

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 planning to provide 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.

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 November 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.

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 November 2003. This information has been obtained from field observations and Pluspetrol and TGP monthly reports.

2.1 Upstream Project

See the November 2003 Pluspetrol Monthly Report for information regarding the upstream project status.

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2.2 Downstream Project

See the November 2003 Knight Piezold Monthly Report for information regarding the downstream project status.

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 work on the ROW and helipads. Monitoring observations also covered implementation of health and safety control. The following sites were visited during the November reporting period:

Upstream

Lurín City Gate

Gas Fractionation Plant and Maritime Platform

Downstream Facilities

Chocoriari Camp

Nuevo Poyentimari Camp

San Antonio Camp

Acocro Camp

Patibamba Camp

Asia Camp

Humay Camp

Machinery storage yard in Puerto San Martin

Scraper Facilities at KP 501+000

Kiteni – Kepashiato Road

Downstream Pipeline ROW

KP 2+500 to KP 5+750

KP 6+900 to KP 12+500

KP 16+000 to KP 17+350

KP 56+250 to KP 58+900

KP 98+500 to KP 102+300

KP 125+300 to KP 149+200

KP 176+700 to KP 178+900

KP 168+600 to KP 205+000

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KP 226+000 to KP 238+000

KP 245+500 to KP 247+900

KP 252+600

KP 264+800 to KP 275+000

KP 459+000 to KP 494+000

KP 501+000

KP 676+000 to KP 689+100

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

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

3.2 Environmental, Health and Safety Observations

A summary of activities where the PMA was properly implemented, as observed during November, is described in the following subsections:

3.2.1 Upstream Project

Lurín City Gate.

1. Workers have been provided with full Personal Protective Equipment
2. A new facility for the storage of fuel cylinders was constructed.
3. Improved storage practices for chemical products and installation of secondary containment for the electrical generation group.

Gas Fractionation Plant

1. To encourage compliance with health, safety and environmental policies in the worksite, a "Health, Safety and Cleanliness" contest has been launched.
2. Worksites are clean and orderly and the workers are using the appropriate type of protective equipment for the type of work being performed.
3. To improve the collection system for solid waste generated in the different worksites, two pickup trucks have been made available to transport waste material to the waste storage area.
4. In compliance with the Environmental Management Plan, the marine environmental monitoring—called Early Warning Monitoring—is being performed and a Baseline is being prepared, the parameters of which will be used to monitor undersea excavation.

Metal Fabrication Workshop and Marine Platform

1. These sites show a satisfactory level of tidiness and cleanliness, and equipment has been placed on portable spill containment trays.
2. A contingency plan has been prepared based on the contractors' health and safety procedures, considering the different types of work involved and the risks represented.

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3.2.2 Downstream Project

General

1. Some of the recommendations raised by IESM Monitors in previous monthly reports were corrected at the camps.

Camps, Pump Stations and Other Facilities

San Antonio Camp

1. Used tires were transported to authorized final disposal sites
2. Common and hazardous waste were removed from the mechanical workshop, used batteries were sent to recycling centers and expired fire extinguishers were replaced.

Acocro Camp

1. Disposal methods for organic wastes were improved
2. The drainage channel located behind the mechanical workshop was cleaned up
3. Polyurethane cylinders were removed from the ground and camp.

Patibamba Camp

1. Environmental works included construction of two storage facilities for lubricant cylinders,
2. Adequate solid waste classification, packing and labeling, treatment and filling of former effluent infiltration ponds was observed
3. Improvement of housekeeping practices at the camp was observed.

Scraper (Pigging) Facilities KP 501+000

1. The work area is tidy and well maintained.
2. Safety signs have been placed near open ditches and in other sites that represent any risk.
3. The electric generators have been placed in secondary spill containment trays

Pipeline ROW

General

Final restoration in progress on ROW and surrounding affected areas (general restoration, special geotechnical work, revegetation and reforestation). The following critical sectors are scheduled to be restored by December 20, 2003:

Base	Sector	Km
Chocoriari	0 - 12	12
Chocoriari	16 - 21	5
Vilcabamba	52 - 60	8
Shimaa	90 - 114	24
Kepashiato	123 - 126	3
Segakiato	137 - 140	3
Comerciato	149 - 152	3
	Specific tasks	5
	Total Km	63

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This work is being executed by 585 workers (divided into 8 brigades) with the support of bulldozers and backhoes. If weather permits, it is planned to extend the work in some sectors, with a goal of approximately 75 km to be restored.

ROW KP 2+500 to KP 5+750

1. This segment of the ROW is mostly flat. Pipeline construction and ROW restoration have been completed. Implementation of geotechnical stabilization works in ravines, is pending.
2. Pasture seeding (*Centrocrema macrocarpum* and *Crotalaria juncea*), which began in late September, is showing excellent germination and growth. Sowing in rows and holes has produced better results than random broadcast sowing.
3. Problems detected by TGP during monitoring and evaluation of reforestation work (inadequate extraction, transport and handling of plantings, sowing holes too deep, low sowing density, low variability index, etc.) were overcome with the training of reforestation personnel.

ROW KP 6+900 to KP 12+500

1. This section of the ROW features an undulating profile with slopes of 100 to 250 meters in length and slope gradients varying from 20 to 50%. Pipeline construction and ROW restoration are concluded. Geotechnical works, as well as revegetation and reforestation, are underway. The geotechnical work that is being executed on the ROW appears to be adequate.
2. Slope breakers are being installed with a 3 to 5% gradient. The flow breakers channel is lined with soil-cement bags or soil bags. The berm above the breakers is seed with *Centrocrema*, and covered with jute cloth. To ensure stability of the flow breakers, they are reinforced with wooden stakes, in sectors where it is required.
3. All runoff collection and drainage channels are being lined with soil-cement bags. Similar to flow breakers, some channel sectors are reinforced with wooden stakes.
4. In order to prevent undermining of the natural watercourse of the ravines, gabions are being installed along their margins, as well as stone or soil-cement bag mattresses. Sediment barriers are installed at the discharge point with tree-trunk gabions.
5. In areas with moderate to steep slopes, *Vetiveria zizanioides* cuttings are being planted to provide additional stability.
6. Slopes at KP 9+700 to KP 9+850 (with 50% slope gradients) were completely covered with jute cloth following seeding.

ROW KP 16+000 to 17+350

1. The ROW features undulating contours with slopes 100 to 250 meters in length, and slope gradients varying between 20 and 40%. Pipeline construction is concluded, while the implementation of geotechnical works is in progress. The access road has not been restored yet.
2. The geotechnical work being executed along the ROW and adjacent areas are adequate. Runoff collector and drainage channels are being built. Slopes with steep gradients are being completely covered with jute fabric following seeding.
3. Geotechnical work on areas with large fill embankments (dump sites) between KP 16+950 (former 17+200) and KP 17+200 (former 17+400) include installation of drainage channels and dissipaters (all of them lined with soil-cement bags), recontouring, seeding, and covering with jute fabric. *Vetiveria* cuttings have also been planted.

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ROW KP 98+500 to KP 102+300 (Shimaa sector)

1. This sector features undulating relief, slopes of 100-300 m in length, and gradients between 10 and 30%. Pipeline construction and ROW restoration are now complete. Special geotechnical work is in progress (erosion control and slope stabilization, and revegetation with grass species (*Centrosema macrocarpum*, *Crotalaria juncea*, *Brachiaria brizantha* and *Vetiver zizanioides*). Reforestation with native shrub species is scheduled to begin soon.
2. Restoration work is satisfactory and, as far as possible, much of the land has been restored to its original relief and contour. Erosion control works being executed along the ROW and lateral backfill slopes (those with slight to moderate gradients) are satisfactory. Lateral (fill embankment) slopes with slight to moderate gradients are also being stabilized with wooden planks.
3. Slope breakers are measured with a clinometer to ensure that they are constructed at the correct angle (3 to 5%). The channels of the breakers are lined with soil cement and the ridge is protected with a jute blanket following seeding with *Centrocema*. Where needed wooden planks have been installed to provide additional reinforcement to the slope breakers.
4. All the runoff collector channels and flow dissipaters are being lined with soil-cement bags. Where needed, the channels are reinforced with wooden planks.

ROW KP 125+300 to KP 149+200 (Kepashiato and Segakiato Sectors)

1. Pipeline construction has been completed and final restoration is in progress.
2. Geotechnical work being executed on lateral (fill) slopes appears to be satisfactory. Slopes are being restored, reseeded (with *Brachiaria decumbens*) and protected with jute blankets. The runoff collector channels and flow dissipaters are being lined with soil-cement bags.

ROW KP 226 to KP 234+800 (former KPs, sector between the Torobamba River and Las Nubes)

1. Pipeline construction is completed and final restoration of the ROW is underway.
2. In order to define the species that are to be used during ROW revegetation (mountain-range area), TGP is performing ground agronomic characterization and soil use surveys.
3. To prevent sliding of material coming from the ROW, towards the road (Patibamba – Chilcas), stone gabions are being constructed.
4. The stone bordering walls (pircas) that were destroyed during construction are being adequately restored.

ROW KP 264+800 to KP 275+000 (former KPs)

1. This section of ROW features rolling hill topography. Pipeline construction and ROW restoration are concluded. Revegetation of the sector is pending.
2. Proper topsoil salvage that was practiced during initial ROW grading provides will provide a good growth medium and seed bank to facilitate revegetation. The original land contour was restored to the extent possible and the topsoil has been re-spread over the restored ROW.
3. Small preexisting drainages in were restored through the construction of stone channels.
4. In order to determine the quantity of seed (kg/ha) that will be required for revegetation in the Alto Andina zone (KP 284+150-new; 4175 m.a.s.l.), a sowing density test was performed. The mixture of seeds used consisted of black oats, white and red clover, *dactylis* as well as English and Italian rye grass. The densities tested were 45, 50, 55, 60 and 65 seed kg/ha.

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ROW KP 459+000 to KP 494+000

1. Pipeline construction is nearly complete, only some tie-ins and the installation of mainline valves are pending. Restoration of this sector is in progress.
2. At the Charcas ravine near Huáncano (KP 459+000 to 464+100), all graded soil that was laid on the bottom of the ravine was removed and the lateral slopes were rounded off.
3. Restoration works are being executed in a seemingly adequate manner. The original land profile is being restored to the extent possible.
4. In agricultural lands, where the ditch is still open (tie-ins), pipes were installed to allow the passage of water from one side of the ROW to the other, in order to keep the irrigation system running.
5. At the La Quinga archeological site (KP 477+600), adequate artifact salvage and data collection work was completed. Salvaged artifacts featured ceramic vases and the remains of a presumably public building, which belonged to the Nazca culture.

ROW KP 676+000 to KP 689+100 (former KPs)

1. ROW grading and leveling activities are adequate in agricultural lands.
2. Sewers were installed in the irrigation channels of this sector (San Juan de Caladores channel and lateral La Cruz channel), in order to prevent crops from being affected.
3. ROW boundaries are properly flagged. The width of the ROW is only 18 meters in this sector, which will help reduce negative environmental impacts, without affecting construction progress or safety conditions.
4. During ROW leveling, vegetation is being removed at ground level (leaving the root system undisturbed), this will allow for an adequate and fast restoration.

ROW KP 676+000 to KP 679+300

1. At the end of each workday, maintenance work is performed on the irrigation canals that cross the ROW where culverts have not been installed.

3.3 Deficiencies

The following discussion focuses on general issues rather than specific occurrences or deficiencies. During November, IESM Monitors provided 84 recommendations for improvements or corrective action, which represents approximately 62% decrease over the October reporting period. Specific details of these recommendations have been provided to the respective company representatives, as appropriate.

As pipeline construction approaches mechanical completion, the number of deficiencies associated with the implementation of temporary erosion control measures (Best Management Practices) has declined significantly. Likewise, the relative numbers of recommendations associated with clean-up activities, e.g., waste management and long-term erosion control stabilization has increased. As such, these may be classified as “punch-list” items that need to be reconciled at some point during the restoration phase.

The recommendations provided by IESM Monitors during the month of November 2003 can be grouped into five general categories. Nearly all are associated with the Downstream Project. These categories of observed deficiencies and the probable underlying causes are generally the same as those reported in previous monitoring reports. The numbers in parentheses indicate the number and associated percentage of IESM Monitor Recommendations for corrective action in each category for the month.

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1. Timely implementation of spill prevention and secondary containment measures at locations where fuels, lubricants, and other potential contaminants (including contaminated soils) are stored (**18 recommendations = 21% of total; previous month, 33 recommendations = 24% of total**).
2. Timely installation of Best Management Practices to prevent land sliding and excessive erosion and sedimentation of surface waters (**4 recommendations = 5% of total; previous month, 7 recommendations = 6% of total**).
3. Effective Health and Safety Management (**17 recommendations = 20% of total; previous month, 25 recommendations = 22% of total**).
4. Effective waste management and sanitary practices at camps and along the ROW (**11 recommendations = 13% of total; previous month, 17 recommendations = 13% of total**).
5. Implementation of effective clean-up/restoration and slope stabilization, including timely remediation of failed efforts (**34 recommendations = 41% of total; previous month, 42 recommendations = 32% of total**).

Spill Prevention and Secondary Containment

Most deficiencies in the deployment of spill contingency and prevention measures continue to be observed in the work camps, and continue to be a high-ranking deficiency. The most common deficiency is associated with the lack of secondary containment measures at warehouse areas for bulk fuel/lubricant storage and storage of other potential contaminants used for construction. Other problems are associated with the need for isolating contaminated soils at semi-permanent work sites (e.g., maintenance areas, fabrication areas, bulk storage areas).

The continued failure in the proper implementation of spill prevention and secondary containment measures, proper removal/disposal of contaminated soils, and general housekeeping in camps and worksites represents a chronic problem that has not abated. As concluded in previous monthly summary reports, one would expect to see improvement in overall compliance with these measures by this stage in the project. This suggests an attitude of negligence on the part of the Contractor and failure to compel compliance on the part of the Owner.

Best Management Practices

Throughout construction, erosion and sediment control measures were installed in the majority of locations where needed along the ROW. During November, number of deficiencies observed was relatively static and mostly associated with hydrostatic testing operations, as opposed to new ROW opening. With the majority of ongoing construction taking place in the coastal desert, the need for temporary BMP's has been significantly reduced.

Health and Safety Management

There were no major incidents reported during November. Most recommendations by IESM Monitors focused on general housekeeping at camps and worksites to remove potential hazards. The need for placing warning signs and safety fencing around open trenches near congested areas was also a prominent concern.

As always, safety is an issue that needs to be reinforced daily at the crew level.

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Waste Management

In most instances, acceptable waste management practices are being followed along the ROW and in the camps. Most of the deficiencies identified during October were associated with the abandonment of work camps, ancillary work sites, and the ROW, where the removal of construction waste and excess soil and rock has not been completed. Another recurrent and prominent deficiency is the need for upgrading wastewater treatment facilities in some of the camps, where the current occupancy rate exceeds original design capacity.

Effective Cleanup/Restoration and Stabilization

As seen in Section 3.2 above, considerable work has successfully been completed during the cleanup and restoration phase. The increased number of recommendations associated with this issue during November may be considered as typical to most pipeline projects. As such, they may be considered to “punch list” items that will require attention throughout the remaining restoration phases of the project.

3.3.1 Reconnaissance Survey of Project Facilities

During the period of November 12 – 18, 2003, a senior pipeline construction specialist from URS participated in a spot-check survey of the project to evaluate the status of cleanup, restoration and stabilization activities completed to date. The following discussions present general conclusions that were made during the reconnaissance survey.

Overall, PlusPetrol has done a very good job in implementing final restoration of the flowlines and well pads. There appears to be a good level of revegetation (both planted and “volunteer”). Of particular significance is the fact that PlusPetrol has retained erosion control experts to direct the oversight of final restoration/stabilization activities.

Rough cleanup and preliminary restoration/stabilization work has been completed along TGP's ROW between KP 0 and KP 83; although ongoing hydrostatic testing of the pipelines has necessitated leaving an access trail open along the ROW to the south of the Urubamba River. This will preclude much of the final erosion control and stabilization work through this sector prior to the onset of the rainy season. The most intensive effort has been done between KP 0 to KP 12 by special permanent erosion control (“PEC”) crews. The PEC program involves location-specific soil stabilization measures, installation of drainage control measures, seeding, and transplanting of vegetation cover from native plant nurseries. This work is being done by Techint on a time-and-materials basis. Weather conditions will dictate the progress that these crews can effectively make until the rainy season ends. Throughout much of the Selva sector, there are numerous areas that will require special erosion control and geotechnical work to overcome problems with slope stability and landsliding before construction may be considered to be adequately complete. TGP plans to pursue this work through the rainy season and into 2004.

In the Sierra sector, most of the clean-up and restoration work has been satisfactorily completed. The grasslands and bofedale wetlands have been recontoured and permanent erosion control measures (mostly slope breakers) have been installed. Contours and ground elevations appear to be properly restored in the bofedale wetlands and it is expected that these should recover when natural hydrologic conditions become reestablished. With the exception of a few locations, it was observed that topsoil was properly salvaged and restored during final clean-up. Seeding of the ROW is planned for the very near future in conjunction with the rainy season.

Most of Coastal sector consists of barren sand desert, with very few environmental concerns. Agricultural lands near Cañete were spot-checked to assess adequacy of topsoil salvage, restoration of irrigation channels and final disposition of croplands (soil decompaction and rock removal). Outside of a few instances where topsoil was not preserved, the work appears acceptable. Irrigation channels are being restored to the satisfaction of the jurisdictional authorities. Excess rock is being removed from croplands.

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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 November 2003.

- Las Malvinas, San Martin 3 (upstream), Chocoriari, Chimparina, Itariato, Kepashiato, Patibamba, Pacobamba and San Antonio camps
- Communities of Camisea, Nuevo Mundo, Nueva Luz, Miaria, Sepahua, Timpia, Ticumpinia, Monte Cramelo, Itariato, Alto Itariato, Alto Manugali, Mayapu, Puerto Huallana, Kepashiato, Tocate, Huyrapata, Cajadela, Chirquintirca, Sacharaccay, Huayllahura, Chilinga, Chacco, Aquila, Tranca, and the Tupac Amaru, Kamaquiriato and Bajo Mantalo settlements.

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:

- On November 7, 8 and 9, 2003, the Third Community Environmental Monitoring Plan (PMAC) workshop was held at the Nuevo Mundo community. Sixteen community promoter, local authorities, members of CONAP and CECONAMA, and representatives from TGP attended the workshop. The objective of the workshop was to implement the PMAC program through the active participation of the local population in the environmental monitoring of the Camisea Project. Pro-Naturaleza conducted the workshop.
- TGP held informative meetings about the Camisea Project for the members of the Mayapu, Camana and Puerto Huallana communities located outside the project's area of influence. During the meetings TGP hired nine people from the Mayapu community to work in the revegetation crews. A representative of CECONAMA attended the meetings.

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- Representatives from Pro-Naturaleza presented and distributed the book “Plan de Manejo Ambiental Comunitario, PMAC (Community Environmental Monitoring Plan) to members of the PMAC. The book includes the results of the first year monitoring, color photographs and color graphics.
- Pluspetrol signed an agreement with the Cayetano Heredia University to conduct an assessment of the impacts on the health and well being on native communities due to the project. The assessment will be conducted in two native communities within the project’s area of influence (Segaquito and Cashiriari) and two communities outside the area of influence (Mayapo and Puerto Huallana) and compare the results.
- Pluspetrol continues to provide safety induction to the new hires and people visiting the San Martin 3 well site. Issues such as personal safety, emergency evacuation exits and roads, and location of extinguishers are included in the induction.
- On November 24, 2003, members of the PMAC conducted an environmental monitoring of the downstream ROW between the Tupac Amaru settlement and Cochoriari. The purpose of the monitoring was to evaluate the implementation of soil erosion and sediment control measures, ROW clean up and reclamation activities. Monitoring continued on November 25 at the community of Ticumpinia, on November 26 at the Chocorairi camp and on November 27 at the community of Camana.

Communication and Consultation Program

- On November 12 TGP and CECONAMA representatives met with members of the Mayapu, Puerto Huallan y Camana communities to discuss the project’s social and environmental issues related to these communities.
- Pluspetrol’s Native Community Department continued the distribution of the “Bajo Urubamba, Matshiguengas y Yanis” book within the area of influence of the Upstream Project. Each community received 5 volumes of the mentioned books for distribution to local authorities, school’s teachers, mothers club and cultural promoters.
- A coordination meeting was held between local authorities from Nuevo Mundo and Ticumpinia communities. The purpose of the meeting was for authorities of Ticumpinia to visit the recently inaugurated “Communal Hall” at Nuevo Mundo and get information on the positive and negative experiences during the construction process of the communal hall.
- From November 11 through the 15, 2003, Pluspetrol visited the nine communities located outside the project’s area of influence with the Atalaya Regional Indigenous Organization (Organization Indigena Regional Atalaya, OIRA). During the site visit Pluspetrol presented the results of the socio-economic evaluation due to the fluvial transportation that was based to determine the compensation for these communities. Pluspetrol signed Letters of Understanding with these communities.

Local Product Acquisition Program

See the November 2003 Pluspetrol Monthly Report for information regarding local product acquisition at the upstream project. TPG under this program does not purchase local products.

Land Compensation Program

Pluspetrol signed Letters of Understanding agreements with the nine communities located outside the project’s area of influence for the compensation due to the fluvial transportation

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impacts. Although, Pluspetrol has not approved compensation claims for aerial impacts for the Mayapo and Puerto Hualluna communities along the Picha River, however, it has approved the construction of a facility at these communities as a donation gesture.

Meridian on behalf of TGP started the final topographic survey to delineate the location of the perimeter fence around the PC3 and PC4. Results of the survey will be critical to determine the compensation amounts to the Chirquintirca community. Previous to the starting of the survey work, TGP met with members of the community that no new negotiations will be conducted until the survey work is finish, however, existing ones will be honored. TGP also signed a compensation agreement with the Tupac Amaru Cattle Association for the impacts to land outside the ROW and proceeded with the payments.

Local Development Program

As part of the Local Development Program (LDP), TGP continued its support to the communities along the ROW. At Tocate TGP proceeded with the grading of two areas (1,500 m² and 1,000 m²) for the construction of houses for the community. TGP conducted the bidding process for the construction of two classrooms and sanitary services at Manguriari, and the construction of three classrooms and sanitary services at the Kuviriari-Palmeras settlement.

Construction of the Mothers Club and the Students Lodging facilities, sponsored by Pluspetrol, continued at the community of Camisea. Construction of the Yine-Yani Communities Federation Offices continued at Sepahua.

Temporary Local Hiring Programs

See the November 2003 Pluspetrol Monthly Report for information regarding Pluspetrol's local hiring. See the November 2003 Night Piezold Monthly Report for information regarding TGP's local hiring.

Other Issues

- Techint donated four computers to the San Martin School teachers located in San Antonio. TGP will donate another five computers.
- Pluspetrol delivered medical equipment to the Sepahua Hospital as part of the fluvial compensation. Staff from the equipment provider is training local staff in the operation and maintenance of the equipment.
- TGP delivered 917 mosquito nets to seventeen communities in the Selva sector to support the control of malaria in this sector.
- Techint donated 103 mattresses to the Ticumpinia community and 20 mattresses and kitchen utensils to the Timpia community.
- TGP provided transportation to evacuate a minor from the Alto Managuli settlement that suffered an accident to the Kamaquiriato Health Center.
- Under the Code of Conduct, Techint fired a drunk-driver that under the influence of alcohol produce damages to house at the Sachaccaray community.

4.1.2 Recommendations

Community Relations and Training Program

TGP and Pluspetrol should improve and reinforce its community relations with the communities within the area of influence of the project. During the month of November

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several observations were made and/or claims received from people, landowners and authorities that have been impacted by the construction activities.

- Members of the Mayapu and Puerto Huallana have been complaining of excessive noise produced by the aerial transportation that scares their animals. TGP and Pluspetrol should investigate the claim and modified the flight routes if necessary.
- TGP should coordinate with Techint and provided support and technical assistant to the San Antonio Annex community to connect the channel that crosses the ROW at KP 162 with the main channel discharging into the river.
- Techint should take a proactive attitude and proceed immediately with the repair of areas affected during the construction activities or at least schedule one instead of waiting for the landowners' claims. At Chirquintica during the clearing of the PC3 access road large quantities of rock fell into an agricultural land that has not been removed. At Cajadela, in the community of Anchiuay, the access road has been impacted by a landslide produced at the ROW; however, no action was taken to restore the access road.
- TGP should make sure that its sub-contractor Walsh fulfils its obligations with the community workers at the nurseries. Local workers complained that Walsh is not making on time salary payments, is not providing the required protection gear and equipment to perform work while raining, is not providing technical assistance and plant plague control, is not providing adequate lodging for the workers, and is not informing about the social benefits according to the law.

Communication and Consultation Program

TGP and Pluspetrol should improve and reinforce its communication and consultation program.

Pluspetrol should make all efforts to attend schedule workshops and meetings with the Community Environmental Monitoring Members (Plusterol did not attend the first day of the third workshop meeting held in Nueva Mundo) to clarify promoters of any questions or concerns during the workshops.

As construction of the ROW is coming to an end, several communities are requesting (or will request) that certain temporary infrastructure be left in place for the use of the communities. TGP should continue its communication with the communities and inform them that any temporary infrastructure built for the construction of the ROW (access roads, bridges, land grading and others) will be dismantled and the areas restored to its original conditions in accordance with the approved EIA. Any such request shall only be done and approved by the Ministry of Energy and Mines (MEM). Any requests received by TGP should be transmitted to the MEM for its resolution.

Land Compensation Program

TGP should take a more proactive attitude to resolve the compensation claims for land impacted due to the construction of the ROW and beyond. Landowners and communities along the ROW claim that they have not received compensation for their affected properties or the compensation was made to the community instead of the owner of the property. Members of the Huayllahura community continued claiming that they have not been compensated, because this issue has not been resolved a member of the community stood in the excavated trench while a backhoe was performing backfill operations. While this attitude was unsafe, the operator and supervisor's attitude were even worst because the

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operator kept on dumping earth into the trench endangering the life of the peasant and the supervisor did not stop the operations until the IDB monitors asked him to do so.

Local Development Program

TGP should continue its Land Development Program support in all areas of the project. Execution of some of the projects has been delayed now for some time such as in San Antonio and Huallhua, Itariato, Shimaa, y Alto Manugali. TGP should also concentrate on productive activities of sustainable nature this can be accomplished by establishing institutional agreements with organizations such as FAO and NGO's that have experience in productive regional activities.

Temporary Local Hiring Program

As the construction activities of the ROW are coming to completion the demand of local work is decreasing, and the demand and anxiety of certain sector is increasing. It is important then that TGP and Pluspetrol continue communicating the level of local hiring that is expected for the remaining of the construction, and focus more in the Local Development Programs.

Other Issues

TGP and Pluspetrol should reinforce the Code of Conduct. During the month of November several complains were received from violations to the Code of Conduct by their workers in Sepahua, Kirigeti, and Huayllahura.

At Pacobamaba a TGP officer was observed distributing candy at the gate of the camp to children from the Pacobamba community, TGP should reinforce induction to avoid similar situations along the ROW.

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.