Chapter 13

Heritage Resources

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13.1 INTRODUCTION

Heritage resources on Sakhalin Island include a broad range of prehistoric and historic resources, as well as some areas of spiritual significance to indigenous peoples. About 40 cultural, prehistoric, and historic resources were identified within and in close proximity to the pipeline route. These include sites dating from the Early Palaeolithic to historic sites dating to WW II. Among the cultural and historic resources are prehistoric habitation sites, military camps, battlefields and memorials of 20th century Japanese architecture. Shipwrecks have also been recorded.

Sakhalin Island also has a long history of armed conflicts and post WW II militarization. Major periods of the Sakhalin Island military history include:

- Armed Russian-Japanese conflicts of the 19th century and successive military operations to 1945,
- Russian-Japanese War as part of WW II and immediately thereafter, and
- Post WW II military and training operations from 1945 to present.

Between 1806-1807, the first Russian-Japanese armed conflict was fought. After a period of increased Russian military activity, Japan ceded Sakhalin Island to Russia in exchange for control of the Kuril Islands in 1875.

In the summer of 1904 Japan launched its first ever invasion of Russian territory. After a brief landing in Kamchatka, Japan launched an invasion of Sakhalin in 1905 landing some 14,000 troops on the shores of Aniva Bay. Following a number of skirmishes, Russia ultimately ceded to Japan the southern half of Sakhalin Island. The division between the Russian held north and the Japanese south was along the 50th parallel (Vysokov 1996).

In 1920 Japanese forces landed at Aleksandrovsk, resulting in the shift of military power, and Japanese occupation of the north. Between 1920-1925 almost all fishing, timber and other businesses were under the control of the Japanese. With the signing of the Peking Convention in 1925 northern Sakhalin was once again returned to the USSR (Vysokov 1996).

On August 8, 1945 the USSR declared war on Japan. The primary theatre of operation was northeastern China as it had been during the Russo-Japanese War of 1904-05. However, there was an overland invasion of southern Sakhalin and amphibious operations in the Kuril Islands (Vysokov 1996). Conflicts were recorded on various parts of Sakhalin as well as along the 50th parallel, which divided the island between the USSR and Japan.

In 1946 the USSR declared southern Sakhalin to be USSR property and the present boundaries of the island were established.

With the rise of the Cold War and the 1960s border skirmishes with China, the island became of strategic military significance. Sakhalin Island was important to Soviet strategic defence against North America and China. Soviet military forces were reported to have received the latest in technology and weapons systems and would have required training areas on Sakhalin to exercise troops and equipment.

13.2 UNEXPLODED ORDNANCE

13.2.1 Background

Historical finds document the existence of unexploded ordnance (UXO) on the Island. UXO finds have been made in 1948-49, 1950-53, 1956, 1960-61, 1966, 1989, 1991, 1993, 1995, 1997 and 2001. There have been various clearance operations over the years. Based on these data it is anticipated that land around and south of the 50th parallel will contain mostly WW II munitions. North of the 50th parallel will contain mostly post-WW II munitions.

13.2.2 Implementation of the UXO Programme

Based on historical finds SEIC considered there was a threat of finding UXO during construction. A small number of bombs and pieces of UXO were found on the surface of several of the IUP and pipeline construction sites in late 2001 leading the development of the SEICs UXO programme.

SEICs overarching philosophy was that all work be conducted in accordance with Russian and internationally acceptable standards. SEIC developed Sakhalin Energy Mine Action Standards (SEMAS) that fulfils those standards.

Contractors experienced working in Russia on projects of a similar nature were employed. The goal was to complete the work in sufficient time to release terrestrial and sub-sea lands needed by the Project. Activities completed or planned include:

Timing	Activity
End 2001 to July 2002	– An international Explosive Ordnance Disposal contractor completed a desk-top risk assessment and provided daily survey support. Forty people, including 30 locally employed EOD technicians were involved in support of Project survey operations
Summer 2002 through construction	– Support the onshore IUP project until early 2003. – Support to the main onshore and off-shore construction work.

SEICs plan to manage the risk to the Project from UXO has several components. These are similar for on- and offshore work and include:

Component	Description
Information Gathering	Actively gather and assess information from a wide variety of sources as part of the General Assessment process. As part of the process the Project footprint is assessed. Assessed UXO risk levels determine any follow up work to be conducted on the ground.
Sampling	Where the potential presence of UXO has been determined, a sampling programme is conducted to confirm or discredit the information indicating the potential UXO problem. This sampling process is called Technical Investigation. EOD teams with specialist equipment conduct this. It is a carefully controlled process that requires good on-site supervision and management.
Clearance	In the areas where the Technical Investigation UXO, clearance operations are implemented to remove and destroy the UXO at the location.
Quality Management	Underpinning the whole process is a comprehensive Quality Management System. This provides the user of the land or seabed with a high level of confidence that the work has been completed to the required standard. The contractor completing the work conducts quality management on itself with further independent checks being conducted.
Coordination	A central coordination centre has been established to act as a focal point for all UXO related matters and direct the Explosive Ordnance Disposal work. This is called the Explosive Ordnance Coordination Centre (EODCC) and is located in Yuzhno-Sakhalinsk.

13.2.2.1 Employment and Skills Development

A substantial skill enhancement programme was conducted to support the onshore Explosive Ordnance Disposal (EOD) programme. A total of 200 personnel, all from Sakhalin Island, completed courses in the spring of 2002. They were given training in basic EOD skills, including use of technical detection equipment, first aid, and site supervision and management, and basic field communications. The majority was offered full time employment with the onshore contractor.

About 25 additional staff were employed in office based jobs. Courses provided on use of information technology, quality management, and project scheduling

Provisional plans call for hiring an additional 200 field and associated office personnel in 2003. After 2003, it is a matter for the contractor, and less than 200 personnel may be required. Where possible, these personnel will be recruited locally and undergo the appropriate development training for the post they are fulfilling.

13.2.2.2 Results

The full onshore EOD programme has been running through summer and autumn 2002. Concurrent to this programme, work is being conducted to locate and exhume war dead prior to the start of construction (see below). Information is shared between these efforts.

All the information combined with the results from the field operations, where UXO has been identified in some locations, have matured SEICs understanding of the situation. In particular, areas that will require further technical investigation and clearance.

13.2.3 Immediate Positive Social Benefit to the Community

The immediate social benefit to the Sakhalin community include:

Component	Benefit
Employment	– About 200 personnel have been recruited on Sakhalin Island in direct support of the EOD programme. They have been fully employed with some demobilization for winter 2002. – SEICs recruitment policy has required contractors recruit personnel from communities along the entire length of the pipeline route, resulting in employment opportunities for people from more remote communities. – Some people are likely to be retained and some to be re-engaged till approximately autumn 2003. – Additionally, if the programme expands additional personnel will receive the opportunity of continuous employment from spring through autumn 2003.
Individual Skills Development	– All personnel employed on the EOD programme have received a wide range of personal development training to prepare them to complete their jobs efficiently and safely. – Although some skills may not immediately appear to be transferable to other industries it is important to note that there is a high technical component to the work with an emphasis on planning, monitoring of work quality, efficient management and safety. These are valuable and highly transferable skills. – Other personnel have been working with information communications technologies, logistics and planning; all of these are in demand and highly marketable skills.
Local Economy	– The programme has made demands on the wider local economy for support. This has ranged from the requirement for accommodation to the provision of building materials and wet weather clothing. These are above the income injected into their local economy by the directly employed personnel. – In the future, there will be the vessels engaged on the offshore programme using Sakhalin ports as re-supply bases and locations for small numbers of shore based support staff. – Vehicles used are mainly Russian built, purchased and maintained locally.

13.2.4 Wider Residual Benefits to the Community and Economy

Above the immediate benefits to the local economy there are some wider and potentially longer-term benefits worth highlighting. Some of these are:

Component	Benefit
Risk Reduction	– By completing the EOD work SEIC will have reduced the risk from UXO on their construction footprint. – SEIC has also established procedures and management systems to schedule and control the work as it is completed. These are transferable and could be used by the Russian Authorities if they decide to continue with the programme for other areas of Sakhalin Island or employ it within areas of the Russian Federation with a similar problem. – After the SEIC UXO survey is complete, a substantial resource of trained operatives will be left on the island, which could be used in future government or NGO UXO survey and clearance programmes.
Venturing with International EOD Companies	– The Russian companies have contracted to complete the work have been required to meet SEICs exacting tendering requirements. Although SEIC has worked with potential contractors to assist them through this process, the successful bidders have won the work on their own merit. – This experience, enhanced with the requirement to manage their contracts in a commercially demanding environment will place all the Russian based companies in a strong position when they bid for other contracts of a similar nature in the international arena. – For the successful bidders, their management teams have, and are still acquiring, considerable commercial and management experience from their involvement working on a project for a large western company.
Future Benefits in International Markets	– Through their involvement with the EOD programme, the successful Russian contractors have and continue to acquire invaluable experience in working to international standards within a quality management system. This provides them with a competitive advantage in bidding for further work of a similar nature in the international arena. – Furthermore, this experience is transferable into other industries and has the potential to benefit a wider range of Russian Federation industry and institutions beyond the immediate scope of the Project.

13.2.5 Conclusion and Summary

The EOD Programme is bringing, and will continue to bring, benefits to the Sakhalin Island community and wider Russian Federation businesses. These include:

- Employment opportunities across Sakhalin Island that peak at approximately 400 personnel working full time,
- Skills development and work experience in a wide number of valuable and transferable disciplines,
- Contribution to local economies with demands for a variety of services across the Project's footprint,
- Development of Russian Companies in operating to western commercial and contractual requirements,

- Development of Russian Companies in conducting works to international standards within a quality management system, and
- Contracts worth millions of dollars to Russian companies.

13.3 WAR DEAD

13.3.1 Background

Identification and treatment of war dead within proposed construction area is the responsibility of the Russian Federation. These responsibilities are described in:

- *On Immortalisation of the Dead in Defence of the Motherland* of January 14, 1993, No. 4292-1 (L*aw On Immortalisation*), and
- *On Matters of Internment and Burial* of January 12, 1996 No. 8-FZ (*Law on Matters of Internment*).

Key points of these laws relevant to the Sakhalin II Project included the requirements that:

- Activities should be conducted to ensure discovery of unknown military burial places and non-buried human remains in advance of construction,
- Activities should be based on local programmes; conducted by public organisations and authorised by federal authorities, and
- No unauthorised exploration and/or exhumation of former battlefields and military burial places shall take place.

13.3.2 Support of Programme Undertaken by Local Authorities

To assist local authorities in fulfilling their responsibilities, SEIC agreed to provide financial support. This support was contingent upon:

- All areas being surveyed and cleared well in advance of construction,
- Work conforming to requirements of Russian law, and
- Within the UXO time frame.

This funding was provided to the local Military Commissariat, through the Russian Defence Sport Technical Organisation (ROSTO). The Commissariat subsequently defined high probability areas (an area of about 168ha) around the 50th parallel to be the focus of intensive survey.

In mid-2002 ROSTO subsequently contracted with the NGO 'Pioneer' to begin the search for war dead. The local Pioneer group is one of many established by the Russian authorities to search for war dead and UXO. These volunteers are usually ex-military personnel with demining experience. Until the economic decline the Russian Federation provided annual support to conduct activities in search of the war dead and demining activities.

Following completion of the programme, the Military Commissariat and ROSTO have agreed to sign a document stating their agreement that the:

- Search results were conclusive and exhaustive, and
- That it will be very unlikely that additional remains of war dead will be discovered during construction.

As a result, construction work can then be carried out with minimum concern of disturbing war memorials.

As a humanitarian gesture, SEIC also provided a monetary contribution to assist in the identification and notification of next of kin of each identified set of remains, and for the burial with military honours on Sakhalin Island, of all war dead found during the Project.

13.3.3 Results as of November 2002

At the time this report was prepared, the search for war dead was still ongoing, but had been suspended due to winter weather. The work will recommence in the spring of 2003. During the summer and fall of 2002:

- Remains of three Russian and six Japanese war dead were found and excavated,
- Russian war dead were transferred to the Military Commissariat until such time that they would be reburied with military honours, and
- Japanese war dead have been cremated in accordance with approved procedures and will be reinterred in Japan.

13.3.4 Discovery During Construction

In the unlikely event that war dead are discovered in the Project footprint during construction, SEIC instructions to contractors will be to stop work in the immediate vicinity of the find and notify the appropriate authorities. It is expected that a team authorised by the authorities will respond in a timely manner using their own personnel and with reference to and the involvement of only the Military Commissariat.

13.4 TREATMENT OF OBJECTS OF CULTURE

13.4.1 Introduction

Construction of the Project will impact some sites of historical and cultural importance. Relevant decisions had been taken on the majority of the cultural and historic resources. Twenty-eight cultural and historic resources are the focus of additional treatment and protection efforts. Additional excavation may be needed at between three to six additional sites depending upon final pipeline alignment.

Work completed to date has been undertaken in order to fulfil the requirements of local authorities. In 1997-1998, the Sakhalin Administration Department of Education, Culture and Sport imposed a requirement to carry out archaeological surveys and report the results prior to Project construction. At the time this document was prepared, surface surveys had been completed of the pipeline ROW, fixed facility sites, camps, laydown yards, access roads, and other ancillary facilities.

SEIC has worked with local archaeologists to amend and supplement the existing SEIC plan. The revised Plan *Sakhalin II, Treatment Plan for Objects of Cultural Heritage* ('Treatment Plan') sets out procedures to be followed in case of discovery of objects of culture. It was developed by SEIC jointly with the Sakhalin State University and subject to approval of the Department of Education, Culture and Sport of the Sakhalin administration.

13.4.2 Cultural Resource Treatment During Construction

The Sakhalin II, Treatment Plan for Objects of Cultural Heritage ('Treatment Plan') sets forth procedures to meet SEICs commitments in treating cultural objects potentially affected by construction of the Project. For the purposes of the Plan, cultural objects are considered to include prehistoric and historic archaeological, historical sites, as well as paleontological objects (hereinafter 'objects'). It considers sites already identified, as well as, treatment of cultural objects, which might be identified during construction. It does not address the search for, and treatment of military war dead as discussed above.

Appropriate treatment procedures may include any or all of the following:

- Avoidance through redesign or re-routing, and/or
- Implementation of methods to minimise construction impacts such as burying the site under fill or reducing the width of the construction right-of-way, and/or
- Archaeological excavations.

The Plan has been developed to fully address SEICs obligations under the Russian Federation's laws and regulations related to the protection of cultural objects. The Plan outlines:

- Responsibilities of Project,
- Monitoring during construction,
- Notification procedures to be followed,
- Procedures for the rapid assessment of importance,
- Methods to minimise impacts to resources through modification of standard construction techniques, and
- Treatment standards for sites considered important, including level of field investigation, laboratory processing and analysis, report preparation, and curation.

The Plan not only describes procedures to be followed for sites identified during construction, but also commits the Project to levels of evaluation and treatment of sites discovered during construction. This strategy applies to areas where:

- Surveys were not completed prior to construction,
- Surveys were completed but where heavy surface vegetation may have limited the ability to identify sites, and
- Buried sites may be exposed during construction brushing, clearing, grading, and trenching.

Data collection efforts during construction will depend upon the type and importance of the site discovered. Based on an analysis of sites, which have been discovered on the island during the last 120 years it is possible to classify sites according to their relative ages, rarity and artefacts that are typically found. Some types of sites and artefacts are relatively common and artefacts are abundant, others are extremely rare and merit more focused investigations.

Because of the unique nature of pipeline construction, emphasis will be placed on collecting samples from archaeological sites for more intensive specialised laboratory analysis and dating than has been possible in the past. As a result, it is anticipated that in the course of the Project important new information will be discovered which will make an important contribution to the understanding of the archaeology of Sakhalin Island.

13.4.3 Previous Cultural Resource Investigations

As of the end of 2002 the fixed facility sites, access roads, and pipeline route will have been the focus of an intensive surface survey. In 2003, pre-construction excavations will be completed at selected sites prior to construction. The procedures described in the Plan will also be implemented in order to manage buried archaeological resources expected to be discovered during construction. Activities completed to date are described below.

Year	Activity
1996	– A desktop survey was completed evaluating the probability for underwater archaeological sites in the Piltun-Astokh Field and the report entitled *Availability of Archaeological Underwater Findings PA Field or in the Vicinity* was prepared.
1997	– A desktop study was completed of the Liquefied Natural Gas/Oil Export Terminal site in Prigorodnoye. Results of this study are presented in a report entitled Archaeological Desktop Study in Korsakov Region. – A surface survey of the Liquefied Natural Gas/Oil Export Terminal and the results presented in *Archaeological Field Study in Korsakov Region.* – A desktop study compiling a list of all known archaeological sites within a two-kilometer wide corridor (centred on the 1997 proposed pipeline alignment) was completed. Results of this work are presented in a report entitled Archaeological Desktop Study Along the pipeline.
1998	– A desktop study was completed for the underwater resources in the Lunskoye Field. The results are presented in a study entitled *Archaeological Research in Lunskoye Field, 1998.*
	– A surface survey was completed of the proposed pipeline route and limited testing completed. Results of this survey are included in a report entitled *Total Record on the Archaeological Survey by the Archaeological Laboratory of the Sakhalin State University within the Sakhalin II Project Area in 1998.* – The locations of known sites near the pipeline route were entered into the Geographical Information System (GIS). Locations of all newly discovered sites have been entered into the GIS system after each subsequent survey.
1999	– Survey was completed of new pipeline alignments designed to avoid important archaeological sites identified in 1998. Results of this survey were described in monthly reports.
2000	Reconnaissance survey was completed of: – Changes made in the pipeline route in 2000, – New alignments designed to avoid previously identified archaeological sites within the right-of-way, and – Proposed camps/laydown yards, access roads, and the booster station #2. Results of this survey are included in the report *Archaeological Survey within the Project Sakhalin II Area in 1998-2000.*
2001	Reconnaissance survey was completed of: – New pipeline alignments, – Additional fixed facility sites such as camps and laydown yards and the OPF, and – Access roads, pipeline landfalls, and areas allocated for water storage and main waterline to the LNG plant. Results of the survey are described in the report entitled *Final Report on the Archaeological Survey Conducted by the Archaeological Laboratory of the Sakhalin State University in the Surface Area of the Sakhalin II Project in 1998-2001.*
2002	– Additional survey is has been completed of several potential new pipeline routes, short reroutes, new fixed facilities sites, and access roads. Results of this survey will be described in the final survey report.

Sites identified within and in close proximity to the pipeline route include those dating from the Early Palaeolithic to historic sites dating to WW II. Among the cultural and historic resources are ancient habitation sites, military camps, battlefields and memorials of 20th century Japanese architecture.

Several sites were found on the LNG/OET site. One was the Prigorodnoye-3 site *Tihyi Brook*. It is a Japanese or Russian military camp dating back to the beginning of the 20th century. It has been avoided. Another previously recorded prehistoric site believed to be on the site has never been relocated. A WW II gun emplacement was architecturally recorded and documented. It has now been demolished. A Japanese Pavilion has been moved to the museum for restoration.

A desk-top study was completed to assess the possibility of underwater resources. The Piltun and Lunskoye fields were above sea level during the Late Pleistocene to Early Holocene approximately 11,000 years ago. Therefore fossils and other items might be found within the seabed sediments. Local archaeologists believe buried sites may occur in sea depths of 100 to 120m, with a higher number of sites potentially occurring in seabeds from 10 to 20m below surface.

Two shipwrecks are believed to have sunk to the north of the Lunskoye field. They are both American whaling vessels from the 19th century. Their resting locations and therefore their potential archaeological and cultural heritage value have not been determined.

13.4.4 Monitoring Procedures

Construction that involves ground disturbance, including but not limited to brushing, grading, excavation and trenching activities may be monitored for cultural, archaeological, and paleontological sites. In the event that a burial or extremely rare site is discovered, the contractor will immediately take measures to work around the find.

An archaeologist will monitor areas of high archaeological sensitivity not to exceed 10% of the total pipeline length. In areas of low archaeological sensitivity a sample will be spot monitored by a qualified cultural resource monitor.

The Treatment Procedure in cases when construction is passing previously found resources varies depending if a site is considered important.

Important?	Monitor During Construction?	Treatment Procedures (TP) (if not completed prior to construction; for newly discovered subsurface components)
Yes	Yes	Implement TP standards if not already completed. If subsurface component discovered, implement TP.
No	No	After basic recording completed either during the survey or discovery during construction, no further work needed.
Unknown	Possibly	Evaluate on a case-by-case basis.

No further mitigation work needed unless exceptional circumstances pertain, such as the discovery of one of the five types of sites described below.

13.4.5 Importance of Burials and Extremely Rare Sites

Five types of sites have been identified, which if found, would warrant cessation of construction activities and work-around until such time that SEIC is notified and site-specific mitigation measures are implemented. These include:

- Human burials,
- Ancient Stone Age (Palaeolithic) sites on surface or buried,
- Cultural and historic resources belonging to the transitional period from Palaeolithic to Neolithic Age,
- Paleontological remains, and
- Middle-age cultural and historic resources.

If these resources are discovered, applicable Treatment Procedures (TPs) will be implemented. Any of the above findings are considered important, requiring further treatment.

13.4.6 Cemeteries And Other Sacred/Cultural Sites

During the Indigenous Peoples consultation effort and during the archaeological surveys a small number of sacred sites identified. All are avoided by the pipeline alignment.

When conducting fieldwork the SA Group documented two cemeteries affected by the Project. Following community consultation, the pipeline ROW was re-routed to avoid the Gornoye village cemetery (Section 5.5).

A cemetery was also documented on the LNG/OET site. Russian residents living in Prigorodnoye in late 1940s and early 1950s used it. Seven graves have been identified. Following consultation the Korsakov Administration authorised the remains will be moved to both the Korsakov municipal cemetery and an existing, second cemetery in Prigorodnoye, located west of the LNG/OET site.

In the event that other cemeteries are identified, the appropriate governmental authorities will be notified ant they will be managed as required under Russian law.

13.5 MITIGATION AND MONITORING MEASURES

The following section summarises SEICs policies and construction management strategy for heritage resources, which may be discovered during construction.

13.5.1 SEIC Management Policy on Discovery and Disposal of Unexploded Ordnance (UXO) from SEIC Land Allocations

13.5.1.1 Key Issues

- Significant military actions occurred at a variety of locations on the Island. The island has also had military installations and live firing ranges.
- A strategy has been devised to reduce possible Project risk from UXO exposure to as low as reasonably possible.

- Russian and international standards have been adopted and specific project standards for the process of decontamination of identified sites developed.
- There is a need for development of standard operating procedures for contractors EOD programme interactions during construction.

13.5.1.2 Management during Construction

Contractors under prevailing SEIC influence will be responsible for ensuring contractor teams and contractor's sub-contractors as applicable implement SEIC requirements. These procedures generally include:

- Adoption of the SEIC policies and guidelines,
- Demonstration of understanding of the SEIC standards for EOD and where applicable adoption and implementation of Sakhalin Energy Mine Action Standards (SEMAS),
- Conformance to federal, regional and local administration requirements for notification and disposal where applicable,
- A requirement that Project teams notify and interface with the local authorities as per Russian regulations to ensure coordinated UXO programme,
- Contractor's execution plans explaining how Project procedure and policies and local governing legislation have been incorporated in their construction plan, and
- EODCC maintenance and control of programme records and data.

13.5.1.3 SEIC Commitments

- To ensure the threat from UXO exposure for SEIC personnel, contractors and those associated with the Sakhalin II Project, is reduced to a tolerable level of risk.
- Will work with Russian authorities and agree on measures to mitigate and dispose of contamination in a safe manner.
- Actively promote local development and employment opportunities by structuring contracts to promote training in EOD speciality fields to resource contracts.

13.5.2 SEIC Management Policy on Discovery of War Dead During Construction

13.5.2.1 Key Issues

- The probability of discovering war dead following completion of the current Military Commissariat project is extremely small. However, SEIC recognises that additional war dead may be discovered during construction and measures must be in place to respond to this eventuality.
- SEIC will adapt existing internal treatment procedures and prepare a *Treatment of War Dead Discovered During Construction Procedure* will be included as part of final construction contracts as applicable.
- Military Commissariat will respond to reports of possible war dead encountered in the Project footprint.

13.5.2.2 Management During Construction

These procedures generally include:

- Contractor's adoption of the SEIC Treatment Procedure,
- Project management by Military Commissariat and their interface with the local authorities as per Russian regulations, and
- Realisation of the concerns of the Oblast administration and local people concerning the respectful treatment of war dead.

13.5.2.3 SEIC Commitments

- Will prepare procedure and work with the Military Commissariat to reach agreement on a procedure to be followed.
- Maintain a master contract with the Military Commissariat as Project Management Contractor,
- Allocate resources to act as interface (as needed) between contractors and authorities, and
- Continue to provide humanitarian contributions to identify remains and provide for burial with military honours found in the Project footprint.

13.5.2.4 Contractor Responsibilities

The contractor will be responsible for the following tasks:

Topic	Key Measures
Training and awareness	– Adopting and implementing the Procedure. – Ensuring that basic awareness training concerning war dead is provided to relevant employees (*e.g.*, field construction workers) and subcontractors as part of overall training programme. – Having sufficient training and expertise to be able to recognise the range of human skeletal and artefactual remains associated with war dead. *Contractor may independently employ qualified specialists to assist with implementation/conformance with Procedure.*
Background information	– Requesting information from SEIC and the Military Commissariat information on the location and importance of previously recorded discoveries prior to ground distributing activities. – Informing the Military Commissariat as to activities and providing them the opportunity to monitor works.
Discovery/ work-arounds	– Developing/implementing procedures to initiate an immediate work-around if war dead are discovered. – Provide for immediate notification of SEIC and/or other designated representatives.
Laws and Regulations Relating to War Dead	– Complying with the laws and regulations of the Russian Federation as per war dead. – All human remains and associated military artefacts are the responsibility of the government. – Unauthorised disturbance and/or removal of remains and associated artefactual remains by Project workers will be strictly prohibited and disciplinary actions implemented as appropriate.
Confidentiality of Locations	– Withholding from disclosure to the general public, information related to locations of war dead. This information is to be handled on a confidential basis to minimise the potential for unauthorised disturbance.
Land Acquisition by Contractor	– In the event that Contractor elects to acquire land (on either a temporary or permanent basis) Contractor will be responsible for ensuring that relevant surveys for war dead are completed in a timely manner and in accordance with established procedures.

13.5.3 SEIC Management Policy on Treatments of Objects of Culture

13.5.3.1 Key Issues

- Meet Russian Regulatory and international best practices.
- Develop archaeological management strategies to implement during construction to minimise potential construction delays/cost growth.
- Support the local Sakhalin archaeological community.

13.5.3.2 Management During Construction

The Sakhalin II, Treatment Plan for Objects of Cultural Heritage describes procedures to be followed by SEIC contractor's during construction. A preferred provider for archaeological services will to implement this Plan. It is envisioned that this preferred provider would maintain a small staff of professional full-time archaeologists who will be devoted solely to the implementation of the Treatment Plan.

In addition, SEICs in-house archaeological coordinator will assist with implementation of this Plan between the various of Project contractors. This coordinator will be part of the SA Group and be based in Yuzhno-Sakhalinsk.

13.5.3.3 Responsibilities of Construction Contractor's Regarding the Treatment and Protection of Cultural Resources

As part of the tender process potential construction contractors were provided guidance concerning SEICs expectations concerning management of Objects of Culture. This guidance document outlined contractor responsibilities as per the Treatment Plan, including:

- Providing cultural resource training to relevant employees and subcontractors as part of overall training programme,
- Requesting information from SEIC on the location and importance of previously recorded cultural resources prior to ground disturbing activities. SEIC will provide known information on locations of know sites, procedures to be followed during construction and if cultural resource monitoring is required,
- Ensuring that any known cultural resource site to be monitored is flagged and construction personnel notified,
- Having sufficient training and expertise to be able to recognise the range of cultural resources remains described,
- Following notification procedures and work-around procedures for sites and/or potential sites discovered during construction,
- Developing and implementing procedures to initiate an immediate work-around in the event potentially important resources are discovered,
- Immediately implementing (to the extent feasible) impact minimisation techniques in the event that human burials and/or extremely rare sites are found,
- Unauthorised collection of artifacts on the Project work site will be strictly prohibited and disciplinary actions implemented as appropriate, and
- Requirement to withhold from disclosure to the general public, information related to specific locations of sites.

Contractor will be provided with more detailed procedures related to minimising of direct impacts. This may include temporary work-around and/or implementation of construction techniques to minimise impacts to sites.

In the event that Contractor elects to acquire land (on either a temporary or permanent basis) Contractor will be responsible for ensuring that relevant surveys for cultural resources are completed in a timely manner by qualified professionals and procedures described in the Treatment Plan implemented.

13.5.4 Assessment of Impacts and Benefits

Topic	Impacts
Unexploded Ordnance	– Positive long-term benefits. The immediate and long-term benefits of this programme are described above.
War Dead	– Positive long-term benefits. This programme is resulting in the recovery of military war dead and providing for repatriation and burial with honours.
Treatment Plan for Objects of Cultural Heritage	– Excavation of archaeological sites results in a permanent loss of the archaeological record. As a result it is considered a permanent adverse impact. – Positive long-term benefits are expected to occur from implementing of the Treatment Plan.

13.5.5 Residual Impacts

RESIDUAL IMPACTS	
Unexploded Ordnance	– No residual impacts are expected. The positive aspects of this programme are considered to be substantial benefit to the Island.
War Dead	– No residual impacts are expected.
Treatment Plan for Objects of Cultural Heritage	– No residual impacts are expected.