



**ANTAPACCCAY OBTAINS OHSAS 18001
AND ISO 14001 RECERTIFICATIONS**

**WE GOT
AN A IN
SAFETY**



It is a pleasure to address you once again in this second edition of the Antapaccay Magazine, in which we review the most important events experienced at our mining operation in the second half of the year. I would like to start by congratulating Antapaccay's entire team for the recertifications of OHSAS 18001 and ISO 14001 standards. This fills us with pride because it proves that our safety and environmental management systems have matured and strengthened.

The recertifications show that we are one of the safest operations in the country and globally. We have worked very hard to create a healthy and injury-free environment. The credit goes to everyone, both our employees and our strategic partners, with whom we are in tune to ensure the continuity of our operations and the safety of our workforce.

I would like to thank all of you. Let us continue to improve.

Many companies fail in times of crisis, such as the one we are still facing. We have managed to keep afloat, because we were able to adopt preventative actions, improve our cost controls and optimise our processes. Indeed, we bet on increasing and optimising our production process, the result of which was implementation of a third flotation row at our concentrator plant that increased the ore processing volume and the capacity for recovery. We already have the first outcomes; and they are very favourable. We are sure that we will continue to optimise our production even further.

With thanks to the joint work of the Maintenance, Engineering and Services and Legal Departments, another aspect to highlight is Antapaccay's success in connecting with the 220kV Network of the National Interconnected Electric System. This work started with the construction of a temporary substation to start up the concentrator plant in 2012, aligning us with the national standard.

In this edition we also learn more about the progress of our closure plan for the Tintaya mine, and our total social investment during the last thirteen years. The Framework Agreement has enabled us to carry out one thousand projects benefitting 75 farming communities from Espinar. We have renewed the commitment to continue to promote the development of the province with our economic contributions.

Enjoy the reading.

Cordially yours,

Edgardo Orderique
General Manager

 Cover Article

ANTAPACCAY IS NOW CONNECTED TO THE 220KV NETWORK OF THE NATIONAL ELECTRIC SYSTEM. WE ARE CONNECTED TO THE NATIONAL ELECTRIC INTERCONNECTED SYSTEM



Commencing Antapaccay's production stage involved great challenges that had to be faced, one of which was to have enough power to start up the concentrator plant. A cross-functional team took on this goal and now celebrates the feat enabling startup of new operations within the estimated time.

Another achievement was Antapaccay's recent success in connecting to the 220 kilovolt (kV) network of the National Interconnected Electric System (SEIN).

"At the commencement of the Antapaccay project, and specifically to start up the concentrator plant, we made the decision to build the temporary 138/220kV Tintaya Expansion Booster Substation. The 220kV Socabaya-Tintaya Nueva Substation line did not exist at the time, because the Ministry of Energy and

Mines was just building it," points out José Champi, Antapaccay's Electric Maintenance Superintendent.

The corresponding Operability Study was submitted to the Committee for the Economic Operation (COES) of the National Interconnected System (SINAC) in 2012. This study included the following three operational stages:

- Stage I started with the loading phase. The new Antapaccay Substation had to obtain power supply from the 138kV bar of the Tintaya Substation through a 138/220kV "booster autotransformer" and a 220kV, 8-km long single triad transmission line.
- Stage II started the reactive power compensation system that included the installation of filters and synchronous compensators.
- In Stage III, the Antapaccay Substation obtains power supply from the 220kV bar of the Tintaya Nueva Substation

(owned by Tesur) through a 220kV, 12-km long double triad line.

PARALLEL ACTIONS

Antapaccay's Maintenance Department launched the Project for the final 220kV Interconnection with SEIN in 2013 through the Electric Maintenance Superintendence. The launch required establishing a plan for the Engineering and Services and the Legal Departments to work as a team. We complied with the pre-operability, operability and start-up testing stages, to finally obtain the authorisation from the COES for the final connection to SEIN.

"After a number of events that included several setbacks, on 5 October 2016 we obtained the approval of COES for the final connection to SEIN. Without a doubt, all members of this team that managed to implement this long-awaited project celebrated," said Champi.

THE BENEFITS OF CONNECTING TO SEIN INCLUDE:

- Reliability and further availability of power supply for Antapaccay. This reduces risk for our business, as it enables us to maintain such supply at more acceptable levels.
- Higher voltage stability, which helps to reduce the magnitude of voltage transients at Antapaccay.

COMPLIANCE WITH COMMITMENTS:

- Compliance with commitment of the Environmental Impact Study (EIS) for the Antapaccay Project.
- Compliance with the delivery point defined in the Electric Power Supply Contract executed between Antapaccay and Kallpa. ■



Edgar Fuentes Control Centre Operator

"IN ANTAPACCAY'S HISTORY, WE WERE PIONEERS IN ACHIEVING THIS FEAT"

"The most important challenge posed by starting the 138/220kV Tintaya Expansion Booster Substation in Antapaccay's Power System area was the interconnection of the two 220kV transmission lines. The Power System area had committed to conduct a study to prove that it was possible to provide power to

the main areas and to the SAG and ball 2 mills, through an emergency system, using the power from the generator sets we had at the Powerhouse. The gen sets were interconnected to Substation 0931 at 33kV through an ancillary line of wooden poles. In Antapaccay's history, we were pioneers in achieving this feat."

Fold-out Cover

Antapaccay connects to the National Interconnected Electric System

2. Social Compass

Thirteen years betting on Espinar's development

5. Recognition

Recognition to 301 employees for their length of service with us

6. Mining Speciality

Increased production with third flotation row to counteract the crisis

12. Green Culture

Mine Closure Plan Target in 2016: rehabilitation of 434 ha

18. Safe Zone

Excellence in Safety We obtained OSHAS 18001 and ISO 14001 recertifications

Fold-out Back Cover

Yuyayninchis and its first fruits

Back cover

Proud of working at Antapaccay Derly Vizcarra, Mine Operations Superintendent



**FRAMEWORK AGREEMENT CARRIED OUT
1000 PROJECTS IN 75 FARMING COMMUNITIES**

THIRTEEN YEARS SERVING ESPINAR





Unlike other companies that only contribute to the extent required by law, Antapaccay is the only mining company in the country that provides additional contribution to development projects in the province. We have strengthened our social management and injected capital that enabled us to create sustainable development projects in the 75 communities of the Espinar province.

On 3 September, Antapaccay's Framework Agreement celebrated thirteen years of service in favour of Espinar's development. Some examples of what we have achieved in these thirteen years include improvement in the cognitive level of the youngest residents of the region, basic infrastructure works across the province, a better health system and the boosting of productivity in the agricultural sector.

As of the ninth contribution, we have invested more than S/ 206 million in one thousand sustainable projects. Our commitment still stands and is stronger than ever. We bet on a better quality of life, and we will continue to encourage the longings for progress that in many cases have become a reality.

These figures confirm the effectiveness of this forum for dialogue and agreement among the community, the Government, our company and civil society. We promote the economic growth of citizens through new ventures aiming to sustainability.

WHAT IS THE FRAMEWORK AGREEMENT?

Entered into on 3 September 2003, the Framework Agreement is a dialogue process with the Espinar Provincial

Municipality and other social organisations. Since then, our company has distributed 3% of its profits before taxes to favour sustainable development projects in the province.

INVESTMENT IN VARIOUS CATEGORIES

Investment lines have diversified to meet main needs of beneficiaries and, in this manner, give rise to a better quality of life. The contributions made have been invested as follows:

Detail of Framework Agreement contributions

CONTRIBUTION	YEAR	BUDGET	No. OF PROJECTS
I Contribution	2004	S/ 6,383,219.70	40
II Contribution	2005	S/ 22,190,919.70	93
III Contribution	2006	S/ 35,200,000.00	137
IV Contribution	2007	S/ 34,116,000.00	169
V Contribution	2008	S/ 19,500,000.00	127
VI Contribution	2009	S/ 23,133,854.00	127
VII Contribution	2010	S/ 28,754,279.00	135
VIII - IX Contribution	2011 2012	S/ 36,907,090.00	172
Total		S/ 206,185,362.40	1,000

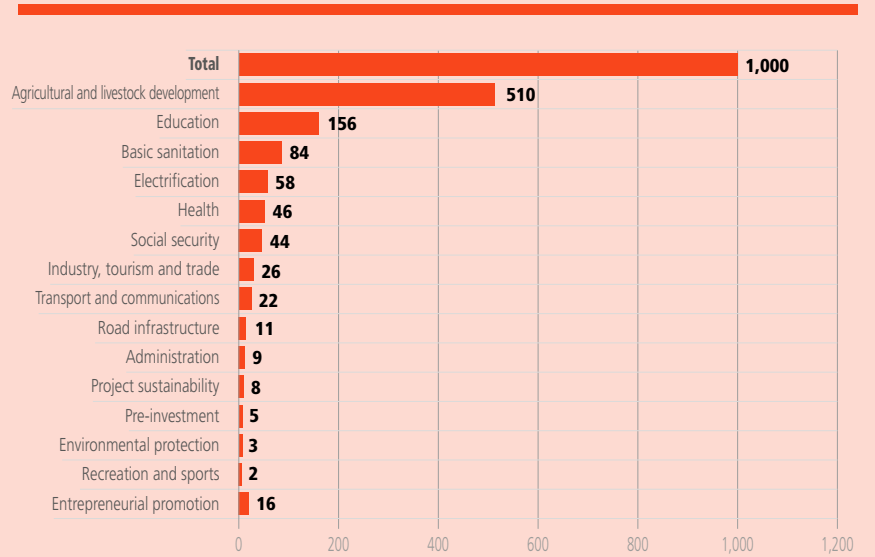
In the Framework administration to date, the following outstanding megaprojects were conceived to expedite and ensure quality of life of beneficiaries:

- Espinar Type II-I Hospital
- Espinar Specialised Educational Resources Centre (CREE)
- Pallpata Alpaca Fibre and Sheep's Wool Plant
- Espinar Dairy Plant (Placmesa)
- Human Capacity Building Programme
- Improvement of Educational Infrastructure
- Agricultural Mechanisation
- Apurímac Canyon

MAIN ACHIEVEMENTS:

- More than five hundred cattle breeding families became permanent suppliers to the Dairy Plant. They have improved their production process and, consequently, obtain a higher sales price for their product. Currently, the plant processes more than 18,000 litres of milk every day. The products of the D'altura brand are sold at supermarkets in Cusco and Arequipa.
- Improvement in cognitive levels of pre-school, primary and secondary students and the implementation of

Investment line vs. No. of projects



preparation programmes to enter the High Performance Schools (COARs) in Cusco and Arequipa, as well as institutes and universities. Additionally, the infrastructure of participating schools has improved, as they have been equipped with school furniture and multimedia classrooms.

- More than eight hundred producers of alpaca fibre and sheep's wool sell their raw material above market prices.

- A larger number of residents from Espinar have access to quality education and are receiving refresher courses with programmes launched through the Framework Agreement.
- Decrease in the neonatal and maternal mortality rate, to the point that currently Espinar is the province with the lowest mortality rate in the Cusco region.





301 EMPLOYEES ARE RECOGNISED FOR THEIR LENGTH OF SERVICE WITH US



Antapaccay knows that human capital is the most valued resource to reach its production goals and objectives. Without the commitment of employees, who offer the best of their capacity on a daily basis, that driving force we call the organisation would not work.

“The Recognition Programme in Five-year Periods is an initiative led by the Human Resources Department, to recognise employees’ length of service with the company, valuing their personal and professional contribution to the achievement of organisational objectives. The programme represents an incentive at work and family levels for employees, and recognises the value of skills and experiences acquired during years of employment that enabled people to grow and contribute to our

organisation,” notes Magali Candia, Social Well-being Supervisor.

Three hundred and one employees celebrate five years of work at Antapaccay this year. They will be recognised between December and January at their respective work areas, in coordination with their Department and with the participation of top company leaders. The number of people who will receive this recognition is shown below:

SENIORITY	No. of EMPLOYEES
5 years	160
10 years	64
15 years	39
20 years	1
25 years	2
30 years	35

TESTIMONIALS

Francisco Paucara (right) (30 years) – Mine Department: So far, I have worked continuously for thirty years, thanks to the effort and dedication I put in my work. That is the idea, as long as I can continue to offer my services. I am happy for the company’s initiative of recognising each five-year period. This boosts our morale.

Miguel Colque (left) (30 years) – Mine Department: I have been working for thirty years. I started on 15 March 1986 and I am proud of working here. Antapaccay is a true school. Our recognition is something positive and I advise the new employees to work safely and with commitment.

WE IMPLEMENT THE THIRD FLOTATION
AT THE ANTAPACCCAY CONCENTRATOR

WE BET INCREASES ALTERNATIVE AGAIN THE CRI



ATION ROW FOR PLANT ON SED VES NST SIS

Mining Specialty



As part of the project to increase capacity of the Antapaccay concentrator plant from 77ktpd to 85ktpd, Antapaccay opened a modern copper (Cu) flotation row at the beginning of the second half of this year, which enabled us to attain a higher, longed-for production target. But, beyond this objective, hitting the target is a strategy for strengthening the company's production in response to the crisis that has seriously affected the price of copper.

"This flotation row has five cells with a capacity of 300m³. It is one of the largest in the world. The main objective of this new row of cells is to reach the production goals with a sustained copper recovery rate of 90% and copper concentrate grade of 35%," said Edgar Canta, Antapaccay's Process Manager, at the ribbon-cutting ceremony.

WHAT WE MUST KNOW:

- The new flotation row commenced operations on 15 July, followed by a period of adjustments and ramp-up.
- Antapaccay's General Manager, Edgardo Orderique; the Process

Manager, Edgar Canta; and the Technical Projects Manager, Hernán Arizola, led the opening ceremony.

- The Archbishop of Sicuani, Pedro Bustamante, blessed the new infrastructure, with the gratitude of participating employees and executives.
- The highest output reached to date is that of August, which closed at 88.9ktpd compared to the 84.86ktpd obtained in May.
- The project cost US \$17.6 million.

COPPER RECOVERY PROCESS AND THE IMPACT OF THE NEW FLOTATION ROW

Ore from the Mine Operations area is crushed, milled and sized until it reaches an appropriate particle size. It then moves to the flotation system, where copper particles are separated from gangue through a physical-chemical process.

THE FLOTATION PROCESS HAS THREE STAGES:

- rougher flotation, where the largest number of Cu ores are recovered;





- scavenger flotation that recovers Cu that has not been extracted in the previous stage; and
- cleaner flotation, where the Cu ore recovered in the previous stages is cleaned from impurities.

“If the concentrate resulting from this flotation process shows a predominance of bornite, chalcopyrite and the presence of chalcocite, this means it has a good grade. The new flotation row is for the rougher and scavenger stages,” emphasizes Manuel Pareja, Metallurgy Supervisor.

DETAILS ON COPPER RECOVERY

Two of several factors affecting Cu recovery have special significance. The first is the residence time of the slurry; and the second, the addition of reagents.

The new flotation row increases residence time of the slurry, improving Cu recovery and providing the circuit with more flexibility for handling ores that are hard to process.

IMPACT OF THE NEW FLOTATION ROW ON COPPER RECOVERY

Figure 1 shows changes in daily copper recoveries pre- and post- start-up of the third flotation row. Although there is a dispersion of values and results typical of the commissioning stage, the sustained increase in recoveries is evident from early August. “These improvements will strengthen over the next days, weeks and months,” said Canta.

Table 1: Residence times before and after the project

Before				
STAGE	No. OF CELLS	TYPE	VOLUME (m ³)	MIN. RESIDENCE TIME
Rougher	4	2Dorr Oliver	300	6.5
		2Wemco	257	
Scavenger	12	12Wemco	257	20.0
				26.5
After				
STAGE	No. OF CELLS	TYPE	VOLUME (m ³)	MIN. RESIDENCE TIME
Rougher	6	4Dorr Oliver	300	10.0
		2Wemco	257	
Scavenger	15	12Wemco	257	25.0
		3 Dorr Oliver	300	
				35.0

% Head Cu vs. Rec. Cu

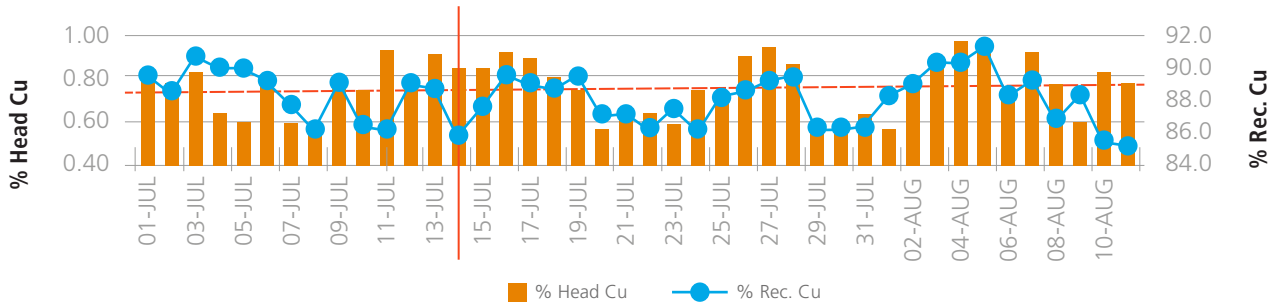
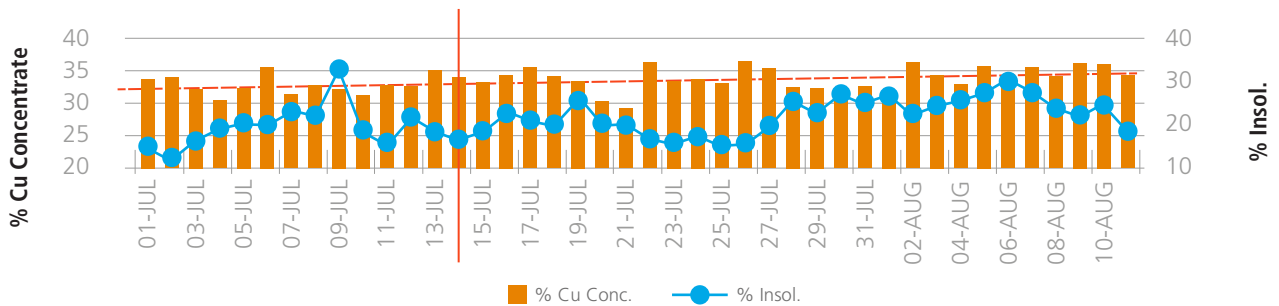


Figure 1. % of head Cu grade and Cu recovery

Note: Figure 1 shows a sustained increase in the Cu recovery value since

the implementation of the third flotation row, which results in a more effective production process.

% Cu vs. Insol. in Concentrate



Note: Figure 2 shows the “copper and insoluble” credits in the final concentrate. Just as in copper recoveries, there is dispersion due to the ramp-up period.

The level of “copper and insoluble” credits increases and remains constant by the end of July and beginning of August. This result is a consequence of the start-up of the new flotation row,

which increases recovery of coarse and mixed particles. However, the start-up of the regrinding mills and the third cleaner stage reduces the insoluble credits in the concentrate.





OPERATIONAL PARAMETERS

The operational parameters of Row 3 are similar to those of the other rows. The addition and proportion of reagents maintains the same dosage as the other rows.

THE BENEFITS

- The third flotation row maintains the recovery at values above 85%, even though there are P80 values higher than 220 microns. The previous recovery did not reach 85%. The forced air together with the longer residence time favours the flotation of coarse particles.
- The third flotation row maintains the recovery above 80%, when processing complex ores (UGM-6 type), a recovery that previously had varied between 75 and 80%.

3rd Line Operational Parameter

	VALUE	UNIT		VALUE	UNIT
Feed flow	1225	t/h	Airflow		
% Solids			FTR 17	950	NM3/h
- Rougher cell	35	%	FTR 18	950	NM3/h
- Scavenger	34	%	FTR 19	1050	NM3/h
			FTR 20	650	NM3/h
Height of foam			FTR 21	750	NM3/h
- Rougher cell	15 to 35	cm			
- Scavenger	10 to 30	cm	Availability	100	&

Fine Cu 2016

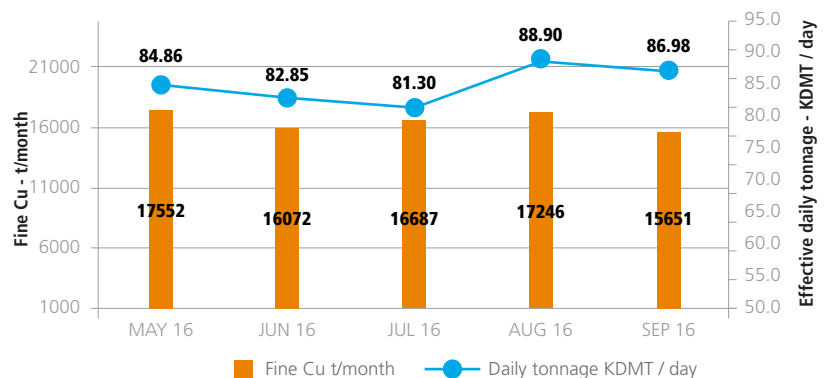
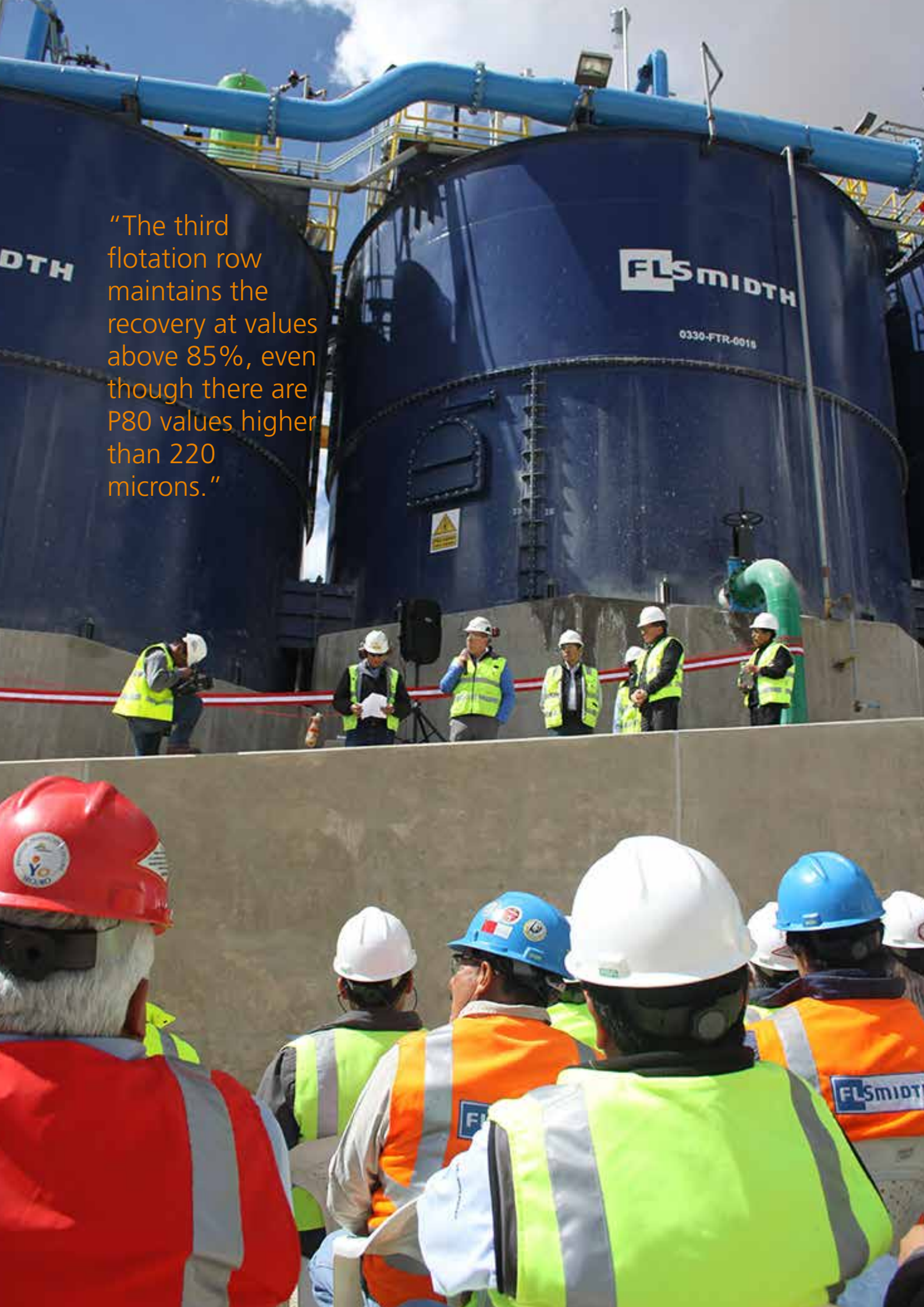


Figure 3 illustrates the evolution of processing rates. The best value to date was obtained in August: we closed at 88.9ktpd compared to the 84.86ktpd for May.

"The third flotation row maintains the recovery at values above 85%, even though there are P80 values higher than 220 microns."





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Green Culture

**MINE CLOSURE PLAN TARGET:
REHABILITATION OF 434HA**

**TASKS STARTED
IN 2012 AND THE
FINAL TARGET
IS 894HA**

Closing the mine is one of the most important environmental tasks implemented during the year. The Environment and Water Resources Department has the responsibility for this job, working through the Mine Closure Management Superintendence, the unit in charge of complying with the Mine Closure Plan.

“The Antapaccay mining unit, Tintaya expansion, started its progressive closure activities in 2012, when we stopped using the waste rock dumps and tailings dams at the Tintaya operation,” says Judith Pilares, Closure Plan Supervisor.

The progressive closure considers the rehabilitation of waste rock dumps (20, 28, 70, 23 and the Central dump), and

the tailings storage facilities (TSFs) at Ccamacmayo and Huinipampa.

These TSFs occupy an area of 894ha. We estimate that we will rehabilitate 434ha by the end of 2016, which represents 48.5% progress. Rehabilitation enables us to minimise impact on the environment and integrate these areas to the surrounding landscape, which also

The forecast progress is detailed below:

CLOSURE COMPONENTS	TOTAL COMPONENT AREA (ha)	AREA REHABILITATED IN 2015 (ha)	AREA REHABILITATED AS OF 2016 (ha)
Waste rock dump 28	219	130	147.5
Waste rock dump 20	157	12.8	30
Waste rock dump 70	79.5	0	0
Gravel dump 23	51	0	0
Central dump	26.5	26.5	26.5
Ccamacmayo TSF	177	60	100
Huinipampa TSF	184	110	130
TOTAL	894	339.3	434





favours the reintroduction of vegetable and animal species.

As shown in the table, work in 2016 focuses on the rehabilitation of 94.7ha, at dumps 28, 20, and the Ccamacmayo and Huinipampa TSFs. Work at the central dump, an area of 26.5ha, was completed since 2012.

AFTER THE REHABILITATION...

We monitor biodiversity in the rehabilitated areas to evaluate the recovery of the local flora and fauna. The central dump hosts rodent species such as mice (bunchgrass leaf-eared mouse, brown Altiplano mouse and Andean vesper mouse), as well as birds (ash-breasted sierra finch, American kestrel, bright-rumped yellow finch and rufous-collared sparrow). "An ecological niche that is an appropriate habitat for various local flora and fauna species has been created," says Linario Condori, Antapaccay's specialist in biodiversity.

"As part of our commitment, we are careful of meeting environmental quality standards; and, during the closure process we meet with communities in the area of direct influence to communicate the Mine Closure Plan. It is important to highlight participation of the surrounding community through contracting local companies to carry out earthworks and revegetation activities," adds Condori.

In 2015 and 2016, we have made significant progress in environmental management, thanks to the joint work, implementation and follow-up of an Annual Environmental Plan.

EXTERNAL COMMUNICATION OF THE MINE CLOSURE PLAN

"In accordance with commitments stated in the Mine Closure Plan, we must keep communities in the surrounding areas of our operations informed about the progressive closure and final closure,"

states Liz Espinoza, Mine Closure Plan Supervisor.

Since October, the Mine Closure Management Superintendence and Community Relations (CR) Department together are coordinating organising informative talks. The purpose of these talks is to let residents of farming communities in the Area of Direct Influence (ADI) of Antapaccay's operations know about the mine closure process and environmental measures considered to date. These talks have included 302 residents of farming communities, sectors and associations in the ADI.

We sent twenty invitations to various farming communities and sectors to attend these meetings. Up to eleven informative sessions occurred as of November. "Nevertheless, the informative talks will continue in accordance with arrangements made by coordinators of the CR Department and representatives of the communities," emphasised Espinoza.

Additionally, in the last two years, we have participated in giving informative talks to schools, and public and private institutions during guided visits to our mining operations. Thirty-six talks have occurred from May 2015 to date, communicating the Mine Closure Plan to 925 people.

Approaching communities through informative talks on the Closure Plan is an opportunity to disclose the scope of the plan, clearing up doubts and answering residents' questions about the process.

WHAT IS THE MINE CLOSURE PLAN?

It is a commitment undertaken to rehabilitate areas used during the life of the former Tintaya operation. The commitment is also included in the

Environmental Impact Study (EIS) for each project (Tintaya and Antapaccay).

The objective of a plan such as this is to return more natural characteristics to the rehabilitated areas, in order to harmonise the previously disturbed landscape. Physical stability is restored to the land and access to water resources is ensured through an appropriate water management system.

Under these conditions, it is possible to repopulate the area with endemic vegetable and animal species typical of the ecological niche.

According to the Ministry of the Environment, the Mine Closure Plan is also an environmental management instrument that includes technical and legal actions carried out by mining

activity holders, in order to adopt the necessary actions before, during and after the closure of operations. This has the purpose of eliminating, mitigating and controlling adverse effects in the area used; so that it achieves characteristics of an ecosystem compatible with a healthy environment, appropriate for biological development and preservation of the landscape.

PARTICIPATION OF THE COMMUNITY

In coordination with the CR Department, we provide temporary employment to residents of the ADI, and also purchases seeds from the organisations in these communities. Earthworks services are also entrusted to local businesses. ■





“The objective of a plan such as this is to return more natural characteristics to the rehabilitated areas, in order to harmonise the previously disturbed landscape.”



WE OHSAS 18001 RECE



EXCELLENCE IN SAFETY

ACHIEVED THE 001 - ISO 14001 CERTIFICATIONS!



Safe Zone





We thank you for letting us have a critical vision and always look for continuous improvement in the development of your Safety Management System. The truth is that we found a mature system and we are sure that these OHSAS 18001 and ISO14001 recertifications evidence the effort made by everyone, from top management to the employees and contractors we interviewed and exhibit the safety culture that characterises your company...," said Antonio Moreno. In September, Mr. Moreno led the audit team of LRQA Business Assurance, the company that reviewed Antapaccay's Safety, Environment and Community management procedures.

Conducted from 13 to 16 September, a thorough external audit found us in compliance with the annual audit and commitment plan of the Integrated Management System (health, safety, environment and community - HSEC). We achieved the OHSAS 18001 – ISO 14001 RECERTIFICATIONS to the delight and pleasure of all those who are part of the Antapaccay family.

The process conducted by LRQA Business Assurance evidenced on-going improvements and thorough and dedicated work performed by all our employees at all levels, in order to achieve healthy and injury-free work environments, proving our leadership in environmental protection, under the OHSAS 18001 and ISO 14001 international standards.

THIS ACHIEVEMENT BELONGS TO ALL OF US

"As a company, this recertification gives us great added value and ratifies our commitment to safety, health and the environment. I want to express my congratulations to everyone for the work performed this year and in the two prior years. I urge all our employees to continue to work hard, showing commitment and effort, to maintain our certification and feel proud of ourselves," emphasised Andrés Miranda, Antapaccay's Safety and Occupational Health Manager.

Antonio Moreno added that "the result of this visit has been highly satisfactory,

since many instances of conformance were found, leading to recommending renewal of the recertification for another 3 years. This certification is subject to annual reviews to follow-up and check that you maintain this performance."

The auditor also recommended to employees of the mining company that they maintain the level of awareness they have kept for many years. "I have watched the evolution of the company for fifteen years, and I see how everyone, including new employees, acquires the spirit of care regarding safety, health and the environment. This work involves everyone, from general management to those who carry out the simplest tasks; and the contractors. They are all part of this achievement," said Antonio Moreno.

THE GREAT CONTRIBUTION OF OUR CONTRACTORS

According to Mr. Moreno and Mr. Miranda, a safe operation largely depends on the human factor, making it useful to emphasise that Antapaccay's





strategic partners (our contractors) have adopted Antapaccay's culture and are a great support for strengthening our Integrated HSEC Management System.

Our contractors even launch safety initiatives worth replicating, such as the case of San Martín Contratistas Generales, who produced an excellent programme to prevent fatigue and drowsiness in October.

Under the slogan *Contra la fatiga y la somnolencia, San Martín marca la diferencia* (Against fatigue and drowsiness, San Martín makes a difference), the contractor launched this programme among its mining truck operators to ensure the safety of its team, since their work demands maximum concentration.

The contractor's project manager, Daniel Sedano, asserted that this campaign was designed to contribute to a safe work environment. "It is important to consider that a good rest is necessary to have a good work day and prevent fatigue and drowsiness. We must all be alert to fatigue symptoms. Ours is a motivational campaign to prevent physical exhaustion and acquire good resting habits," he pointed out.

ALERTÍN, THE MASCOT OF THE CAMPAIGN

"Alertín" was the mascot presented during the launch of the campaign. This funny meerkat symbolises the importance of teamwork and constant alert that characterise these small mammals that live in the African deserts. The purpose

of the mascot is to promote the state of on-going alert among San Martín's operators. The personnel were also provided with informative material, pins, anti-stress balls, and the most outstanding employees were recognised.

Antapaccay's Safety and Occupational Health Manager, Andrés Miranda, and Mine Operations Manager, José Mazzerini, said the initiative of the contractor emphasises the significance of creating a safe work space to prevent any incidents that jeopardise lives of employees. "It is an excellent initiative and it is important to replicate this contribution, and we also expect to implement it with Antapaccay's operators. We all benefit from working without fatigue and drowsiness problems," they said. ■

At Antapaccay, we favour a culture of innovation and continuous improvement. The *Yuyayninchis* programme was conceived to drive forward and materialise Continuous Improvement (MC) or Project Management (GP) ideas.

Katherine Aguilar, who is in charge of managing the programme, says that when a feasible idea is available, the next step is its implementation through MC or GP. "So far, 486 ideas were generated, 385 of which correspond to MC and 141 to GP. Since January 2015, when the programme started, we have implemented 58 MC ideas and 21 GP ideas.

Juan Zuzunaga is responsible for strategic

control of the project. He says that *Yuyayninchis* is a system for generating and implementing ideas. It starts with receiving ideas, continues with analysis of interest, and a technological and financial analysis, to finally reach the formal proposal for implementation. People we interviewed emphasised that "all those who conceive an idea that becomes a reality obtain the company's recognition."

ONE EXAMPLE PROVES OUR POINT: OPTIMISATION OF THE MINING TRUCK WASH

Israel Carpio is a contract manager and one of the employees whose project management proposal is well set on a path. His idea took shape under the

name of "Modernisation of the washing system for mining trucks and ancillary fleet." It promises to expedite truck washing, saving time and money.

We estimate implementation of the project will yield a 0.20% increase in the availability of the mining truck fleet and ancillary fleet. This will result in more hours to operate and produce. The Maintenance personnel that must perform this job will have more time to carry out other tasks or make inspections and eliminate backlog.

"The mechanics in charge of the wash will be released to perform other tasks, since the project only requires the truck operator, but we will also obtain a system with a maintenance and operation cost

that can be absorbed by the construction company. We must also mention that the project will be paid in two years, but it will operate for a longer time," points out Carpio.

The project has also passed several filters and, if it obtains the green light as expected, it represents an investment of US \$1.5 million. Estimated benefit would result in annual savings of US \$800,000 for the company.

Israel states that the system will use robots arranged in arches along a tunnel through which mining trucks pass. Currently, it takes two and a half hours to wash a haul truck, time that could be reduced to 10 or 30 minutes according to the size and dirtiness of the vehicle.

The idea arose a long time ago when Israel was attending a mining convention. He observed a technology applied in Chile (Mechanised Interface for Robots and Computers - MIRC) that uses robots to save up to 70% of the average water consumption, a scarce resource in that country. He thought of this and looked for a similar technology (from ABS) that could be applied to Antapaccay's reality.

"*Yuyayninchis* is a good programme, because it promotes development of ideas. We must always wonder if there is another way of improving things. We find out through research. Even the craziest idea can become a great project," says Carpio. ■

"We estimate implementation of the project will yield a 0.20% increase in the availability of the mining truck fleet and ancillary fleet. This will result in more hours to operate and produce."



YUYAYNINCHIS: THE PROGRAMME THAT ALLOWS CRYSTALLISING IDEAS

ISRAEL CARPIO EXPLAINS HIS PROPOSAL FOR TRUCK WASH IMPROVEMENT



Mine Operations Superintendent

I have been working at the company for ten years, and I feel proud because I have seen the exponential growth of the company throughout this time, thanks to the effort and good level of commitment of our work team to obtain results. In recent years, Antapaccay has reached several achievements: safety and environmental certifications, reactivation of the Tintaya plant, increased productivity of our teams, and cost reduction are only a few examples.

I started out as an intern at the Mine Operations area and I thank God for letting me have a job to this day. I am very happy belonging to Antapaccay and, above all, to this great team. Although there may be complicated moments, I always felt mutual support between my leaders and co-workers. Thanks to so many personal and professional satisfactions, I can say that "Antapaccay is a school and I am proud of belonging to this family."



DERLY VIZCARRA

PROUD OF WORKING AT ANTAPACCAY