

Financed by Open Society Institute Assistance Foundation

**The Audit Project of the Azerbaijani Sector of the Southern
Caucasian Pipeline (SCP) by local NGOs**

Final Report

of Ecology Working Group on

“The Audit of the Reinstatement Activities along SCP”

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DISCLAIMER

The contents of this report should be treated as the opinions and conclusions of the report's authors. In no way does this report reflect the policies or view of the project sponsor or any other organization concerned. The authors are solely responsible for any mistakes in this report. The project participants note that they have fully understood their duties and tried to do their work professionally. Such principles as professional approach to the audit performance, competency, comprehension of the duties put forward have been observed in writing the report and an effort was made to fully guarantee the maximum effectiveness of the audit procedures. An attempt was made to observe the principles of mutual respect and understanding with associates of parties going through the audit during the audit process. The members of the audit group approve the report with their signatures below.

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EXECUTIVE SUMMARY

The introduced audit project has been implemented and financed in order to increase the knowledge and capacity of the NGO members on the “Audit of Reinstatement Activities along SCP” under the initiation of Open Society Institute – Assistance Foundation (OSI-AF). The implemented project has been dedicated to the ecological audit of the environmental protection activities along SCP. Members of the leading NGOs have participated in the project (for “Sustainable Development”, “Agrococonsulting Center”, “Center of the Development of Initiatives”, “The “Progress” Public Union for Stability and Development). The audit has been realised based on the Memorandum on Understanding of August 5, 2005 and grant program No. 13281 of November 14, 2005.

BTC/SCP is a huge construction project with a number of major impacts. Different engineering-installation works on international standards have been carried out by this project. Thus, it is possible to expect the environmental impact of these huge works, minor as it might be. From this point of view, the inspection of carried out reinstatement activities would be just in favor of the work. For this purpose, auditing on behalf of the civil society for the elimination and decrease of these impacts during all stages of construction is of great importance. Auditing can provide the civil society with information on the process, as well as define ways of improvement for the implementation, ensuring its transparency. Thus the audit to be performed here should not be occasional, but rather consistent and detailed. The errors discovered during the carried out social audit can result in the decrease of the negative impact on environment and in the increase of the level of its security. In its turn, the control of the community will cause the increase of the responsibility of the companies, as well as mutual work of all interested social groups.

The following are the project objectives:

Audit of obligations 753, 766, 769, 771, 880, 925, 1038-1042 on the reinstatement of soil, landscape, water margins and bio-restoration in EIA document.

- 1 - Audit of the landscape reinstatement during SCP construction
- 2 – Audit of the performance of SCP in reinstating soil.
- 3 - Audit of the performance of SCP in reinstating vegetation.
- 4 - Audit of the performance of SCP in reinstatement of water margins.

The following outcomes can be noted based on the discovered facts:

Achievements:

1. The program on the restoration of bio-diversity that covers all stages of planned works and documents on method are based on modern norms and standards.
2. Collection of seed materials along the whole pipeline was carried out at optimal time. Necessary condition for reservation of seeds was created and the monitoring on their condition was carried out. The seeds have been tested and the germination capacity prior to planting was studied.
3. Special methods for the reinstatement of crossings and valleys have been analyzed and their compliance with modern requirements has been approved.
4. Stabilization on the river banks has been carried out in accordance with the plans, daily and weekly reports are prepared and the measures to be taken during floods have already been prepared.
5. Concrete programs and plans have been prepared for the total elimination of bentonite break out risk and high level activities are being carried out.

Shortcomings:

1. Though it was stated that the surface level of the ground in Yevlakh Temporary Dwelling Camp had been removed, the area where this soil had been removed was not informed about.
2. It was determined in the approved program that no damage would be caused to Tuqay forests, but 4,67 ha of area had already been damaged. The works hadn't been completed yet and it was impossible to carry out their assessment.
3. Practically, along the whole length of the pipeline and also in the areas of bio- restoration , the pipeline security groups drive their vehicles directly within the separated pipeline site.

Non-conformities:

Certain eliminable and striking non-conformance was revealed during audit. This non-conformance was stated with the purpose of carrying out a more proper reinstatement of the soil, vegetation, water margins and landscape. The following can be included into this Non-conformance :

1. Internal audit report on the reinstatement process is missing. If such a report exists, the company collaborators possess no information about it. This does not correspond to the undertaken obligation.
2. Paragraph 2 of the Specifications state that everybody involved in the activities should get acquainted with the document on norms and standards to be applied, as well as be provided with a copy of that document. The indicated obligation hasn't been fulfilled.
3. According to the obligations undertaken by the company (SCP obligations list 1229) the reinstatement had to be carried out immediately after the completion of the construction. Though the construction was completed in 2005, reinstatement works haven't been commenced yet.
4. The replacement of the rotten bionets in incomplete reinstatement areas within Hasansu hasn't been carried out according to the obligations, which in its turn increases the risk of erosion.
5. Records on the inspection of guide berms providing the flow-out of underground waters that has come up to the surface in Hasansu area are not kept in accordance with the obligations.
6. SCP obligation EN 1317 (Reinstatement SCP No 018/a AZ) states that for the purpose of eliminating furrowing, (resulting in) erosion and damage in the vicinity pipeline RoW should not be allowed to be used as a highway. The access to the site should not be permitted in the areas indicated by the company. Vehicles belonging to the SPS (State Protection Service) officers were moving along the pipeline in all of the inspected areas.
7. The representative of monitoring group didn't carry out the calculations on moved and increased plants. (These data haven't been given to the auditor yet). It has not been possible to get information on the number and amount of these plants from Merdekand arboretum up to the present day. These facts are not coincident with "Plan on movement of rare species from pipeline site" and modern quotas and standards.

Recommendations:

1. BTC/SCP reinstatement experts, as well as PR collaborators should have information on the relevant obligations and internal documents.
2. BTC/SCP should strengthen the control over the reinstatement by contractors and improve the control system to a considerable extent. Responsible collaborators of

contracting companies should be provided with necessary documents in accordance with the undertaken obligations.

3. The duration of the reinstatement and return of camps with completed activities to their tenants should be determined.
4. Serious anti-erosion measures should be taken in Hasansu, Tovuzchay and Asrinchay areas characterized with high risk of erosion. These sites should be regularly visited in accordance with the undertaken obligations, especially after heavy rains.
5. The guide berms within Hasansu should be inspected in accordance with the obligations and the central office of the company should be provided with relevant records regularly.
6. We would propose to ban the movement of vehicles along the RoW in accordance with the undertaken obligation.
7. SCP company has to take measures for strengthening control over reservation of Iris Akutiloba in Merdekan arboretum and on its return to the area of habitation.
8. Inventory of the lands with destructed natural fertility, and relevant programs and measures for the restoration of the previous natural condition of these lands should be prepared.
9. SCP company should take measures on the use of excess land and for going beyond the contract with Akstafa Forestry against the contractor and its own employees.
10. Measures should be taken on the utilization of bio-restoration areas by Pipeline Security Service.

Conclusions:

1. The implementation and monitoring of the SCP reinstatement activities haven't been organized to the required level at lower organizations (BTC contractors and subcontractors). Documentation in the English language can be shown as a shortcoming, which means that the requirements of the law of the Azerbaijan Republic on the State Language haven't been followed. This also prevents the understanding of the requirements and awareness of the necessary information by the company employees and large community with poor knowledge of English.
2. Though BP/BTC and CCIC undertook the obligation on the implementation of reinstatement in accordance with International standards, they weren't able to fulfill the undertaken obligations during the visit to the audited site.
3. The scope of carried out works, meetings with BTC/SCP representatives and observations during field trips enable us to eliminate the shortcomings, we have discovered and the company is aware of, before the completion of reinstatement along the RoW.
4. In general the ecological measures along SCP meet the modern requirements up to a certain degree and can be applied as successful experience.
5. Taking into consideration that the audit carried out by the working group on the environmental protection is within the program of NGO Capacity Building, it would be for the benefit of the general work to organize this work once a year like audit trips.

I. INTRODUCTION

BTC/SCP is a huge construction project with a number of major impacts. Different engineering-installation works on international standards have been carried out by this project. Thus, it is possible to expect the environmental impact of these huge works, minor as it might be. From this point of view, the inspection of carried out reinstatement activities would be just in favor of the work. For this purpose, auditing on behalf of the civil society for the elimination and decrease of these impacts during all stages of construction is of great importance. Auditing can provide the civil society with information on the process, as well as define ways of improvement for the implementation, ensuring its transparency. Thus the audit to be performed here should not be occasional, but rather consistent and detailed.

The errors discovered during the carried out social audit can result in the decrease of the negative impact on environment and in the increase of the level of its security. In its turn, the control of the community will cause the increase of the responsibility of the companies, as well as mutual work of all interested social groups.

1.1. Project Objectives

The following are the project objectives:

- 1) Audit of obligations of SCP executors on landscape reinstatement.
- 2) Audit of obligations on soil reinstatement during the pipeline construction.
- 3) Audit of obligations on vegetation reinstatement during the pipeline construction. .
- 4) Audit of obligations on the reinstatement of water margins that water pipeline crosses.

The implementation of the following duties have been planned to achieve the main objectives of the project:

- Audit of the effectiveness of the decrease of environmental impact in SCP operations company and contracting companies carrying out reinstatement activities;
- Audit of the observance of ecological standards, nature protection and reinstatement measures during the pipeline construction;
- Audit of reinstatement of soils, natural landscape and biocenosis along the pipeline RoW;
- Audit of reinstatement obligations of the water margins in pipeline construction;
- Establishment of the public audit data base after collecting the necessary information;
- The purpose of this establishment is to inform the public and relevant interested structures about the situation on the ecology and environmental protection in the areas that have undergone the impact of the pipeline construction and on the observance of the standards and norms of environmental protection and ecology during the construction.

The accuracy of the information received during the audit will involve all the persons interested in the issue to this field. Thus, the outcomes of the project will have a positive impact on large areas and will increase the degree of mutual understanding and cooperation among different layers of the civil society.

1.2. Project Scope, Project Focus and Project Feasibility

1.2.1 Examination of the reinstatement of soil, vegetation, landscape and water margins in appropriate picket areas along SCP;

1.2.2 Examination of one of the areas indicated as interim zones in BTC/SCP and CCIC reports;

1.2.3 Examination of the areas of ongoing construction and adjacent areas.

The implementation of the audit was feasible due to the following conditions:

- Participation of the group members in the audit training organized by OSI-AF;
- Determination of responsible persons within the group on audit directions;
- Comprehension of the essence of the duties put forward by the team members;
- Awareness of each of the team members of their functions;
- Existence of the resources within the planned scope of the audit;
- Clear description of the duties and understanding of the SCP obligations of each of the working group members on the audited fields prior to site visits.

1.3. Project Criteria

1.3.1. Obligations connected to the environmental protection measures within SCP operation program;

1.3.2. Control plan on SCP Reinstatement;

1.3.3. Implementation Specifications of SCP contractors on the reinstatement of environment.

1.4. Details on the Auditee

BP company is the executor of BTC pipeline project and it is also the technical operator of SCP. At the same time BP company is the construction manager and operator of Sangachal Terminal.

Financial shareholders of the SCP Co are BP (technical operator – 25.5%), Statoil (commercial operator – 25.5%), SOCAR (10%), LUKAcip (10%), NIKO (10%), Total (10%) and TPAO (9%) companies. The construction of BTC and SCP in Azerbaijan is carried out by CCIC (Consolidated Contractors International Company). The operation of the CCIC company covers the design, construction, testing and operation of the pipeline. Five independent construction camps have been constructed along the pipeline route by CCIC. These camps have completely independent infrastructure. A great number of machinery and equipment have been involved to the construction. CCIC company of Greece was established in the Near East in 1952 and it has implemented projects in more than 35 countries of the world so far. Technologically developed CCIC has turned into a huge company carrying out large-scale international projects from an ordinary construction company. CCIC is ranked as No 1 among the construction companies in the Near East and as the 14th among the world construction contracting companies.

1.5. General Information on SCP (South Caucasus Project) and Presentation of Audit Topic

443 km out of the total length of 1750 km of SCP goes through Azerbaijan. This pipeline project is implemented in connection with the pipeline project for the gas excesses from Shal Daniz deposit and BTC oil pipeline project. The pipeline route goes through 13 regions and 135 settlements (as well as 97 villages) within the territory of Azerbaijan. The pipeline route and its infrastructure covers 2548,7 ha of area. The pipeline crosses 16 water basins (rivers), as well as the river Kura twice. The weight of the pipes only transported through the roads during the construction was more than 1,5 million tons and the vehicles (trucks and cars) overcame the distance of 9,5 million km within a month. The facts should be evaluated without bias and the compliance of the company with the strategies, rules, legal and other requirements should be audited in order to define the degree of control criteria implementation and to find out facts.

All together 95% of the SCP project has already been completed. By November 25, 2005 90% of the project construction in Azerbaijan and 81% in Georgia had been completed. At present half of the 442,4 km section of the pipeline in Azerbaijan has undergone hydro-testing. Improvements have also been achieved in Georgia, the main attention being on the completion of surface works before winter. Besides, 98% of the gas delivery unit has been finalized and 95% of the gas delivery unit has been completed in Georgia. The gas delivery unit in Azerbaijan is within the work volume of Sangachal terminal.

There are 1600 people working for the project in Azerbaijan (together with BTC) at present and 1300 out of them are Azerbaijanis. The main mechanical works are planned to be completed by the end of the present year.

SCP is one of the biggest projects not only in Azerbaijan, but also in the whole world due to the scale of construction and capacity of project. It is clear that the implementation of such large scale activities may lead to serious negative changes in the environment of Azerbaijan. Sufficiently large-scale measures have been planned to decrease the number of negative outcomes during the development of the pipeline project and the international standards have been applied in the field of security, human safety and environmental protection. Besides, the level of observance of these standards during the pipeline construction is an area of concern of not only Azerbaijanis, but also the whole world community. This is first of all related to the small amount of accurate and independent information. SCP management and also the relevant government bodies inform the public slightly and irregularly about the implemented works and local conditions, as well as about the negative impact of the pipeline on the environment, natural landscape and life style of the local population. The public is provided with little information on the degree of observance of international standards accepted on SCP project. It should also be taken into consideration that the acquaintance of the public with the outcomes of the audit of company activities is one of the most important issues from the transparency point of view. Under such conditions, the joint audit by social organizations is a positive case. Social ecological audit is considered in the national legislation.

II. Methodology

2.1. Audit group members and their roles (see Appendix 1).

In accordance with the agreement on the basis of the Memorandum on Understanding signed between Open Society Institute Assistance Foundation (OSI-AF) and BP on August 5, 2005, the selection has been carried out among NGO members who took part in the monitoring of obligations undertaken during the BTC pipeline construction in 2005 and supported by OSI-AF, who was responsible for the implementation of "Audit of Obligations on the Management of Community Relations and Complaints during SCP Construction" and those who were willing to take part in 2006 program. Prior to the commencement of the audit performance, the working group took part in the seminars on audit performance with the participation of international consultants and AMG members selected by OSI-AF and acquired some knowledge and practice in this field.

The principles of professional approach, competitiveness, comprehension of duties were observed during the audit performance and report preparation. The group members made efforts for providing the maximum effectiveness of audit procedures. Efforts were made for following the mutual respect and understanding principles with the collaborators of audited subjects during audit performance.

Chingiz Gulaliyev (coordinator) – Analysis of the situation on following the nature protection standards for the protection of landscape resources during the pipeline construction. Effectiveness of the utilized techniques and their compliance with standards. Control plan for Contractor's Reinstatement Work and Inspection of landscape reinstatement in the areas indicated in the work plan in accordance with Specifications to Contractors on Reinstatement. Analysis of the landscape management principles following the reinstatement and preparation of audit report according to those documents.

Niyazi Aliyev (member) – responsible for the audit of measures to be taken on the protection of bio-diversity along SCP RoW, as well as the audit of the correspondence of measures on bio-restoration with the activities carried out. Preparation of thematic report on field investigation (route visits on indicator species, based on the results of the study on the condition of rare species, as well as the moved plants).

Sabuhi Huseynov (member) – getting acquainted with the documents approving the reinstatement and management of water margins along SCP route. Holding meetings with the employees of the departments on reinstatement and management of water margins and with their representatives on sites. Defining the level of implementation of the approved plan on the reinstatement and management of water margins and studying their effectiveness. Getting acquainted with the documentation on the methods on water margin reinstatement and managements from investigation point of view for other groups. Noting the discrepancies on the basis of acquired documents. Preparing thematic audit reports on the reinstatement and management of water margins.

Saleh Huseynov (member) - Acquaintance with the documents reflecting the condition of land reinstatement along SCP. Effective analysis of implemented works. Preparation of thematic audit report in accordance with the instructions on Reinstatement Specifications.

Tural Abbasov (student) – responsible person for translations, administrative assistance, document management, record taking and photography.

2.2. Methods Applied during Audit

These methods have been carried out as a systematic, independent and documented process for evaluating the compliance of the organization with the strategy and other

requirements. It also considers sustainable development programs on BP/BTC/SCP and thus the implementation of every element of ESIA in accordance with the real conditions.

Observations, comparison of activities carried out with responsibility, photographing as a proof, meetings and discussions with responsible persons and registering can stand as examples for methods applied during the audit.

2.2.1. On Landscape

The following measures are considered to reach the objectives::

- Audit of soil reinstatement along the pipeline;
- Audit of landscape reinstatement along the pipeline;

The following directions have been indicated in the Specifications (environmental impact assessment, ecological norm and standards) on the Reinstatement Works of Contractor and Control on Contractor's Reinstatement Work along SCP site by the working group consisting of NGO representatives:

- Management of environment in accordance with the documents to be presented, as well as inspection on the observance of ecological standards and norms;
- Condition of land resources in the pipeline areas (erosion, impact on surrounding lands and natural landscapes, compliance with the normative documents reflecting the effectiveness of restoration);
- Compliance of the bio-restoration in pipeline areas with the undertaken obligations;
- Audit observation of land reinstatement in compliance with the obligations undertaken by SCP and CCIC along SCP site.

Meetings have been held during the audit with the experts of both companies. After the acquaintance with the documents and preparation of audit inquiry, they were introduced to the experts for respond. Site visits have been organized to inspect the obligations undertaken according to the documents.

Project coordinator has determined the implementation schedule and the scope of the carried out work on different directions with the working group (find the list in the executing section of the project). The coordinator has been responsible for the organizational issues and for spending the financial funds in accordance with the accepted budget throughout the project.

According to the approved behavior code and distribution of responsibilities, every member of the working group has been responsible for the quality and accuracy of the information on sites.

A specially compiled form has been used for recording the evidence discovered during the audit process and a digital camera (photo camera) has been utilized to approve them as site evidence (every photograph included the date and was confirmed with the corresponding comments and signatures of the BTC staff and contractors). In accordance with the public audit rules, all the information of this kind is converted into proofs. All the received information has been analyzed and prepared as a data base. This data base includes both the audit outcomes and the information on the environment prior to SCP construction. Besides, annual thematic reports (by the working group members) have been prepared on every direction of the investigations.

2.2.2. On Soil Reinstatement

Audit has been carried out using the impacts on land related to the pipeline construction, mitigating measures, residual and cumulative impacts, visual observation, digital measurements, comparative analysis, review of presentation materials, analysis of working, audit and monitoring documents by BTC and contractors and inquiry methods.

2.2.3. On Bio-restoration

The following methods have been applied during the implementation of the project:

- Initial open and closed meetings with SCP/BP, BTC and CCIC representatives;
- Review and analysis of the documents related to audit;
- Visual observance of the audited issues;
- Competitions and inquiries with the responsible persons on sites;
- Observation of the activities carried out by SCP/BTC along the pipeline RoW;
- Collection and analysis of the information received during audit.

2.2.4. On Reinstatement of Water Margins

- Special methods have been developed for carrying out audit on the reinstatement of the water margins along the pipeline.
- These methods have been applied as a systematic, independent and documented process to evaluate the compliance of the organization with the strategies and other requirements. It also considers further continuous development programs on BP/BTC/SCP and thus the implementation of every element of ESMS in relation to real conditions.

2.3. Feasibility of the Selection of Sites

2.3.1. Landscape

1. AGT Pipeline Project, project No 410088 on the observation of the audit of the landscape reinstatement in the areas indicated below in accordance with the obligation specified in item 3, paragraph 1.1 of document 410088/10/I/PL/025 on “Specifications on Pipeline Reinstatement - Azerbaijan” on the “possible reinstatement of the landscape in the areas of huge visual impacts”.

2. Paragraph 6 of document “Specifications on Pipeline Reinstatement - Azerbaijan” No 410088/10/I/PL/SP/025 states about the above mentioned areas: “The Contractor shall carry out full photo and video photographing of the whole project area prior to construction and after final reinstatement”. Keeping to this principle, comparison of the level of observance of construction obligations in the selected areas.

3. Final item of paragraph 6 of document 410088/10/I/PL/SP/025 on “Specifications on Pipeline Reinstatement - Azerbaijan” states: “As indicated in Annex A, the Contractor will prepare working methods and graphics on the areas with the final condition code of A and general methods and graphics with the final condition codes of B and C on the areas for the reinstatement of the route and will present them to the company”. Observing the compliance with these methods and graphics on the selected areas. The above mentioned areas have been selected taking into consideration the mentioned facts. BS EN BST 19011-2002 standards have been taken as basis during the auditing.

2.3.2. Soil Reinstatement

Samples for auditing have been selected taking into consideration the natural soil-climatic condition, construction phases, standards applied during the construction, special reinstatement approaches and location of objects.

Taking into consideration the mentioned grounds, site visits have been made to 0-29 km (mud volcanos and special reinstatement area), 75-85 km (Kurdi winter pasturelands – State Fund Land), 150-175 km (cultivated farming lands in Kur-Araz plain), 220-230 km (Yevlakh temporary dwelling camps, pipeline section crossing Kur, quarry area), 295-310 km (area of Samukh region), 342-347 km (area of Tovuz region, State Fund lands), 420-435 km (area of Aghstafa region – Tugay forests, Jeyranchol massive). BTC has also been required for providing the opportunity of office acquaintance with the operation, implementation, audit and monitoring documents. Despite the insistent requirements of the audit group, this opportunity hadn't been partially provided. One-day trip (25.01.06) was organized to Mughan temporary dwelling camps for getting acquainted with these documents, but the inconvenient working conditions (deficiency of translators, missing working documents that were required, return to Baku soon after lunch under the pretext of bad weather conditions) didn't allow the audit members to carry out productive work (1 person/hour effective functioning).

Only one site visit was organized by BTC dated 05-07.03.2006. And during this visit the audit members were allowed to work effectively for only about 7-8 hours. This site visit didn't include all of the areas selected by the auditors. It was noted that the remaining areas would be visited during the following trip. But, later BTC stated that no site visits would be organized any more.

As is obvious, the possibilities of auditing on land reinstatement were very small as compared to the huge construction works and their importance. Taking into consideration the fact that the construction of the pipeline has already been completed, the auditing of the most important technological processes has been impossible.

2.3.3. Bio-restoration

On areas of agreed auditing
BK 24th km. (in the areas where *Iris Acutiloba* grows);
Mardakan Dendropark – study of the condition and maintenance measures of the moved *Iris Acutiloba* plants;
BK – 212th km – (region of Samukh), study of the preparation phase for farming;
BK – 235th km – application of bio-restoration activities;
BK - 285,420, 423,435, 438th km – application of the different phases of bio-restoration activities.

2.3.4. Reinstatement of Water margins

Special methods – method documents have been prepared separately for huge crossings. As for small river flows and channels, a generalized (for several channels) method document has been prepared, namely HDD, micro-tunnel methods. This methodology document includes the measures to be taken during floods as well. Special methods have been developed for the crossings with Hasansu and Kura and auditing of the activities carried out according to the Methodology documents has been planned.

Knowledge on the activities to be audited, awareness of appropriate issues, aspects and impacts for the activities, legislation and other requirements, as well as documentation system and auditing principles stated in BS EN ISO 19011-2002 document have been followed.

2.4. Audit Program (more detailed information in Appendix 2)

- Initial acquaintance meeting for studying the principal documents;
- Acquaintance meeting of BTC/BP collaborators on the audited field;
- Meeting with relevant CCIC collaborators;
- Preparation of the list of documents to be required from BP/SCP
- Receipt of the required documents;
- Initial audit meetings between group members and BP/SCP;
- Preparation of the questionnaire;
- Compilation and analysis of the information, study and processing of the initial outcomes.

2.5. Initially Required Documents.

2.5.1. On landscape

- Control Plan for Contractor; (CPC);
- Contractor's Execution Plans and Procedures(CEPP);
- CCIC manual on ESMS (Ecological and Social Management System);
- AET001-1000-EB-ПЛH-00008 Landscape Management Plan;
- AET001-1000-EB-ПЛH-000011 Reinstatement Management Plan;

2.5.2. On soil reinstatement:

- Implementation Plans;
- Records on Progress
- Monitoring Documents
- Audit Documents
- Schedule of Works

2.5.3. On Bio-restoration

- Environmental and Social Impact Assessment (ESIA)
- Reinstatement Specifications;
- Azerbaijan Reinstatement CCP.
- Manual on Ecological and Social Management System (ESMS).

2.5.4. On the reinstatement of water margins

- ESIA on SCP
- Annex to ESIA
- Conditions of Approval on Norms
- Plan of Measures on Movement
- Control Plan on Contractor's Work

2.6. Review of the Documents and Preparation of Questionnaires (Check-list is added into Appendix 3)

In accordance with the audit to be performed and with the documents to be reviewed only the following documents were presented in the Azerbaijani language (see Appendix 3):

2.6.1. On Landscape

1. ESIA on Pipeline
2. SCP obligations

3. Control Plan for Contractor's Reinstatement (Reinstatement SCP № 018/ a AZ)
4. Reinstatement Specifications of Contractor - Project № 410088

The following documents in English were presented in BP Business Center and translated by the student attached to the group.:

1. 18 Weekly Report WC 25.04.05;
2. EFO daily report 2004;
3. EFO daily report 2005;
4. EFO daily report 2006;
5. Incineration records;
6. BTC001-B110-MS-PRO-00129;
7. Iris Acutiloba Monitoring Program Azeri;
8. Mud Volcano Ridge Method Statement;
9. HDD Method Statement;
10. KP366 Borrow Pit EA;
11. photos of reinstatement, erosion control;
12. Bio-restoration Plan A03_DRЫIFG;
13. HDD Method Statement (SCP) ;
14. KP 391-393 EЫIA;
15. Waste donated to communities.

Several of the documents required in the Mughan camp were presented to the ecological audit group. Questionnaires were prepared for a more productive audit performance and they were responded in Mughan camp.

2.6.2. On Soil Reinstatement

Planned activities and processes.

- Contractor will carry out the complete reinstatement of any lands undergone the impact of construction or related works (Reins, 15.1)
- Written agreement with the landowner on the reinstatement level will be obtained (Reins, 15.1)
- Contractor will provide the anti-erosion control to preserve the erosion degree at level 3 or lower (Reins., 15.2)
- Contractor is responsible for the protection of the topsoil (Reins., 17.1)
- Topsoil should not be mixed with subsoil (Reinst., 17.3)
- Contractor is responsible for the excess soil (Reinst., 19.5)
- The subsoil will not be place on the top of the topsoil during standard and special reinstatement (Reins., 20.1)
- The topsoil will be removed and separated from the subsoil where possible in Gobustan (Reins., 26.3)
- The productive layer of the soil will be removed and preserved at special places (CCP, 3.2.1)

“Audit Registration Form” and “Non-conformance Registration Form” were prepared and multiplied for the soil reinstatement audit performance (a sheet of paper per question). The date of the audit performance, name of auditor, the audited unit, requirements, deficiencies, etc. were reflected in those documents. The conditions were developed indicating the source of undertaken obligations and the relevant legislation, as requirements. As for shortcomings discovered during the audit performance, in accordance with the undertaken obligation, was stated.

2.6.3. On bio-restoration

The standards, applied technologies and the volume of planned works were of the greatest importance during the work with documents. The volume of the approved activities, control procedures and monitoring were selected as principal parameters. Main questions and procedures were developed for audit performance (the question list is attached to the annex). Review of documents in Mugham camp:

- Contractor's Reinstatement Specifications - Project № 410088;
- Hasan Su Site – on the selected areas with permanent reinstatement;
- Environmental and Social Impact Document on Hasan Su River Site;
- Construction Method Document, etc.

The main regulations document for the reinstatement of natural vegetation cover is "Reinstatement specialisation". (section 25 Creation of environmental control system and preparation of several documents have been planned for providing timely and quality reinstatement of damaged biotopes based on EIA and Ecological and Social Control System (ESCS) materials, SCP and CCIC, that is the contracting company for the construction, have created an excellent environmental management system. They have also prepared documents and standards for the reinstatement of the natural structure of biodiversity. As stated in CCP section 3.2.4, paragraph 3 and section 25, Reinstatement Specifications, the contractor has to prepare special methods for bio-restoration. The purposes of bio-restoration are explained as follows:

- The bio restoration strategy is based on increasing the volume of seed bank of samples remaining on the protected surface, besides equivalent materials (seed, bulbs and plants) or on replanting of plants removed prior to building operations, after the project is over.

- Planting the sufficient number of plants for decreasing the erosion level by the restoration the local flora.

- The contractor should determine the AGT for bio-restoration measures according to HSE requirements 410088-L-00-SA-SP-006 for large-scale contracts. AGT is prepared according to the requirements indicated in sections 25.3 and 25.8:

In agriculture and other lands in-use areas the contractor will leave the areas in the condition stated in the initial agreement. Except for the agreed conditions, the contractor will bring the land to working condition: it will be flattened and softened. Fertilizing and planting of the areas with constant growth will be carried out either by the landowner, or by the tenant.

The following bio-restoration activities need be carried out in "non-agricultural" zones and unused lands: At least 70% of plants must be restored within a year. "Needs to be restored" means that the first healthy growth should already be noticed for some species. This requirement will minimize the topsoil erosion and provide the continuous development of plants under almost any condition. Reinstatement should be carried out in the areas with less than 70% vegetation cover. The growth speed of the plants depends on soil, hillside and climate. If the amount of rain or natural floods is less than 50% or there are 25% more hillside, minimum 50% growth (50% of the vegetation cover in the areas with <70% initial cover) will be achieved for the first year with 70% growth at the end of the next year after the completion of the Contract.

2.6.4. On the Reinstatement of Water Margins

The following documents were presented to the audit group:

- a) Hasan Su Site – permanent reinstatement
- b) Environmental and Social Impact of Hasan Su Site
- c) Construction Method Document

III. Observations, Findings and Analysis

The following site visits were organized in accordance with the agreement with BP/SCP:

- PK- 237 Yevlakh;
- PK- 245 Garabagh channel;
- PK-285, Ganja, Dali Mammadli;
- PK-312-314 AB12, Asrinchay;
- PK-375- 376+500 Tovuz construction camp;
- PK 394 -395, Agstafa;
- PK-396+500- 398, AB18 Hasansu;
- PK-412 AB19- Kura West;
- PK-422 AB21;
- PK-430- 440, Boyuk Kasik.
- PK -224 Yevlakh, Kura crossing;
- PK- 65 Mughan camp

3.1. On Landscape Reinstatement

3.1.1. Obligation:

Section 6.4.4 (AƏT001-1000-EB-MAH -00001 PEB Y02) of the ESMS Manual (Project Procedure – ecological and social management system) requires the performance of audit in accordance with ISO 14001 standards by BTC-Co. It is also stated that, BTC.Co should carry out audit and site inspection of the Contractor during the construction project.

Observation:

During the meeting at BTC/SCP office on March 24, 2006 the BP PR advisor stated that, no audit had been performed on the reinstatement and no reports existed on it. Thus we are not able to present such a report to the working group.

Non-conformance :

Internal audit report on the reinstatement process is missing. If such a report exists, the company collaborators possess no information about it. This does not correspond to the undertaken obligation.

Recommendation:

BTC/SCP reinstatement experts, as well as PR collaborators should have information on the relevant obligations and internal documents.

3.1.2. Obligation:

Paragraph 2 of the Specifications state that everybody involved in the activities should get acquainted with the document on norms and standards to be applied, as well as be provided with a copy of that document.

Observation:

During the site visit to the Mughan camp on January 25, 2006, it turned out that the workers at the camp didn't have copies of such documents (see Appendix 4, photo 1)

Analysis:

The fact that CCIC hasn't fulfilled these obligations also indicates to the improper control function.

Non-conformance:

The indicated obligation hasn't been fulfilled.

Recommendation:

BTC/SCP should strengthen the control over the reinstatement by contractors and improve the control system to a considerable extent. Responsible collaborators of contracting companies should be provided with necessary documents in accordance with the undertaken obligations.

3.1.3. Obligation:

It is stated in SCP obligations list 1229: To support the construction, the Constructor has to reinstate the used lands in a way satisfying the landowner/local executive body, as well as address the land owner/local executive body for the approval on the reinstatement level after the completion of the construction on the lands of the construction units (camps). In other words, the contractor has to furnish the land owner/local executive body with the document on the lands with adequate reinstatement.

Observation:

During the visits to PK-375- 376+500 Tovuz camp and PK – 237 Yevlakh camp on March 5-7, 2006, as the result of the talks with the Environmental Officer and BTC PR representatives, it was revealed that the camp was fenced with wires in 2003 and the whole area was graveled and due to the completion of the activities in 2005, the camp was emptied. (see Appendix 4, photo 2).

But the area hasn't been restored to its previous state. Information on the area of the camp is missing. No reply was received from the company representatives to our question about the duration of the lease agreement on the area. The people accompanying us were unaware of the implementation period. 20 cm topsoil removed from the camp area had been placed in its vicinity. The time of landscape reinstatement works to be carried out here was unknown. The duration of the final reinstatement is not clear either. According to the field inspector reinstatement in the area is not going to be carried out on a special time schedule, but rather after the completion of other works.

Analysis:

The inspectors accompanying us during site visits had no accurate information.

Non-conformance :

According to the obligations undertaken by the company (SCP obligations list 1229) the reinstatement had to be carried out immediately after the completion of the construction. Though the construction was completed in 2005, reinstatement works haven't been commenced yet.

Recommendation:

The duration of the reinstatement and return of camps with completed activities to their tenants should be determined.

3.1.4. Obligation:

According to Field Environmental Weekly Report (Hasansu, Asrinchay, Tovuzchay) Week Commencing: 25 April 05, Peter Bayliss (out 28.4.05), Paul Walton, Luis Seleme, Paul Bochenski (in 29.4.05) document erosion cover have to be replaced with new ones (as they rot quickly) as the anti-erosion nets rot before the bio-restoration was fully completed.

Observation:

During the visit to Hasansu, Asrinchay, Tovuzchay areas on March 6-7, 2006 we witnessed the implementation of a huge amount of work. Though the works carried out in Hasansu are fascinating, some of them are not consistent with the undertaken obligations. Since the risk of erosion is very big, the anti-erosion bio-grasses had to be under control until full bio-restoration. According to the documents submitted to us, the latest inspection in the area was carried out on April 25, 2005. No further inspection seems to have been carried out since then. The rotten nets hadn't been covered with new ones. This was more obvious at the hillside with a bigger erosion risk (see Appendix 4, photo 3). The grass in the areas was rotten at the time of observation and no plant cover was striking. We haven't got acquainted with the documents on the progress of this process. No obstacles limiting the access to the area were encountered.

The reinstatement in Tovuzchay and PK 375 and Asrin chay areas hasn't been completely carried out (see Appendix 4, photo 4).

Ongoing works in Asrinchay area. The risk of erosion is very big along the pipeline. The slope of the cutting is very steep. The number of anti-erosion nets is not sufficient. In certain areas the topsoil has already undergone erosion.

Analysis:

The observations at Hasansu on March 6, 2006 proved that no observation had been carried in the area since April 25, 2005, the bio-restoration hadn't been completed and the rotting nets hadn't been replaced with new ones. We consider this case a non-conformance due to its irrelevance with the stated obligation. Erosion was already obvious in Tovuzchay and Asrinchay areas since the erosion matting hadn't been properly applied.

Non-conformance:

The replacement of the rotten bionets in incomplete reinstatement areas within Hasansu hasn't been carried out according to the obligations, which in its turn increases the risk of erosion.

Recommendation:

Serious anti-erosion measures should be taken in Hasansu, Tovuzchay and Asrinchay areas characterized with high risk of erosion. These sites should be regularly visited in accordance with the undertaken obligations, especially after heavy rains.

3.1.5. Obligation:

The AGT pipeline project No 410088 (Pipeline Reinstatement Specifications Azerbaijan 410088/10/L/PL/SP/025) paragraph 22.1.1 states that the guide berms should have the capacity of providing the outflow along the pipeline. Thus, two types of outflows are described.

The guide channel should not be deeper than 0.4 m, based on the highest flow within 10 years calculated by the contractor and the width of the channel should be at least double its size. The following minimum requirements should be observed:

- The width at the foot of the channel shall be 0.7m and its total depth shall be 0.3 m (or larger if not sufficient for the flows);
- The channel should be covered with stones (D 50-75 mm) up to 0.15 m depth;
- The erosion matting should be placed as an additional layer below the stone cover for channels with >50m slope (at least small jute or Hessian cover should be applied for this purpose).

- The outflows shall be inspected every two weeks and the company shall be informed about any cracks or damages; these measures should be taken within 14 days or earlier depending on the degree of damage.

Observation:

During the observations at Hasansu, it turned out that water had accumulated in the second guide berm installed in the southern part of the river bed, which means that the guide berm hadn't been installed with the proper slope. The water accumulated here is due to this problem.

Non-conformance:

Records on the inspection of guide berms providing the flow-out of underground waters that has come up to the surface in Hasansu area are not kept in accordance with the obligations.

Recommendation:

The guide berms within Hasansu should be inspected in accordance with the obligations and the central office of the company should be provided with relevant records regularly.

3.1.6. Obligation:

SCP obligation EN 1317 (Reinstatement SCP No 018/a AZ) states that for the purpose of eliminating furrowing, (resulting in) erosion and damage in the vicinity pipeline RoW should not be allowed to be used as a highway. The access to the site should not be permitted in the areas indicated by the company representatives:

- Preparation of berms high enough (at least 1.5 m) for blocking the movement of means of transportation. Berms should be stuck to the vegetation cover or to the foothills where possible to prevent the movement of vehicles from around the berms, or;
- Erection of permanent fences in accordance with project specialation 410088/00/L/CV/SP/004 or;
- Replacement of large stones (with the diameter of 0.3 or larger) dug out during the construction;
- Other methods proposed by the contractor and agreed to by the company.

The criteria applied for the selection of the methods of this type should include their potential efficiency, visual impact, as well as the availability of local materials. Limit to the access to every point shall be agreed on with the corresponding member of the company.

Observation:

Vehicles belonging to the SPS (State Protection Service) officers were moving along the pipeline in all of the inspected areas. It is not clear whether the reinstatement of soil, vegetation and landscape along the pipeline RoW will be possible (PK 411 and PK 430 see Appendix 4, photo 5-6).

Non-conformance:

We note the irrelevance between our observation and the undertaken obligation, since the above mentioned obligations contradict the observed situation.

Recommendation:

The observed case means that the works carried out along the pipeline RoW are useless. We would propose to ban the movement of vehicles along the RoW in accordance with the undertaken obligation.

3.2. On Soil Reinstatement

3.2.1. Obligation:

Section 17.2 of the Reinstatement Specifications and section 17.1 of ESIA state that, the depth of the topsoil should be determined in the areas with necessary drilling.

Observation :

25.01.06.Mughan Camp. I required the records on the depth of the topsoil and on drilling. The documents were presented to me and I carried out the audit of the documents. It became clear that the working records and final documents were compiled by different people. Those people are not specialists in the indicated field, thus the depth of the topsoil was measured after excavation of ditches.

Analysis:

1. The soil is not treated in correspondence with the undertaken obligations and defined requirements:

1) The presented final documents state that the measurement had been carried out by V.M., a field specialist. But the working records indicate the names of different people for these activities.

2) The people who had made these records are not experts on these activities, thus the results of their records are doubtful.

Round numbers as 5 cm, 10 cm (KP 52.500-53.000, 286.045-286.200, 377.650-378.250), 15 cm (KP 59.000-87.000), 20 cm (KP 135.000-138.000, 166.600-172.000), 25 cm (KP 102.150-109.850), 30 cm (KP 287.700-301.780). Such round numbers are rare in the nature. With the exception of Sangachal area, the depth of A humus soil is about 1 meter.

3) According to the presented documents the depth of the topsoil was measured in September-October 2005 and the ditches were dug in 2004, which means that the ditches were dug first and the topsoil depth was measured later.

3.2.2. Obligation :

Section 20, page 22, paragraph 1 of the Reinstatement Specifications state that 2 situations are planned for the subsoil reinstatement: standart and special reinstatement.

Joint inspection by BTC/SCP is specified as a requirement in Reins. document (20.1.1).

Observation :

25.01.06 Mughan Camp. I required for the information on the areas undergone special and standard reinstatement and BTC/SCP inspection documents. I was orally informed about the areas undergone special reinstatement. No inspection documents were introduced.

3.2.3. Obligation :

As stated in section 19.5 of the Reinstatement Specifications, after the pipe surface has been refilled, excess subsoil should be shifted in accordance with the Contract requirements on Environment.

Observation :

25.01.06 Mughan Camp. I required for the records on the shift of subsoil for review. But, the documents weren't introduced to me.

3.2.4. Obligation :

The contractor will proved anti-erosion control to keep the degree of erosion at level 3 or lower (Reins. 15.2).

Observation :

25.01.06. Mughan Camp. I required for the records on erosion mattings for review. The documents were introduced. I couldn't carry out audit due to the fact that the documents were in English.

3.2.5. Obligation:

Contractor will test the degree of oxidation of topsoil and will make records at least every 3 months. (Reins. 17.4)

Observation :

25.01.06. Mughan Camp. I required the documents on the degree of oxidation of the accumulated topsoil for review. But the documents weren't introduced.

3.2.6. Obligation:

During standard reinstatement, the subsoil should be set to the depth of 300 mm without damaging the pipeline isolation or ditch crosses. "Flat lifting" method will be applied for this operation to prevent the mixture when applying the topsoil. Hillside stability, relief, topographical differences, drainage possibilities of surface waters and degree of condensation should be tested by the Contractor and the Company (Reins. 20.1.1).

Observation :

25.01.06. Mughan Camp. I required for the documents on the inspection of hillside stability, relief, topographical differences and degree of condensation by the contractor and company for review. But the documents weren't introduced.

3.2.7. Obligation:

Ditch drilling, refilling of the area beneath pipeline and management of wasteland are planned (B.S. 19).

Observation:

25.01.06. Mughan Camp. I required the documents on the time, depth and location of ditching for review. The documents were introduced, but the documents indicating the depth were not among them.

3.2.8. Obligation:

The surface and subsoil levels will be prevented from mixing during drilling (B.S. 17.3).

Observation :

25.01.06. Mughan Camp. I required the documents on the works for preventing the mixing of surface and subsoil levels and on the inspection of those works during drilling for review, but the documents weren't introduced.

3.2.9. Obligation :

The contractor will provide the topsoil or its equivalent material necessary for the reinstatement of the original productive depth in areas where the depth of original topsoil is 300 mm or less. (Reins. 20.2.)

Observation :

25.01.06. Mughan Camp. I required the documents on the works for the reinstatement of original productive depth and inspection documents for review, but they were not introduced.

3.2.10. Obligation:

Decrease of the degree of erosion through planting local plants, restore of soil in farming areas and reinstatement of local flora in non-farming areas are planned (Reins.25).

Observation :

25.01.06. Mughan Camp. I required the documents on the implementation of activities for the prevention of erosion through planting and restore of soil and on the inspection of those works for review. The document on the implementation was introduced. Due to time limit it was not possible to review and make notes on the document. But the part of the documents on the sowing in later December 2005 caught my attention.

3.2.11. Obligation :

Requirements on additional reinstatement (final condition) plan ecologically sensitive approach towards quarries and standard approach towards special farming areas. (Reins. Annex BA)

Observation :

25.01.06. Mughan Camp. I required information on the condition of the sand quarry in Yevlakh region (about 244 km). The fact that the quarry within Yevlakh region was missing from CCIC list surprised me, since I myself observed this quarry during previous monitoring. Yevlax rayonundan Torpaq karyerin vəziyyəti barəyə məlumat istədim.

3.2.12. Obligation:

It is stated in B.S. 15.1 that the soils will be emptied immediately after the removal of private soil reinstatement installations and written agreement on the level of reinstatement will be acquired from the landowner.

Observation :

05.01.06. Yevlakh Camp. I asked for information on the amount of topsoil within Yevlakh camp, reason of interruption of reinstatement and availability of document proving the written agreement of the landowner. It was stated that reinstatement in small areas would be carried out after the removal of concrete cover. Written agreement document was not available and no information was provided on the amount of topsoil.

Analysis :

The existing topsoil was very little and it would not be sufficient to fulfill even 10% of the minimum requirement.

3.2.13. Obligation :

Section 20, page 22, paragraph of B.S. document states that two situations are planned for the reinstatement of topsoil– standard and special reinstatement. Joint inspection is defined as a requirement in Reins. 20.1.1.

Observation :

06.03.06. Aghstafa 422th km. I wondered about the type of reinstatement carried out in the area. It was stated that standard reinstatement had been implemented. I required BTC/SCP inspection document for review. It was stated that no monitoring or audit had been carried out there and no confirmative document was available.

Analysis:

No documents approving the inspection by BTC/SCP have been introduced.

3.2.14. Obligation:

The productive layer of the soil will be dug out. The contractor is responsible for excess soil (CCP 3.2.1).

Observation :

06.03.06. Aghstafa, Right Bank of Kura. I required the documents on the amount of excess topsoil accumulated in the area and on its further application for review. I was informed that no such document was available.

3.2.15. Obligation :

Contractor will provide anti-erosion control with the purpose of preserving the erosion degree at level 3 or lower (B.S., 15.2)

Observation :

06.03.06. Hasan Su. The soil in the area had been leveled, but the vegetation cover hadn't been restored. The level of erosion observed in the sloping areas was 4 and more. My question on the reason of erosion was ignored.

Analysis: Level 4 erosion was observed in the area.

3.2.16. Obligation:

The Main Principles of Parcellation Program (2.3.1) states that BTC and SCP pipeline routes will be constructed within 44 m RoW.

Observation

07.03.06. Samukh , 312 km. Reinstatement was completed in the area. I asked for the monitoring and audit documents for review. I was informed that they were not available. Wormwood plant which is of a very great importance for the area hadn't been restored. The width of the RoW turned out to be 49 m during measurements, which is 5 m longer. The reason for excess width wasn't explained.

Analysis:

Monitoring and audit documents weren't introduced. The width of the RoW turned out to be 49 m during measurements. The reason for excess 5 m wasn't provided.

3.2.17. Obligation:

The Contractor will carry out complete reinstatement of areas that have undergone the impact of construction (Reins., 10.3)

Observation :

07.03.06. Goranboy, 285 km. I required information on the activities carried out in the area. It was stated that the area had been tilled and prepared for sowing for bio-restoration and that the documents were kept in Mughan.

According to my observation, the area was a farming area. No bio-restoration was planned there. Probably, the representative was unaware of this requirement.

Analysis: Despite the fact that it was a farming area, bio-restoration was planned there.

3.2.18. Obligation:

The Contractor is responsible for the protection of the topsoil productivity (Reins. 17.1).

Observation :

07.03.06. Yevlakh , 244 km. Topsoil had been preserved in the area since late 2004. The obligations require restoration of ground surface layer (productive layer) after pipeline covering. No documents on the commencement of refilling process were presented during the observation.

Analysis:

The ground surface layer was drilled 2 years ago, but no restoration of the productive layer has been carried out here.

Recommendation:

Inventory of the lands with destructed natural fertility, and relevant programs and measures for the restoration of the previous natural condition of these lands should be prepared.

3.2.19. Obligation :

The contractor will provide complete reinstatement of the areas that have undergone the impact of the construction (Reins. 10.3)

Observation :

07.03.06. Yevlakh , 237 km. I asked for the documents on the reinstatement works carried out and to be carried out in the area. The documents weren't introduced. My question was orally answered and informed that bio-restoration had been carried out in a 12 m wide area and fresh sowing will be applied to 44 m area due to the movement of vehicles in the area. No bio-restoration should be carried out in the area due to the fact that it was a farming area. Probably, the representative was unaware of this fact.

Analysis:

The site had been levelled and earth road had been set on the top.

3.2.20. Obligation:

The Contractor will provide the reinstatement of areas that have undergone the impact of construction or related works (Reins.10.3)

Field investigations will be carried out for the visual assessment of the reinstatement measures taken by the contractor within all construction activities. (CCP. 5.2.1.).

Photo presentation was organized in stead of the site visit to volcano areas. (Caroline Young, BTC representative).

Observation :

The appearance of vegetation cover in the area within the indicated months of December-January-February (KP 29) is not possible, since the vegetation of plants during that period is equal to 0. No monitoring or audit had been carried out for more than a year. We have certain doubts and concerns due to the fact that we were prevented from a site visit to the area.

Analysis:

The appearance of vegetation cover within the indicated time is logically, scientifically and practically impossible, since the vegetation of plants during that time is equal to 0.

- No monitoring or audit has been carried out in the area for more than a year.
- We have certain doubts and concerns due to the fact that we were prevented from visiting the area.

3.3. Audit of activities on Bio-restoration

3.3.1. Obligation :

According to the requirement stated in CCP 3.2.4 section, paragraph 3 and section 24, paragraph 1 of Reinstatement Specifications, the contractor should establish an environmental management system for providing quality and timely restoration of damaged biocenosis, and prepare several documents.

SCP and CCIC, the contracting company for the implementation of construction and reinstatement works, have created an excellent environmental management system and prepared documents and standards on restoration of natural structure of bio-diversity. Restoration of bio-diversity programs that cover all stages of the planned works and special methods have been developed and Methodical Documents have been prepared.

Observation:

The audit group was provided with the following documents *in Mugan camp (25.01.06)* and audit was performed on the basis of those documents. "Reinstatement Specifications" which is the main regulations document for the restoration of natural cover (section 25), Construction Method document on EIA and Ecological and Social Management System Materials.(Construction Method Statement, Punchlist, Punchlist KP 395+500 (Gabions) & KP 395+300; Reinstatement Drawing AGT Pipeline Project; BTC 001-B110-PL-PS0-05101.

Analysis :

The program on the restoration of bio-diversity that covers all stages of planned works and documents on method are based on modern norms and standards.

3.3.2.Obligation:

According to the requirement of CCP section 3.2.1, statement 9 and section 25, paragraph 1 of Reinstatement Specifications, the contractor had to prepare the "Plan on Movement of Rare Plant Species from the Pipeline Site".

Observation :

The methodical documents were acquainted with in *Mugan camp (25.01.06)* Field investigations for the discovery of rare species had been carried out at the initial stage of the activities and "Plan on the movement of rare species from the pipeline site". The specialists found out one plant species - Iris ajulitoba. No other rare species are shown in ESIA.

- Pipeline 24-30th kilometer. According to investigations this is the area of the program on the movement of Iris Ajutiloba. This program was carried out with the participation of specialists from Azerbaijan National Academy, Botanical Institution and Mardakan Dendrapark. More than 30 thousand samples were determined during the audit of this program. Prior to the pipeline construction 32-621 bulbs had been transferred to Mardakan arboretum and planted in the test area.

- A site visit was organized to the 24th kilometer section in Gobustan and to Mardakan arboretum. The audit performance in Gobustan showed that, in some experimental areas returned and planted species had been damaged. (most probably, this was due to the grazing sheep). The plants in the experimental area of Mardakan arboretum were in good condition. But during the visit the audit group realized that the plants had been planted in 4 ha area in advance. At present these plants cover about 50% of this area. the employees of arboretum couldn't explain the fact.
- The methodical document on the "Plan of the movement of rare species from pipeline site" which is part of the Program on Reinstatement of bio-diversity that covers every stage of the planned works is based on modern norms and standards.

Non-conformance:

The representative of monitoring group didn't carry out the calculations on moved and increased plants.. (These data haven't been given to the auditor yet). It has not been possible to get information on the number and amount of these plants from Merdekand arboretum up to the present day. These facts are not coincident with "Plan on movement of rare species from pipeline site" and modern quotas and standards.

Recommendation :

SCP company has to take measures for strengthening control over reservation of Iris Akutiloba in Merdekan arboretum and on its return to the area of habitation.

3.3.3. Obligation :

Audit performance on the observation of obligation (357, 362, 367, 370, 376, 470, 471, 495, etc) in the selected areas according to CCP section 3.3, page 31, paragraph 3 and section 25 of Reinstatement Specifications on the bio-restoration of biocenosis should be carried out by the audit group.

Observation :

- Collection of seed materials along the whole pipeline was carried out at optimal time. Necessary condition for reservation of seeds was created and the monitoring on their condition was carried out. (The seeds have been tested and the germination capacity prior to planting was studied).
- The total planting was carried out in 120 kilometer area only by the time of audit performance. Preparation works are carried out in the remaining part of the area. The planting of seeds has been interrupted due to the air condition (winter season). Works are carried out in accordance to the schedule. It was noted that bio-restoration works had been interrupted in the 420-435th km RoW area due to the poor quality recultivation of the land.
- The soil had been restored during the construction of micro tunnels in the cross section between 232 and 411th kilometer section of the pipeline and Kura river, preparation works had been carried out, and conditions had been made ready for seed planting. The composition of the prepared seed materials is in accordance with the approved natural plant composition.
- During the audit performance it was realized that 10 ha area of Tuqay forests had been used for the construction of micro tunnels for the pipeline. This is 4.67 ha more than the planned area. At the same time 8 long-term plant species had been damaged and the environment had suffered the loss of 89,0 million manat (AZM). Acceptance-delivery Punch list on bio-restoration hasn't been carried out yet.
- 212th kilometer –(Samukh region) – Preparation works for planting are being carried out here.
- 235th kilometer - bio-restoration works are held in this area.

- In 285, 420, 423, 435, 438th kilometer sections of the pipeline the biological restoration works are held in different stages. During the observation on the progress of works it was noted that the general level of preparation works is in accordance with modern requirements and standards.

Analysis:

1. It was determined in the approved program that no damage would be caused to Tuqay forests, but 4,67 ha of area had already been damaged. The works hadn't been completed yet and it was impossible to carry out their assessment.
2. In Yevlakh (212th km) and Samukh (235th km) the planting had already been completed, but due to high level of ground waters (salinity) the germination level of the seeds was low. The plants had been damaged by cattle in Samukh region.
3. Practically, along the whole length of the pipeline and also in the areas of bio-restoration , the pipeline security groups drive their vehicles directly within the separated pipeline site.
4. According to the information of the company representatives, at present (during the audit performance) negotiations are carried out with governmental structures on a special corridor for transport in the middle of the pipeline site. If the area of the RoW for the work scope had been taken into account and calculated, the recultivation expenses could have been considerably decreased.

In connection with this, negotiations are carried out with governmental structures on separating transport route for the maintenance of the pipeline in the middle of the pipeline RoW.

Recommendations:

1. SCP company should take measures on the use of excess land and for going beyond the contract with Akstafa Forestry against the contractor and its own employees.
2. Measures should be taken on the utilization of bio-restoration areas by Pipeline Security Service.
3. The SCP company should have taken into account the area of transport corridor for the scope of the planned works in advance. In this regard, the company should find out the stage, when this fault occurred.
 - During the stage of planning of pipeline RoW project;
 - Otherwise, the existence of section on the establishment of route for the security service along the pipeline in contractor's Terms of Reference should be determined, and its observation should be investigated.

3.4. On River Bed Reinstatement

3.4.1. Obligation:

CCP 3.2.4, paragraph 2, and Section 24, paragraph 3 of the Reinstatement Specifications. Covering works mainly in river banks shall be completed within 48 hours. In case of impossibility of completing these activities within 48 hours, the contractor (CCIC) shall come to an agreement with BTC-Co company.

Observation :

Kurdarya is included into the group of shallow rivers. It crosses the pipeline at the 422th km. Reinstatement on the BTC pipeline has already been completed. Reinstatement on SCP is about to be finalized. The pipelines have been laid through open drilling method in the river. The river was returned to its source.

It was not possible to carry out a great part of the reinstatement in Kurdarya river within 48 hours. BTC was informed about the reinstatement works in a few places that took a little more than 48 hours. This issue was agreed upon and the documentation was carried out in the form of reports. The documents are kept in the Baku office of BTC.

Analysis:

In case reinstatement is not possible within 48 hours, the contractor (CCIC) should have come to an agreement with BTC-Co company, but the documentation was carried out in the form of report. This should be noted as a negative case.

The planned reinstatement works haven't been completed by now and additional measures are necessary. The implementation of these measures is under discussion, which indicates the proper implementation of the planned activities.

3.4.2. Obligation:

CCP 3.2.4. section, paragraph 3, and Section 24, paragraph 1 of the Specifications on Reinstatement, according to the requirements, the contractor has to prepare special methods for the crossings and reinstatement of valleys and should also include the measures to be taken during floods. According to the requirements stated in Section 24, paragraph 5 of the Reinstatement Specifications, the contractor has to carry out bed stabilizing in the areas of unstable channels and present it to BTC for approval.

Observation:

A method document for these areas has been prepared and this document reflects the measures to be taken during floods.

Floods for the last 200 years have been studied. The tunnel was supplied with protection wall during construction, which was demolished after the completion of the tunnel.

Hasansu, 398th km

The scope of work carried out here is very huge and at first sight it is astonishing. 150.000 m³ of soil has been removed. Special berms have been installed here. The whole area is covered with erosion nets. Draining systems, namely French drain, have been installed in the area. Ground waters and the flows from the adjacent mountains have been collected through channels, transmitted to the collector made of small river stones and directed into the river. Gabions have been constructed on both banks of the river. Those gabions have been covered with elastic stable synthetic nets. The gabions have been installed both horizontally and vertically. Open drilling has been applied here. The level of erosion has been minimized. Water has been removed through draining and small hills – domes that direct water to the central part have been made to avoid the erosion. The central road, that the ground waters will cross, has been covered with pebble.

Tovuz river, 376th km

Open drilling-cutting method has been applied here. The proper drilling of the ditches allowed the easy installation of the pipe. The pipeline was later concreted.

The river bed hasn't been completely reinstated. Large diameter pipes have been installed at the river bed to function as a temporary artificial bridge at the moment. The natural river flow flows through the metal pipes installed in this river. There are still a lot of work remaining in

the river valley. Thus, several small hills have been covered with anti-erosion nets. Soil hills that prevail in the valley haven't been covered with such nets yet. During the observations of the group members, an artificial stream from the natural river bed was approved. Despite the fact that the initial 10-20 m section of this stream looks like natural, 25-55 m further it is clearly seen that it is an artificial stream. Several pools have appeared in the area of this artificial stream, which is the parts of the river covered with pebble. Since the river direction tends to change in this area, stabilization is carried out with great care.

Asrin river, 375th km

The river flow is not very strong, the water in the river decreases during summer. Both banks of the river have been accurately covered with large-size river stones. Open-drilling method has been applied here as well. Large-size river stones covering the river banks have also been applied in the river beds. The stones covering the banks look like the gabions in Hasan Su.

In the upstream and downstream hills visual erosion channels have appeared along each other, since they haven't been covered with anti-erosion nets. It has been stated that negotiations are going on with BTC for the installation of these nets and the erosion level is expected to be minimized in the near future.

Special methods – method documents have been prepared separately for big crossings. As for small river flow and channels, single generalized (for several channels) method document has been prepared. Measures to be taken during floods have been included into the method document:

- Kura West, 411th km. It was not possible to complete the activities within 48 hours due to the application of tunnel method. All the activities has been agreed on with BTC and documented. Daily and weekly reports have also been sent to the Baku office of BTC.
- Second location of crossing with Kura (5 total locations). HDD hasn't been applied due to the natural structure of the ground. It was also not possible to apply open drilling because of width and high water level of the river.
- Tunnel method that is financially more costly and technically more difficult has been applied here. 2 tunnels of 12 meter depth have been drilled.
- The natural river bed hasn't been damaged and artificially changed due to the application of tunnel method. Reinstatement works have been carried out, but not completed yet.
- Thus, the audit group observed – witnessed the existence of a few small pools as the result of the increase of ground waters. The company official stated that they would be covered with soil.
- No draining channels here. Handing over hasn't been carried out through a punch list yet.

Analysis:

Special methods for the reinstatement of crossings and valleys have been analyzed and their compliance with modern requirements has been approved.

The application of special methods for the reinstatement of crossings and valleys has resulted in the damage of the natural river bed. The works in progress haven't been completed yet and their evaluation hasn't been possible.

Stabilization on the river banks has been carried out in accordance with the plans, daily and weekly reports are prepared and the measures to be taken during floods have already been prepared.

Stabilization is carried out with great care here due to the possibility of the change of river flow direction. But it is difficult to carry out evaluation since the works haven't been completed yet.

At present negotiations on the netting are going on with BTC. Measures on minimizing the erosion in the near future are being planned.

3.4.3. Obligation :

HDD (tunnel) minimizes the number of sediment cases in accordance with the requirements stated in CCP 3.2.6. section, paragraph 1, page 32. Despite all this, there is still some risk of bentonite break out. Measures preventing bentonite and other spillages have been defined.

Observation:

Bentonite and other deposits that can cause sediment have been totally eliminated during tunnel drilling to prevent the risk of bentonite break out in the area. Ground casing has been carried out. Sections of the pipeline that cross rivers are specially isolated and concreted. During the visit to Mughan camp two years ago, the audit group determined the existence of bentonite break out. Bentonite sediment was also found in Chili village. This sediment was completely eliminated during the construction. A method has been selected for the crossings of river beds taking into consideration the soil-ground features. The method of tunneling is very costly and not applicable for small river crossings. HDD has been applied in the village of Chili, Kura East, Guyzay, Aghsu, Garabagh channels and Tughyanchay river.

Analysis:

Concrete programs and plans have been prepared for the total elimination of bentonite break out risk and high level activities are being carried out. But the records on sediment cases haven't been presented to the audit group up to the present day.

IV. Conclusions

1. The implementation and monitoring of the SCP reinstatement activities haven't been organized to the required level at lower organizations (BTC contractors and subcontractors). Documentation in the English language can be shown as a shortcoming, which means that the requirements of the law of the Azerbaijan Republic on the State Language haven't been followed. This also prevents the understanding of the requirements and awareness of the necessary information by the company employees and large community with poor knowledge of English.
2. Though BP/BTC and CCIC undertook the obligation on the implementation of reinstatement in accordance with International standards, they weren't able to fulfill the undertaken obligations during the visit to the audited site.
3. The scope of carried out works, meetings with BTC/SCP representatives and observations during field trips enable us to eliminate the shortcomings, we have discovered and the company is aware of, before the completion of reinstatement along the RoW.
4. In general the ecological measures along SCP meet the modern requirements up to a certain degree and can be applied as successful experience.
5. Taking into consideration that the audit carried out by the working group on the environmental protection is within the program of NGO Capacity Building, it would be for the benefit of the general work to organize this work once a year like audit trips.

V. Acknowledgements

The audit group members express their gratitude to the following people for the realization of the project, for the acquisition and translation of the documents, for the organization of meeting and site visits and for their valuable proposals in audit performance.

- Farda Asadov - OSI – AF / Azerbaijan Executing Director;
- Galib Afandiyev – Director of Oil Profit Transparency Program;
- Esmira Asadullayeva – OSI-AF / Azerbaijan Coordinator of the Project Working Group;
- Matin Akhundlu – BP-BTC Project Coordinator;
- Rizvan Hasanov – Company Security;
- Jalal Mammadov – Supervisor
- Simon Mackwayer – CCIC Field Inspector;
- Fuad Alibalayev – CCIC Manager Assistant on Environment;
- Vugar Ahmadov – CCIC Field Manager on Environment;
- Caroline Young – BTC/SCP;
- Andrew Buckman – BP PR Advisor;
- Elmira Gasimova – BTC Responsible Person on Project Assistance;
- Ramzi Botani – CCIC Manager on Ecology;
- Elnara Huseynova – Collaborator of EST Department;
- Osman Tarzumanov – CCIC Field Inspector;
- Eldar Shukurov – BTC Expert on Plant Protection;
- Clive Morgain – OSI-AF / Azerbaijan International Consultant on Audit Training and Audit;
- Members of Consulting and Training Council during Audit and its Implementation;
- Fikrat Jafarov – Local Sponsor of Ecological Audit Group;
- OSI – AF / Azerbaijan for its financial support;
- Drivers and others who assisted to the project.

APPENDICES

Appendix 1.

Information on Audit group members

- ❖ **Chingiz Gulaliyev.** “Sustainable Development” Public Union has been in function since 2002. The main activity direction of the social unity is to achieve a sustainable development strategy of Azerbaijan and to put it among the richest countries of the world. The organization is taking part in the realization of mutual projects in this direction with international and local NGOs. Chingiz Gulaliyev, a member of the Unity assists to its work in this direction.
- ❖ **Sabuhi Huseynov.** Social Unity Progress for “Stability and Development” has been functioning since 2003. It has taken part in several projects, including Legal Education Outreach Project in 2003, Development of Local Ecological Plan for REM Caucasus in 2004, Ecological Monitoring of BTC Pipeline in 2004, and Ecological Audit Program of SCP in 2005. Sabuhi Huseynov, Head of the Organization is an engineering chemical-technician who graduated from Moscow Fine Chemical Technology University in 1986. He has 12 years of engineering experience. He was Chief of Civil Defense Headquarters in Nizami district of the city of Ganja. Mr. Huseynov has been head of Progress Social Unity since 2003. He was head of Atmosphere Air Subdivision of the Ecological Monitoring of BTC in 2004. He was an auditor of SCP Ecological Audit Group on the reinstatement of river margins in 2005.
E-mail: sabu200478@yahoo.com; progress@gitc.aznet.org
- ❖ **Saleh Huseyn.** “Agroeco Consulting” Center was registered in 1999. The main directions of its activities are the solution of agricultural and ecological problems. The center has implemented 1 international and 8 local projects in this direction so far. Saleh Huseyn, Head of the Center, is a soil expert and has his PhD in agriculture. He is also President of Agroeco Consulting Center. He has broad theoretical and practical experience in agriculture and ecology. Saleh Huseyn has held responsible positions in National Academy of Sciences, Ministry of Agriculture, State Soil Committee and President Apparat of the Republic of Azerbaijan.
- ❖ **Niyazi Aliyev.** “Center of Development of Initiatives” went through state registration as a social unity in the Ministry of Justice on June 25, 1998. The main direction of its activities is the organization of educational measures on the management of ecology and stable development. The center has implemented 5 projects in this direction. Niyazi Aliyev is President of the Center.
- ❖ **Tural Abbasov** holds master’s degree at Azerbaijan State University.

Planned schedule on the audit of activities on the protection of SCP ecological interests

No	Events/Date	October 30	November 6	November 13	November 20	November 27	December 4	December 11	December 18	December 25	January 1	January 8	January 15	January 22	January 29	February 5	February 12	February 19	February 26	March 5	March 12	March 19	
		1.	Contract with OSI/AF																				
2.	Acquisition of the required documents																						
3.	Acquaintance meeting with SCP collaborators																						
4.	Visit to SCP site with group members																						
5.	Visit to the active construction site (....., PK.....)																						
6.	Site visits for the observation on soil reinstatement (PK....., site 4, 5)																						
7.	Site visits for the observation on the reinstatement of river margins (....., ПК.....)																						
8.	Site visits on landscape reinstatement																						
9.	Site visit for the observation on the reinstatement of bio-diversity (ПК ...)																						
10.	Meeting with corresponding CCIC collaborators																						
11.	Meeting with the collaborators of Ministry of Ecology and Natural Resources																						
12.	Compilation and processing of the outcomes																						
13.	Protection of report project																						
14.	Project review with ACI collaborators																						
15.	Report translation																						
16.	Presentation of report to BP/SCP																						
17.	Presentation of the final report to BP/SCP																						
18.	Study of report by BP/SCP																						
19.	Meeting with participants on the agreement on the final report																						
20.	Signing of the final report																						
21.	Informing the public about the report																						

Notes:

1. The contract signed between OSI-AF Azerbaijan and the Team reflects the salaries of the team members and the amount of other expenses related to the activities, payment rules and the settlement of force majeure cases in accordance with Azerbaijani legislation. .

2. It is planned to acquire the BTC and SCP documents directly related to the Environmental Protection and Reinstatement. The process intends to submit the list of the defined documents to organizations and acquire them with the participation of OSI-AF collaborators on the basis of special procedures.
3. It is planned to get acquainted with the SCP officers directly responsible for the environmental protection and reinstatement (responsible person for the aerial survey, environmental protection and reinstatement, groups of involved ecologists, etc.). The purpose of the meeting is the definition and acquisition of the documents related to relevant activities and arrangements of site visits.
4. Joint visits of the group members to the SCP work sites are planned. These trips can be of different types:
 - Trips pre-arranged with the company, with defined place and time;
 - Trips with the purpose of site visit;
 - Trips of meeting and acquaintance character.
5. The main purpose of the trips to the active construction zones is the assessment of the adequacy of activities to internal instruction, the degree of mastering these instructions by the staff and control procedures upon these processes.
6. Performance of public audit of BTC and SCP activities on the approved areas with the purpose of soil reinstatement.
7. Performance of the public audit of BTC and SCP activities on the areas with the approved observation on the reinstatement of river beds.
8. Performance of public audit of BTC and SCP activities on the approved areas in connection with landscape reinstatement.
9. Performance of public audit of BTC and SCP activities on the approved areas in connection with the reinstatement of bio-diversity.
10. Items 11, 12 and 13 consist of the main purpose of compiling the outcomes observed by the group members, their analysis and re-assessment.
11. Item 14 on the preparation of the report project intends the development of the initial version of the audit outcomes by the group members indicated in the first approach.
12. Items 15, 16, 17 and 18 intend the review of the developed project by OSI-AF specialists.
13. Item 19 has the purpose of acquaintance of the audited organizations and contractors with the results of the approved audit report.
14. Item 20 has the purpose of approving audit results with BTC and SCP.
15. Item 21 intends the discussion of ways of informing the public about the audit performed by the group members in accordance with the agreement of BTC and SCP.

Checklist

Questionnaire for Audit of Reinstatement Activity along the BTC/SCP Pipeline Route by CCIC at a first meeting with company personnel.

The audit inquiry we are interested in is on the following areas:

Landscape Reinstatement

1. Sangachal - Gizilmammad PK 0-52
2. Sangachal Hajigabul
3. Areas of mud volcanos
4. Gizilmammad - Borsunlu PK 52-72
5. Gobustan PK 9-11
6. PK 4-5-6th areas
7. Pump Station PSA2
8. Hasan Su PK 390-398
9. Kura 28: PK 100-300

Soil Reinstatement

1. Sangachal - Gizilmammad PK 0- 52
2. Gizilmammad - Borsunlu PK 52-272
3. Borsunlu - Georgia PK 272-443

Vegetation Reinstatement Sangachal PK 52 Reinstatement of Iris areas.

Reinstatement of Water Margins

1. Kura West
2. Hasan su PK 396-398
3. Jeyrankhechmaz PK 8-9
4. Gobustan PK 60-70

Vegetation

1. Section 25.4, page 32, paragraph 4 of Reinstatement Specifications requires the Contractor to prepare Bio-restoration Materials Specifications for presenting it to BTC Co for its approval and describe the number and type of samples to be planted. Provide evidence that meet these requirements.

2. Section 25.5., page 23, paragraph 2 of Reinstatement Specifications requires the Contractor to develop Bio-restoration Schedule and to include pre-construction transplantation or tilling process into this schedule (besides processes on soil preparation after the completion of construction and the care on farming and plants till the end). Indicate evidence proving the fulfillment of these requirements.

Soil

2. Section 17.2, paragraph 1, page 18 of Reinstatement Specifications states that the depth of topsoil will be determined in case of need for drilling. Please indicate records on the thickness of topsoil on the selected areas.

3. Section 20, page 22, page 1 of Reinstatement Specifications states that two situations are planned for subsoil reinstatement – standard and special. Which areas out of the indicated ones are subject to special and standard reinstatement?
4. Joint inspection is stated as a requirement in Section 20.1.1, page 23, paragraph 2 of Reinstatement Specifications. Provide evidence on the inspection of areas by BTC/SCP that have undergone impact with the purpose of subsoil reinstatement in the indicated areas.
5. Please provide for review records to demonstrate where excess subsoil remaining after backfilling has been given to local communities or has been sent for BTC approved disposal as stated in section 19.5, pages 8-21 of Reinstatement Specifications.
6. Please provide for review the records on erosion matting indicated in Annex A of Reinstatement Specifications and replaced in the indicated areas.
7. Has Contractor carried out any interim reinstatement works in the areas that are subject to the impact connected to the installation of SCP pipeline? Has any of these interim works been implemented in the indicated areas? Indicate methods for the above mentioned works as stated in section 14.2.1., page 13, paragraph 1 of Reinstatement Specifications.

Water Margins

8. Section 3.2.4, paragraph 2, page 30 of CCP and section 24, paragraph 3, page 30 of Reinstatement Specifications state that rived bank cover works should be completed within 48 hours. Please, provide evidence meeting these requirements.
9. Section 3.2.4, paragraph 3, page 31 of CCP and section 24, paragraph 3 and 1 of Reinstatement Specifications state that the Contractor should develop special methods for the reinstatement of crossings and valleys and should include measures to be taken during floods into them. Provide evidence proving it.
10. Section 3.2.6., page 32, paragraph 1 of CCP states that HDD (tunnel) minimizes the number of sediment cases. Despite this, there is still some risk of bentonite break out. Provide evidence that reflect the measures for preventing bentonite or other spillages. We would also like you to provide us with the records on any spillage during clean up, constituent and corrective measures.
11. Section 3.2.4, paragraph 3 of CCP and section 24, paragraph 5 of Reinstatement Specifications state that the contractor should carry out bed stabilization in the areas of unstable channels and notify BTC for its approval. The contractor should determine the rivers that need bed stabilizing. Please provide evidence in this regard.

Landscape

12. Have the sensitive biotopes beyond pipeline undergone the impact during the construction activities and especially during the construction of soil dams in sloping areas? If so, provide us with their list, with impact elimination graphic and approving documents.
13. Please provide us with the landscape reinstatement graphic and implementation graphic during the utilization of excess lands in the vicinity of mud volcano ridges, within Gobustan (KM 0-29) and Pumping Station.

14. Please provide us with the list of final full-scale landscape reinstatement areas at points beyond pipeline that have undergone impact (as the result of utilization of transportation means or other).

15. Have the areas that require additional works on agreement during reinstatement been selected on all phases during reinstatement process and where have these areas been registered for additions works? Please introduce us the evidence proving the carried out works.

16. Section 3.2.4, Item 2 (page 30) of CCP states that contours and condition of the interfered parts of water margins should be restored to its pre-construction condition in every possible case. If this is not possible the Contractor has to propose typical ways (with engineering background) and this should be included into the method documents approved by BTC Co.

17. Section 3.2.6 Item 3 (page 32) of CCP states that in practically possible cases streams will be re-profiled for being restored and the relevant materials preserved separately in pipeline will be used for this purpose. Ecological issues will be taken into consideration during the design of areas that require anti-erosion measures for providing long-term stability and efforts will be made for making minimum changes to the river bank or bed substrates and profiles. Please provide evidence proving the fulfillment of this requirement on the indicated areas.

18. Section 3.2.7., item 2 (page 32) of CCP states that the Reinstatement CIPP will describe additional precautions that will be taken in the vicinity of the mud volcano ridge where there is a high risk of wind erosion. These may include pegging down erosion control matting, the use of hydroseeding and the sowing of fast growing species. Please provide evidence that prove the fulfillment of this requirement on the indicated areas.

19. Section 3.2, item 2, page 15, of CCP states that the acceptance and execution of reinstatement plan start with the records on bio-restoration and erosion prior to construction. The Contractor has to carry out investigations on this issue prior to the commencement of the construction and keep topography/video records as a part of activities after the reinstatement works. All this will be based on geodesy information. Please provide us with the documents on the investigation before and after construction including photo and video records and show us the areas that are sensitive according to you.

Some general questions

20. What evidence can you provide for monitoring of reinstatement performance by yourself, the Contractor, as required under Section 5.3, page 39 of the Reinstatement CCP?

21. Please provide the audit group with the evidence providing the adequacy of the carried out activities in all of the indicated areas with KPI's.

22. Display any "System on Following of Measures" for the management and following of measures by CCIC considered necessary as the result of internal and external monitoring/audit.

Photos



Photo 1 . During Meeting at Mughan Camp. January 25, 2006.



Photo 2. PK -237. Yevlakh camp, March 5, 2006.



Photo 3. Hasansu. March 6, 2006



Photo 4. PK 375 Tovuzchay



Photo 5. The pipeline RoW is used as a road (PK 411) March 6, 2006



Photo 6. The pipeline RoW is used as a road (PK 430) March 6, 2006

Summary table

NGO WORKING GROUP TITLE: Ecology AWG

NGO WORKING GROUP MEMBERS: Chingiz Gulaliyev, Saleh Huseyn, Niyazi Aliyev, Sabuhi Huseynov, Tural Abbasov (student).

AUDIR OBJECTIVES:

- 1) Audit of obligations of SCP executirs on landscape reinstatement;**
- 2) Audit of obligations on soil reinstatement during the pipeline construction.**
- 3) Audit of obligations on vegetation reinstatement during the pipeline construction.**
- 4) Audit of obligations on the reinstatement of water margins that water pipeline crosses.**

BP/BTC/SCP responses may be characterized as below:

Accept (A): We accept the reported non-conformance, finding, observation, recommendation. We will take appropriate steps, or provide evidence on how BP/BTC/SCP has already addressed this issue.

Accept with Qualification (AwQ): We understand and appreciate the audit result in question, but we disagree with some aspect of non-conformance, finding, observation or related recommendation, as presented. We therefore “qualify” our agreement by providing details of our policies and/or actions that address the issue(s) raised.

Reject (R): We disagree with the Audit result; in the BP/BTC/SCP Summary provide our views.

Reject with Qualification (RwQ): Company doesn't agree with the finding and the recommendation of Audit Working Group in general, however recognizes existence of some of the challenges.

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Landscape			
Non-conformances			
NC1	<p>Commitment: Section 6.4.4 (AЭT001-1000-EB-MAH -00001 PEB Y02) of the ESMS Manual (Project Procedure – ecological and social management system) requires the performance of audit in accordance with ISO 14001 standards by BTC-Co. It is also stated that, BTC.Co should carry out audit and site inspection of the Contractor during the construction project.</p> <p>Non-conformance: Internal audit report on the reinstatement process is missing. If such a report exists, the company collaborators possess no information about it. This does not correspond to the undertaken obligation.</p>	<p>R1: BTC/SCP reinstatement experts, as well as PR collaborators should have information on the relevant obligations and internal documents.</p>	<p>R: While BP/BTC/SCP are pleased that Audit Group is familiar with our environmental and social management system (which is described in Audit Group report as ‘excellent’), we disagree with the Group’s interpretation of the ESMS and corresponding commitments and activities.</p> <p>In fact, the ESMS stipulates audit and assurance activities will be undertaken to ensure that project activities comply with, and are part of, the overall management system.</p> <p>Audit Group has been given sight of internal (and external) audit reports that evaluate project performance against environmental (and social) standards, as established in ESMS and commitments. Thus audit reports include, but are <i>not limited to</i>, reports on reinstatement. We disagree with the group’s charge that an audit report specifically dealing with reinstatement is <i>missing</i>. When reinstatement activities have been completed, reports focusing on periodic evaluation of reinstatement success and challenges are planned.</p> <p>It should also be noted (as has been repeatedly pointed out to Audit Group) that <i>field inspections</i> are carried out on a daily basis by BTC/SCP and CCIC field staff and form an important part of the auditing process. The field inspections focus on the most significant environmental and social concerns, as identified from the Commitment Register. Results are forwarded to management on a weekly basis, in the form of Weekly Reports, for compliance tracking purposes. (Audit Group has had sight of these documents). Field Inspections are used as a mechanism to more regularly check critical commitments, verify corrective actions are implemented and effective, and follow-up on non-compliances and issues identified in previous audits.</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Landscape			
Non-conformances			
NC2	<p>Commitment Paragraph 2 of the Specifications state that everybody involved in the activities should get acquainted with the document on norms and standards to be applied, as well as be provided with a copy of that document.</p> <p>Non-conformance The indicated obligation hasn't been fulfilled.</p>	<p>R2: BTC/SCP should strengthen the control over the reinstatement by contractors and improve the control system to a considerable extent. Responsible collaborators of contracting companies should be provided with necessary documents in accordance with the undertaken obligations.</p>	<p>R: BP/BTC/SCP and CCIC are currently undertaking world-class reinstatement of the RoW in Azerbaijan, and strongly disagree with the assertion that relevant staff are not aware of norms, standards, and documents that manage these activities.</p> <p>Extremely tight control systems are in place to monitor and audit performance against the ESMS requirements. As mentioned above, these take the form of daily field inspections by BTC/SCP and CCIC, and weekly reporting to management. Control systems also include regular internal auditing, issuing and follow up of Corrective Action Requests (CARs), periodic external audits by a range of organizations including local NGOs, International Finance Institutions, Social Resettlement Action Plan (SRAP) monitoring panel and Caspian Development Advisory Panel (CDAP), all of which have closely scrutinized reinstatement practices implemented by BTC/SCP.</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Landscape			
Non-conformances			
NC3	<p>Commitment It is stated in SCP obligations list 1229: To support the construction, the Constructor has to reinstate the used lands in a way satisfying the landowner/local executive body, as well as address the land owner/local executive body for the approval on the reinstatement level after the completion of the construction on the lands of the construction units (camps). In other words, the contractor has to furnish the land owner/local executive body with the document on the lands with adequate reinstatement.</p> <p>Non-conformance According to the obligations undertaken by the company (SCP obligations list 1229) the reinstatement had to be carried out immediately after the completion of the construction. Though the construction was completed in 2005, reinstatement works haven't been commenced yet.</p>	<p>R3: The duration of the reinstatement and return of camps with completed activities to their tenants should be determined.</p>	<p>RwQ: Audit Group correctly points out that it is the responsibility of BP/BTC/SCP and CCIC to reinstate "used lands" in a manner to the mutual satisfaction of landowner/authority and company. As was pointed out to the Group during site visit, reinstatement of (former) camp sites is well underway, <i>and has taken into account the specific requests of owners</i>. It is inaccurate to say reinstatement has not commenced, and misleading to imply that we are not in regular communication with the landowners. We regret that (evidently) the Audit Group has not contacted the landowners, and in so doing, gained a more complete understanding of the agreements and processes we are undertaking on their behalf.</p> <p>Construction of SCP was in fact mechanically completed in April 2006, and at this point, 100% of the SCP RoW and approximately 50% of the running track had been fully reinstated (Phase 1 and 2 reinstatement). Tovuz camp had also been completely reinstated in accordance with the requirements of the ESMS and to the landowner's satisfaction. Other off RoW facilities were either still in use at this time or in the process of being reinstated, and the full intention is to reinstate all off RoW facilities in accordance with ESMS and/or landowner requirements.</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Landscape			
Non-conformances			
NC4	<p>Commitment According to Field Environmental Weekly Report (Hasansu, Asrinchay, Tovuzchay) Week Commencing: 25 April 05, Peter Bayliss (out 28.4.05), Paul Walton, Luis Seleme, Paul Bochenski (in 29.4.05) document erosion cover have to be replaced with new ones (as they rot quickly) as the anti-erosion nets rot before the bio-restoration was fully completed.</p> <p>Non-conformance The replacement of the rotten bionets in incomplete reinstatement areas within Hasansu hasn't been carried out according to the obligations, which in its turn increases the risk of erosion.</p>	<p>R4: Serious anti-erosion measures should be taken in Hasansu, Tovuzchay and Asrinchay areas characterized with high risk of erosion. These sites should be regularly visited in accordance with the undertaken obligations, especially after heavy rains.</p>	<p>R: The sites in question, as with all important reinstatement sites along RoW, are inspected <i>on a regular basis</i>. Audit Group was given weekly field reports as a reporting sample; they do not indicate the sole visits to these areas, as Group implies.</p> <p>Anti-Erosion netting, as described in Group's finding, are <i>designed to decompose</i>. One of the advantages of the use of this netting is that they are to be left in situ, rather than pulled out (which would cause significant environmental damage). Thus the 'damage' that the group report is normal. It is indeed included in BP/BTC/SCP reinstatement plans to monitor, evaluate, and improve anti-erosion measures as needed. This will include replacing netting <i>when required</i>.</p> <p>BTC/SCP are following the principle strategy that a balance must be sought between replacement of erosion matting and the disturbance to the ground that this in fact causes, which may in fact damage bio-restored areas, and destabilize the area more than if the partially degraded matting were left in place.</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Landscape			
Non-conformances			
NC5	<p>Commitment The AGT pipeline project No 410088 (Pipeline Reinstatement Specifications Azerbaijan 410088/10/L/PL/SP/025) paragraph 22.1.1 states that the guide berms should have the capacity of providing the outflow along the pipeline. The outflows shall be inspected every two weeks and the company shall be informed about any cracks or damages; these measures should be taken within 14 days or earlier depending on the degree of damage.</p> <p>Non-conformance Records on the inspection of guide berms providing the flow-out of underground waters that has come up to the surface in Hasansu area are not kept in accordance with the obligations.</p>	<p>R5: The guide berms within Hasansu should be inspected in accordance with the obligations and the central office of the company should be provided with relevant records regularly.</p>	<p>R: The types of diversion berms constructed at the Hasansu crossing are distinctly different to those referred to in the AGT pipeline project No 410088 (Pipeline Reinstatement Specifications Azerbaijan 410088/10/L/PL/SP/025) paragraph 22.1.1. They have been specifically designed as a site specific solution at this crossing. As noted above, regular field inspections, particularly of areas prone to erosion, are undertaken by BTC/SCP and CCIC. Records of these activities can be found in both daily and weekly field reports. It is inaccurate to imply that inspections are not made; neither is it the case that “records are not kept.”</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Landscape			
Non-conformances			
NC6	<p>Commitment SCP obligation EN 1317 (Reinstatement SCP No 018/a AZ) states that for the purpose of eliminating furrowing, (resulting in) erosion and damage in the vicinity pipeline RoW should not be allowed to be used as a highway. The access to the site should not be permitted in the areas indicated by the company representatives.</p> <p>Non-conformance Vehicles belonging to the SPS (State Protection Service) officers were moving along the pipeline in all of the inspected areas.</p>	<p>R6: We would propose to ban the movement of vehicles along the RoW in accordance with the undertaken obligation.</p>	<p>A: Audit Group has identified a key challenge facing the successful reinstatement of BTC/SCP RoW. BTC/SCP acknowledge SSPS vehicle movements along the RoW as a significant finding, since it means that the commitments within the ESMS with respect to full reinstatement of the RoW cannot be met.</p> <p>We appreciate the desire of the government of Azerbaijan to provide security for the pipelines; our intent is to work with the government to ensure pipeline security while honoring reinstatement commitments.</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Soil			
Findings			
F1	Though it was stated that the surface level of the ground in Yevlakh Temporary Dwelling Camp had been removed, the area where this soil had been removed was not informed about.	R7: Inventory of the lands with destructed natural fertility, and relevant programs and measures for the restoration of the previous natural condition of these lands should be prepared. (negative finding)	R: Topsoil removed from area of Yevlakh camp has been stored along perimeter of area, as was indicated to Audit Group during visit. BP/BTC/SCP and CCIC strongly disagree with the implication that BTC and SCP projects have destroyed “natural fertility” of lands in Azerbaijan, and, while appreciating the utility of such surveys, do not expect to undertake measures <i>beyond</i> the extensive studies (ESIA), inspections, and reinstatement efforts underway. Livelihood restoration, including soil fertility will be monitored on a regular basis post construction internally by BTC/SCP and also externally by the SRAP monitoring panel.
Audit of Obligations on Bio-restoration			
Findings			
F2	The program on the restoration of bio-diversity that covers all stages of planned works and documents on method are based on modern norms and standards (positive).	(positive finding)	A: BP/BTC/SCP and CCIC stand by project construction and reinstatement methods and activities, which we believe are world-class, and appreciate Audit Group’s commendation.
F3	Collection of seed materials along the whole pipeline was carried out at optimal time. Necessary condition for reservation of seeds was created and the monitoring on their condition was carried out. The seeds have been tested and the germination capacity prior to planting was studied (positive).	(positive finding)	A: As above, BP/BTC/SCP and CCIC stand by project construction and reinstatement methods and activities, which we believe are world-class, and appreciate Audit Group’s commendation.

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No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Bio-restoration			
Findings			
F4	It was determined in the approved program that no damage would be caused to Tuqay forests, but 4,67 ha of area had already been damaged. The works hadn't been completed yet and it was impossible to carry out their assessment.	R8: SCP company should take measures on the use of excess land and for going beyond the contract with Akstafa Forestry against the contractor and its own employees. (negative finding)	AwQ: It is misleading to suggest that BP/BTC/SCP and CCIC will leave "unapproved" damage as a legacy of pipeline construction. It should first be noted that pipeline construction requires an enormous amount of temporary, planned impacts and subsequent remediation. In this specific case, the Audit Group has been provided extensive documentation that reveals specific plans and actions regarding the 4.67 ha in question. Thus the Group should be well aware that CCIC applied for permission for temporary use of land in question from the Ministry of Ecology and Natural Resources (MENR). They received this permission, which included stipulations regarding reinstatement of damaged forest, and are working with the Agstafa Forestry Department to complete biorestoration in accordance with the approval granted by MENR. There is no need for SCP to pursue the actions recommended by Audit Group.
F5	Practically, along the whole length of the pipeline and also in the areas of bio- restoration, the pipeline security groups drive their vehicles directly within the separated pipeline site.	R9: Measures should be taken on the utilization of bio-restoration areas by Pipeline Security Service. (negative finding)	A: As noted above, Audit Group has identified a key challenge facing the successful reinstatement of BTC/SCP RoW. We appreciate the desire of the government of Azerbaijan to provide security for the pipelines; our intent is to work with the government to ensure pipeline security while honoring reinstatement commitments.

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Soil			
Non-conformances			
NC7	<p>Commitment According to the requirement of CCP section 3.2.1, statement 9 and section 25, paragraph 1 of Reinstatement Specifications, the contractor had to prepare the “Plan on Movement of Rare Plant Species from the Pipeline Site”.</p> <p>Non-conformance The representative of monitoring group didn’t carry out the calculations on moved and increased plants. It has not been possible to get information on the number and amount of these plants from Merdekand arboretum up to the present day. These facts are not coincident with “Plan on movement of rare species from pipeline site” and modern quotas and standards.</p>	<p>R10: SCP company has to take measures for strengthening control over reservation of Iris Akutiloba in Merdekan arboretum and on its return to the area of habitation.</p>	<p>R: In fact, both the CCP (reinstatement) and the Reinstatement Specifications indicate that “where practicable, rare species will be removed from all project areas...before construction starts, and replaced...during the re-instatement process.</p> <p>Audit Group correctly notes that it has had sight of a “Plan on Movement of Rare Plant Species from the Pipeline Site,” BP/BTC/SCP disagree with the Group’s assessment that management and control over Akutiloba is inadequate. We are satisfied with the efforts of the Merdekan Arboretum, and expect to complete successful reintroduction of this valuable Iris.</p> <p>To this end, an Iris Acutiloba re-introduction strategy has been written and agreed between BTC/SCP and the Azerbaijan Institute of Botany, and will be implemented by the Institute.</p>

No.	Issue	Related Recommendation	BP/BTC/SCP response* (A, AwQ, R, RwQ) and explanation
Audit of Obligations on Water margins			
Findings			
F6	Special methods for the reinstatement of crossings and valleys have been analyzed and their compliance with modern requirements has been approved (positive).	(positive finding)	A: BP/BTC/SCP and CCIC stand by project construction and reinstatement methods and activities, which we believe are world-class, and appreciate Audit Group's commendation.
F7	Stabilization on the river banks has been carried out in accordance with the plans, daily and weekly reports are prepared and the measures to be taken during floods have already been prepared (positive).	(positive finding)	A: As above, BP/BTC/SCP and CCIC stand by project construction and reinstatement methods and activities, which we believe are world-class, and appreciate Audit Group's commendation.
F8	Concrete programs and plans have been prepared for the total elimination of bentonite break out risk and high level activities are being carried out (positive).	(positive finding)	A: As above, BP/BTC/SCP and CCIC stand by project construction and reinstatement methods and activities, which we believe are world-class, and appreciate Audit Group's commendation.