

CERREJÓN COMMENTS ON THE CINEP REPORT “MINING, AGRARIAN AND ENVIRONMENTAL CONFLICTS IN SOUTHERN LA GUAJIRA”

June 28, 2016

We appreciate the BHRRRC giving us the opportunity to comment on the report published by CINEP in May of 2016 titled “Mining, agrarian and environmental conflicts in southern La Guajira”. Although CINEP makes some effort to support their accusations with figures and data, we regret to say that most of their accusations are based on decontextualized information, opinions, and generalizations. In addition, we regret that, over the four years it took to prepare this report, CINEP never contacted Cerrejón directly to get firsthand information that would allow them to present a balanced report.

Therefore, we offer information on the following topics:

1. Comments on access to land

- Cerrejón rejects the accusation that there has been an “irregular concentration of land” as stated by CINEP in the report. On the contrary, all land acquisition processes have rigorously adhered to Colombian regulations.
- The comment in the report to the effect that “when a new file is opened, the nature of the property’s origin is obscured, that is, its background is that of an empty lot” is false. In accordance with Article 51¹ of Law 1579 of 2012, and even earlier regulations, when a real estate file is opened, a note registers its origin, which allows the usual study and verification of the deed source.
- The accusations that “the process of land tradition in favour of the Cerrejón company can be considered another example of extensive undue appropriation of lands that occurred, in this case, between 1981 and 1989” suggest that the sales between 1981 and 1989 had to be authorized by Incora or be “undue” as long as at least 15 years had not elapsed since the corresponding adjudication of the uncultivated land. This claim is false since the restriction of 15 years is a provision of Act 160 of 1994 (Article 39), which was not in effect in the 1980s and also considered a scenario not covered by the report. The law of that period (Act 135 of 1961) did not forbid the sale of adjudicated empty property, but it denied the beneficiary the option of a new adjudication within a specific period (Article 37). As regards permits, this law established the requirement of prior approval by Incora, but as a right of preference so that the entity would have the first refusal for acquiring the property, not as a requirement for the validity of the sales process (Paragraph b of Article 51).
- In accordance with the above, it must be made clear that, in each of the agreements reached, the company carried out the required due diligence for acquiring the properties by studying the deeds to verify compliance with provisions in legal regulations when the transfer of ownership deed is finalized.
- Concerning lumping land by the company, it should be noted that the owner of one or various properties, while meeting compliance with requirements stipulated by law, may divide, subdivide, or amalgamate said properties as an act of disposition and fee simple absolute by the owner. This legal act does not hide the background of the real estate since the inscription remains public and is therefore also disputable by third parties.
- When Cerrejón finds that the deed derives from the adjudication of uncultivated land (through the competent body, whether Incora, Incoder, or another), in addition to being certain of purchasing from the deed owner (for which the adjudication had to fulfil an administrative act that we assume to be legal and in accordance with the regulations determining it), we also ascertain that the sale has no restriction

¹ Article 51 of Act 1579 of 2012. Opening land title registration number for division or amalgamation. When the deed involves dividing a property into various sections or amalgamating several of them into a single unit, new land title registration numbers shall be opened noting their derivation. Furthermore, any encumbrances, restrictions, or conveyances in force shall be transferred from the largest land title registration entry.

whatsoever since there is no prohibition against divesting an adjudicated empty property in accordance with Act 135 of 1961 and Act 160 of 1994 and in the resolutions on property adjudication.

- Concerning amalgamating land by the company, it should be noted that the owner of one or various properties, while meeting compliance with requirements stipulated by law, may divide, subdivide, or amalgamate said properties as an act of provision and full domain of the owner. It should also be mentioned that said legal act does not obscure the background of the property since the inscription remains public and it can therefore also be disputed by third parties.

2. Comments on environmental impacts

- Concerning the request by the ANLA that “it urges the Cerrejón company to render accounts for non-compliance of monitoring and regulations”:
 - We believe that the above recommendation is out of order taking into account the fact that the National Environmental Permitting Authority (ANLA) exercises permanent oversight of compliance with the environmental obligations established in Cerrejón’s Comprehensive Environmental Management Plan (PMAI) through technical monitoring visits to different operational areas and through the exhaustive review of supporting documentation corresponding to said compliance. Furthermore, the ANLA also visits communities in our area of influence, verifying their socio-environmental status and getting feedback from residents.
 - Oversight results are documented in the various administrative acts issued by this authority, in which it reports the status of compliance with the different environmental obligations and establishes additional observations and control measures.
- On the request made of Cerrejón to “Provide accounts to the government and general public regarding your records measuring contamination of the air and water in order to provide an environment of transparency”:
 - Cerrejón provides accounts to the government and general public through regular reports on air and water quality delivered to the competent environmental authorities (the ANLA and Corpoguajira).
 - As regards air quality, the monitoring results are filed monthly with the Information on Air Quality System (SISAIRE).
 - This information is public and can be consulted by any interested person.
 - In addition, since Cerrejón’s Operational Integrity System is ISO 14001-2004 certified (Environmental Management System), there are regular audits by competent bodies to assess compliance of our environmental operational plans and controls, including air-quality control and water management.
 - Another form of accountability is the socialization of our environmental management through the tours offered to different stakeholders, including persons from the communities in our area of influence, academics, and journalists.
 - Cerrejón’s Social Responsibility Policy provides for the publication of the monitoring network results in quarterly bulletins of the Air Quality Oversight Committee and through monitoring results dashboards installed in the sampling stations.

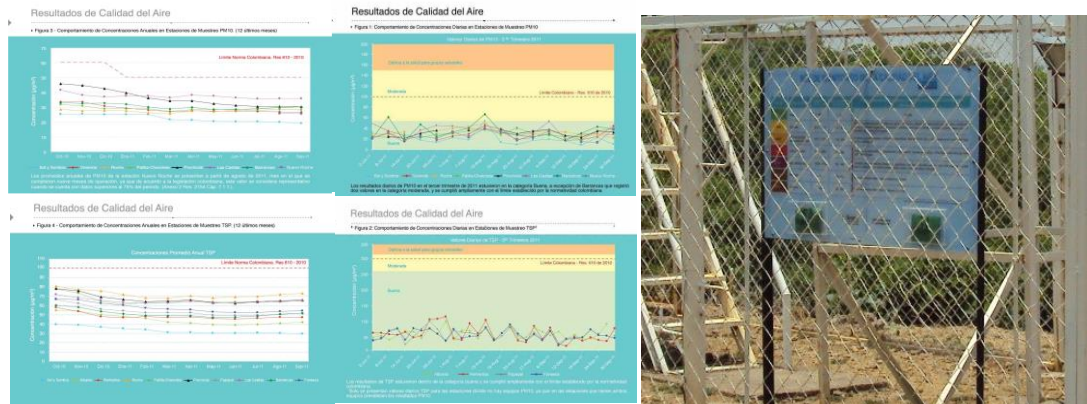


Figure 1. Air Quality Oversight Committee communications. Quarterly bulletin (left) and notice board (right).

Comments on water management

On the accusation of inadequate management of runoff and rainwater in the mine dumps, we want to clarify that, although it is true there have been occasional events of slides of waste rock and coal to these bodies of water, they were not significant nor did they significantly impact water quality, as shown in the reports on the results of monitoring the quality of Cerrejón Creek.

To support and reinforce the fact that Cerrejón does indeed comply with “The activities and obligations defined and approved by Resolutions 2097 of 2005 and 1632 of 2005 (specifically as concerns the Rainwater Management Program)”, below we present a summary of how these activities are carried out:

- On the management of runoff water (pages 29 and 32 of the report), Cerrejón’s environmental management of water in mining zones covers the relation between natural water resources and the wastewater from the various operational activities, recognizing that water is a scarce resource in La Guajira.
- Cerrejón’s Environmental Management Plan for water establishes the guidelines for water management at the Mine and in Puerto Bolívar, consolidating everything concerning the amount and quality of natural and waste water, including legal requirements. In addition, it contains the criteria and general guidelines to detect, prevent, and control potential adverse effects on natural water bodies as a result of the different activities at the mining complex.
- As part of the management of runoff water in the mining area, in 2013 we began a program to upgrade the entry channels for the settling ponds, which consists in lining them with Concrete Canvas to reduce the generation of suspended solids during the fall of water when the spillway is higher than said channel. This action reduces the discharge of solids into natural drainageways such as the Ranchería River and its tributary streams. The photos below demonstrate the construction process for installing these channels.



Initial status of channel.



Upgrading the channel to install the lining.



Lining installed.

- These engineering works, in combination with upgraded dumps, building fall structures, and reclamation, lead to fewer sediments reaching natural drainage ways.

Comments on water supply and consumption

- Page 32 of the CINEP document states, "According to the document Modification of the Comprehensive Environmental Management Plan for the P40 Project, prepared by the company Ingeniería y Diseño (Ingetec S.A.), between 2006 and 2012, Cerrejón used 1,053.10 litres of water per second (l/sec) from licenses granted by Corpoguajira for surface sources (the Ranchería River, Bruno Creek, and Tabaco), Ranchería River aquifer wells, and depressurization wells; meanwhile, the communities clamour for access to enough water to live".

It should be noted that the figure of 1,053.10 l/s corresponds to our consumption of low-quality water since the consumption of high-quality water is actually 504.6 l/s for the same period of 2006 to 2012. High-quality water is captured from the Ranchería River and its aquifer, whereas low-quality water is mining water from coal seam dewatering, sea water, and dump runoff. The table below illustrates capture by source for the period in question.

REALIZACIÓN DE CONSUMOS DE AGUA DE BAJA CALIDAD Y AGUA DE ALTA CALIDAD 2006 - 2014 (m3)								
AÑO	POZOS DESPRESURI	ESCORTRENTIAS	SUPERFICIAL RIO	SUBTERANEA RIO	BAJA CALIDAD	ALTA CALIDAD	TOTAL	% ALTA CALIDAD
2006	3,378,662	1,849,794	3,228,356	803,706	5,228,456	4,032,062	9,260,518	44%
2007	2,883,134	1,877,942	1,941,645	684,396	4,761,076	2,626,041	7,387,117	36%
2008	2,881,617	1,650,465	1,110,193	968,198	4,532,082	2,078,391	6,610,473	31%
2009	3,028,187	1,491,405	2,134,803	994,611	4,519,592	3,129,414	7,649,006	40.9
2010	2,758,026	1,459,279	548,452	924,281	4,217,305	1,472,733	5,690,038	25.9
2011	2,667,982	1,877,925	775,642	446,692	4,545,907	1,222,334	5,768,241	21.2
2012	3,172,781	2,809,316	910,612	441,841	5,982,097	1,352,453	7,334,550	18.4
2013	2,319,609	4,707,810	800,313	445,765	7,027,419	1,246,078	8,273,497	15.1
2014	1,816,908	9,288,942	1,061,164	273,812	11,105,850	1,334,976	12,440,826	10.7

- However, apart from Cerrejón, other actors also consume water captured from the Ranchería River. According to Resolution 1725/12 of Corpoguajira, surface water licenses (irrigation and deep wells) granted in the Ranchería River watershed correspond to a total of 17,235 litres per second (l/s), distributed as indicated below.

Sectores	Litros por segundo	Porcentaje de uso %
Doméstico y Servicios	8697.6	50.46%
Sector Agroindustrial	8537.4	49.54%

Sector agroindustrial	Litros por segundo	Porcentaje de uso %
Arroz	712	8.3
Palma	158	1.9
Ganado, pasturas y otros cultivos	7403	86.7
Cerrejón	264.4	3.1

This information clearly contradicts CINEP's claim that Cerrejón consumes the water, thus depriving the communities of this resource. As can be seen in the table, the Corpoguajira grants for Cerrejón correspond to 3.1% of the department total for the Ranchería River watershed.

- Below is a summary demonstrating that Cerrejón uses this scarce resource efficiently.
 - Since 2007, Cerrejón has been substituting high-quality water by low-quality water as one of the measures in our Water Savings and Efficient Use Program (PAUEDA). Our highest consumption

(nearly 90%) is used in dust emission control such as road wetting, fog canons, and sprinklers. It is also used in the coal-washing plant.

- High-quality water (from the river and its aquifer) refers to water that is suitable for human and household consumption after conventional treatment and for direct use in agriculture and livestock raising and industrial activities. Low-quality water is not suitable for direct use in agriculture, livestock, or industry, and it requires specialized treatment for household use. It derives from coal seam dewatering and runoff in the mine pits as well as from sea water.

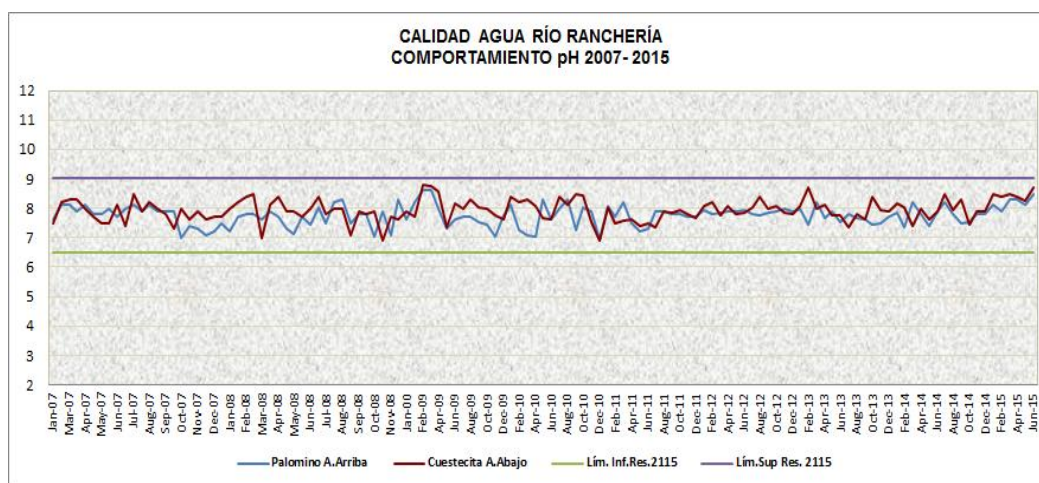
In response to the accusations of water pollution

- At the very start of the mining operation, Cerrejón established a water-quality monitoring program on the Ranchería River and its tributaries. The monitoring network comprises the following bodies: Treatment system of domestic wastewater (ARD), treatment systems of industrial wastewater (ARI), treatment systems for mining wastewater (ARM), Ranchería River surface water, Ranchería River groundwater (shallow aquifer), tributaries to the river, coal-seam dewatering wells, sea water, and coastal waters.
- Every year, we take over 800 samples from the area of influence of the mining operations, both at the Mine and Puerto Bolívar.
- Monitoring is monthly for the river, creeks, wells, discharges, and coastal waters, whereas monitoring is quarterly for the wastewater treatment systems. Discharges are sampled when they occur, generally on a monthly basis, but if there is no discharge there is no sampling.

Concerning the accusation on contamination with heavy metals and processes contributing to acidification of drinking water, we note the following:

- Regarding the claim “Among the problems occurring are, first, contamination with heavy metals and processes contributing to the acidification of drinking water,” we should clarify that the physical-chemical characteristics of the mining waters are a pH of 8.0 to 8.8 in contrast to what is mentioned in the document. Likewise, water from the Ranchería River and the Cerrejón, Bruno, and Tabaco creeks (in the mine’s area of influence) is also alkaline. In fact, before the Ranchería River enters the mining operations area, its pH is 6.9 to 8.6 and when it exits that area the pH is 6.9 to 8.8 (average of 7.9). No acid conditions have ever occurred in the mine’s wastewater nor in the natural drainage ways. Consequently, we can reaffirm that the document’s claim of cases of acidification is entirely false.

pH Trend 2007–2015



On community claims of alleged alteration of water quality (page 26):

- Although some sediments may be transported away from the mining area during periods of rain, this does not make Cerrejón responsible for the entire sediment load reaching the Ranchería and its tributaries.
- The photo below illustrates the illegal quarrying of sand from the Ranchería River in the zone of the Provincial Indigenous Reservation. Note the eroded banks and the accumulation of sand dredged from the riverbed. The colour of the sand shows it does not derive from the mining area.

Sand quarrying on the Ranchería River.



- We have also identified the intervention of the riparian buffer zones by farmers and livestock ranchers, with the removal of the natural cover giving rise to erosion on both banks of the river.

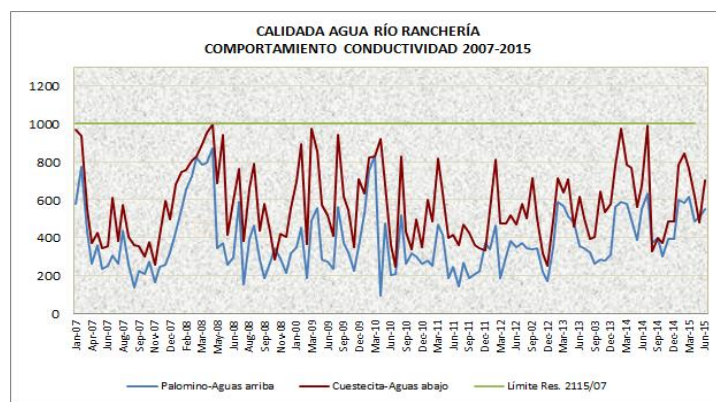
River banks altered by farmers and livestock ranchers in the Albania zone.



On the presence of mercury, lead, arsenic, cadmium, or chrome in the rivers and the IC reports

- Measurements on the presence of metals are delivered to the environmental authority as appendices in a timely manner. The analyses (performed by an independent laboratory) include the following parameters: aluminium, arsenic, barium, beryllium, boron, cadmium, calcium, cobalt, copper, iron, lithium, manganese, magnesium, mercury, molybdenum, nickel, lead, selenium, sodium, zinc, chrome, and cyanide. A further 21 parameters are also analysed in our own laboratory.

- Quality reports for these parameters are available for 2007, 2008, 2011, 2012, 2014, and 2015. Between 2011 and 2012, a monitoring network was established the entire length of the Ranchería River valley through an agreement with Corpoguajira. The final document can be found on that corporation's web page, showing the results for all these metals. In this case, the metals included for analysis for this agreement were chosen taking into account the requirements of the environmental permits granted by the environmental authority.
- It is true that the boxplot distribution reached up to 1,927 $\mu\text{S}/\text{cm}$ (RIO107) in February of 2014, but it was an isolated datum corresponding to 0.07% of the total data reported for that parameter.
- Regarding the concern as to the need to investigate the source of an increase in conductivity when it exceeds usual levels by 50%, it is not necessary as we know firsthand that high conductivity values are characteristic of mining waters due to the presence of sulfates and chlorides, which are not a risk to human health. The graph below illustrates the trend for this parameter in stations upstream (RIO111) and downstream (RIO109) of the mining operations. Note that the levels below the mining operations are slightly higher than upstream, but both stations show levels within the acceptable range for drinking water. Station RIO107 is upstream of station RIO109.

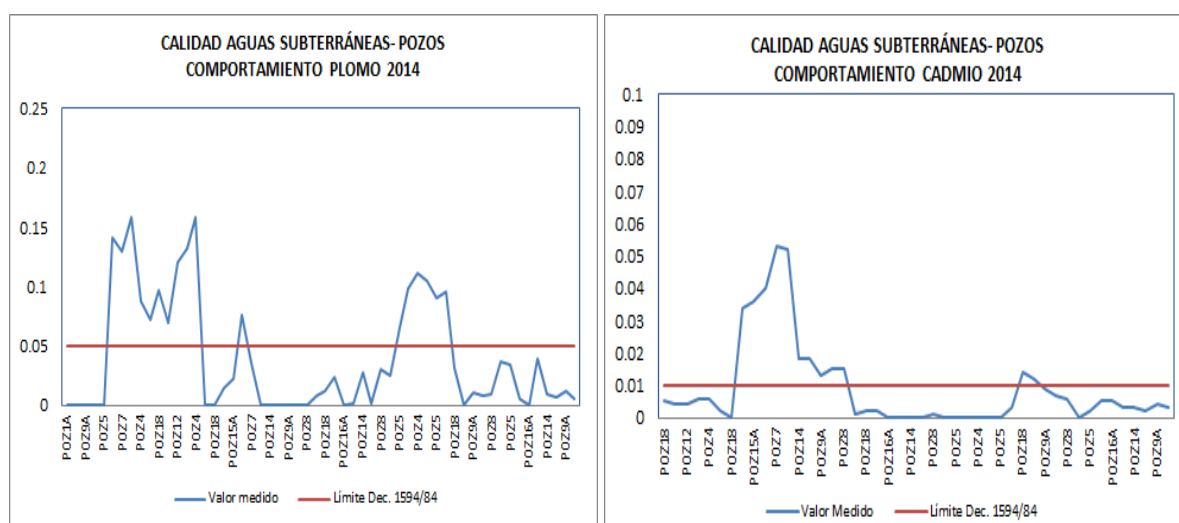


- Later on page 28, it states that, "In turn, the four stations analysed, located upstream and downstream of Bruno Creek and Cerrejón Creek, recorded concentrations in 2007 of up to 0.0214 mg/L for Cd and of 0.05344 mg/L for Pb".
- The upstream stations for both creeks are, as the name indicates, before the mining operations, so the presence of these metals is a characteristic of these bodies of water. It is also only an occasional level because most of the results are lower. Sometimes the upstream station records higher concentrations than the station downstream of the mine.
- In fact, the value of 0.05344 mg/L of lead was recorded in September of 2007 at the station upstream of Bruno Creek, whereas at the downstream station the concentration was just 0.01495 mg/L. The site of the station downstream from this creek is beside a road to the village of Los Remedios where community residents wash vehicles and indulge in recreational activities.
- Clearly, then, the highest level is found at the station outside the mine's area of influence. At the time, the reference was Article 38 of Act 1594/84, which set a maximum value of 0.05 mg/L, which that level, strictly speaking, did not exceed. For cadmium, the upstream and downstream stations record similar values of 0.204 mg/L and 0.0214 mg/L respectively, indicating there is practically no mine impact.
- Regarding the statement about groundwater that, "Concentrations of Cd and Pb monitored show a significant difference between the years analysed, with increases in concentrations in 2014".
- There is indeed a difference between the two years being compared, which is explained below. Although it is true that, in 2014, cadmium and lead values were higher than those for 2007, most of the former do not exceed the maximum allowable limits set by Act 1594/84. Thus, 83% of cadmium values

are below 0.01 mg/L (the limit set by the regulation), and 68% of lead values are below 0.05 mg/L (see graphs below).

- In 2007 and 2014, Act 1594/84 was in force, so any comparison with regulations must be made against Article 38 of this Act, which establishes the criteria under which water is of sufficient quality for use in human and household consumption with conventional treatment (see graphs below).
- The 2007 analyses were performed by an outside laboratory and the 2014 analyses were performed in Cerrejón’s in-house laboratory. The normal differences in results between two labs is known as reproducibility. Furthermore, our lab is undergoing evaluation for metals for accreditation with the IDEAM, which ensures more accurate, reliable results.

Lead and cadmium levels in wells penetrating the Ranchería River aquifer.



Comments on the air quality

- According to the database and multi-annual historic records of Cerrejón's monitoring network in La Guajira, we have never exceed the maximum allowable limits for PM10 set by Colombian legislation.
- The WHO defines the maximum allowable concentrations of PM10 particulate matter as being 20 $\mu\text{g}/\text{m}^3$ for the yearly average and 50 $\mu\text{g}/\text{m}^3$ for a 24-hour average. However, due to environmental conditions in Colombia and contributions from local activities, generally the country records higher levels than that even in areas without any industrialization due to the influence of common household activities in rural zones (e.g. burning wood), wind erosion of bare areas, and farming and livestock activities.
- The PM10 particulate matter trend at Cerrejón is similar to that in other parts of the country in addition to being in accordance with Colombian legislation and aligned with legislation in other countries such as the United States and Australia. Various monitoring networks countrywide evidence these similarities. Particulate matter levels in Bogotá², Bucaramanga³, the Valle de Aburrá, and the department of Caldas⁴ almost always exceed 30 $\mu\text{g}/\text{m}^3$.

² Sector Report, District Secretary of the Environment, Management Indicators of the District Administration, Agreement 067 of 2002; Impact Indicators – Agreement 489 of 2012, District Development Plan 2012–2016 “Human Bogotá”, Bogotá, D.C., January of 2013.

³ Annual Air Quality Report of Bucaramanga, Coordination of Environmental Information and Investigation, CDMB, Bucaramanga, February of 2011.

⁴ Air Quality Report, Division of Natural Resources, Corpocaldas, Mauricio Velasco García, 2013.

- Specifically in Cerrejón's area of influence, the PM10 annual average at the Sol y Sombra station (upwind of the mining operations and therefore representative of the regional air quality) was 25 µg/m³ in 2015. Clearly, the usual activities in the area (burns, farming activities, roads, and other barren areas) and the barren areas in the Alta Guajira alone cause levels to rise above the WHO's maximum allowable limit.
- This is not to say that health and its relation to emissions levels is not covered or is unprotected by Colombian legislation. In fact, the emissions protocol adopted by Resolution 650 of 2010 (modified by Resolution 2154 that same year) establishes risk levels associated with particulate matter concentrations.

Comments on noise

- Although on occasion there have been levels above the threshold limits of Resolution 627 of 2006 in some of the networks mentioned in the document, the analysis must be comprehensive because these high levels coincide with equally high Leq90 values, which are related to background activities, that is, those carried out by communities.
- Consequently, as indicated in the Environmental Compliance Reports (ICA, the initials in Spanish) referenced by the CINEP study, in some cases this zone surpasses the maxima allowed by current regulations (reference values) because of the high noise levels from local activities such as vehicle traffic on highways near population centres and celebrations by community residents.
- Therefore, it is impossible to obtain values any lower than the background levels for each population centre since the trend is dominated by factors outside the mining operation's control.

3. Comments on resettlements

Tamaquito II

- The report mentions the Tamaquito II resettlement as an example of involuntary resettlements in southern La Guajira. However, this is considered to be a *voluntary* resettlement since the community itself requested it of the Barrancas Mayor's Office in 2006 due to their isolation as nearby communities were resettled by Cerrejón. The municipal administration requested the company's support to relocate the community, and the company decided to go ahead and provide assistance (also analysing the possibility of future expansion).
- The resettlement was participatory, including the choice of the destination property, the dwelling design, and the village layout. Even though the community's original site only covered 10 ha, we agreed to donate 300 ha so it could officially establish itself as an indigenous reservation. The request is currently in the hands of the State agencies, and Cerrejón is providing the community with consulting. In 2008, Cerrejón had already supported the community in their request of the Ministry of the Interior to be recognized as an indigenous community. This application finally led to the issuance of Resolution 0047 of December 24 of 2008, which recognizes it as an indigenous group.
- The community also designed the layout of the new settlement, including an area for traditional games amongst other facilities. In addition, they designed their houses in accordance with their traditions, with an ample patio for agricultural tasks and an extra thatched-roof area, as well as other rooms. By community request, they also made the bricks with which the houses were built.
- In accordance with their world vision, the families carried out rituals taking leave of their site of origin and rituals for their arrival at the new site.
- It should be noted that the residents of Tamaquito II have no interest in working in mining activities. Therefore, Cerrejón (as part of the measures agreed to in the resettlement) entirely sponsors students in the vocational, technical, university, and/or master's studies of their choice.



- Currently, two collective livestock production projects benefit 18 families, and 13 farming and commercial projects benefit other individuals. The vast majority of Tamaquito families chose farming projects (80%), which are long-term investments expected to start providing revenue in the first quarter of 2017. Cerrejón has even supported care for the animals due to the severe drought.
- Furthermore, the garbage collection service is operating without incidence. In the memorandum of understanding signed with the community in December of 2015 to work together on compliance with the resettlement agreements, we agreed on regular reviews of this service (ongoing to date). The garbage collection truck picks up twice a week. In addition, Cerrejón has supplied 35 garbage cans for the community's waste.

Chancleta

- It is untrue there was no participation nor consultation concerning community facilities such as the cemetery, the school, and the healthcare centre. On the contrary, the resettlement negotiation talks were completely participatory. During the talks, we reached agreement with the community on building the school, healthcare centre, and cemetery at the destination site, providing better conditions than at the site of origin, where there was only a school and an open area where the deceased were laid to rest.

Patilla

- Regarding the accusation of the private security service being cut off without prior warning, note that, before the families moved, we agreed to hire private security at the new site for three months in order to safeguard their assets there while the move was organized. The service continued until the agreed date in compliance with the joint agreement.

Roche

- The water supplying the Roche resettlement is from a deep well. Consequently, due to its nature and the prolonged drought in the department of La Guajira, the water has high calcium concentrations. Although this does not negatively impact human health, it does cause ongoing problems to the treatment plant and pipes, impacting the continuity of supply to the community. Nonetheless, the amount of water delivered to families is twice the WHO minimum of 100 litres per inhabitant a day, with a real average consumption of 211 litres of water per resident a day.
- In order to improve the water quality, we are currently upgrading the water treatment plant to treat surface water from the Ranchería River using a recently constructed water-uptake facility licensed by Corpoguajira. The water captured from this source will also be used to supply farming and livestock production projects.

Las Casitas

- There are no reports of the death or loss of animals as CINEP's document claims. The families that have relocated to the new site own small livestock species, and families owning large animals at the site of origin still have their animals there and are authorized to enter the mine area to recover stray animals.

We invite CINEP to talk to Cerrejón about this complex setting, the prevention and mitigation measures for operational impacts, and our engagement with communities neighbouring the operation.

For any further information, please contact Carlos Franco (carlos.franco@cerrejon.com), Manager of Social Standards and International Relations.