

ENVIRONMENTAL AND SOCIAL MONITORING REPORT

Camisea Natural Gas and Natural Gas Liquids Pipeline Project, Peru

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1.0 INTRODUCTION

The Inter-American Development Bank (IDB) and the Corporación Andina de Fomento (CAF) (collectively the Lead Arrangers or “MLAs”) have been performing independent environmental and social monitoring (IESM) of the Camisea natural gas and natural gas liquids pipeline project (“Downstream Project”) in Peru since September 2002. The MLAs are considering providing partial financing to Transportadora de Gas del Peru (TGP), the company sponsoring the downstream component of the Camisea Project.

The Camisea Project consists of three sub-projects:

1. The gas field in Block 88 and the proposed Fractionation Plant and Export Terminal near Pisco (“Upstream Project”),
2. The natural gas and liquids transportation pipeline (“Downstream Project”), and
3. The natural gas distribution network in Lima and Callao (“Distribution Project”).

The Downstream Project consists of a 33-year concession agreement with TGP to build, own, operate and transfer two major pipeline systems: a 697 kilometer (km) natural gas pipeline and a 575 km natural gas liquids (NGL) pipeline. The two pipelines will be laid in parallel trenches on a common right-of-way (ROW) extending from a gas processing plant at Las Malvinas, located in the Ucayali Basin 431 km east of Lima, to a proposed NGL processing and shipping facility near the port of Pisco, 200 km south of Lima). The natural gas pipeline will run north to the Lima City gate at Lurin from a point east of Pisco (Figure 1).

This monthly report summarizes the construction monitoring activities performed as part of the overall Environmental and Social Due Diligence review in considering financing for the Downstream Project. The monitoring activities conducted during February 2003 are covered in this report.

1.1 Monitoring Objectives

URS Corporation (URS), an international environmental and engineering consulting firm under contract with IDB/CAF, initiated the IESM of the project in September 2002. The MLAs’ review primarily focuses on the Downstream Project, however both the Upstream and Distribution projects are being monitored by URS field personnel because of the overlapping and cumulative environmental and social sensitivity of the tropical rainforest location and impacts. The objectives of the IESM are to provide the MLAs with reliable and unbiased information regarding the project’s compliance with environmental and social management plans and procedures, as well as construction best management practices (BMPs).

The IESM team consists of full-time environmental and social monitors in the field who perform the following principal activities:

- Conducts daily field observations and documents environmental and social procedures and processes that are being implemented by TGP and its contractors;



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- Reviews other construction monitoring activities that are being carried out by TGP and its contractors (Gulf Interstate, Domus, and Knight Piesold);
- Prepares daily reports to IDB/CAF regarding ongoing activities in the field;
- Provides immediate recommendations, as necessary and appropriate, to TGP, Pluspetrol, and their field representatives regarding ways to improve management practices.

The IESM does not include redundant sampling, testing, and other measures that are performed by Knight Piesold and Domus for TGP's environmental and social monitoring programs. For sampling and testing results, one can refer to Knight Piesold's monitoring reports. Likewise, INMAC performs monitoring on behalf of Pluspetrol for the Upstream Project. During February, URS personnel also visited the Upstream Facilities as part of the due diligence on behalf of the Export-Import Bank of the United States. Therefore, in this report, the upstream portions of the project are given a bigger consideration.

These monthly summary reports are also being prepared to document the effectiveness of the project's environmental management plans and procedures (Plan de Manejo Ambiental [PMA]) and the recommendations for improvement wherever applicable. The monthly monitoring reports are available to public through the Camisea Web page, www.camisea.com.pe.

1.2 Report Organization

This monthly monitoring report is a summary of the environmental and social daily and weekly reports and is organized into four major sections:

- Introduction
- Project status and construction activities completed during the current reporting period
- Environmental, health and safety monitoring completed along with observations and recommendations
- Social monitoring completed along with observations and recommendations.

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2.0 PROJECT STATUS AND CONSTRUCTION ACTIVITIES

The following is a summary of the project status and construction activities during February 2003. This information has been obtained from field observations and Pluspetrol and TGP monthly reports.

2.1 Upstream Project

2.1.1 3-D Seismic

The seismic exploration of Block 88 had been complete since October 2002.

2.1.2 Flow Lines

No new flow lines were being laid during the month of February 2003. Installation of erosion and sediment control, re-forestation and reclamation measures were ongoing along the flowline between Las Malvinas and the production well cluster at San Martin-1. Installation of a temporary bridge at the Sachavacay crossing and at KP 2+34 and KP 4+257 continued during February.

The San Martin-2 base camp was being installed during February; the base camp will be used during the construction of the ROW flow line between San Martin 1 and San Martin 3, as well as drilling of wells at San Martin-3.

A daily average of 40 people stayed at the KP 10+500 and KP 20+000 camps.

Monitoring of the water, air and noise quality parameters continued at the KP 10+000 and KP 20+000 camps during the month of February. Limited archeological monitoring of the flowline was conducted during February.

2.1.3 Gas Plant and Air Strip at Las Malvinas

During February, several aspects of the Las Malvinas processing plant construction were completed:

- Construction of the concrete foundation for equipment at the gas plant;
- Construction of the workshop and warehouse facilities;
- Construction of the west side perimeter drainage at the airfield, and east side perimeter drainage at the gas plant;
- Clearing of the vegetation along the southern approach to the landing strip; and
- Construction of the concrete supports for the pipe storage areas.

A daily average of 280 people was accommodated at Las Malvinas base camp.

Solid waste generated at Las Malvinas Camp increased by approximately 217 tons, the majority of the solid waste generated was non-hazardous industrial waste. A small portion of the waste was contaminated soil. Approximately 2 tons of wood, carton and concrete were disposed on site. A total of 10 tons of organic waste was incinerated on site. Approximately 8 tons of solid waste and 40 cylinders containing used oil, contaminated water and soil, and absorbent pads were shipped of for final disposal in Pucallpa.

Implementation of soil erosion control measures continued around the gas plant and airport. Seeding of the side slopes of the perimeter drainage channel with "centrocema", and seeding of the disposal and stockpile areas continued. Maintenance of the erosion and sediment control measures along the flow line ROW, the flow line and the gas plant was also conducted during February.

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Several training classes were conducted at the Las Malvinas camp on waste management and spill prevention issues. Monitoring of the water, air and noise quality parameters continued at the campsite during the month of February. Groundwater samples were tested for assess the quality of the water for potential use at the camp. Archeological monitoring of the area of influence at Gas Plant and airstrip also continued during February.

2.1.4 San Martin – 1 Well Pad

Perforation of the San Martin well 100024 was initiated at the beginning of the month. By the end of the month the total vertical drilling reached about 1,200 meters.

A daily average of 177 people stayed at the San Martin -1 camp. Thirty-two tons of solid waste was generated at the site, and 5.4 tons of organic wastes were incinerated onsite.

The north side slope of the SM-1 platform that had failed due to the heavy rains was being stabilized and measures were being taken to control further soil erosion. The drainage channels were being relocated and breakers were being installed to reduce the flow velocity and minimize erosion. Maintenance of the sedimentation ponds and drainage channels were also performed in February.

Monitoring of the air, noise and water quality parameters at the camp continued during the month of February.

Pluspetrol also provided 105 hours of worker training on environmental and health and safety issues (water treatment, waste management, community relations, and emergency response).

2.1.5 Fluvial Transportation

T&S Camero, on behalf of Pluspetrol was conducting daily inspections of the fluvial transportation program in February. There exist a total of nine control points between Las Malvinas and Maldonadillo along the Lower Urubamba River. Inspections include boat speed, contents, and other factors. Non-hazardous solid waste generated at the control points and ships were collected and sent to Las Malvinas camp for storage and final disposal. A total of 3,157 Kg of solid waste were generated.

URS visited the communities along the Urubamba River, potentially impacted by the fluvial transportation, in order to obtain feedback from these communities regarding the fluvial transportation program.

2.2 Downstream Project

2.2.1 Right-of-Way

During the month of February, the pipeline ROW survey, clearing, trenching, stringing and bending, welding and coating, lower-in and backfill, regrading and installation of the optic fiber cable continued mainly in the Sierra and Coastal sectors. In the Selva I and II sectors, the activities consisted of improving the camp conditions, storing the gas pipes delivered at Las Malvinas and Chocoriari camps, and preparation of the equipment. The crossing activities of the Urubamba River near Chocoriari continued during February.

Transportation of the gas pipes along the Urubamba River continued. Pipes for the Kiteni, Chimparina and Kepashiato camps were ready for shipment.

In addition, in the Sierra sector re-composition of the ROW has started, and construction of the second tunnel in the San Antonio spread was initiated but is progressing slowly. In the Coastal sector grading of the ROW between Humay and Lurin and Humay and Huancano has started. In the agricultural areas, the topsoil is being stockpiled and culverts have been installed at irrigation channels crossings.

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The following is a summary of the pipeline ROW status as of the end of February:

Natural Gas

Approximately 61.5 percent of the natural gas pipeline ROW was cleared, 60.1 percent graded, 28.5 percent trenched, 27.8 percent pipe stringing, 26.7 percent welded, 17.4 percent lowered-in, 13.7 percent backfilled, and 14.2 percent of the fiber optic cable installed.

Natural Gas Liquids

Approximately 75.5 percent of the NGL pipeline ROW was cleared, 73.6 percent graded, 48.1 percent trenched, 44.2 percent pipe stringing, 41.1 percent welded, 38.4 percent lowered-in and 37.8 percent backfilled.

River and Road Crossings

The horizontal directional drilling activities for the Urubamba River crossing continued near Chocoriari during February.

2.2.2 Construction Camps

Thirteen base and satellite camps, including the main camp in Pisco, were open during the month of February along the ROW. Four were located within the Selva I and II sectors (Chocoriari, Chimparina, Kepashiato, and Kiteni,) with skeletal crew for maintenance purposes, and eight were active in the Sierra sector (San Antonio, Toccate, Pacobamba, Acocro, Vinchos, Rumichaca, Patibamba and Huaytara). In the Coastal sector construction of the Humay camp was completed.

2.2.3 Other Downstream Project Activities

Grading of Pumping Stations 4 (PS4) continued according to schedule and the concrete work continued. Grading construction activities for PS3 also continued in February.

3.0 ENVIRONMENTAL, HEALTH AND SAFETY MONITORING

3.1 Introduction

URS provided independent monitoring of the effectiveness of environmental, health and safety (EHS) and social mitigation measures during construction. The monitoring was conducted by visiting active construction sites to observe implementation of measures contained in the Plan de Manejo Ambiental (PMA), TGP's Health and Safety (H&S) Plans and the construction specifications.

Specific works that were observed included project infrastructure facilities, such as potable water intake, treatment and distribution; collection, treatment and disposal of sanitary and storm water; installation of erosion and sediment control measures; drilling mud management; work camp safety and sanitary conditions; and clearing of the ROW and helipads. Monitoring observations also covered implementation of health and safety control. The following sites were visited during the February reporting period:

Upstream

Las Malvinas camps (Pluspetrol, Sade-JJC, G&M), gas plant and facilities:

Nuevo Mundo and Camisea camps and the former Peruanita seismic camp.

Fluvial Traffic Control Point No. 8; and Heliport # 51 used for seismic activities.

San Martin 1 well pad; and future site of San Martin 3 well pad.

Flow Lines: (KP 0+000 to KP 14+800)



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Downstream

Pipeline ROW: (KP 0+800 to KP 2+500); KP 12+000 to KP 172+500 (aerial survey by helicopter); KP 296+000 to KP 302+000; KP 308+300 to KP 309+750; KP 314+500 to KP 319+000; KP 347+000 to KP 356+250 and KP 417+000 to 432+000. KP 458+500 to KP 464+500, KP 478+000 to KP 490+000, KP 452+000 to KP 452+500 and KP 553+900 to 554+600.

Access Roads: San Miguel – Patibamba – Pacobamba – Toccate - San Antonio roadway; the Panamerican Highway access (KP 216).

Camps: Vinchos, Rumichaca, Huaytará, San Antonio, Acocro, Chocoriari and Humay

A Public Hearing on the Cañete route variation was attended.

Pertinent sections of the PMA that were the focus of monitoring include:

- Prevention, correction and/or mitigation plan.
- Waste management plan
- Environmental training plan
- Contingency plan
- TGP's/Pluspetrol's H&S Plans

3.2 Environmental, Health and Safety Observations

A summary of activities where PMA implementation was adequate, as observed during February, is described in the following subsections:

3.2.1 Upstream Project

Gas Plant and other Facilities at Las Malvinas. There is an ongoing program of induction briefings and training regarding environment, health and safety, and native communities. These training programs are targeted towards workers either contracted directly by Pluspetrol or indirectly through its subcontractors.

Construction of the perimeter storm drainage channels for the gas plant and airfield runway is nearly 95% complete. This has greatly improved surface water runoff management from the streams that were intersected by the construction of the runway and gas plant.

Nuevo Mundo Camp. The grounding system and the secondary containment (geomembrane) are being repaired around empty fuel tanks (two JP-1 tanks and two diesel tanks, each with a capacity of 1,000 m³). The shipment of solid wastes and contaminated soils to Pucallpa for proper final disposal is underway.

San Martin 1 Well Platform. Improvement works are ongoing, including drainage works, means of access, storage of cuttings, etc. Stabilization and erosion control measures were conducted at the north side slope of the platform that had failed previously.

Fluvial Traffic Control Point No. 8. The Supervision of Fluvial Transportation Program is underway. This program will provide a continual supervision of the boats and barges utilized by Pluspetrol and Techint on the Lower Urubamba.

Pluspetrol and Sade Camps at Las Malvinas. The overall conditions of Pluspetrol and Sade camps were in good. Practically all of the solid wastes have been sent to Pucallpa for proper final disposal. Contaminated soils were placed in bags, which were then placed upon pallets (50 bags each) and wrapped in plastic for subsequent transport to treatment centers.

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Flow Line ROW. Erosion and sediment control measures were implemented along the flow line ROW. Vertical steel beams with a horizontal concrete beams were installed in the areas where the ROW width is narrow in order to support the pipes. The beams are buried between 9 to 12 meters deep and located on either side of the gully or depressed area, similar to the bridge abutments, that provides support to the pipes. The area between KP 4+000 and 5+400, known as the “caracol”, additional erosion control and stability measures are required. The area is very unstable due to the steep slopes and deep gullies. At KP 12+800 the side slopes of the ROW present unstable conditions that need to be addressed immediately. The channel at the bottom of the slopes shows accumulation of sediments, the support beams shows erosion around the steel beams. Revegetation of the ROW is underway. Tree species such as “caoba” and “tornillo” were planted along the ROW, and the area that will serve as the access has been revegetated with “paja pichi, these are natural species from the area. The side slopes at KP 14+700 required additional seeding.”

3.2.2 Downstream Project

Access Roads

Diesel Spill Site (Libertadores Highway - Km. 174): Clean-up of the spill affected area continued. The riparian areas of the stream flowing towards the Seco River have been restored and revegetated. In addition, a wire fence was set in place in order to prevent cattle from damaging the completed restoration work.

San Miguel – Patibamba – Pacobamba – Tocate - San Antonio Roadway: Appropriate traffic control measures were implemented for speed control. Control posts are located in Patibamba, Santa Catalina de Tranca and Tocate. Landslides along the road continue to occur due to rainfall. Normally, cleaning and maintenance activities are the responsibility of Province Municipalities. However, because of intensive traffic by project vehicles and the fact that part of this road will be co-located with the pipeline ROW (approximately 15 Km of Tocate-San Antonio Sector), these maintenance activities are being performed by Techint.

San Antonio - Tocate Roadway (KM 35 to KM 72): In order to avoid landslides caused by fill embankments (to prepare for the pipeline ROW), stabilization measures such as retention walls (using logs and compacted soil) are being built. At cultural resource sites, appropriate protection, excavation, data recovery, and curation of archeological artifacts have been performed. All archeological activities are being performed according to the Conservation and Protection of Archeological Heritage Laws in Peru.

Camps

Induction training courses on environmental protection issues, health and safety, and community relations were given to new workers. Courses for defensive driving and 4-wheel vehicle operation were given to Project Inspectors, Coordinators, and Supervisors that will be assigned to the Coastal Zone.

At the San Antonio Camp, service and infrastructure improvements were implemented. The Camp Manager’s cooperation toward problem solving problems is acknowledged.

On February 25, 2003, one of the 50,000 gallon bladders containing Diesel 2 ruptured at the Chacoriari camp creating a wave action that overtopped the secondary containment berm. The bladder contained 45,000 gallons of diesel fuel when it failed. It was reported that the majority of the fuel was contained in the secondary containment system, however approximately 100 gallons reached the Urubamba River. The response team from the Chocoriari camp installed absorbent and barrier pads in the river and at the of the spill, and a pit/berm was open before the river to contain the spilled fuel. Approximately 360 square meters of soil was contaminated. The soils were removed and stored for final disposal. This is the second incident involving the rupture of a fuel bladder, and the cause is being attributed to a material failure.

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Pipeline ROW

TGP's environmental inspectors in the Coastal Zone have experienced good cooperation and coordination with the contractor (Techint) with regard to implementing actions to minimize negative environmental impacts.

As part of the Environmental Impact Assessment process for the Cañete Alternative, a Public Hearing was held. A copy of the Executive Summary of the EIA was provided to the public that attended.

The following observations were made:

- It was explained that the route of the Cañete alternative was selected to avoid the complex agricultural drainage systems that were encountered along the original route (land likewise avoid rehabilitation projects sponsored by the Ministry of Agriculture).
- The pipeline construction process was explained in highly technical language and without the benefit of any schematic illustrations or other graphics.
- The explanation of the EMP should have been much more extensive and detailed.
- The question regarding the hiring of local labor was not answered adequately. It was suggested that from 400 to 450 persons would be hired; however, the EIA states that only 250 persons are foreseen to be hired. This question should have been anticipated and a proper answer should have been prepared in advance.
- Response to questions regarding the probability of pipeline leaks and explosions was also inadequate. There should have been more emphasis on describing the details of the pipeline's safety measures such as pipe coating, cathodic protection, block valves, the SCADA system, routine surveillance, etc.

3.3 Deficiencies

Implementation of the PMA in the areas observed on the downstream project, mainly the Sierra and Coastal sectors were acceptable. Although overall compliance remains acceptable, one would expect to see improvement in performance. The Selva sector remains closed until March 31, 2003 when operations will resume.

While improvement has been noted for correcting previously identified deficiencies, new deficiencies are continually being observed. Implementation of proper environmental practices continues to lag behind other construction operations. Specific locations along with concerns and recommendations were discussed in the field with the respective company representatives, as appropriate.

The following discussion focuses on general issues rather than specific occurrences or deficiencies. The primary concerns with the Downstream Project during the month of February 2003 could be grouped into four general categories. These categories of observed deficiencies and the probable underlying causes are generally the same as reported in previous monitoring reports.

1. Effective waste management and sanitary practices at camps
2. Timely implementation of spill prevention and secondary containment measures at locations where fuels, lubricants, and other potential contaminants are stored.
3. Timely installation of Best Management Practices to prevent land sliding and excessive erosion and sedimentation of surface waters and bofedale wetlands. There is an urgent need to implement slope stabilization, erosion control, and maintenance/repair of existing BMP's on ROW sections through the Selva, which have been degraded from heavy rainfall.

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4. Coordination of clean-up and restoration activities to ensure that all sites are reclaimed and to avoid unnecessary disturbance to restored areas.

Waste Management

In most instances, acceptable waste management practices are being followed along the ROW and in the camps. However, consistent and comprehensive implementation of proper waste management practices has lagged or has been incorrectly applied (mostly in the work camps). Although notable effort was made during this reporting period, there is need for further improvements, most notably Huaytará, Rumichaca, Acocro and Humay camps.

Probable causes include:

1. Inadequate due diligence, leadership by project management and insufficient allocation of workers assigned to waste management.
2. Insufficient surveillance and enforcement by TGP regarding waste management issues.
3. Inadequate engineering design.

Recommendations to improve performance on this issue include:

1. Techint should provide better onsite supervision and where needed, increase the number of workers dedicated to waste management in accordance with the PMA.
2. TGP should take a stronger contractual position to compel Techint to maintain acceptable waste management practices in full compliance with the PMA.

Spill Prevention and Secondary Containment

Most deficiencies in the deployment of spill contingency and prevention measures continue to be observed in the work camps. The most common locations include warehouse areas for bulk fuel/lubricant storage and storage of other potential contaminants used for construction. No reportable incidents occurred as a result of these deficiencies.

Probable causes include:

1. Techint's priority on pipelaying production to recover from schedule delays, as opposed to a coordinated effort to focus due attention to all aspects of construction.
2. Insufficient due diligence by operations and logistics personnel
3. Inadequate leadership and training to crews responsible for the proper implementation of spill prevention.
4. Insufficient dedicated staff to implement measures.

Recommendations to improve performance on this issue include:

1. Provide better onsite supervision to identify potential problems and to direct proper implementation of spill prevention and containment practices for camps and other bulk storage areas.
2. Increase the number of crews responsible for implementing proper methods for spill prevention and material storage.
3. Diligent onsite enforcement by TGP.

Best Management Practices

Erosion and sediment control measures have been installed in most locations (e.g., ≥ 80 percent) where needed along the ROW. Since construction has now been underway since April 2002, this application rate should be considered only marginally acceptable and efforts should be made to bring the compliance level to the 95% level. The lag in timely and

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effective erosion and sediment control implementation is a recurring deficiency that is inconsistent with the PMA and Techint's environmental specifications. It is appropriate to expect that Techint would be familiar with these practices at this stage of construction.

Most of the deficiencies observed during February focused on the lack of erosion and sediment control measures in the vicinity of bofedale wetlands and at stream/river crossings. This appears to be the result of Techint's inability to give due attention to integrating environmental protection into the sequence of work, resulting in erosion control crews not being able to keep up with the rest of the construction work.

In the Selva, high rainfall and runoff have overwhelmed existing control measures and created new concerns that should be promptly corrected as soon as conditions improve. TGP should continue to identify and prioritize problem areas that will require remedial action, and ensure that they are properly addressed as soon as it becomes feasible to commence work in this sector.

Most likely causes for the erosion control problems observed include:

1. Inability of erosion control crews to keep up with other construction activities.
2. Emphasis by Techint on pipelaying production rather than other important responsibilities.
3. Ineffective oversight and enforcement by TGP.
4. Erosion control crew demobilization during the holiday recess.

Recommendations to improve performance on this issue include:

1. TGP should provide better surveillance and diligent onsite enforcement.
2. TGP should continue to prioritize areas for receiving stabilization work and BMP installation by Techint. For remote sites, this work should be initiated in a timely manner after the rainy season.
3. Provide better onsite supervision and where necessary, increase the number of workers dedicated to erosion control crews and provide better training regarding erosion control practices.

Coordination of Clean-up and Restoration

It has been observed that restoration crews have missed some access roads and off-ROW project sites. This requires some amount of backtracking through sections of restored ROW to properly address these omissions. Use of the restored ROW by vehicles and equipment negates the effectiveness of the original restoration work.

Most likely causes for the erosion control problems observed include:

1. Inadequate coordination and supervision of cleanup crews by Techint.
2. Ineffective oversight and enforcement by TGP.

Recommendations to improve performance on this issue include:

1. Techint should coordinate restoration activities so that sites that require reclamation work are not omitted.
2. TGP should provide better surveillance and diligent onsite enforcement.

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4.0 SOCIAL MONITORING

4.1 Introduction

URS also monitored the effectiveness of Pluspetrol and TGP's Community Relations Plan (CRP). The purpose of this plan is to identify, understand, and manage key social aspects of the project that impact the communities within the project's area of influence. Pluspetrol and TGP have implemented a Community Relations Office to implement the different programs included in the CRP. The Community Relations Office is composed of a community relation manager, a supervisor, and a team of coordinators, who are responsible for the fieldwork.

The monitoring was conducted by visiting active construction camps, communities, and settlements. The following sites were visited during February 2003.

- Nuevo Mundo, Las Malvinas (upstream), Rumichaca, Huaytara and Acocro camps
- Communities of Segakiato, Cashiriari, Nueva Luz, Maria, Sepahua, Timpia, Andaraccay, Vinchos, Ccasanccay, Parcco, Pinao, Seccelambras, Pampamarca, Huicco, Concepcion 8 de Diciembre Ex-tranca, Huaytara, Santa Rosa de Tambo, Ccoñañe, Asabran, Occollo, Cayramayo, and Rosaspampa, the Cañete Valley, and Malvinas settlement.

Specific monitoring of the following programs was conducted:

- Community Relations and Training Program
- Communications and Consultation Program
- Local Development Program
- Temporary local hiring programs

In general, the programs specified in TGP's and Pluspetrol's CRP are underway. The following is a summary of the observations and recommendations for the reporting period.

4.1.1 Observations

Community Relations and Training Program

The TGP Community Relations Training Program is designed to prevent, minimize, and manage negative social impacts within the area of influence. Under this program, Pluspetrol and TGP conducted the following activities:

- Members of the Community Monitoring Committee (CMC) from Segakiato and Cashiriari, conducted an inspection of the San Martin 1 well.
- Under the Medical Contingency Plan, Pluspetrol provided assistance to evacuate a child from Nueva Luz and his family to Lima for a medical procedure. Also a child from the Cashiriari community was evacuated due to a bite from a poisonous snake. Pluspetrol also provided transportation to MINSA personnel, teachers from Sepahua and authorities from the communities of Sepahua, Bufe Pozo and Kirigety to and from Lima.
- Pluspetrol signed the fluvial impact agreement with the community of Kirigueti. The agreement covers a period of three years.
- Pluspetrol has incorporated to its Social Department a Machiguenga person as coordinator. Other communities had showed interest and hope that Pluspetrol will give them an opportunity to integrate the Pluspetrol's Social Department.

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- “No Vacancies” sign was posted at the Rumichaca camp. Techint also provided an explanation to the people looking for work about the Temporary local Hiring Program. After the explanation people that came from other parts of Peru left the land that belongs to the community of Ccarhuaccpampa where they settle temporary.
- During a meeting between the Ayacucho’s ombudsman office, OSINERG, TGP’s community relations officer for the Sierra sector and URS social monitor, the ombudsman office representative indicated that her office will provide the necessary training to the local communities on their rights under the Peruvian laws.

Communication and Consultation Program

- Pluspetrol held a meeting with the authorities from the Segakiato community to coordinate and monitor the agreements signed with the community. Negotiations for the use of the land during 2003 currently occupied by the SADE camps at the KP 10+500 and KP 20+000 in the flow line, were initiated with the community.
- A meeting at the Tupac Amaru community was held to explain the agreement related to the compensation due to the fluvial transportation.

Local Product Acquisition Program

Pluspetrol purchased seedling of pajapichi from the Segakiato community in the amount of 22,000 nuevos soles, and plant trees from the Miaria and Sensa communities in the amount of 300 nuevos for the re-forestation of the flow line ROW. TGP under this program does not purchase local products.

Land Compensation Program

TGP continued its negotiations for the use of land along the ROW in the Sierra and Coastal sectors. Negotiations were held in the Cañete and Pisco valleys in the coast, and in the Chiquintirca community in the Sierra.

Local Development Program

- On February 2 and 3, Pluspetrol conducted a workshop for the Community Monitoring Committee Members (MCM) at the Shivankoreni community. Twenty monitors and representatives from CECONAMA, COMARU and FECONAYY attended the workshop. The workshop included issues such as erosion control and environmental measures and procedures at the camps.
- As part of the local development program, SENCICO on behalf of Pluspetrol conducted a topographic survey of the Ticumpinia-Chocorairi community for the construction of the students’ shelter.
- TGP conducted a workshop at the community of Timpia to provide information to the communities about the Local Development Program and help the communities to identify priorities for local development. Similar workshops were implemented in the Sierra sector at the communities of Concepción 8 de Diciembre Ex-tranca, San José de Parcco and Huaytará. Scholarships were identified as the most important issue by the communities for their development during the meetings.

Temporary Local Hiring Programs

During the month of February, Pluspetrol hired 3 new local people for its sub-contractor CSM for the disposal of spoils at the San Martin 1 well pad site, and 4 new hires to work in the maintenance of Las Malvinas Camp. Likewise, TGP hired 206 and 31 local people in the Sierra and Costa sectors.

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Camp Conditions

The construction camps in general, provide adequate accommodation for the workers. At the Malvinas camp, a new camp is being built for the EPC1 contract awarded to SADE-SKANSKA, JJ Calmet & Latin Tecno. The camp will accommodate a peak of 900 people during May, June and July. The camp will be provided with modules, each module will accommodate 96 people and will be provided with 16 bathrooms and 16 showers, hot and cold water. A treatment plant for potable water and a treatment plant for wastewater are also under construction.

Other Issues

- TGP approved the acquisition of material to implement the Vinchos community center. Also, purchased 25 aluminum sheets for the community.
- Techint will fix damages cause by the construction to the Ccsanccay community access road. The access road was closed by the community.

4.1.2 Recommendations

Community Relations and Training Program

TGP and Pluspetrol are continuing with the implementation of their community relation and training programs. The workshops to train the Community Liaison Officers (CLO) have been very positive.

Pluspetrol should promote the Machiguenga coordinator to Community relation Officer at its Social Department and hire somebody else to coordinate the radio operations to enhance and improve the community relations with the communities within the area of influence.

TGP should reinforce its Workers Conduct Code in the Coastal area where the ROW will cross more populated areas and contact with the community members are more likely to happen.

Communication and Consultation Program

Pluspetrol should improve their communications programs to provide more adequate and accurate information regarding their commitments during the construction and operation of the project. There are still complaints by the communities located within the area of influence of the project that they are not getting this information.

TGP's communication program in the Coastal sector continued to be weak. Communities are not advised in advance of when, how and for how long construction will impact populated areas, communities and land farms. In order to accomplish this task, TGP should increase the number of CLOs and train them with communication skills and provide transportation, materials and tools to reach the people from the Coastal areas and provide them with accurate information.

Land Compensation Program

TGP should continue implementing the land compensation and relocation programs more effectively. Members of the Pinao, Seccelambras, Pampamarca, Huicco and Paccahuanca communities have expressed their concern regarding compensation of their land affected by the project. They indicated that was not previous compensation agreement signed with TGP, however, the ROW was already opened affecting their land. Similar situations exist along the ROW in the Sierra and Coastal sectors where communities are awaiting to be compensated or sign the agreements.

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Local Development Program

TGP should analyze carefully the implementation of a scholarship program before its implementation. The program shall be coordinated with the Ministry of Education, NGOs, and other educational institutions to make sure that the program satisfies the communities' expectations, and avoids the negative experience from Shell's scholarship program

Temporary Local Hiring Program

Expectations for local hiring are high in the coastal sector. It is important that TGP communicates with these communities the level of local hiring that is expected during construction and make it clear that any hiring will be done only through TGP's Local Hiring Program. Misunderstanding or false expectations could end up in the interruption of the construction activities by the communities as had happened in the Sierra sector.

Other Issues

The presence of children and other people along the ROW continue to be a concern in the Sierra sector. TGP should take safety measures to avoid children close to the pipe trenches to prevent accidents. These measures shall be implemented especially in populated areas.

Very poor conditions at the Graña y Montero camp at Las Malvinas were observed during the month of February. The dorm camps are over crowded, the illumination of the tents are very poor with only one light per tent, the floors were only covered with geomembrane over natural soil, and the facilities (bathrooms) were not sufficient to satisfy the needs of the people. The big dorm tent was divided on the rear back and created a storage area to deposit "hazardous" materials, such as cement, epoxy and chemicals for the water and wastewater treatment plants. The wall that divided the dorm area and the storage area was made of plastic and was only half of the tent's height, not providing adequate separation to the workers sleeping on the tent. Pluspetrol shall take immediate steps to improve the conditions at this camp, and eliminate the storage on the back of the big tent. Also, Pluspetrol should ensure that in future, Graña y Montero will provide its workers with proper accommodations at its camps in accordance with the PMA.

During the last week of January and beginning of February an E-coli epidemic at the Graña y Montero camp was detected. Sixty-six workers were affected and treated at the Pluspetrol's medical facility at Las Malvinas. Results of the water and food samples analyzed indicated that the source was the treated water at the Graña y Montero camp. Pluspetrol shall enforce on its contractors the same standards included in the PMA.

5.0 FOLLOW-UP ACTIONS

The observations and recommendations discussed above have been discussed with TGP's and Pluspetrols' on-site inspection staff and will be tracked for compliance during subsequent monitoring.