to the CLOs, the mailing method has not proven to be very effective. People tend to perceive the mailed leaflet as one of 'junk' adverts they receive in numerous quantities among their post and therefore, do not pay particular attention to the contents of the leaflet.

#### Box 4 Legal excerpt from Sakhalin Energy Public Grievance Leaflet

#### Consent to disclose grievance-related information to the third parties

I am aware that this grievance of mine (in full or in part) refers to actions or failure to act of third parties, which are not Sakhalin Energy (for example, contractors of Sakhalin Energy).
I understand that in order to efficiently resolve my grievance Sakhalin Energy will have to contact these third parties so as to check into the facts stated in the grievance and work out a solution.
I hereby agree that Sakhalin Energy can disclose this grievance (as well as additional information that I have provided and will provide to Sakhalin Energy in connection with this grievance) to third parties to whose actions or failure to act my grievance refers (at that Sakhalin Energy shall not disclose information, which could contribute to identifying me personally, if I requested so by ticking in the grievance registration form).

#### 2.3.3 Grievance Hotline

Sakhalin Energy also operates the confidential and free phone line to address telephone enquiries and complaints from communities within Sakhalin Island. The number of this grievance hotline is advertised on Sakhalin Energy public website<sup>19</sup> and is indicated in the Public Grievance Leaflet (in section 'How Do I Report A Grievance?'). AEA tested the grievance hotline after the monitoring visit and found this service not working<sup>20</sup>. The AEA social monitors informed the Company about this defect and the technical problem was subsequently rectified. Sakhalin Energy also apprised AEA that the grievance hotline is normally checked twice per month.

AEA repeated the testing of the grievance hotline after it had been repaired. The line was functional and was answered by an advisor who suggested that in order to file a grievance, a complainant should download a grievance form from the Sakhalin Energy website and then send it to the Company via email or fax. Whilst recognising the helpfulness of such advice, consideration should be given to the fact that access to the internet or a fax machine may not be readily available for all local citizens, particularly elderly people or the unemployed. In this case, it is advisable to refer a caller to the local CLO or to suggest where a paper copy of the public grievance leaflet could be obtained. This will enable better access to the grievance procedure for representatives of all social groups.

#### 2.3.4 CLO Involvement

Upon receipt of a grievance, a CLO normally establishes first contact with the complainant over the telephone, which is followed by an individual meeting aimed to assess the nature of a complaint and to gather all details required to initiate an investigation. During the investigation, CLO regularly liases with the responsible Action Parties both within Sakhalin Energy's Project teams and involved contractor/subcontractor companies.

As indicated in section 2.3.1 (Grievance Procedure) above, there have been a number of anonymous grievances<sup>21</sup>, most often related to alleged breaches of the employment law. CLOs would normally attempt to ascertain the contact details that are necessary to implement a full investigation process. The progress in resolving lodged grievances is subsequently monitored by the responsible CLO. If a Statement of Satisfaction was eventually signed by a complainant, the CLO would normally follow up the case by contacting the complainant after a certain period of time in order to ensure that the grievance does not recur.

<sup>&</sup>lt;sup>19</sup> <u>http://www.sakhalinenergy.com/en/aboutus.asp?p=whistleblowing</u>

<sup>&</sup>lt;sup>20</sup> The telephone was answered by a contractor unrelated to the grievance service.

<sup>&</sup>lt;sup>21</sup> Sent by email and without indication of any contact information. According to the CLOs, it further transpired that such anonymous grievances had often been sent by contractor employees.

During the visit, the social monitors met with two complainants whose grievances were successfully resolved<sup>22</sup>. Both interviewees acknowledged the accessibility of the grievance procedure and the extent of the CLOs' involvement in the investigation process. A complainant in Nogliki noted that in the absence of the procedure, resolving the grievance would have become a considerably prolonged process and appealing to the court would have been the only possible solution. It was also mentioned that involving local administrations is not necessarily the most effective method of resolving disputes between private companies given that the administrations do not have such legal power. From this perspective, in some cases Sakhalin Energy's grievance procedure represents the most effective means of settling a grievance.

Another complainant in Smyrnikh commended the speed of the resolution process and responsiveness of the CLO who had facilitated the procedure. A good degree of public awareness of the grievance procedure promoted by the local CLO was also noted.

#### 2.3.5 Grievance Management Roll-out

Sakhalin Energy's Social Performance Team (SPT) ensures that all individuals within the Company who are potential Action Parties for grievance resolution are familiarised with the grievance procedure by undergoing a formalised training provided by the SPT. The training aims to brief the responsible individuals on their role and involvement in the grievance investigation and resolution, the process of assigning and delegating the 'Action Party' responsibilities, the communication requirements<sup>23</sup>, methods of tracking the grievance status and the close-out process.

CLOs receive separate training on grievance management and the interaction with Action Parties.

### 2.4 Compliance Management

#### 2.4.1 Contractor Compliance

Sakhalin Energy ensures that the management of contractor companies receive targeted training (including field-based training) on the Health, Safety, Environment and Social Action Plan (HSESAP) compliance requirements. Contractor employees are familiarised with the entire range of applicable policies, standards and norms, including Sakhalin Energy's grievance procedure, as part of the mandatory induction upon commencement of the employment. Personnel starting the new shift are made aware of all alterations and updates to the existing policies and rules that have come into force during the previous shift, i.e. within the intervening 28 days. In addition, regular safety meetings are conducted to remind employees of all the applicable requirements. Relevant information such as grievance leaflet, Workers' Code of Conduct and the Hunting, Gathering and Fishing Policy is displayed on the staff notice boards (**Photo 9**).

Contractors' compliance is monitored using the following means:

- Social Compliance Monitoring Handbook (SCMH);
- Field monitoring by SPT;
- CLO day-to-day monitoring;
- External evaluation by the independent monitors.

The SCMH is a key instrument for systematic monitoring of contactors' social compliance. It also provides guidelines on the monitoring and reporting requirements, explains the benefits of implementing social protection measures, assigns main responsibilities and includes checklists, questionnaires and reporting datasheets as helpful tools in the process of compliance monitoring. Given that the SCMH requirements are primarily based on the HSESAP commitments, revision of the HSESAP for Operations entails revision of the SCMH, respectively. According to a presentation provided by the Sakhalin Energy's SPT, the SCMH roll-out to operational contractors will start tentatively in the 3<sup>rd</sup> quarter of 2009, once the HSESAPs for operations have been finalised.

<sup>&</sup>lt;sup>22</sup> Details of the grievances studied during the monitoring visit cannot be disclosed in this Report due to confidentiality of the grievance procedure.

<sup>&</sup>lt;sup>23</sup> All grievance-related e-communications are circulated via a special 'community grievance' functional mailbox

An explanatory leaflet detailing Sakhalin Energy's requirements for social compliance was observed on the staff notice board at the PMD in Nogliki (**Photo 10**).

At the time of the monitoring visit, regular reporting arrangements on the core HSE and Human Resources (HR) parameters were in place. Taking into account the current adjustment of the Operational HSESAP, additional specific reporting requirements for contractors will be introduced once the HSESAP revision has been finalised. Sakhalin Energy validates the adequacy of the reporting through site visits and inspections (internal audits of the contractor compliance).

During the construction phase, all major contractors were required to assign their own CLOs in order to maintain regular contact with the affected public. At the operations stage, appointment of an individual CLO position for a contractor company does not appear feasible given the limited manpower allocation. Due to limited social impact during the Operations phase, engagement with the affected communities is mainly implemented via Sakhalin Energy's local CLOs. Additionally, the heads of contractor organisations will act as the focal points on social issues at the operations stage.

The use of these management measures to ensure contractor compliance appears to be effective, and has resulted in contractors' compliance on the key social commitments. Specific examples include the following:

- All contractors are pursuing the local content policy that aims at the preferred employment of workers domiciled on Sakhalin Island. Workforce from continental Russia is employed in cases where specific engineering or highly technical qualifications are required that cannot be filled by locally available skills. For example, at the contractor-operated PMD in Nogliki, 38 personnel are from Sakhalin Island, including 17 workers from Nogliki itself (the total number of employees is 54). From 58 employees at the PMD in Yasnoe, only 15 workers have been hired from continental Russia. At the PMD in Gastello, nearly 25% of the staff are locals, including from Okha, Makarov and Poronaisk. PMDs' central offices in Yuzhno-Sakhalinsk distribute announcements of available vacancies on the Internet and in local newspapers as well as via employment bureaus.
- During the working shift<sup>24</sup>, camp-based accommodation is provided to all shift workers, including the locals who reside in proximity to the site. All shift workers stay in the territory of the site for the entire duration of their shift. Quality of the accommodation and catering must be compliant with all applicable sanitary requirements and is regularly inspected by representatives of Sakhalin Energy and the State Sanitary and Epidemiological Service. Various recreational facilities are also provided on the site (Photo 11). All the PMD sites visited were 'closed' sites, i.e. allowing only work-related absence in strict accordance with an issued permit to work. Any other absences must have advance authorisation by the management.
- Routine alcohol testing is conducted at contractor sites and staff are familiar with the Policy on Hunting, Gathering and Fishing.

#### 2.4.2 Internal Compliance

All Company's managers attend mandatory HSESAP awareness training. The HSESAP focal points are responsible for the roll-out within the Project teams. The following aspects are covered as part of the HSESAP training:

- Potential consequences of a non-compliance (compliance failure)
- Risk assessment matrix
- Incident categorisation and the response timelines
- Reporting requirements, including on social incidents
- Social severity criteria
- Public disclosure and external compliance audits
- Managers' role in maintaining compliance
- HSESAP commitments specific for each Project Asset.

<sup>&</sup>lt;sup>24</sup> Typically 4 weeks

As indicated above (Sections 2.3.4 and 2.4.1), separate training on the grievance procedure is rendered to all potential Action Parties within the Project and contractor teams.

### 2.5 Implementation of Social Commitments

#### 2.5.1 General Overview

Heads of the local administrations who were interviewed during the monitoring visit noted the Company's proactive initiative and appreciation of the social issues. There is a well-established interaction between Sakhalin Energy and the affected communities in various social spheres, including provision of the financial support for socially-oriented activities, implementation of awareness raising programmes and rendering assistance in the improvement of local social infrastructure and utilities (e.g. installation of computers in village schools and libraries, acquisition of vehicles, purchasing facilities for social institutions, installations of street lighting, traffic lights and road signs, etc). The Head of the Nogliki Administration mentioned that all requests for assistance that the Administration had directed to Sakhalin Energy via the local CLO were fulfilled.

The post-construction demobilisation plans initially envisaged by the Company, which involved data basing and exchanging information on worker movements and skill-sets with other businesses in the Russian oil and gas industry, were not practically feasible in the context of Russian labour law which does not allow sharing of personal information about employees with 3<sup>rd</sup> parties. However, the demobilisation actions that have been implemented by the Company and Contractors in practice (including phased lay offs according to the construction schedule and the provision of lists of workers to be laid off to the local employment bureaus in advance) appear to have worked well, and uncontrolled unemployment in communities visited in Sakhalin was not raised as an issue. In addition, it appears that many workers who were employed and trained during the construction phase have been able to find work in other projects in the region.

As part of the social commitments related to the construction, contractors were required to implement measures for the prevention of sexually transmitted diseases (STDs), including free provision of condoms in worker camps. The Company is currently considering the applicability of this measure and queries the necessity to impose this requirement on contractors at the operational phase<sup>25</sup>. This is on the grounds that the measure may not be required in closed camps with the strictly regulated regime and enforced Code of Conduct. Additionally, a requirement to provide condoms could be seen as culturally inappropriate in the traditional Russian context. However, provision of condoms to labour forces staying away from their homes for prolonged periods of time represents good international practice. AEA suggest that, in order to address the cultural sensitivities of the issue, the availability of condoms could be required of contractors but presented as a health training / awareness raising exercise.

As part of the HSESAP revision for the operations phase, Sakhalin Energy suggests that from operations onwards the Company's Social Investment programme should mainly focus on implementation of the flagship long-term partnership projects, and that amounts allocated for social investments in the affected communities should be determined annually. AEA believes that preserving adequate investment support remains of great importance for maintaining favourable relations with the affected communities and therefore recommends that minimum investment amounts should be specified in the HSESAP. It is also important that investment opportunities of a smaller scale remain accessible to the local communities. AEA therefore advises that, in addition to flagship projects, the small grants scheme should continue to be implemented.

In addition, AEA suggests that independent external evaluation of the Company's investment projects should be conducted with a frequency higher than that proposed in the HSESAP operational revision (e.g. at least biennial instead of the proposed triennial evaluation of projects). Higher periodicity of the independent evaluation will allow timely adjustment of the investment priorities/targets and enhancing suitability of the investments for the actual community needs. It will also enable projects' effectiveness and public satisfaction with the implemented social investment initiatives to be reviewed more frequently.

<sup>&</sup>lt;sup>25</sup> At present, condoms are typically distributed on World AIDS Day (1 December)

In terms of commitments to protecting archaeological sites and cultural resources in the vicinity of project facilities, the Company has developed a Treatment Plan for Objects of Cultural Heritage during Operations, which includes a measure to mark and protect known sites. This plan appears comprehensive and should also be communicated to the relevant Project teams and contractor staff. The key commitments laid out in the Treatment Plan will also need to be included in the updated HSESAP tables for operations, with measures for the identification and monitoring of cultural resources during constriction retained in a separate HSESAP document as commitments to be fulfilled in the event of project variations leading to new constriction activities (see section 4.4.1 for HSESAP discussion).

#### 2.5.2 Public Availability of Targeted SIAs

As per the HSESAP commitment, Sakhalin Energy conducted a number of targeted social studies for project variations, including the Chaivo Social Impact Assessment (SIA) and the scoping survey and public consultation process for the LNG permanent accommodation in Prigorodnoye<sup>26</sup>. Given the scale of the latter project that entails construction of the 100-vacancy accommodation and the social impacts that can potentially be associated with it (dust and noise nuisance, deterioration of road surface quality, limited access for personal vehicles, potential disturbance caused by the construction personnel), AEA deem that the LNG permanent accommodation project warranted a fuller scale SIA rather than the high-level scoping/screening exercise that was actually implemented.

AEA therefore advise that a scale and the level of detail of targeted social studies that will be conducted in the future should be tailored to the scale of an assessed activity and be commensurate with an extent of predicted impacts (i.e. full SIAs as opposed to scoping surveys).

It is also recommended that in the interest of transparency, summaries of the implemented targeted SIAs and scoping studies which act as addenda to the SIA should be publicly posted on the Sakhalin Energy website.

### 2.6 Social Monitoring Conclusions

Overall conclusions of the undertaken social monitoring survey are:

- No material non-compliances have been identified
- All required systems and procedures are in place
- Minor aspects need further improvement, as listed below.

AEA recommends that the following aspects be taken into consideration for improvement:

- Biannual frequency of the Community meetings may be revisited at the operational phase, taking into account the declining public interest in the Project. However, given the remaining high degree of interest in some of the affected communities, public meetings should continue to be available for the benefit of maintaining effective relationship with the local population.
- Location of social-related information on the Sakhalin Energy public website should be optimised to enable better accessibility of the documents.
- Placing updated public documentation on the Sakhalin Energy website should be implemented in a timely manner (including grievance reports and Social Monitoring Programme for Operations).
- The Company should ensure that the grievance phone line is fully operational at all times and no prolonged disruptions occur to this service. Additionally, various alternative means of lodging a grievance should be recommended to a caller contacting the hotline, taking into account that their access to the internet or other modern electronic devices may be limited.

<sup>&</sup>lt;sup>26</sup> The Residential Complex for LNG plant/ OET Service Personnel Project.

- Implementation of targeted SIAs for Project's variations / alterations should remain a regular practice. The depth and level of detail of such social studies should correspond to the scale of an assessed project and the severity of anticipated impacts. Summaries of the undertaken targeted SIAs and scoping studies should be made available on the Sakhalin Energy website for the purpose of ultimate transparency.
- Language of the legal disclaimer on the grievance leaflet needs to be simplified in order to keep it
  easily understandable to general public.
- Specific requirements for the social compliance reporting by contractors should be put in place upon finalisation of the HSESAP operational changes.
- Provision of condoms in workers camps at the operations stage should be given consideration as an example of good international practice.
- Minimum commitments of social investment for the operational phase should be specified in the HSESAP instead of determining the investment amounts on an annual basis. In addition to longterm and large-scale flagship projects, small grants should remain available for the local communities. Frequency of the external evaluation of investment projects may need to be shortened to enable timely alignment of the investment aims and priorities.
- In case Sakhalin Energy receives any investment requests from the Prigorodnoye dacha community after the investment fund for Stroitel association has lapsed, those requests should be given consideration on an individual basis.

## 3 Environmental Monitoring – Onshore Pipelines

### 3.1 Overview of Field Observations

#### 3.1.1 General Reinstatement Works

AEA inspected a range of locations along the onshore pipeline RoW during the May monitoring visit. Sites were identified by AEA on the basis of experience gained during previous field monitoring visits, with a particular focus on key risk areas such as steep slopes and sensitive rivers and their condition after the 2009 spring thaw. The sites visited are listed in Appendix 4.

AEA has undertaken extensive field monitoring since 2003 with the two most recent previous monitoring trips being undertaken in September 2008 and November 2008. Photographs taken in May 2009 are shown alongside those from September 2008 in Appendix 1, comparing slope and riverbank conditions at key locations along the RoW.

Focus remained on the quality of reinstatement works, in particular:

- Temporary erosion controls
- Permanent reinstatement of the RoW (including wetlands)
- Reinstatement of riverbanks
- Bridge removal / replacement

Overall, a favourable impression was gained of the quality of erosion control and reinstatement works in place at the time of the May site visit. In particular, significant improvements were identified over previous site visits with respect to:

- Drainage controls
- Surface stabilisation
- Slope stabilisation and profiling
- Wetland reinstatement

Each of these areas is discussed in further detail below.

AEA notes that permanent riverbank reinstatement works are **not yet complete**, and provides further commentary and recommendations in the relevant section.

#### **Drainage Controls**

Drainage controls have been implemented in the form of slope breakers, French drains, spoon drains and cross-drainage channels at a wide range of locations on the RoW. The drainage controls were identified as being installed at the necessary locations, with very few exceptions. The design of drainage controls was also found to be of a generally good standard, although some areas for improvement (relatively minor and generally associated with maintenance) were also identified. Some specifics of drainage control are discussed in turn below:

- The frequency of spacing of slope breakers was generally found to be adequate (**Photo 12**). However, a number of locations were identified where minor maintenance and upkeep to slope breakers would be beneficial to reduce both rilling on the slopes and the volume/energy of runoff water handled by the slope breakers. These are rare, not of significant concern at the current time and can be readily rectified. In addition, Sakhalin Energy has identified several of these areas as summer maintenance projects, and monitoring of these sites will continue in the future. AEA appreciates that the timing of this monitoring visit had not allowed sufficient time for crews to access locations following the spring thaw in order to make any necessary repairs.
- The majority of drainage controls were identified as being appropriately armoured by either geotextile fabric (for slope breakers) or rip-rap (for spoon and French drains).

• The location and design of drainage outfalls were identified to be generally adequate, although a number of locations were noted where routine maintenance or further engineering is required to minimise the risks of erosion into the RoW, especially where drainage channels are directed towards steep slopes at the side of the RoW. Examples of this include the southern slopes of the R. Kormovaya, where, although riprap has been installed at the outfall, additional engineering may be required, as sediment tends to fill the riprap drainages (**Photo 13**).

#### **Surface Stabilisation**

Improvements to surface stabilisation on slopes along the RoW have been made through increased use of geotextile fabrics and progress made with seeding. Evidence of significant seeding was observed, although the extent of re-vegetation varied significantly along the RoW reflecting the timing of the visit following the spring thaw and the lack of topsoil in some areas. We note that even where broadcast seed has yet to germinate, the presence of seed during spring will help with re-vegetation in summer and autumn 2009. Areas where re-vegetation has occurred most successfully are those where the soil is particularly fertile and re-vegetation has occurred naturally, for example wetlands and where hydroseeding has been undertaken (e.g. around faults). The use of geotextile fabric to aid surface stabilisation prior to biological reinstatement was identified at a number of sites to good effect. This acts as a key for seed, helping to avoid wash-off. We suggest that geotextile fabric should be used for future winterisation and reinstatement in Section 3B (see Section 3.2 below).

#### **Slope Stabilisation and Contouring**

Work is currently progressing on the stabilisation of slopes and side-cuts along the RoW. Some good examples of engineering were identified in areas previously highlighted by AEA as 'risk areas' potentially requiring additional works e.g. R. Kormovaya and R. Gar. Monitoring and maintenance of the more challenging slopes (predominantly located in Section 3B) will continue to be required and detailed designs may need to be implemented for some key slopes (e.g. near the R. Krinka, R. Gar and the R. Kormovaya) based on the results of the monitoring (**Photo 14**).

#### **Riverbanks Reinstatement**

Permanent reinstatement works on riverbanks was a primary focus in 2008, with all engineering works required under the water use licences (WULs) needing to be completed before first oil in the pipe<sup>27</sup>. This was not completed across the entire RoW as approximately 60 bridges still need to be removed, some of which will be replaced with permanent bridges (**Photo 15**). In either case, these activities will create new disturbance and require riverbank reinstatement. Silt fences should remain in place until disturbed soils have stabilised. Silt fences should be tied into bridges at locations where new bridges are installed following removal of the temporary bridge. In some instances, naturally re-vegetated and stabilised riverbanks are being re-worked, with resultant re-disturbance of the river in order to meet the WUL requirements for Reno mattress protection. Works should be scheduled in order to minimise the time between the removal of temporary riverbank protection and the installation of permanent protection, particularly at a time of year when heavy rainfall can be expected.

#### Wetlands reinstatement

Reinstatement of wetlands was also a focus during 2008, including removal of most running tracks through wetlands areas. AEA noted the success of natural re-vegetation within many of the wetlands areas along the RoW during the November 2008 visit. AEA has previously recommended that Sakhalin Energy remove the running tracks through the wetlands without disturbing naturally vegetated areas along the RoW, with the exception of areas where visible crowning or pooling occurred over the pipelines. In May 2009, it was noted that Sakhalin Energy had indeed avoided causing new disturbance to naturally vegetated areas while removing and running track and reinstating the area (**Photo 16**). AEA understands that Sakhalin Energy is monitoring a few areas where minor crowns are still visible over the pipelines and is actively correcting areas of obvious pooling.

<sup>&</sup>lt;sup>27</sup> Known by Sakhalin Energy as Ready For Start-Up (RFSU)

To illustrate the general improvements made over time, we present below chronological changes at the following representative locations:

#### • KP 345 R. Gar

During previous site visits to this area (e.g. May 2006 and November 2007) AEA identified concerns with erosion and mudslides along the steep slopes that, if not rectified, could pose a risk to the pipeline. During the May 2009 site visit, AEA found that the area has been subject to significant geotechnical engineering and biological reinstatement works, including:

- re-profiling of the slopes
- o installation of gabion supports
- $\circ$   $\;$  installation of armoured drainage channels and slope breakers
- $\circ$  surface stabilisation through application of geotextile fabric.

The works appeared from visual inspection to be of good quality, although ongoing monitoring of the performance of these geotechnical solutions will need to be undertaken by Sakhalin Energy. The greatly improved status of the site in May 2009 is contrasted with the situation viewed by AEA in multiple previous visits (**Photo 17**).

#### • KP 347 R. Kormovaya

The area around KP 347 is characterised by steep slopes in rugged mountain terrain. AEA identified concerns over erosion controls (e.g. lack of slope breakers and poor drainage controls leading to visible sediment flows and mud slides) in the area during previous site visits, for example during 2007. Significant improvements were identified during the May 2009 site visit. A comparison of the site status between 2007 and May 2009 is shown in **Photo 18** and illustrates improvements to drainage controls (avoiding the mud slides seen in May 2007), the installation of slope breakers, initial stabilisation of side cuts, placement of riprap-lined French drains, construction of settling ponds and the use of geotextile fabric with seeding to promote revegetation.

#### • KP 348 R. Krinka

Conditions at the R. Krinka, both past and present, mirror that of R. Kormovaya. Previously, a lack of slope breakers and poor drainage control left the area prone to slides with large amounts of sediment routinely migrating down the slope and into the river. Recent geotechnical engineering and biological reinstatement efforts have stabilised the slope by providing substantial drainage, proper slope breakers and vegetation to protect the surface soils. The change in the condition of the slope over time is evident (**Photo 19**).

#### 3.1.2 Wetlands

Disturbance to wetland flows has previously been identified by AEA at a small number of wetland areas, including visible pooling where the running track was seen to be disrupting the hydrological flows in:

- Wetland areas between KP 212 to KP 220
- Wetland areas in the vicinity of the R. Leonidovka basin (KP 269 to KP 277)
- Dolinsk Wetlands between KP 524 to KP 535

These sites were also identified for remedial works in the RemAP. In winter 2007/08, remedial works were undertaken in the area KP 212-220 to remove the running track. During the September 2008 visit, access to the entire area was not possible due to ground conditions. However, in the areas accessible (northern sections), AEA found the wetlands to be recovering well, suggesting that the remedial works had been successful. In particular, the previously identified pooling was no longer visible. This was confirmed during the May 2009 visit with observations of wetlands at KP 510 and KP 524.

Sakhalin Energy's efforts in monitoring and maintenance of the wetlands were obvious during the site visit (e.g. monitoring of minor crowns over the pipelines left in place to avoid unnecessary disturbance and filling in of pits over the pipelines with peat to eliminate pooling) as evidenced in **Photo 20**. Monitoring of the wetlands will continue until 2011.

### 3.2 **Progress Against the Remedial Action Plan**

#### 3.2.1 Introduction

Significant improvements in reinstatement and erosion controls on the pipeline RoW were identified during the May 2009 site visit as well as previous visits in 2008, as discussed above. However, AEA notes that the rate of progress did not meet the RemAP target to complete all reinstatement of the RoW by the end of 2008. Additionally, it appears all reinstatement efforts may not be complete by the end of 2009, possibly even 2010 due to bridge removal / replacement. Due to the minor amount of work remaining, AEA strongly advises Sakhalin Energy to implement a plan allowing for the completion of all bridge removal / replacement and associated reinstatement, wetlands and riverbanks in the following sub-sections, including overviews of the progress made to date. AEA recommends that, in the light of the actual progress made, Sakhalin Energy provides an update on the RemAP, for example as part of the monthly HSESAP report, including:

- The progress made as of May 2009 (in terms of areas signed off by Sakhalin Energy as "ready for start-up" (RFSU), technically reinstated, and biologically reinstated)
- A realistic plan and timetable for completion of technical and biological reinstatement (including success criteria) prior to the end of 2009.

#### 3.2.2 Technical Reinstatement of the RoW

Based on the May 2009 HSESAP Report, Sakhalin Energy estimated that technical reinstatement had been completed on 96% of the RoW and that 91% of RoW biological reinstatement had been completed. Sakhalin Energy also reports that 100% of the RFSU works on the RoW are now complete.

Work is still ongoing to stabilise the steep slopes (>10 degrees), involving addition of slope breakers, drainage control, geotextile fabric reinforcements and hydroseeding. As of November 2008, 69% of all the steep slopes were reportedly completed, the remainder of which were being winterised.

Observations during the May 2009 visit indicate that most, if not all, of the above objectives were met by Sakhalin Energy; however, it was also noted that not all reinstatement is complete (e.g. reinstatement of RoW approaching KP 313 Goryanka), and multiple areas requiring bridge removal and reinstatement (see section 3.2.5 below).

#### 3.2.3 Biological Reinstatement

Although biological reinstatement was not included in detail in the RemAP, it was stated in the RemAP that Sakhalin Energy aimed to complete biological reinstatement by the end of 2008. Biological reinstatement activities had not been completed as of May 2009, including biological reinstatement of some steep slopes (e.g. KP 345 Gar and KP 348 Krinka). Some areas, such as KP 348 R. Krinka, have been technically reinstated but biological reinstatement (hand seeding) has not yet occurred (**Photo 21**). Other areas, including KP 313 R. Goryanka (one side) have not yet been technically reinstated (**Photo 22**).

While field inspections undertaken during the May 2009 visit, as well as during the September 2008 site visit, indicate that significant seeding has taken place along the RoW, the extent of actual revegetation varied significantly along the RoW, reflecting the timing the seeding occurred and the lack of topsoil in some areas. We do note that in certain areas, especially where soil fertility is low and original topsoil has been lost, successful biological reinstatement may be a longer term and iterative process. In such cases solutions to aid re-vegetation, such as the use of mulches, different fertiliser mixes and geotextile fabric may need to be experimented. Given the timeframe over which this is likely to occur, it is important that capability and knowledge of RoW reinstatement issues is successfully transferred from the construction teams to the operational teams. We recommended in November 2008 that Sakhalin Energy develop specific plans to ensure that this happens during the

2009 handover period, and were pleased to observe that several staff members with historic knowledge of the RoW had indeed been retained for maintenance during operations.

The success of seeding in terms of actual re-vegetation will require ongoing review by Sakhalin Energy.

#### 3.2.4 Wetlands

One of the main potential impacts to wetlands from the construction of the pipeline has been the installation of temporary access roads and running track. As part of the RemAP, an assessment was required, *inter alia*, to identify:

- 1. Where permanent roads/running track are required for operational maintenance
- 2. The design for permanent access roads/running track in wetlands to ensure no longer term impacts on the functioning of the wetland hydrology
- 3. The best approach for removal of temporary roads/running track not required for operational maintenance (it is recognised in the RemAP that in some instances removal may not be possible or could lead to greater impacts than leaving in situ).

Following these assessments, a wetlands remediation plan was to be developed. This was originally due for completion in 2007, but delays meant that it was not completed until September 2008. This plan was reviewed by AEA on behalf of Lenders. Final decisions on all permanent access requirements were recently made although elevated plank roads are being removed in locations where it has been determined they are no longer required. The Pipelines Access Plan, yet to be reviewed by AEA, details where plank roads will be left in place and where permanent roads will be constructed to access Block Valve Station (BVS). AEA has requested this report for review.

#### 3.2.5 Riverbank Reinstatement

Under the RemAP, reinstatement of the riverbanks was due to be completed by the end of 2008. While the majority of riverbanks were engineered in accordance with WUL requirement prior to RFSU in mid-October 2008, several temporary bridges (approximately 60) still require removal or replacement with permanent bridges. In each case, disturbance to the river will occur and subsequent reinstatement of the banks will also be required. In cases of removal, a temporary access road may also require reinstatement. Bridge removal was an original commitment in the HSESAP to be completed by 2007; additionally, water use licences (WUL) permitting work to occur within water protection zones (WPZ) expired at the end of 2008. Sakhalin Energy estimates that the work may not be completed until 2010.

AEA views this incomplete action as non-compliance against the RemAP. It will be difficult for AEA to provide project sign-off concerning environmental issues until bridge removal / replacement and subsequent reinstatement efforts are complete.

### 3.3 Future Maintenance

Geotechnical engineering works have been developed as necessary by Sakhalin Energy at a wide range of locations, including numerous riverbanks, fault crossings, steep slopes, sides-cuts and subsurface flow locations. Where deemed necessary, geotechnical engineers have developed site-specific, detailed engineering designs. Review of these engineering designs is outside of the scope of AEA in its role as the IEC, and is addressed by the Lenders' Independent Technical Consultant. Nonetheless, on the basis of visual inspections undertaken by AEA during the May 2009 monitoring visit, we make the following general observations.

Visual inspection of the engineering works installed to date reveals a generally high standard of work. However, given the nature of the geological hazards posed in some portions of the RoW, ongoing monitoring of the performance and condition of the installed engineering solutions will be required throughout the lifetime of the project. It is to be expected that monitoring over time may reveal that the engineering works at certain sites need to be repaired or upgraded to ensure ongoing protection of the pipeline against geological processes. Following the May 2009 site visit, we identify a number of generic areas where the need for future monitoring of sites, re-working of geotechnical engineering or simple upkeep and maintenance may be particularly likely:

- The outfalls on drainage channels may require further stabilisation and energy dissipation. This is particularly likely where drainage channels discharge to steep slopes adjacent to the RoW (e.g. where the pipeline runs along erodible hill ridges), with the associated risk of erosion into the side of the RoW. Examples of where this may occur include the R. Kormovaya and R. Gar.
- Rivers where significantly eroding banks lie immediately outside of the RoW with the risk that the river erodes behind the existing engineering within the RoW. Examples of where this may occur include the R. Ai, R. Goryanka and the R. Imanovka. In such instances we recommend that Sakhalin Energy continues to monitor the channel erosion and, if necessary, considers the need to seek additional land allocation to enable installation of engineering outside of the current RoW.
- At some locations on the RoW, steep side cuts have been developed where the RoW has been contoured (see for example on slopes adjacent to the R. Gar, R. Krinka, R. Kormovaya, and R. Chinarka, as well as others identified in previous reports). In such cases the side cuts have not been feathered back to more stable angles because of the additional land allocation that this would require. The future stability of these side cuts needs to be monitored and, if necessary, additional engineered solutions implemented (including seeking additional land allocation if appropriate).
- Several BVS sites were observed during the May 2009 visit, as well as on multiple previous visits, as having differing levels of secondary containment around fuel drums and generators (Photo 23). Some sites had adequate secondary containment around all fuel drums stored on site as well as the generators used to power and heat the guardhouses. Other sites were observed to have some secondary protection, and a few sites were seen to have no secondary containment at all. In a few instances, fuel drums had been placed within a secondary containment unit but the unit had been intentionally pressed down to release snow melt which builds up inside the containment unit, rendering it useless. AEA views this as a minor upkeep item which should be easily remedied as Sakhalin Energy has sufficient secondary containment units available and can easily fabricate more; however, it seems to be an ongoing issue. Sakhalin Energy should ensure secondary containment units are delivered to all BVSs when fuel drums are delivered to the sites.

The need for future monitoring and management of these risks is recognised by Sakhalin Energy, and the Company has developed a geological risk register and inspection schedule. In order to ensure that these issues are successfully managed as the project moves fully into the operational phase, it is important that existing capability and site-specific knowledge of the RoW is successfully transferred from the construction team to operational team. This would ideally include retention of key construction staff during a crossover period, which was noted in the May 2009 visit.

## 4 Other Items

### 4.1 Oil Spill Response Plans

Seven Oil Spill Response Plans (OSRPs) have been developed by Sakhalin Energy and reviewed on two separate occasions by PCCI, the Lenders' independent oil spill consultants. Following the first review, Sakhalin Energy made many changes to the plans to incorporate recommendations provided by PCCI in order to bring the plans up to international standards and industry-recognised best practice. PCCI's second review, conducted in early 2009 identified a few outstanding issues, which were not addressed by Sakhalin Energy following the initial review comments. These issues are discussed below.

#### 4.1.1 Secondary Containment

PCCI noted that nearly all of their comments from both reviews have been incorporated into the most recent OSRPs; however, the OSRPs for the OPF and the Prigorodnoye Onshore facilities, while in accordance with RF regulations, do not comply with international best practice. The deficiency primarily relates to an assumption of 100% secondary containment within the facility 100% of the time.

Concerning the worst case discharge potential from the OPF and Prigorodnoye Onshore facilities, the current OSRPs continue to make the assumption that 100% of any spilled oil is completely contained within the facility 100% of the time. Such assumptions do not constitute industry best practice, and in fact some of the Review Documents and Standards, such as the US's Oil Pollution Act of 1990, require planning for oil that escapes secondary containment. Given the location of the OPF in a zone with known, high earthquake potential and high ecological sensitivity in wetlands, rivers and Red Data Book (RDB) and migratory bird nesting areas, planning for spills that may migrate beyond secondary containment is both prudent and best practice.

The current OSRPs contain very generic strategies for responding to spills on land and for cleaning and restoring oiled soil. Response and clean-up strategies that are specific to the facility location and surrounding environment are not contained within the plans. Furthermore, since the plan makes the assumption that no oil can escape from the facility, there are no strategies for responding to spills entering streams, rivers or wetlands near the OPF and the Prigorodnoye Onshore facilities. PCCI considers the lack of site-specific strategies for spill response and clean-up a deficiency against industry best practice.

There are currently no wildlife protection strategies in the plan and no procedures or guidance for keeping RDB or migratory birds out of spilled oil, even oil that is confined within secondary containment or within the OPF facility.

#### 4.1.2 Wildlife Oil Spill Response Guidelines and Equipment

#### Documentation

Wildlife Oil Spill Response Guidelines should be completed as part of a comprehensive OSRP. PCCI notes that these plans have not yet been made available as of the spring 2009 review period. Sakhalin Energy has informed AEA that the Wildlife OSRP should be completed by the end of August 2009. AEA considers these plans to be of particular importance in the OPF and Prigorodnoye Onshore OSRPs where 100% secondary containment is assumed 100% of the time and therefore do not contain a strategy to address oiled wildlife outside the facility. Sakhalin Energy has also produced a Wildlife Rehabilitation Site Implementation Manual, the purpose of which is to give an overview on the deployment and use of all materials, constructions and infrastructure necessary to activate the Wildlife Rehabilitation Site Implementation Manual will be published together at the end of August and will be reviewed by PCCI, ideally before the proposed September 2009 monitoring visit.

#### **Equipment Delivery**

AEA understands that wildlife response equipment has now been delivered to OPF, Gastello and LNG PMDs, and will be maintained throughout the operations phase. Only delivery of equipment to the Wildlife Rehabilitation Site at LNG remains outstanding. AEA proposes to verify and inspect this equipment during the next independent monitoring visit<sup>28</sup>.

It is understood that, according to current plans, not all PMDs will contain wildlife response kits. Given that AEA has not yet had the opportunity to review the Wildlife Oil Spill Response Plan, and that breach of secondary containment has not yet been analysed (section 4.1.1), it is arguable that all not reasonable scenarios have been anticipated. AEA therefore recommends that Sakhalin Energy equips all PMDs with wildlife response kits and provides training to use this equipment in the near future.

#### 4.1.3 Public Disclosure

It was decided during previous visits that full OSRPs would not be posted on the web, as originally considered. This decision was agreed upon as a safety precaution in order to protect assets from potential acts of vandalism or terrorism. Methodology Handbooks ('handbooks') for each asset have been completed by Sakhalin Energy and have been posted on the Sakhalin Energy website.

The HSESAP<sup>29</sup> stipulates that redacted versions of each asset plan shall be prepared and made publicly available in Russian and English prior to first oil. This did not happen prior to first oil, compounded by indecision on Sakhalin Energy's part over which documents to prepare for disclosure. AEA has been informed that redacted versions of the asset-specific OSRPs have now been prepared and will be provided for review by July 2009. It is AEA's current understanding that a combination of handbooks and redacted plans will ultimately be posted on the web. Clarification as to what Sakhalin Energy proposes to disclose and when it will be available is urgently required.

#### 4.1.4 Russian Federation Negotiations

Sakhalin Energy has been actively participating in discussions with the Russian Federation (RF) concerning the use of dispersants and in-situ burning in the event of an oil spill. These negotiations have been ongoing for some time as RF regulations are not completely compatible with international best practice concerning spill response strategies and techniques.

AEA was informed during the May 2009 monitoring visit that Sakhalin Energy successfully negotiated RF approval for the use of dispersants in the event of an offshore spill. Regulations are in place to prevent the use of dispersants in the Western Grey Whale feeding areas. Additional negotiations between Sakhalin Energy and the RF concerning in-situ burning were less successful – no agreement to use in-situ burning has yet been forged. Sakhalin Energy has decided to table the issue and potentially continue discussions at a later date.

Sakhalin Energy has also been conducting meetings with the RF to discuss response strategies to larger Tier 2 and Tier 3 spills. Currently, the RF is scheduled to take over the operations of any spill response efforts in the event of large-scale spills, using Sakhalin Energy's superior spill response equipment and facilities. Sakhalin Energy has been negotiating for the formation of a mutual committee to operate as lead in the event of a Tier 2 or Tier 3 spill. AEA believes it is important that Sakhalin Energy maintains at least a share of the lead role in large-scale spill response activities. Sakhalin Energy has conducted several oil spill response drills and will continue to do so in the future. These drills ensure that Sakhalin Energy and its contractors are qualified to efficiently use the equipment and facilities to most effectively control the spill.

<sup>&</sup>lt;sup>28</sup> AEA's next visit to Sakhalin is proposed for September 2009, to coincide with an OSR exercise being held on the island

<sup>&</sup>lt;sup>29</sup> HSESAP Part 2: Table 2.1, commitment 57

### 4.2 Camp Decommissioning and Demobilisation

As the project progresses from construction phase to operations, Sakhalin Energy needs to execute the plans developed for the mothballing, abandonment or disposal of the construction camps. At the time of the May 2009 site visit, definitive plans had been developed for the camps, although several of the plans have not been executed and alternative future usages for some camps are currently being considered. Detailed decommissioning plans are required for each camp once the future disposal/abandonment options are confirmed, including plans for the disposal of assets and materials (e.g. utilities, buildings and fittings etc.) and appropriate site investigation/remediation. The Nogliki camp, Yasnoye camp, Tumanovo camp and Sovetskoye camp are the only camps currently open; all are scheduled to close by the end of August 2009.

In addition, demobilisation plans are required in order to best manage the termination of local employment. The development of such plans is required under the HSESAP. While these plans have been developed, it is possible the feasibility of the plans may be an issue (e.g. selling camps with the buyer maintaining all aspects of the camp including sewage treatment facilities). Sakhalin Energy should be prepared to formulate backup plans for camps with unresolved demobilisation plans.

### 4.3 Biodiversity Action Plan

The Biodiversity Action Plan (BAP) was developed by Sakhalin Energy in 2008 and contains a list of actions and projects aimed at protecting the natural biodiversity on Sakhalin Island. The BAP contains specific measures to protect sensitive, RDB and endemic flora and fauna and enhance their habitats. The Biodiversity Group (BG) was formed to provide expert advice and undertake consultation with national and international stakeholders during the development of the BAP, and to direct and manage the actions described in the BAP. The BG consists of a diverse group of interests including representatives from Sakhalin Energy, RF and local authorities, non-governmental organisations (NGOs), ornithological groups and other interests.

As of May 2009, the BG has approved the BAP as a working document and has prepared a priority matrix of all actions with respect to the groups various interests. The group's next steps will be to attempt to tie the BAP to the OSRP and to begin executing projects described on the priority matrix. The group also desires to forge partnerships with other entities that are currently operating in Sakhalin or may begin operations in the future. The next meeting is tentatively scheduled for either 10<sup>th</sup> or 17<sup>th</sup> September 2009.

AEA views the BAP and the BG as a potentially powerful tool in the protection of Sakhalin Island's biodiversity. AEA has a strong desire to attend the next BG meeting to track the progress of the group and the effectiveness of the BAP.

### 4.4 HSESAP Structure and Reporting

Several discussions were held during the May 2009 visit concerning the status of the HSESAP. These discussions primarily focused around the development of an Operations HSESAP, focusing on actions likely to occur during the operations phase, and a method to streamline the reporting against the HSESAP. These items are discussed in more detail below.

#### 4.4.1 Operations HSESAP

The current HSESAP document was designed to incorporate all activities occurring during all phases of the project including: design and pre-construction, construction, post-construction and operation. The development of an Operations Phase HSESAP was a project commitment, designed to simplify the document by eliminating all activities that do not relate to operations.

AEA and Sakhalin Energy have agreed in principle to a draft Operations HSESAP document, with a few outstanding issues to be reviewed by both parties. Further discussion will continue between AEA

and Sakhalin Energy in order to finalise the document. It is envisaged that commitments relating to design, construction and pre-operational activities will be moved to a separate document, which comes info force in the event of future construction-related activities (e.g. pipeline dig-ups, additional trains, infrastructure etc). While most construction commitments have been removed from the draft Operations HSESAP, a few specific items remain, as they have not yet been completed (e.g. bridge removal and reinstatement). These items will remain in the Operations HSESAP until the time of their completion, at which time they may be removed.

#### 4.4.2 Report Streamlining

Sakhalin Energy has requested changes to the standard reporting processes, which has occurred throughout the life of the project. Historically, Sakhalin Energy has prepared detailed monthly and quarterly HSESAP reports for the Lenders, as well as preparing separate monthly and quarterly reports for the IEC. After reviewing both reports, it was agreed by AEA, the Lenders and Sakhalin Energy that the two reports could be merged into one comprehensive report. The single report will be sent to both groups. The responsibility to ensure all relevant information from previous reports remains in the newly formatted report falls with Sakhalin Energy. It was also decided that the frequency of the reporting (monthly and quarterly) would remain the same. Two main factors contributed to this conclusion:

- A change in the reporting frequency would require an amendment to the CTA. This could be a long process involving Sakhalin Energy, the Lenders and AEA and would result in little benefit, and
- According to the CTA, the reporting frequency changes upon project closeout to quarterly. This is expected to occur around June/July 2010 if all environmental and social commitments have been reached.

With immediate effect, Sakhalin Energy will continue to prepare both monthly and quarterly reports until the time of project closeout; however, one encompassing version of these reports will be sent to both the Lenders and AEA.

### 4.5 Health & Safety Aspects

During the course of the site visit a small number of health and safety issues were identified by AEA that we recommend Sakhalin Energy investigates and resolves. These are summarised below:

- Fencing around the laydown area at the Sokol camp was seen to be in poor repair, with fencing missing over a significant portion of the laydown perimeter. Given the close proximity of the camp to the village of Sokol and also the intention to use the Sokol laydown camp in the medium term to store various materials from all the pipeline sections as construction comes to an end, AEA recommends that an appropriate security fence be erected.
- Local residents had been responsible for a series of four security breaches at BVSs. Fences at the BVSs were cut and an attempt to disrupt the power supply was made by cutting wires. Fortunately all attempts were unsuccessful; however the act does put the perpetrators at risk of injury or electrocution. This also poses a significant risk to the project assets. Sakhalin Energy has advised that plans are underway to equip BVSs with motion detectors and security cameras.

### 4.6 Western Gray Whale Advisory Panel

Sakhalin Energy has accepted the panel's recommendation to postpone its summer 2009 seismic surveys; however AEA understands that several other companies may continue to conduct exploration activities, including seismic surveys, in the area throughout the summer. The next WGWAP meeting (WGWAP-7) will be held from 11<sup>th</sup> to 14<sup>th</sup> December 2009. Seismic surveys during the 2010 summer season are expected to be an item of discussion at this meeting.

## 5 Summary and Conclusions

AEA acknowledges the achievements that Sakhalin Energy has made in its implementation of the social component throughout and upon finalisation of the Project's construction phase. The following positive aspects are worth noting:

- Effectively operating network of Community Liaison Officers;
- A wide range of public engagement activities;
- Public availability of information;
- Robust grievance procedure;
- Effective management of contractors' social compliance.

A number of areas have, however, been identified that require further attention. These have been discussed in detail in Section 2.6 Social Monitoring Conclusions, and in summary include:

- Maintaining timely updates of public documentation;
- Optimising the structure of the Project's library on the Sakhalin Energy public website to ensure straightforward access to social-related documents;
- Improving accessibility of summaries of targeted Social Impact Assessments on the public website;
- Outlining minimum social investment commitments for the operational phase.

Overall, a favourable impression was gained of the reinstatement works being undertaken on the onshore pipeline RoW. In particular, AEA acknowledges the significant improvements identified compared to works witnessed during numerous previous site visits undertaken between September 2003 and November 2008.

Notwithstanding the generally favourable findings of the site visit, a number of issues have been identified. These are summarised in the table below together with recommended actions for their resolution.

Environmental Aspect	Issue/recommendation
Progress against RemAP targets	AEA notes that the reinstatement progress did not meet the RemAP target to complete all reinstatement of the RoW by end of 2008. AEA recommends that, in the light of the actual progress made, Sakhalin Energy provides an update on the RemAP (for example as part of the monthly HSESAP report) including:
	<ul> <li>The progress made by the end of May 2009 (in terms of areas signed off by Sakhalin Energy as RFSU, technically reinstated, and biologically reinstated)</li> </ul>
	<ul> <li>A realistic plan and timetable for completion of technical and biological reinstatement and bridge removal (including success criteria) prior to the spring thaw of 2010</li> </ul>
	• A realistic plan and timetable for completion of bridge removal and replacement and subsequent reinstatement (including success criteria) prior to the spring thaw of 2010.
Future monitoring of RoW reinstatement & geotechnical engineering	Given the nature of the geological hazards posed in some portions of the RoW, ongoing monitoring of the performance and condition of the installed engineering solutions will be required throughout the lifetime of the project. In order to ensure that these issues are successfully managed as the project moves into the operational phase, it is important that existing capability and site-specific knowledge of the RoW is successfully transferred from the construction team to the operational team. This would ideally include retention of key staff into the Project's operations phase.

Environmental Aspect	Issue/recommendation			
	AEA notes that in certain areas, especially where soil fertility is low and original topsoil has been lost, successful biological reinstatement may be a longer term and iterative process. In such cases solutions to aid re-vegetation, such as the use of mulches, different fertiliser mixes and geotextile fabric may need to be experimented with. Given the timeframe over which this is likely to occur, it is important that capability and knowledge of the RoW reinstatement issues is successfully transferred to the operational team from the construction team. AEA recommends that Sakhalin Energy develop specific plans to ensure that this happens during the 2009 handover period.			
Construction camp	A demobilisation plan is required for all construction camps. It is anticipated that some camps will be sold and left in an operational state. Guarantees must be in place to ensure camp emissions and effluents remain within legal limits.			
Construction camps (pipelines)	Detailed decommissioning plans for construction camps should be implemented and future disposal/abandonment options should be confirmed for active camps and closed camps which have not yet been demobilised, including plans for the disposal of assets and materials and appropriate site investigation/remediation.			
Oil spill response at PMDs	An apparent mismatch in the expectation of experience and responsibilities of the CREO oil spill response personnel at the PMD was observed during the September 2008 visit. This issue appears to have been resolved. Observation of the September 2009 oil spill response exercise will confirm the status of the issue.			
	AEA recommends that consideration be given to providing each PMD with a wildlife response kit.			
Oil Spill Response Plans	PCCI has twice noted that current versions of the OPF and Onshore Prigorodnoye plans assume 100% secondary containment 100% of the time and therefore do not contain measures for reacting to an incident in which a spill breaches the facility containment. International best practice requires this to be analysed in a worst-case scenario. AEA recommends the plans be revised to accommodate international best practice procedures.			
	The current OSRPs do not contain Wildlife Oil Spill Response Guidelines. AEA understands these are currently in draft form and will be ready for review around the end of May or early June 2009. AEA is eager to review these plans.			
Secondary Containment of Fuel Drums and Generators at Block Valve Stations	AEA has routinely requested better maintenance of secondary containment units around fuel drums and generators at all block valve stations. AEA recommends that Sakhalin Energy reviews their standards and procedures to meet this requirement and monitors the success of this task. We recommend secondary containment units be delivered to sites when fuel drums are re-supplied.			
Health and safety issues	During the course of the site visit, a few health and safety issues were identified by AEA that we recommend Sakhalin Energy investigates and resolves. These are summarised below:			
	• The need for appropriate security fencing around the Sokol laydown area to restrict entry from unauthorised personnel, including local community members.			
	• Four security-related incidents occurred at Block Valve Stations in which fences and electrical cables were cut. Sakhalin Energy stated that motion detectors and cameras will be installed to prevent future occurrences.			

## Appendices

- Appendix 1: Photographs
- Appendix 2: List of Interviewees for Social Monitoring
- Appendix 3: Property Market Valuation of Prigorodnoye Dachas
- Appendix 4: Sites Visited by Pipelines Monitoring Team

## Appendix 1

## Photographs



Photo 1 Sakhalin Energy bulletin board at the local library in Pobedino

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Photo 2 List of contractors contact details provided in Gastello Information Centre/CLO office



Photo 3 Notice of CLO open hours by the post office in Smyrnikh



Photo 4 Public notice board by the post office in Pobedino (displays information about CLO location/contacts and open hours and grievance leaflet)



Photo 5 Sakhalin Energy notice board in Gastello administration office

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Photo 6 Public enquiry log book at Sakhalin Energy Information Centre in Gastello (indicates date, content of the enquiry, actions taken, and any other comments)

![](_page_38_Picture_0.jpeg)

![](_page_38_Picture_1.jpeg)

Photos 7 Sakhalin Energy Information Centre in Gastello

![](_page_39_Picture_0.jpeg)

Photo 8 Grievance form placed on the staff notice board at PMD Nogliki

![](_page_39_Picture_2.jpeg)

Photo 9 Staff notice board at PMD Gastello. Displays grievance leaflet (left) and the Code of Conduct for Sakhalin II Project Workers (right)

![](_page_40_Picture_0.jpeg)

Photo 10 Social compliance explanatory leaflet placed on the staff notice board at PMD Nogliki

![](_page_40_Picture_2.jpeg)

Photo 11 Gym at the staff recreation area, PMD Gastello

![](_page_41_Picture_0.jpeg)

Photo 12 KP 348 Krinka – Effective slope breakers and drainage channels. Small slide on unprotected slope at left and lack of regeneration indicate need to monitor area.

![](_page_42_Picture_0.jpeg)

Photo 13 KP 347 Kormovaya – Effective slope breakers with cocomat, riprap side drains, side cuts with geotextile fabric. Small rills forming on unprotected side cut and drain filling with sediment indicate need for future monitoring and possible maintenance.

![](_page_43_Picture_0.jpeg)

Photo 14 KP 345 Gar – Exceptional stabilisation of steep slope using slope breakers, side drains and geotextile fabric on steepest areas. Sediment visible in both side drains and slight amount of sediment entering river channel on left indicate need to monitor and maintain the area.

![](_page_44_Picture_0.jpeg)

Photo 15 KP 314 Mana – Newly installed permanent bridge. Silt fence should be installed and tied into bridge until freshly disturbed soil is allowed to stabilise. Similar works remain on approximately 60 bridge sites.

![](_page_44_Picture_2.jpeg)

Photo 16 KP 510 Wetlands reinstatement with promising regeneration. Slight crowns over pipelines are not a current problem but will require monitoring, as noted by Sakhalin Energy.

![](_page_45_Picture_0.jpeg)

Photo 17 Comparison of KP 345 Gar from September 2008 and May 2009 showing additional geotechnical engineering (new slope breakers, dual side drainage channels, geotextile fabric on side cuts).

![](_page_45_Picture_2.jpeg)

Photo 18 Comparison of KP 347 Kormovaya from September 2008 to May 2009 showing additional engineering (new slope breakers, dual side drainage channels, geotextile fabric on side cuts).

![](_page_45_Picture_4.jpeg)

Photo 19 Comparison of KP 348 Krinka from September 2008 to May 2009 showing erosion control measures effective after spring thaw. Area will require ongoing monitoring.

![](_page_46_Picture_0.jpeg)

Photo 20 Operations at KP 524 (edge of Dolinsk wetlands) to correct subsidence over pipe shows active monitoring and maintenance of RoW. Bog mats used to minimize damage to wetland habitat and peat used as fill to avoid placement of foreign material in wetlands – both good practice.

![](_page_46_Picture_2.jpeg)

Photo 21 Lack of biological reinstatement (seeding) at KP 348 Krinka could lead to surface soil destabilisation and thus undermine properly implemented technical reinstatement.

![](_page_47_Picture_0.jpeg)

Photo 22 Technical reinstatement not complete (temporary access road still in) and biological reinstatement not complete at KP 313 Goryanka. Scheduled to be competed summer 2009.

![](_page_47_Picture_2.jpeg)

Photo 23 Insufficient secondary containment (of varying levels) at different BVSs. This has been an ongoing issue seen on all spreads.

## **Appendix 2**

### **List of Interviewees for Social Monitoring**

#### Site Visit Meetings

Olga Deryabina – Sakhalin Energy CLO for South Sakhalin Island (Aniva, Dolinsk and Kholmsk Districts Tatyana Derivedmid – Sakhalin Energy CLO for Korsakov Leena Zhamyanova – Sakhalin Energy IP CLO for Nogliki Irina Polyanskaya – Sakhalin Energy CLO for Gastello Vyacheslav Tikhonov – Sakhalin Energy CLO for pipeline Spread 2 Olga Shpagina – Sakhalin Energy CLO for Central Sakhalin Island (Makarov, Poronaisk and Smyrnikh Districts)

Head of Administration, Gastello District Administration Head of Administration, Sovetskoye District Administration Mayor, Nogliki District Administration Head of Education Department, Dolinsk District Administration Mayor, Dolinsk District Administration Vice-Mayor, Dolinsk District Administration Vice-Mayor, Dolinsk District Administration Head of Employment Centre, Dolinsk District Mayor, Korsakov District Administration Vice-Mayor, Korsakov District Administration

GazProm TransGas Tomsk, Sovetskoye PMD Supervisor GazProm TransGas Tomsk, Nogliki PMD Supervisor GazProm TransGas Tomsk, Yasnoe PMD Supervisor GazProm TransGas Tomsk, Gastello PMD Supervisor

LNG Permanent Accommodation Site Head

Complainant from Nogliki Complainant from Smyrnikh

Korsakov (four women, three men) Sovetskoye (six women, four men) Smyrnikh (four women, two men) Gastello (six women)

Stroitel Dacha - Head of Dacha community (cooperative) and four members

#### Sakhalin Energy staff (internal office meetings)

Oleg Bazaleev – Social Performance Manager Olga Beck – Social Performance Adviser Marina Ee – Head of Social Assessment Group Natalia Gonchar – Stakeholder Engagement head for Korsakov Vladimir Penkin – Human Resources Director Dmitri Petelin – HSE representative responsible for Cultural Resource Issues Elena Shujaeva – Issues Management and Media Nina Tveritinova – Loan Compliance Officer Valentin Zhovtun – Social Performance Adviser Oleg Tkachenko – Head of Government Relation Svetlana Nebet – Community Liaison Coordinator

## **Appendix 3**

### **Property Market Evaluation of Prigorodnoye Dachas**

Independent GAKS agency conducted the market valuation of the dachas in 2006-2007.

The Dachas market values were calculated on the following bases:

- Gathering and analysis of general data, i.e. natural, economic, social and other factors that affect the value;
- Gathering and analysis of specific data. This includes examining the property, studying relevant design and estimate documentation, interviewing the property owner, consulting with real estate agencies, analysing prices offered on comparable properties at the real property and rental markets.
- Analysis of maximum use efficiency, taking into consideration all the existing physical, economic and legal constraints.

The valuation was carried out based on the Methodology for Determining Market Value of Land Plots (developed by the Ministry of Property Relations in 2002).

The following characteristics were taken into account when valuating the property:

- Type of land use, including architectural style, the extent of vegetation, recreational amenities, the level of development;
- A title to property;
- Transport accessibility;
- Availability of utilities e.g. centralised power supply and municipal services;
- Technical characteristics of buildings and structures, e.g. the year of commissioning, number of storeys, etc.

The maximum use efficiency of a property was determined based on the following:

- Designated and permitted use of a land plot being valuated;
- Current use of the land plot;
- Prevailing types of land use in the neighbourhood;
- Development prospects in the area where the property is located;
- Anticipated changes on the land market.

The accumulated wear and tear (depreciation) was also taken into consideration, i.e. physical damage (as a result of weathering, incorrect maintenance, etc.), functional obsolescence (non-compliance with the modern market requirements in terms of design, quality of materials, and maintenance costs), external alterations (changes in social standards, environmental settings, legislative and financial conditions), or combination of all these factors.

Three different methods of valuating the properties were used:

- Cost analysis a method that is based on determining the value of costs related to the development of a property, including all wear and tear. This method is based on the principle of substitution, i.e. a buyer will not pay for the property an amount higher than is needed to replace it with another property that has analogous characteristics.
- Benefit analysis evaluation of an income-generating property based on capitalisation or discounting the future cash flow that is anticipated from using the property. Some Dachas were not an income-producing property as they had been assigned for an individual use. However, this method is applicable if a portion of the agricultural produce grown on the plot is sold.

• Comparative analysis of sales implies comparing sell prices for analogous properties. A corrective coefficient is then applied in order to account for differences between the properties that are being compared. Over the recent years, there had been hardly any sell offers for dachas in Prigorodnoye. Using selling prices for similar properties in other districts could distort the result, and therefore this method was not applied.

Values derived from the calculations based on the different methods were adjusted using the weighted mean value.

Loss of the Dachas' market value due to the construction of the LNG plant (i.e. resulting loss of a recreational value, due to heightened environmental and other hazards, impaired infrastructure in the locality, deteriorated transport connection with Korsakov) was assessed at **50%** for all properties. The loss of property market value was researched and calculated by Social Science Department of the Sakhalin State University in 2006. A comparative method based on analysing the prices for dachas in different areas of Korsakov district prior to the construction of the LNG (1999-2002) and up to 2006 was applied in the research.

A number of parameters were taken into consideration when comparing locations and infrastructure, including the proximity to the coast, direct transport connections to Korsakov and Yuzhno-Sakhalinsk, accessibility of recreation, proximity of gathering and fishing areas. As part of the research, a range of individuals were interviewed, including dacha owners at Prigorodnoye and other areas in Korsakov, real estate experts, and heads of other dacha cooperatives.

## Appendix 4

## Sites Visited by Pipelines Monitoring Team

Location	Date
Office Discussions	
Yuzhno kick-off meeting	12/05/09
Yuzhno office discussions & HSE inductions	12/05/09
Yuzhno office discussions OSRP, RemAP, BAP, WGWAP, HSESAP)	15/05/09
Yuzhno HSESAP meeting	18/05/09
Yuzhno HSESAP meeting	19/05/09
Yuzhno (close –out meeting)	18/05/09
Pipeline RoW and Camp Sites (Section 3)	
Tumanovo Camp	13/05/09
Goryanka River – KP 313	13/05/09
Mana River – KP 314	13/05/09
Gar River – KP 345	13/05/09
Kormovaya River – KP 347	13/05/09
Krinka River – KP 348	13/05/09
Pegas River – KP 365	13/05/09
Lesnaya 1 River – KP 367	13/05/09
Chinarka River – KP 372	13/05/09
Pipeline RoW and Camp Sites (Section 4)	
Krasnaya River – KP 461	14/05/09
Firsovo – KP 485	14/05/09
Sovetskoye Ridge – KP 503	14/05/09
Ai River – KP 505	14/05/09
Wetlands – KP 510	14/05/09
Dolinsk Wetlands – KP 524	14/05/09
Sokolovski Farm – KP535	14/05/09
Komsolov Farm - KP 543	14/05/09
Fault 20 and Imanovka River – KP 570	14/05/09

![](_page_52_Picture_0.jpeg)

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