



Commitment to Responsible
Development

AREVA and Niger, a Sustainable Partnership

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AREVA and Niger, a Sustainable Partnership

As the country's first private employer and main industrial partner for the past 40 years, AREVA is a major stakeholder in the Nigerien economy. Mining activity generates important revenues that have a positive impact on the development of social and public initiatives (employment, population health, training, infrastructure development, etc.).

AREVA has been contributing to the improvement of living conditions of local communities for a long time.

As far as the environment is concerned, there is regular monitoring of mining activity under the supervision of the Nigerien State. At all its sites, AREVA uses an active policy for risk prevention, impact limitation, and environmental protection. Health and safety for AREVA's workers and contractors are among the company's main daily priorities. Accordingly, the group meets the established binding objectives it set (accident frequency rate below 2 and annual radiological dose below 18 mSv).

Since 2003, AREVA has been a member of the Extractive Industry Transparency Initiative (EITI). This shows its genuine commitment to greater financial and economic transparency vis-à-vis communities and stakeholders, such as the State of Niger.

Finally, continuous improvement is one of the company's major goals. Greenpeace's report, "Left in the Dust", published in May 2010, seems to basically rely on the public's fears and disinformation, which does not bring anything constructive to the process. It is backed up by a polarized discussion relayed by anti-nuclear organizations, advocating confrontation between companies, communities and civil society, rather than a dialogue which would however be a source of progress and sustainability.



Testing in the COMINAK Underground Mine in Niger.



1

Highlights

This report entitled “AREVA and Niger, a Sustainable Partnership” is intended for AREVA’s partners and stakeholders.

It examines accusations made by Greenpeace, the non-governmental organization (NGO) that published in May 2010 an accusatory and caricatured report on AREVA’s mining activities in Niger.

The AREVA Group’s Nigerien subsidiaries are aware of all the issues raised in the NGO’s report and are already addressing them in their action plans. The company wishes to respond to them here in complete transparency.

AREVA is a responsible stakeholder and committed to continuously improving its environmental and societal performance.

“Left in the Dust”, the report published by Greenpeace, followed a visit in November 2009 by a delegation of representatives of the NGO to AREVA’s mining sites in Niger.

In inviting representatives from Greenpeace to learn more about its mining activities and facilitating their administrative and logistical legwork, AREVA showed openness and transparency.

Greenpeace

Greenpeace is a non-governmental association based in Amsterdam.

The association was created in 1971 to fight against nuclear testing, an issue to which it is historically very committed.

Today it is one of the most active groups on everything pertaining to the environment, and more specifically global warming.

Greenpeace France remains hostile to partnering with companies but some sections of the organisation in the rest of the world are getting closer to the economic world.

Source - Panorama des relations ONG / Entreprises : Quelles évolutions pour quelles influences. Novethic Etudes / Manifeste - June 2006

During its stay in Niger, the delegation was able to visit the sites without restriction and take measurements freely in the streets of Arlit and Akokan.

At the conclusion of the visit, a large number of technical documents were provided to the members of the NGO.

AREVA is committed to continuous progress on all the issues related to protecting the environment, neighbouring communities and workers.

The company reports on these matters on a regular basis. It acknowledges that its growth depends on activities being carried out in a sustainable, ethical and responsible manner.

In this document, we will review the accusations made by Greenpeace and provide technical, regulatory and factual answers.

Among the issues mentioned, we will discuss resource preservation, particularly water, qualitatively and quantitatively. We will also address the issue of radioactivity, including aspects related to radon, dust and tailings or linked to the presence of scrap metal and waste rock in the streets of Arlit and Akokan.

Beyond the controversy that Greenpeace is trying to create, AREVA disputes the accusation that it poisons people and this polarized view of its relationships with the Nigerien Communities.

The group has been a sustainable and committed stakeholder for Niger for almost 50 years. This document highlights all the actions taken to benefit people and states the economic and material benefits enjoyed by Niger, thanks to mining activities.

AREVA's commitment to its stakeholders is real and sincere. Its transparency has been demonstrated on many occasions and the company is open to any audit of its facilities, in Niger or elsewhere, as long as it is independent and carried out in a professional, competent and responsible manner.

Greenpeace Accusation

The Greenpeace report entitled “Left in the Dust” covers a vast array of issues occurring in proximity to mines, based on research by Greenpeace, scientific analyses, documentation and a compilation of witness statements. The report is not intended to be an exhaustive study on the negative impacts of nuclear energy, uranium mining or all activities of AREVA. The conclusions made by Greenpeace are aimed at highlighting existing health and environmental risks caused by uranium mines in Niger and that were discovered through their research.



» AREVA, Full Transparency

Extractive Industries Transparency Initiative (EITI)

The Extractive Industries Transparency Initiative (EITI) is a process whereby government revenues generated by extractive industries, such as taxes, mineral rights, tax on benefits and royalties, are published in independently audited reports.

AREVA was one of the first multinational enterprises to participate in EITI in June 2003.

This is AREVA's commitment today:

- The presence of an EITI coordinator at the central level as established by the Chief Executive Officer; in this case, the company's Business Ethics Advisor. In mining operations, designation of an EITI correspondent within the Mining Business Group as well as correspondents in each mining subsidiary located in a member State. The financial division of the Mining Business Group in collaboration with the group's Financial Division, oversees the transmittal of the payment statements to the member countries.
- Moreover, under instructions from the Chief Executive Officer, the annual internal ethical report, coordinated by the Business Ethics Advisor (a mandatory process for frontline managers at AREVA since 2004 for all the group's divisions), includes payment statements of all the mining subsidiaries to governments of EITI member countries. Therefore, the EITI compliance report is not artificial or optional for AREVA. It is a mandatory report, which financial data are sent to EITI afterwards.

Since May 9, 2008, SOMAÏR and COMINAK, subsidiaries of AREVA, have officially affirmed their commitment to EITI.

→ *The solemn reaffirmation of AREVA mining subsidiaries' commitment to EITI can be found in the appendix section.*

Independent and competent specialists undertake radiological analyses

In this report, we present numerous results of analyses provided by the ALGADE independent laboratories.

ALGADE is part of the CARSO laboratories group, and accredited to conduct radiation protection assessments and measurements.

The company is accredited by ASN (the Nuclear Safety Authority) in France to:

- Monitor workers' external and internal exposure to natural radionuclides of uranium and thorium chains; and
- Measure, through its laboratories, radioactivity in the environment.

ALGADE's laboratories are also accredited by COFRAC (French Committee of Accreditation).

1 Highlights



Open-Pit Mine in Arlit, Niger

Accountability to Nigerien Authorities

AREVA's mining activities are overseen by and regularly monitored by the Nigerien authorities. Below is a summary of documents regularly submitted to these stakeholders.

→ Ministry of Mines and Energy (Ministère des Mines et de l'Énergie - MME)

The MME has authority on all issues relating to radiation protection, mineral titles, explosives, export of uranium, mining methods and techniques. It receives reports on:

- Annual production statistics;
- Measures relating to the limitation of exposure

→ Mines Directorate (Direction des Mines - DM)

The DM has authority on all matters related to follow-up on mineral titles, and compliance with the Mining License. It also intervenes in matters relating to radiation protection and worker safety. It receives reports on:

- Workers' monthly statistical dosimetry measurements report;
- Radioactive solid waste management activities;
- Annual report on environmental radiological monitoring.

→ Ministry of Public Health (Ministère de la Santé Publique - MSP)

The MSP is the national public health authority. It receives reports on:

- Sources and equipment causing workers' exposure;
- Dosimetry results for workers and the environment.

→ National Center for Radiation Protection (Centre National de RadioProtection - CNRP)

The CNRP has authority on all issues relating to radiation protection and the control of practices involving sources of ionizing radiation. It receives reports on:

- Workers' dosimetry results over a moving 12 months;
- Monthly results summary of all ambient measurements;
- Annual summary report of results of all measurements relating to radiation protection;
- Results of environmental radioactivity monitoring.

→ Ministry of Environment and Fight against Desertification (Ministère de l'Environnement et de la Lutte contre la Désertification - ME/LCD)

The ME/LCD has authority on all issues relating to the global environment, methods and processes to fight desert advance, and the administrative procedures to assess and study the impacts on the environment (including related planning activities, works and documents). It receives reports on:

- Discharge of waste water from plants and industrial sites in reservoirs;
- All development and environment activities, projects or programs impacting the natural and human environment;
- Environmental Impact Study Report.

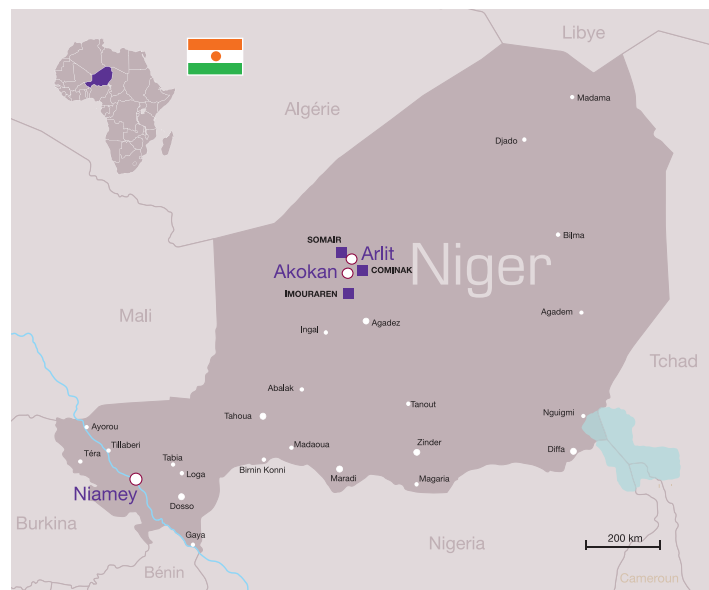
>> AREVA in Niger

At this time, the uranium potential in Niger is developed by two Nigerien corporate entities: SOMAÏR and COMINAK, of which AREVA is a shareholder and the operator.

Since the 1970s, these two companies have been managing the uranium deposits of the Arlit District in north-central Niger. Mining has continued since the establishment of the group, and AREVA decided to maintain all its production means even during the uranium price major crisis (between 1985 and 2003).

Each company owns a mine (an open-pit mine for SOMAÏR and an underground mine for COMINAK) and an ore-processing plant. The towns of Arlit and Akokan respectively were developed around the two mines, and these two communities constitute urban centres totalling over 100,000 people.

In 2009, the share of consolidated production in Niger was 2,296 tonnes of uranium. The AREVA Group is preparing to start production from the large Imouraren deposit at the end of 2013. With reserves of over 180,000 tonnes of uranium, this mining facility will be the second largest uranium mine in the world. Production will be around 5,000 tonnes a year over the next 30 years.



IDENTIFICATION CARD

GEOGRAPHIC LOCATION OF NIGER

Niger is at the intersection of West Africa, Central Africa and the Sahara. A land-locked country and a central hub for land communications between South and North, Niger is bordered by Burkina Faso and Mali to the west, Algeria and Libya to the north, Chad to the east and Nigeria and Benin to the south.

With a total area of 1,267,000 km², Niger shares over 5,700 km of borders with seven countries. The capital city is Niamey.

POPULATION OF NIGER

In 2009, Niger had about 14.7 million inhabitants in the west and the river valley (Djermas-Songhaïs, Peulhs, Gourmantchés), in the centre and east (Hassouas, Kanouris, toubous, Arabs, and Peulhs) and in the north (Touaregs, Arabs, and Peulhs). The population

growth rate is among the highest in the world (3.3% annually).

Ninety eight percent of Nigeriens are Muslims.

The national languages are French (the official language), Haoussa, Zarma-Songha, Tamasheq, Fulfuldé, Kanouri, Toubou, Arabic and Gourmantchéma.

NIGERIEN ECONOMY

By activity sector:

- Agriculture and livestock: 41% (mil, sorghum, black-eyed peas, rice, peanuts, cattle, camels, goats, etc.).
- Industry (including mines): 14%
- Services: 45%

GDP per capita in 2009: 250 €

» AREVA and Regulations on Radiological Exposure



Drumming station at the Somair Processing Plant.

“ In France, **70% of the radioactivity to which a person is exposed occurs naturally** and 30% corresponds to “added” radioactivity, mostly from medical exposure.

What is radioactivity?

Radioactivity is a natural phenomenon. It is due to the characteristic of the nucleus of radioactive atoms to spontaneously transform into other atoms (radioactive or not) while emitting an energy-bearing ionizing radiation. Radioactivity can be found:

- In soils and ground material (terrestrial radiation);
- Coming from the sun (cosmic radiation);
- And even in the human body (potassium 40, carbon 14).

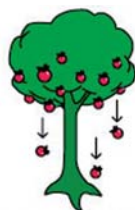
For medical and industrial needs, man has been able to produce artificial radioactivity. Whether natural or artificial, the characteristics and effects of radioactivity are identical.

Sievert Unit of Measurement

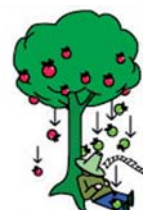
The term **Sievert** is used several times in this document. Below is a quick explanation of this unit.

- **A Sievert (Sv)** measures **the effects** of ionizing radiation on living matter. At equal absorbed doses, the effects of radioactivity on living tissues depend on the type of the radiation (alpha, beta, gamma,), and on which organ. The dose received by people is expressed in Sv.

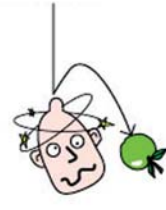
Units of Radioactivity Measurement



The number of apples falling can be compared to the **Becquerel** (number of disintegrations per second)



The number of apples that have landed on the sleeping man can be compared to the **Gray** (dose absorbed)



The effect on the body according to the weight or size of the apples can be compared to the **Sievert** (effect produced)

Source CEA



Exposure Norms for Workers Always More Stringent

In terms of workers' radiation protection, Recommendation 60 of the International Commission on Radiological Protection (ICRP) and the Euratom Directive 96/29 set **the maximum exposure of a worker at 100 mSv over 5 years and 50 mSv over a single year**. For world experts at the ICRP, this limit is sufficient to rigorously protect individuals from health impact. In Niger, this norm was reinforced in 2006 in Act 2006-017, **thereby establishing 20 mSv as the maximum annual incremental dose that a miner can receive**.

As early as 2002, AREVA set 20 mSv as the annual maximum limit for individual exposure to ionizing radiation for all its activities. To achieve this result, the Group's Nigerien mines set an operational objective of a maximum of 18mSv per worker, which was reached in January 2003. Criteria for radiation protection of workers meet the same requirement as those used in Europe and Canada.

At the end of 2009, 1,725 workers from COMINAK and SOMAÏR, as well as 1,256 contractual employees were being monitored for radiation exposure.

By the end of December 2009 no worker, at SOMAÏR or COMINAK, showed dosimetry results higher than 17 mSv per year, which is 15% below the regulatory limit.

Each exposed worker has a dosimetry monitoring record. The results are posted and consolidated by work zone and exposure level.

The Safety and Radiological Protection services at each of the sites also conduct regular information and awareness campaigns in all the mines.

WORKERS Exposure Limit Set by:	Annual incremental Dose beyond Natural background Radioactivity
ICRP & EURATOM directive	100 mSv over 5 years
Nigerien Legislation	20 mSv
AREVA Requirement	18 mSv



Lung X-Ray at the COMINAK Hospital in Akokan

Public Exposure Norms Met

French Decree 2002-460 dated April 4, 2002 reiterates the European regulation **and sets for the public an incremental dose not to exceed 1 mSv per year**.

Nigerien By-law 003 / MME / DM dated January 8, 2001 also sets the same exposure limit for the general population as the French decree.

This limit is met around the mines and in the neighbouring towns of Arlit and Akokan. The added dose for neighbouring population is on average below 0.5 mSv per year. The values are between 0.3 and 1 mSv added to the natural environment.

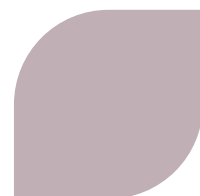
POPULATION Exposure Limit Set by:	Annual Added Dose beyond Natural background Radioactivity
French Decree & Nigerien By-law	1 mSv

Dosimetry Results for Workers at SOMAIR

Year	SOMAIR Staff Monitoring	Total Staff Monitored	Breakdown of Workers Monitored*				Average Dose of Workers (mSv)	*Maximum Individual Dose (mSv)
			0 to 6 mSv	6 to 12 mSv	12 to 18 mSv	18 to 20 mSv		
2007	AREVA employees	481	462	19	0	0	2.95	9.40
	External Contractors	265	129	6	0	0	1.77	9.53
2008	AREVA employees	521	497	24	0	0	3.20	9.30
	External Contractors	318	310	8	0	0	1.89	7.50
2009	AREVA employees	603	593	10	0	0	2.60	9.50
	External Contractors	501	465	36	0	0	1.74	9.20
NOTE <i>The regulatory exposure limit for workers is set at 20 mSv according to Nigerien legislation and 18 mSv by AREVA requirements</i>								

Dosimetry Results (mSv) for Populations Living in Close Proximity to the SOMAIR Site		2008	2009
Sedentary Population	Adults	0.19	0.18
	Children	0.30	0.17
Nomad Population	Adults	0.19	0.18
	Children	0.19	0.16

“ **100% of workers monitored** (SOMAIR, COMINAK, contractors) had a dosimetry exposure **below 18 mSv in 2007**. These results confirm the teams' efforts since 2003. Moreover, the annual public radiological exposure is below 1 mSv.



Dosimetry Results for Workers at COMINAK

Year	Staff Monitoring at COMINAK	Total Staff Monitored	Breakdown of Workers Monitored*				Average Dose of Workers (mSv)	*Maximum Individual Dose (mSv)
			0 to 6 mSv	6 to 12 mSv	12 to 18 mSv	18 to 20 mSv		
2007	AREVA employees	1034	576	294	174	0	6.31	15.80
	External Contractors	818	585	174	59	0	4.01	15.39
2008	AREVA employees	1038	584	359	95	0	5.88	15.09
	External Contractors	868	722	123	23	0	3.02	15.25
2009	AREVA employees	1122	687	340	95	0	5.63	15.80
	External Contractors	755	625	108	22	0	3.28	16.15

NOTE *The regulatory exposure limit for workers is set at 20 mSv according to Nigerien legislation and 18 mSv according to AREVA's requirements.*

Dosimetry Results (mSv) for Populations Living in Close Proximity to the COMINAK Site		2008	2009
Sedentary Population	Adults	1	0.59
	Children	1	0.61
Nomad Population	Adults	0.66	0.50
	Children	0.66	0.51

(*) Results at the end of the calendar year.



*Environmental Monitoring: Fresh Water Sample in Akouta,
a Village near COMINAK.*



2 Environmental **Accountability**

At its sites in Niger, as at all its other sites, AREVA implements everything possible to limit the impact of its activities on the environment and on populations to a level as low as reasonably achievable.

To this end, the mining companies monitor and report regularly on their environmental performance. They have a monitoring network for water, air, soils and the food chain.

The management of natural resources and the use of aquifers remain a major concern for the AREVA group.

» Environmental Monitoring Network of AREVA's Mining Companies

“ There has been
constant water
quality monitoring since the
beginning of production by the
mining companies.

Water Quality Control

Water quality control is now centralized within the scope of the AMAN Project, which collects all the chemical, bacteriological, and radiological analyses. The results are made available to all stakeholders.

Water samples are collected and radiological analyses are performed on a semi-annual basis.

The results of these analyses are compared to the World Health Organization (WHO) recommended limits and show that Nigerien and international drinkability norms are being met.

There is also an additional monitoring on aquifer water quality outside the mining activity's area of influence in Agadez, 250 km south of Arlit.

Below, as examples, are the water monitoring results for COMINAK.

Water Quality Monitoring Analyses Results

Year	Unit	Sodium	Chlorides	Sulphates	Nitrates
2006	mg/l	123	26 à 87	45	40
2007		141		28	38
2008		154		56	40
Reminder of WHO's Recommended Limits		200	250	200	50

Water Radiological Monitoring		WHO's Guideline Values	2006		2007		2008*		2009	
			Akokan	Agadez	Akokan	Agadez	Akokan	Agadez	Akokan	Agadez
Radium 226	Bq/l	< ou = 1	< 0,02	< 0,02	0,01	0,02	N/A	N/A	0,01	0,02
Uranium 238	Bq/l	< ou = 10	< 0,16	< 0,44	0,20	0,28	N/A	N/A	0,20	0,28

* 2008 data not available (water sampling was not allowed at Agadez for safety reasons).



Environmental Monitoring, Fresh Water Sample Collection in Akokan.

Food Chain Monitoring

Food chain monitoring is based on analyses of radionuclides contained in fruits and vegetables grown in town gardens.

Samples are collected once a year at harvest time. Results are compared to those of fruits and vegetables from gardens in Agadez, which is located outside the mining activities' potential impact area.

FOCUS

AMAN Project

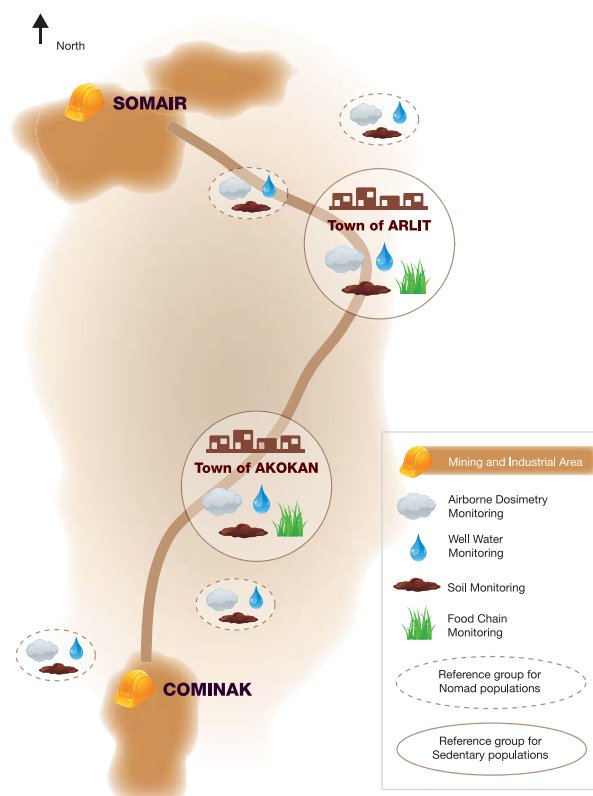
The role of the AMAN Project (AMAN means water in the Tamacheck language) is to obtain enough knowledge of existing aquifers in the Arlit-Akokan area to ensure, in the short, medium and long terms, the supply of potable water and industrial water necessary for the population and the mining sites in the area.

Action plans implemented to meet its mandate:

- Conduct hydrogeological studies to assess existing water tables (piezometers readings, operating flow in the existing network, water quality)
- Identify additional resources available across all mining concessions held by AREVA within the area,
- Centralize all the data.

These studies must allow the optimization of the production network management (flow to apply to production activities, development of future works given the aquifer's productivity and the water quality desired).

ENVIRONMENTAL MONITORING NETWORK OF AREVA'S MINING SITES IN NIGER





Ambient Air Quality Measuring Station.

Air Monitoring System

Radiological air quality is monitored on an ongoing basis at the mining sites and in their immediate environment, as well as in the towns of Arlit and Akokan.



Atmospheric Monitoring Station.

The air monitoring network includes 12 dosimeters. This is a regulatory requirement aiming at continuously analyzing the air quality. There are six environmental monitoring stations positioned within the SOMAïR perimeter (including two in Arlit) and six environmental monitoring stations for COMINAK (including three in Akokan).

These dosimeters measure the dose rate and the potential alpha energy due to short-lived radon 222 and 220 daughter products. They also allow for the measurement of airborne dust activity concentration. The annual averages are 110 to 200 nJ/m³ for alphapotential energy from short-lived radon 222 daughter products and are about 0.2 mBq/m³ for dust activity concentration. A monthly value is provided and the average of these values allows the assessment of the annual dose related to ambient air received by populations.

In addition to these dosimeter measurements, soil samples are collected in a wide perimeter around the sites to monitor possible atmospheric deposition.



Soil Quality

Soil quality control is part of the environmental monitoring regularly carried out by AREVA and its subsidiaries.

Soil samples are taken every year along seven radial lines based on the direction of prevailing winds (north-east / south-west).

Along each radial line, eight soil samples are collected and analyses are conducted with respect to U238, Ra226 and Pb210 and on fine grain fractions (< 50 µm) and coarse fractions (50 µm–2mm).

The monitoring network data confirm the absence of impact. Two spots at the edge of the site had readings of 0.66 and 1.1 Bq/g of uranium (compared to 0.15 Bq/g of uranium measured for background radiation) and do not pose any health risks.

To avoid fine particles dispersal during mining activities, dirt roads are regularly sprayed with water.

To optimize potable water consumption, mining companies use recycled industrial water. This water may present trace amounts of radioactivity but its use does not cause a significant radiation concentration in the soils.

Recent studies confirm that this practice does not present any health risks for the populations and that the calculated doses remain within natural background variation levels.

AREVA is presently conducting studies to identify processes to reduce the dispersal of dust in the mines and to reduce the use of water when suppressing dust.



A Street in the Town of Arlit.

SUMMARY

Air and Soil Monitoring

The AREVA's mining companies SOMAÏR and COMINAK have around their industrial sites and in the urban areas a network comprised of several stations to monitor the radiological impact of their activities on the environment.

These monitoring stations measure and evaluate continuously the airborne radioactivity levels (radon gas and radioactive dust). In addition soil samples are used to monitor possible atmospheric deposition.

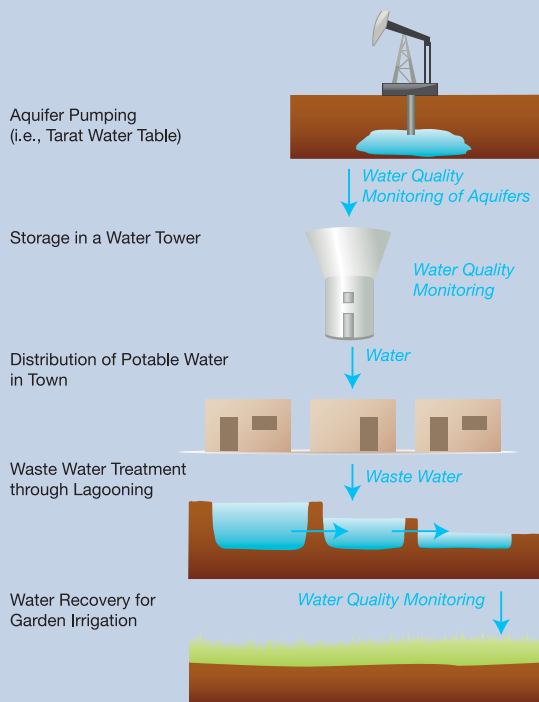
"The concentration of uranium and other radioactive materials in a soil sample collected near the underground mine was found to be about 100 times higher than normal levels in the region, and higher than the international exemption limits."

Greenpeace, "Left in the Dust"

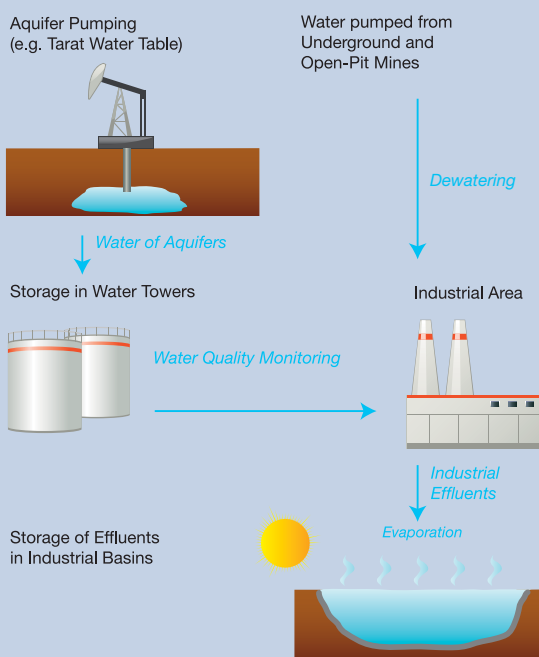
**Greenpeace
Accusation**

TO BETTER UNDERSTAND OUR WATER MANAGEMENT

The following diagrams show water management from the aquifer to its final destination, when it is used by populations or by the mining activities.



Flow of Water used by Communities



Flow of Water used for Mining Activities

>> Water Management

Underground Water Tables

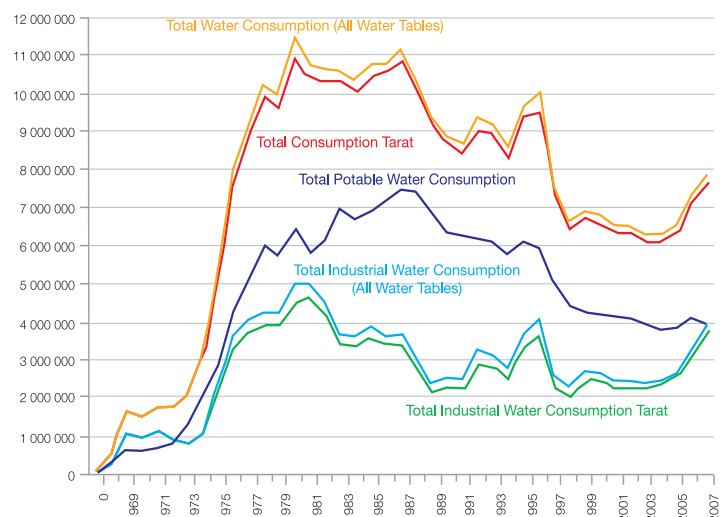
The mining companies take part in the group's active policy for a permanent reduction of the environmental footprint and water consumption.

There are several fossil water tables at the Arlit and Akokan mining sites. Mining operations only use one, the Tarat water table, for potable water. This table has initial reserves estimated at 1.3 billion m³. Over 40 years of operations, 23% of the reserves have been used, representing a volume of 302 million m³.

The annual consumption **was reduced by 35%** over the past 15 years. It is now about **8 million m³** per year, with 65% of this volume used to supply the urban areas of Arlit and Akokan.

At the same time, uranium production at Somair has doubled over the last ten years.

Consumption of Potable and Industrial Water Since 1969
(Source: Data from AREVA/AMAN Project)





Hydrogeological Drilling in the Imouraren Area

Optimization of Water Consumption

Among the innovative projects is the ore treatment by heap leaching at SOMAÏR. Compared to traditional industrial processes in the mining sector, it allows for lower water consumption per tonne of ore treated.

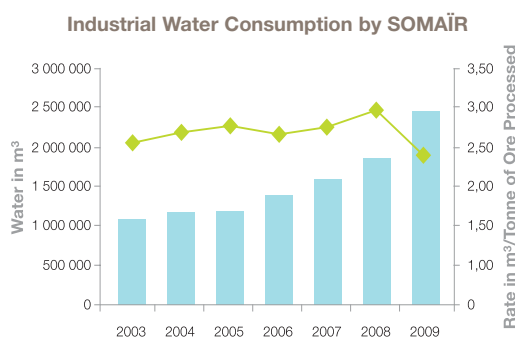
Other measures, such as improvements to the milling process or the use of mine drainage water in the industrial process, help increase the preservation of existing resources.

The initiatives led by AREVA provide data critical to understanding the hydrogeology of northern Niger:

- Implementation in 2004 of the AMAN Project by AREVA. This research is conducted in particular on the western side of the Arlit geological flexure (on the aquifers of Izegouande and Téloua) and south of COMINAK ;
- 2004 modeling study performed by École Nationale Supérieure des Mines de Paris, focussed on the hydraulic behaviour of the Tarat water table and, in particular, predicting its evolution over the next 50 years. A new study, expanded to the other water tables, is scheduled for 2011. It will include the data from the monitoring network.
- The introduction of VEOLIA Eau (company specializing in water distribution and delegated management) currently doing a study on the state of the distribution network in Arlit and Akokan. The initial results are expected at the beginning of 2011.

Water consumption is also part of awareness campaigns for workers and their families.

“Water is a necessary resource for any mining or industrial activity. To preserve this resource, AREVA's mining companies are increasing their efforts to optimize water consumption and industrial water recycling.



“In 40 years of operations, a total of 270 billion litres of water have been used, contaminating the water and draining the aquifer which will take millions of years to be replaced.”

Greenpeace, “Left in the Dust”

**Greenpeace
Accusation**



Drinking Water Quality: Uranium, Radon and Nitrates

Contrary to erroneous statements made by Greenpeace, although the organisation received a copy of the reports published regularly on hydrogeological and hydrochemical data summary⁽¹⁾, analysis results from fresh water wells in the last 20 years do not show an increase in uranium concentration.

Currently, these wells are being monitored on a semi-annual basis and results are made available to all stakeholders (State services, civil society, and NGOs). It is important to note that the Tarat water table (used for mining activities) has a geochemical background that is naturally high in uranium with an average around 20 µg/l (with results varying from 5 to 55 µg/l).

However, in comparison, several aquifers in the Agadez region with no uranium mining activities also contain high uranium values.

	2006	2007	2008 ⁽²⁾	2009	2010
Concentration in Uranium, Water Distributed in Agadez (250 km South of Arlit)	20 et 53 µg/l	23 µg/l	Not available	37,2 µg/l	45 µg/l

Greenpeace Accusation

"In four of the five water samples from the Arlit region, the uranium concentration was above the WHO recommended limit for drinking water. Historical data indicate a gradual increase in uranium concentration over the last 20 years, which can point at the influence of the mining operation. Some of the water samples even contained dissolved radioactive gas, radon 222."

Greenpeace, "Left in the Dust"



Three potable water wells located in the SOMAIR industrial area are no longer used because they had high uranium concentrations, several tens of micrograms per litre, due to their proximity to the deposits.

It is impossible to have a radiological impact on the groundwater due to industrial activities. Most of the wells are located outside their area of influence and uranium concentration in Arlit wells is similar involves to the one monitored 30 years ago. In all cases, if fresh water wells had a high uranium concentration due to their proximity to deposits, their use would no longer be allowed.

Like numerous aquifers located near uranium rich geological areas, there is a possibility of a radon concentration in Tarat waters.

However, Nigerien and international regulations do not take radon gas into account in assessing radiological quality of waters for the simple reason of their natural degassing when they are used. The arguments put forward by Greenpeace about risks related to radon gas are therefore based more on the will to raise fears than actual facts.

Furthermore, we can add that the Tarat waters have very low radium 226 activity, which is the source of the presence of radon⁽³⁾.



Environmental Monitoring, Vegetation Sampling near the Somair Processing Plant in Niger.

1 Hydrogeological Synthesis -Tarat Water Table in the Arlit – Akokan Area.

2 2008 data not available (water sampling at Agadez was not authorized for security reasons).

3 This dose is calculated from activity related to U238, U234, Ra226, Pb210 and Pb210.

FOCUS

Health Risks

The IDT calculations (Indicative Total Dose) for potable water give a dose lower than 0.1 mSv for an annual consumption of 730 litres.

Populations are not exposed to any health risk caused by the water distributed in Arlit and Akokan.

This result meets Nigerien and international regulations.

Moreover, water distributed in town meets the nitrate levels set by regulations implemented in Niger, i.e. 45 mg/l.

It is true that high nitrate concentrations are found in some wells. In 2008, an ANTEA consulting firm study showed that in addition to naturally high background radiation, which is a characteristic of the Sahara waters, there is some human pollution. It comes from the irrigation of gardens with treated waste water in urban areas.

Improvements to the quality of distributed water are made by diverting the most nitrate-rich wells towards the industrial water network and digging new wells with lower concentrations.

» Air and Soil Management

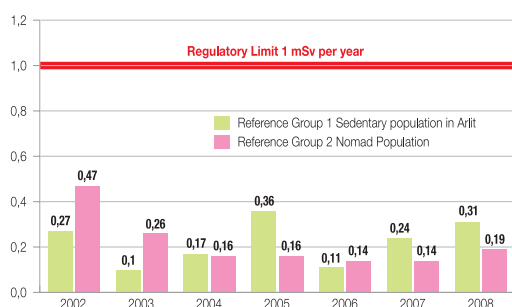
“ Water table utilization for urban and industrial needs **can not have a negative influence on vegetation.** ”

Impact of Water Consumption on Vegetation

The piezometric map prior to the start of mining activity indicated a water level over 25 meters deep: at that depth the water table level cannot influence vegetation growth on the surface.

The same observation can be made for the Imouraren area where the water level is 27 meters deep. The area presents very little vegetation cover, growing along the koris, where are concentrated small surface water layers fed by summer rain.

Evaluation of the added public dose in the SOMAIR perimeter from 2002 to 2008
(Data Source: service radioprotection SOMAIR)



Dust and Risks for the Population

The environmental radiological monitoring network does not indicate massive dispersal of radioactive dust and confirms the absence of contamination within the towns.

The values of dust activity concentration are about 0,2 mBq/m³. All the reference groups have an added annual dose of less than 1mSv, in compliance with Nigerien regulation and international standards.

Greenpeace Accusation

“The flora has disappeared. It is a desert country, but there are trees...their roots cannot grow deeper than 60 metres! However the water tables are now at 300 meters: the trees cannot reach them.”

Greenpeace, “Left in the Dust”

“Fine (dust) fractions showed an increased radioactivity concentration reaching two or three times higher than the coarse fractions. Increased levels of uranium and decay products in small particles that easily spread as dust would point at increased risk of inhalation or ingestion...”

Greenpeace, “Left in the Dust”

Example of the Akokan Police Station

The mining companies have been aware of the high radon concentrations, mentioned by Greenpeace, at the Akokan police station since the end of 2003.

Well before Greenpeace indicated this anomaly, AREVA launched several actions to determine the source of high radon measurements in this area: a modeling study of radon dispersal in 2004, a campaign of continuous measurement of radon volumetric activity between 2006 and 2008 and additional soil investigation in 2009.

To date, the source of this radon concentration is not clearly identified. Additional investigations are scheduled for 2011.

However, analyses and samples taken at the police station confirm that public exposure standards are met. Regulations require that the public not be exposed to added doses higher than 1 mSv per year and tolerate an exposure of more than 1 mSv per year with an average of 1 mSv over a period of five consecutive years.

ADDITIONAL DATA

Annual Average in PAEC Rn 222 (nJ/m ³)	
2005	199
2006	159
2007	187
2008	216
2009	166

Annual Added Effective Dose (mSv)	
2005	0.99
2006	0.82
2007	1.06
2008	1.36
2009	0.63
Average Over 5 Years	0.97



Akokan Police Station

"A radon measurement performed at the police station in Akokan showed a radon concentration in the air three to seven times higher than normal levels in the area."

Greenpeace, "Left in the Dust"

**Greenpeace
Accusation**



Mill Tailings site of SOMAIR. Niger.

FOCUS

Tailings Decommissioning

Since the middle of the 1990s and the closure of mines in France and Gabon, research and studies have been ongoing on long-term tailings management. In 2005, studies on the evolution of tailings characteristics and cover test plots were launched in Niger. They have now been complemented by performance studies that will contribute to the decommissioning measures.

The AREVA group applies the same decommissioning methods to all its mining sites.

Mill Tailings

Since the beginning of mining and as part of their industrial activities, the mining companies have been storing ore-processing tailings in impoundments (14 million tonnes at COMINAK, 17 million tonnes at SOMAIR).

The COMINAK impoundment lies on Teijia clay and the SOMAIR impoundment is on an impervious liner laid on top of the Izegouande clay and sandstone formation. They are surrounded by dikes and/or berms.

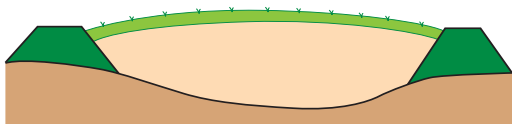
Two drill holes performed in 2007 demonstrated the effectiveness of such facilities to protect the underlying ground.

A thick and hardened layer forms at the tailings' surface when they dry, preventing dust from dispersing.

All data collected from the monitoring network and studies show the absence of significant impact of these tailings on the sites' environment.

All the employees working in the tailings area are individually monitored for radiation exposure. None were over the annual regulatory limit (20 mSv).

Depression + Surrounding Dike or Berm
Total Fill in





» Waste Rock and Contaminated Material Management

Background

In the past, materials that no longer had any industrial use like scrap metal and mine waste rock became public property and could be reused by local communities. It is true that these materials can have a low radiological activity. However, they do not currently, nor in the past, present any major health risk for the populations. It is also important to underline that at the time of this practice, regulations limited public exposure to 5 mSv (it is now 1 mSv since 2001); a limit respected by these materials and waste rock.

The samples that Greenpeace called into question were rocks of small sizes. The maximum exposure measured represents, in the worst case, a dose rate at 1 metre from the soil of 0.003 mSv per hour. Therefore, one would have to spend 14 days a year standing on this rock in a street of the mining town to reach the regulatory limit of 1 mSv, which is irrelevant given the current traffic of inhabitants at that location.

Nonetheless, even in the absence of a health impact, since 2002 AREVA has strengthened radiological control of such materials. It has also committed to correct and prevent practices that would not allow for these materials' management in a manner respectful of established procedures and Nigerien regulations.

“ In April 2010, **AREVA Niger, civil society and local authorities signed a series of protocols** and procedures to implement multipartite radiological control of materials and equipment in the streets of Arlit and Akokan, including also more stringent monitoring of used materials exiting the industrial sites. These measures will be taken throughout 2010 and 2011.

On the streets of Akokan, radiation dose rate levels were found to be up to almost 500 times higher than normal background levels. A person standing less than one hour a day at that location would be exposed to more than the maximum allowable annual dose.

Although AREVA claims no contaminated material gets out of the mines anymore, Greenpeace found several pieces of radioactive scrap metal on the local market in Arlit, with radiation dose rates reaching up to 50 times more than the normal background levels. Locals use these materials to build their homes.

Greenpeace, "Left in the Dust"

**Greenpeace
Accusation**



Bi-annual Relative Stability Measurements of a Mill Tailings Impoundment.

Action Plan Given to Greenpeace

Despite the absence of health risks and to close the debate raised by some civil society organizations, AREVA in partnership with the authorities, committed to perform a comprehensive monitoring of the streets and public places in the mining towns. Measurements collected by teams comprised of AREVA workers and representatives of the authorities and civil society, have already started in Arlit and Akokan.



This stage is included in the action plan provided to Greenpeace in December 2009.

To determine the presence of contaminated materials outside industrial sites, a measurement protocol and agreements defining the roles and responsibilities of all stakeholders have been developed.

All local stakeholders signed these documents in April 2010 (Centre National de Radioprotection du Niger, Ministère des Mines, Arlit's regional administrator, civil society and AREVA sites).

The measurement protocol is comprised of a radiometric survey of the streets, houses and public buildings around the mining sites.

The action plan (see appendix) shows AREVA's desire to assume its industrial activity and act responsibly. A monitoring committee including all the stakeholders was established and will ensure the monitoring of all the measurements made in the towns of Arlit and Akokan.

In June 2010, the assessment of the monitoring indicated a total of 11 anomalies detected in the 16 linear kilometres of roads covered. The materials identified are being processed according to the protocol established by the stakeholders.

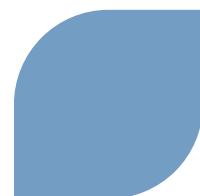
After all the monitoring is complete, a report will be published in 2011 to publicly state the actions taken.

FOCUS

ALARA Principle

AREVA applies the ALARA principle (As Low as Reasonably Achievable) whereby human and environmental exposure to ionizing radiation must be as low as reasonably achievable given social and economic factors.

It is a precautionary principle aimed at considering potential risks associated with low doses and providing, as an objective, acceptably low risks for the population given existing regulations and technical means.



Measures Taken for Waste Rock and Scrap Metal

Comprehensive grid measurements of streets and public buildings started in January 2010 is ongoing to complete the first waste rock research initiated in 2004 and continued in 2006. This is done according to the procedure established in consultation with stakeholders (administration, elected officials, and civil society representatives).

The first results showed the presence of a small number of slightly contaminated samples with no health risk for the populations.

Since 2002, all industrial materials transferred to the public domain by mine operators have been submitted for radiological testing and decontamination when necessary. Materials cannot leave the mine without the prior approval from the most senior site managers, an added guarantee of the safety of these operations.

This procedure was reinforced in 2007 with the exclusion of materials that had been in contact with uranium-bearing solutions.

Mining companies are also mobilizing to deal with theft and the illegal sale of scrap metal from their mines. AREVA deploys means to fight against these practices and regularly conducts radiological testing, as a precaution, among scrap metal sellers, in collaboration with the ministry responsible for the mines.

Testing by Grid Measurements on the Street.



COMMUNE URBAINE
D'ARLIT

AREVA

BIBLIOTHEQUE
MUNICIPALE
D'ARLIT

*In partnership with the urban community of Arlit
in Niger, the AREVA Foundation contributed to
the creation of the Arlit municipal library.*



3

Acting Responsibly towards Neighbouring Communities

As the country's largest private employer, AREVA has been contributing to the improvement of living conditions in local communities for a long time.

To do this, AREVA has an ambitious societal policy, for which it has committed 6 million Euros per year for the next five years.

» **Local Economic Development**

AREVA is actively involved in Niger's development as the country's main industrial partner. The economic benefits of mining are real, numerous and tangible. AREVA's role in Niger generates many positive impacts.

- Over 25 million Euros spent on community development over the past six years
- Over 37 million Euros in various taxes paid to Niger in 2009 and 3 million Euros in societal contributions

Industrial Sector

For more than 40 years, AREVA has been a major player in the modern industrial sector in Niger. As such, it is a platform for investment, technology, and natural resource development. The journey started in 1968 with SOMAIR and was reinforced in 1974 with the creation of COMINAK. It continues with Imouraren where a 1.2 billion Euros investment is planned for more than 30 years of industrial activity.



Simulator Training for Future Heavy Mining Equipment Drivers at Imouraren SA.

Greenpeace Accusation

"For many years, AREVA and its partners have exploited the population, the earth, water and air in the mining region. Their activities continue to threaten the health, safety and welfare of the citizens in the area, as well as damage the surrounding environment for literally hundreds of thousands of years to come. AREVA is not only physically and socially exploiting the Nigerien people, it is also robbing them of their greatest known economic resource by not sharing the wealth of the uranium excavation."

Greenpeace, "Left in the Dust"



The AREVA Foundation supports the Agapé Niger Center for vocational training in bakery and bread making. Niamey.

Employment and Training

With over 2,500 direct employees in the group's entities, AREVA's mining companies are the largest private employers in Niger.

In addition, the mines have always had on-site training centres in addition to other training efforts in schools and centres outside the companies.

Qualitatively speaking, these mining units boast the highest concentration of people who master modern technologies in mechanics, electricity, mining, chemistry, computer science, management, etc. The average budget allocated for training over the last three years was 2.85 million Euros.

Savings and Financial Benefits

The years of economic slump in the uranium market (1985 to 2003) should not let us forget the boom at the end of the 1970s when uranium represented 70% of exports and was the main contributor to GDP after agriculture. Today, it represents 62% of exports, 7% of the GDP and 12% of tax revenues.

The AREVA group subsidiaries gave 18.8% of their sales to the state in 2008 and more than 40 million Euros in 2009 in taxes, dividends and contributions. Local purchases by AREVA entities in Niger represent 34.5 million Euros or 34% of total purchases of the group's entities in Niger, generating a substantial economic activity.

“ With a ratio of **four indirect jobs created per worker** in the mining companies, the mines' impact is estimated at **more than 10,000 jobs in Niger in 2010**. ”



Road construction between Arlit and Akokan.

Infrastructure Development

The Group's presence in Niger allowed for the construction of many facilities that benefit the entire population today.

SOMAÏR and COMINAK manage two hospitals in Arlit and Akokan with technical support centres that are the best performing in the country. First created to provide medical care for the miners and their families, the centres are now largely open to the public free of charge. Imouraren also recently opened a medical centre treating local residents for free. This centre provided approximately 3,000 consultations in 2010, 40% of which were to the local residents.

The mining activity also allowed for the construction of housings and a modern network of water distribution. It contributes to the funding of public services' operating costs and the construction of school facilities (schools, libraries, lunch rooms, etc.).

The presence of AREVA in Niger also allowed for the construction between 1978 and 1980 of a 685-km paved road between Tahoua and Arlit. It opens up the area to the West African network and serves the Agadez and Arlit regions from the southern end of the country.

These works are now complemented by the financing of the Arlit-Akokan road and an urban road system in Arlit. This project began at the end of 2009 and requires an investment of 4.5 million Euros. Aware of its responsibilities in this rugged area, AREVA decided to participate to the improvement of tracks the regions where it operates, thus increasing road safety while preventing vehicle dust dispersal.

In partnership with the urban community of Arlit in Niger, the AREVA Foundation helped to create the Arlit municipal library.



» Populations Health

Hospital Care

Expenses for health care provided to the local residents came to 1.14 million Euros in 2009 for the hospitals in Arlit and Akokan, representing 26% of total expenses.

These facilities have a comprehensive technical support centre with biological, radiological, ultrasound and endoscopic diagnostic tools. The COMINAK lab can perform some analyses necessary for medical practice: blood counts, biochemical assessments, tumour markers, thyroid hormones, reproduction hormones, serology of hepatitis B and C, emergency cardiac workups, complete IgE, etc.

When it is not possible to diagnose on site, samples are taken and sent to labs in Niamey or France.

Both hospitals were audited by independent expert organizations (Quanta Medical and GISPE), which reports were made public in 2007. Their conclusions confirmed the quality of care provided.

Statistics from mine hospitals are regularly sent to Arlit's Regional Health Directorate (Direction Départementale de la Santé) and the Ministry of Public Health's National Health Information System Directorate of Niger (Direction du Système National des Informations Sanitaires du Ministère de la Santé Publique du Niger). Results analyses show no new diseases and no highly divergent statistics compared to other regional departments.



“Care in mine hospitals is **free and provided to all walk-in patients**. In fact, care provided to the population represents a third of the interventions and more than 50% of major medical or surgical procedures.



Pediatric Ward at the COMINAK Hospital in Akokan.

“However, it goes on to say that mine employees and their families account for two thirds of patients treated, and the rest treated are from the general population. Statistically, in an urban area of 80,000 inhabitants where the company only employs 2,400 people (plus families), the equal acceptance of all patients – given these figures – seems quite improbable.”

Greenpeace, “Left in the Dust”

**Greenpeace
Accusation**



“ Today AREVA is the only company in Niger to have anticipated the changes in Nigerien regulations. In 2008, it created the position of Occupational Physician exclusively devoted to medical monitoring of workers.

Allergic Disorders

Allergic disorders (affecting the lungs, ears, nose and throat, and eyes) are among the first pathologies encountered in the Agadez region.

Encountered more in the Sahara, they are typically found in deserts and are classified as such by the World Health Organization.

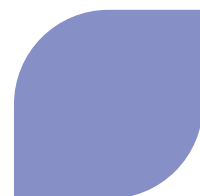
They are caused by the aggressive impacts of sand on the eyes and lungs, and not by mining activity as implied by Greenpeace.

Workers are monitored in the mines' hospitals built at the very beginning of mining activity, in the 1970s.

Greenpeace Accusation

"Death rates due to respiratory infection in the town of Arlit (16.19%) are twice that of the national average (8.54%)."

Greenpeace, "Left in the Dust"



Health Observatory

A world first in industry, health observatories are the result of a scientific and multipartite (AREVA, States, NGOs) approach. They will allow authorities and also former workers and local populations to be informed, in complete transparency, of health impacts of the mining sites (existing or past) managed by AREVA.

They are based on:

- **Post-employment monitoring of former workers** exposed to uranium; to this end, a medical visit is organized every two years (clinical exams, lung x-rays for workers exposed to ore, blood tests ...);
- **Health monitoring of populations** living in the area of influence of the mining facilities. Independent and scientific data analyses (medical registries of recorded diseases, hospital records, case studies...) will demonstrate whether, compared to other regions of the country, health conditions are degrading, stable or improving because of the presence of uranium mines for the neighbouring populations.

Announced in March 2007 by Anne Lauvergeon, Chief Executive Officer of AREVA, this unique structure of observations is to be deployed at all AREVA mining sites. Launched in Gabon in October 2010, they will begin in Niger as soon as the agreement protocol with authorities is ratified. The independent experts in charge of the existing data collection will have to complete the computer compilation of medical data.

In addition, to ensure complete transparency of the impact of existing and past mining activities on health, a study will also be conducted on miners' mortality between 1968 and 2005.



COMINAK Hospital in Akokan.

"While safety improvements and radiation monitoring of the current employees is crucial and necessary, it does nothing to make up for the risks former workers were exposed to."

Greenpeace, "Left in the Dust"

**Greenpeace
Accusation**

» AREVA Showing Solidarity with Nigerien Populations

AREVA, a partner with Niger for half a century, has always shown its solidarity with the Nigerien people in the region where it operates and at the national level, for instance through recent emergency assistance measures.



Emergency Food Assistance, July 2010.

Emergency Assistance

In 2005, after the grain deficit, AREVA provided assistance in the amount of 472,600 Euros with additional donations from local staff for food supplies and nutritional supplements (plumpy nut) for children. Moreover, specific food supply assistance targeted nomad animal breeders in land-locked areas of the Agadez region.

In September 2009, AREVA gave 458,000 Euros to flood victims of torrential rain in several communities of the Agadez region. At the same time, AREVA gave the same amount as its collaborators in Niger to fund reconstruction projects by local associations.

In 2010, AREVA responded to the call for solidarity made by the Nigerien government to face the food crisis threatening 7.8 million people and provided assistance in the total amount of 1,073,000 Euros to the most affected regions (Tahoua, Maradi, Zinder, and Diffa).

This assistance consisting of food supply for people and of animal feed was complemented by a specific program of ready-to-use therapeutic foods and medicines for children in the Centers for Nutritional Recovery and Pediatrics (Centres de Récupération Nutritionnelle et Infantile - CRENI).

All these actions were taken in collaboration with national and international NGOs and in close relationship with central and regional authorities and the National Cell for Food Crisis (Cellule Nationale de Crise Alimentaire).

Similar actions are being considered for 2011 aimed at gradually recovering from the food crisis.

In partnership with the French Red Cross, AREVA supports food safety reinforcement measures in the Zinder region targeting 2,000 households (with approximately 14 people) at a cost of 330,000 Euros.



AREVA funded the Secondary School of Akokan.

Education

Since the beginning, education has been a major focus of AREVA's social programs in Niger. They have provided assistance for primary and secondary education in the Arlit region with construction, renovations and school equipment projects. The total cost of these projects was 468,000 Euros in 2006-2008 with two significant projects: operation "tables and benches" for the schools in the Agadez region in 2007, and reconstruction and equipment of the Secondary School of Akokan in 2008.

AREVA also supports Nigerien postsecondary education with two flagship scholarships projects. First for young students from disadvantaged backgrounds to continue their studies in Niger; at the Niamey School of Mines and Geology (École des Mines et de la Géologie de Niamey - EMIG) and second in France through a special program for the best Nigerien female high-school graduates. The total amount for all these programs since the end of 2006 was 988,000 Euros.

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Nigerien Female Students with a Scholarship Funded by AREVA.

“ The implementation of a joint development program in Niger is part of AREVA's approach to social responsibility and sustainable development.

Joint Development Pilot Project

As part of the construction of the new mine at Imouraren, AREVA initiated a study at the beginning of 2010 on capacity building for small and medium-sized Nigerien businesses, the possibilities of contracting with national businesses and local economic development around the project area. A three-year program is being developed with a total budget of 2.3 million Euros that is slated to start at the end of 2010.

This program aims at deploying, during the mine construction phase, a strong strategy, for local employment, neighbouring communities' development and development of the resources in the project region (targeted recruitment and training of nationals by subcontractors). It will reinforce the development of revenue-generating activities and a lasting industrial and commercial network in the implementation areas.

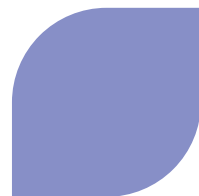
Electrification

As part of decentralization efforts underway in Niger, the urban community of Arlit has engaged and appealed to AREVA for an electrification program covering four neighbourhoods located on the edge of town, selected not only for their demographic importance, but also for their economic growth.

This project aims to develop the medium and low voltage grid network in these neighbourhoods. It started in 2008 and is now almost complete, with 247,500 Euros in funding from AREVA, in partnership with the Group for the Defense of the Right to Energy in Niger (Collectif pour la Défense du Droit à l'Énergie au Niger - CODDAE) and the French association Right to Energy (Droit à l'Énergie).

Mining Camp at Imouraren.





» Information to Local Populations

Transparency is one of AREVA's driving principles in its industrial actions. In Niger as elsewhere, the group communicates and exchanges regularly with the authorities, civil society and local populations

Whether through Local Information Commissions, the Public Information Bureau, public hearings or Bilateral Orientation Councils, there are many forums for dialogue and consultation with our stakeholders. Communities' representatives, NGOs, local and national authorities are also regularly informed of the development and evolution of the mining activities.

Local Information Commission (CIL)

Since 2005, AREVA has been organizing annual Local Information Commissions (CIL). Mining company representatives report on their results and industrial and environmental performance to local stakeholders (prefecture, town hall, traditional chiefs, NGOs, social and professional representatives...).

Results on health, safety, environment, societal impact and industrial performance as well as challenges related to local development are presented and discussed. Water and air analyses are widely discussed.

The last CIL meeting took place in Arlit on February 4, 2010. Going forward, it is planned to hold meetings twice a year.



Local Information Commission Meeting.

"90% of Nigeriens do not even know that we produce uranium today in Niger. 100% of Nigeriens do not know what radioactivity is! 100% of Nigeriens do not know that uranium is used to make electricity!"

Greenpeace, "Left in the Dust"

**Greenpeace
Accusation**



Public Information Bureau in Niamey.

Public Information Bureau

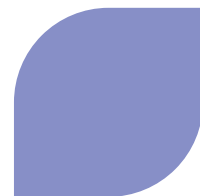
In February 2008, AREVA opened a Public Information Bureau (PIB) in Niamey. The public is invited to come and receive information about the group's activities and opportunities they provide.

A new Bureau will open in Arlit and another in Imouraren in the next few months. A website dedicated to AREVA's operations in Niger is in the works (www.niger.areva.com). The objective is to involve more the various administrations, civil society and all other stakeholders in information and communication activities related to the mining companies.

Mining Projects and Public Hearings

Any new mining project implemented by AREVA is accompanied by a societal and environmental impact study.

This document presents the societal and environmental aspects of the future project (development of neighbouring communities, initial state, air, soil, climate, health risks, fauna and flora...). It states in a very transparent manner all the positive and negative consequences of the project's implementation. It also presents mitigation and compensation measures to be taken by AREVA to ensure that the project's impact is as low as possible.



Impact studies are submitted to the authorities and presented to the populations at public hearings. They must be approved during a validation workshop gathering experts from AREVA and the Nigerien State, members of civil society and representatives of various administrations.

The content of the Imouraren project was discussed at length in May 2008 with the administration, NGOs, elected officials and customary leaders in Agadez.



Validation Workshop for the Imouraren Project, Niger.

Bilateral Orientation Councils (BOCs)

Created in May 2006 to strengthen dialogue on projects to be funded for the benefit of the populations, the BOCs gather local elected officials, administrations and civil society along with AREVA. They help to define on a regular basis (four meetings in 2009, three in 2010) local development policy and major intervention priorities, voice opinions on projects, and ensure - after defining the terms and conditions criteria - the right balance of collective facilities between the communities involved and the departmental community.

Meeting with the NGO Ikwane.





View of the SOMAIR Industrial Area.



4

Action Plans

Continuously Improving our Practices

For all the topics discussed above, as a responsible corporate citizen, AREVA had already started implementing action plans (see appendices).

AREVA clearly displays its willingness to continuously improve and move quickly on all these issues.

The company thus communicates a global action plan with short and medium-term objectives.

4

Action Plans

Continuously Improving our Practices

OBJECTIVES

- 1 Implementation of the health observatory action plan _____ March 2011
- 2 Launch the joint development initiative at the Imouraren Project with all AREVA entities concerned _____ March 2011
- 3 Increase the knowledge of our water consumption, manage it through global and individual savings programs, and approve a rehabilitation plan for hydraulic systems and water distribution networks _____ May 2011
- 4 Complete action plan on marked materials radiological monitoring outside industrial sites _____ June 2011
- 5 Reinforce communication structures (CIL, PIB, BOC, and website) to better meet all stakeholders' expectations _____ July 2011
- 6 Draft engagement plans with stakeholders for all our operations in Niger, and make them public _____ September 2011
- 7 Finalize rehabilitation and decommissioning plans for the SOMAIR and COMINAK sites including long-term mining waste management _____ September 2011
- 8 Implement a diversification strategy for water supply sources, along with strengthened water quality monitoring _____ October 2011
- 9 Set rules for consumers and institutional mechanisms supporting decentralization of operations for the water supply of the towns of Arlit and Akokan _____ December 2011
- 10 Conduct an independent audit of our mining facilities and exploration activities in Niger _____ September 2012

These dates may be delayed given the security situation in the AREVA group's operating regions.

5

Appendices

Global Action Plans:

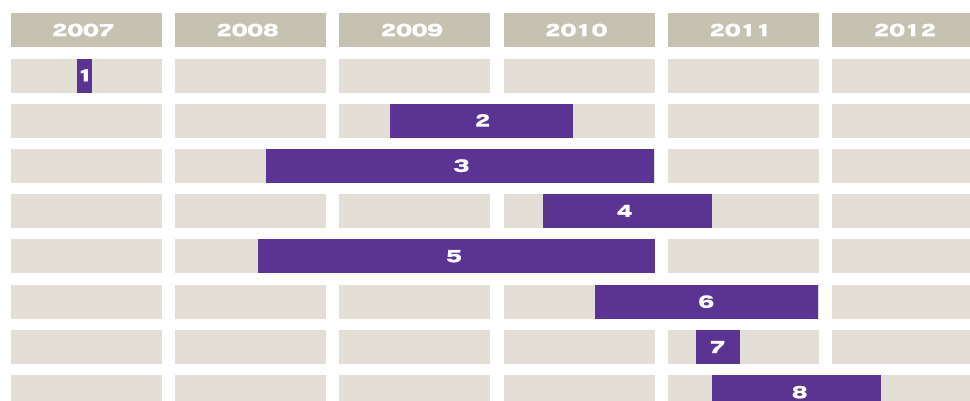
- Health Observatory in Niger
- Contaminated Materials outside Mining Sites

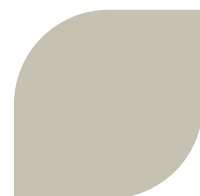
Solemn reaffirmation of the commitment by SOMAïR and COMINAK to the Extractive Industries Transparency Initiative in Niger (EITI)



Somair Hospital in Arlit.

Global Action Plan Health Observatory in Niger		Start	End of Implementation of Action
1	First meeting with the Ministry of Public Health on the subject	July 2007	July 2007
2	Documentation – Develop statutes with all stakeholders	June 2009	July 2010
3	Create a list of former miners and deceased employees	August 2008	December 2010
4	Hire an occupational physician	March 2010	April 2011
5	Mortality study (list mortality causes)	August 2008	December 2010
6	Health watch (define target diseases and compare them to another region)	August 2010	December 2011
7	Implementation of the Health Observatory Structure in Niger	March 2011	May 2011
8	Post-employment monitoring	April 2011	March 2012





Global Action Plan Contaminated Materials Outside Mining Sites		Start	End of Implementation of Action
1	Radiological testing outside the industrial site, performed jointly with the Local Mining Directorate (Direction Départementale des Mines d'Arlit DDME - formerly Service des mines d'Arlit)	2006	2008
2	Exchanges with Greenpeace after its visit	November 2009	May 2010
3	Responses to the Greenpeace communication to the media	November 2009	April 2010
4	Radiological testing in Arlit and Akokan by joint teams (AREVA, authorities...)	November 2009	March 2010
5	Capacity building (recruitment)	January 2010	March 2010
6	Mapping and modeling analysis	August 2010	December 2010
7	Management of the materials identified through mapping	December 2009	November 2010
8	AREVA's communication in response to Greenpeace	December 2009	November 2010
9	Independent radiological testing by an external entity	January 2011	March 2012

2006	2007	2008	2009	2010	2011	2012
1						
				2		
				3		
				4		
				5		
					6	
				7		
				8		
					9	



Grid Measurements on Scrap Metal



Extractive Industries Transparency Initiative in Niger (EITIN)

SOLEMN REAFFIRMATION OF THE COMMITMENT BY SOCIÉTÉ DES MINES DE L'AÏR (SOMAÏR) AND COMPAGNIE MINIÈRE D'AKOUTA (COMINAK)

Following its adherence to the EITI process at the London conference on March 11, 2005, the State of Niger established an office to coordinate the initiative nationally, which soon became a permanent secretariat.

This entity organized a launching workshop in Niamey on September 6 and 7, 2006 with the participation of industrial actors, among which SOMAÏR, COMINAK and AREVA NC Niger, various Nigerien institutions and the World Bank.

On this occasion, as an active participant, AREVA reaffirmed its commitment to adhere to EITI, in particular to its implementation in Niger; for which the official commitment was made at Lancaster House in June 2003.

In the spirit and pursuit of this program's objectives, we, the chief executives of SOMAÏR and COMINAK corporations, solemnly reaffirm our adherence to ITIE in Niger.

With our renewed commitment, already apparent from our participation in subcommittees responsible for the implementation of the action plan, we intend to support and actively participate in this program established by the Interministerial Committee and the National Steering Commission, the organizations managing the process, and we will thus work for the optimum deployment of EITI in Niger.

Niamey, May 9, 2008

Signed by the Chief Executive of SOMAÏR, Serge Martinez
and the Chief Executive of COMINAK, Andreas Mittler



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Glossary

ALARA

As Low as Reasonable Achievable. Provisions put in place by an industrial company to reduce exposure as much as reasonably achievable, taking into account economic and social factors.

Anthropogenic Pollution

Negative change in the environment due directly or indirectly to human activity. Synonym of negative impact.

Aquifer

An aquifer is a layer of ground or rock, sufficiently porous (that can store water) and permeable (where water circulates freely) to contain an underground water table. An underground water table is a natural fresh water reservoir that can be tapped.

Clean Waste

Soils, sands or rocks that do not contain uranium in extractable levels or no uranium at all, but that must be mined to access the actual ore body.

COMINAK

Mining Company of Akouta

Deposit

Geological concentration of useful materials with potential economic benefits through mining.

Dewatering

Mine drainage water after infiltration that is pumped and brought to the surface. They can be used for industrial purposes.

Dose

Measure characterizing the exposure of people subjected to radiation. This term is often mistakenly used to mean dose equivalent.

Dose Rate

The dose rate is the amount of energy received per kilogram of living matter per unit of time. It is expressed in Sievert per unit of time.

Dosimetry

Determination by assessment or measurement of the absorbed radiation dose by a substance or an individual.



Geochemical Background

Usual concentrations measured in soils, generally called background.

Koris

Kori means “oued” or temporary water stream in the Haoussa language; the word has spread and is widely used in all of Niger.

Mill Waste

Very fine and moist sand left after uranium milling and containing all the other minerals present at the start, including other natural radionuclides not extracted.

Piezometer

Drill hole allowing to check the water level of a water table and take samples for analysis.

Potential Alpha Energy Concentration

Potential alpha energy concentration is the sum of the energies of the alpha particles of radon daughters emitted when all short-lived daughter products of radon in a unit volume of air have disintegrated.

Radiation Protection

Measures to protect the health of the populations and workers from ionizing radiations.

Radon

Radioactive gas of natural origin due to the decay of uranium and producing radioactive daughters.

SOMAIR

Mining Company of Aïr.

Total Indicative Dose (TID)

The total indicative dose (TID) corresponds to the effective dose resulting from the incorporation, over a year, of all natural and artificial radionuclides detected in a water distribution system, except for Radon and its short-lived daughter products.



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