

Annex I - Cuba

Cuba is the largest island in the Caribbean, covering approximately 109,884 square kilometres and comprising the main island together with Isla de la Juventud and the Sabana-Camagüey archipelago. The terrain is mostly flat with mountainous regions in the east, and the country is divided into fifteen provinces and one special municipality. The population is approximately 11.3 million and the capital is Havana. Agriculture is a significant part of the economy, with sugarcane, tobacco and coffee the principal crops, and pesticide imports have fallen from about 40,000 tonnes a year in the Soviet period to less than 1,000 tonnes today. In total **101,638.4 kg/l of obsolete pesticides and other chemicals**, from **twelve (12) inventoried stockpiles at twelve (12) sites**, have been endorsed for confirmed disposal.

It should be noted that **under Cuban law** the designated Contractor must be represented by a national company, which is the entity that processes all the authorisations needed for internal movement and for export. **A further 80,000 kg of pentachlorophenol mixed with soil at CU-07** is offered as an optional quantity if sufficient budget is available within GEF 10472, bringing the stated total to 181,638.4 kg/l; that quantity is the only site shown in purple in this Annex.

Table 1 – Summary of the on-the-Ground Identified Stockpiles, by Site (CU-XX) ¹

Site Ref.	Site Name	GPS Coordinates	Type of Waste	Quantity (l/kg)
CU-01	Almacenes La Coloma, Pinar del Rio (GELMA)	22°21'56.5"N 83°40'36.0"W	Obsolete pesticides	30,634
CU-05	Former GELMA storage, now TABACUBA, Pinar del Rio	22°27'36.1"N 83°40'27.7"W	Obsolete pesticides	5,480
CU-06	Instituto Liliana Dimitrova, Mayabeque	–	Obsolete pesticides	200
CU-07	Empresa Papel – CUBAPEL, Santa Cruz del Norte	23°08'50.1"N 81°55'08.1"W	Other chemicals	2,600
CU-09	Manicaragua Municipal Storage (MINSAP)	22°09'54.0"N 79°58'40.8"W	Obsolete pesticides	83
CU-10	Santa Clara Municipal Storage (MINSAP)	22°24'28.8"N 79°57'46.8"W	Obsolete pesticides	48
CU-11	Laboratorio de Sanidad Vegetal de Villa Clara, Santa Clara	22°25'51.1"N 79°56'40.9"W	Obsolete pesticides	500
CU-12	UEB Pulpa Cuba	21°50'34.4"N 79°51'14.4"W	Other chemicals – pentachlorophenol	3,600
CU-13	UEB Cubapel Jatibonico	21°56'06.0"N 79°09'54.0"W	Other chemicals – pentachlorophenol	938.6
CU-14	UEB Almacen Aljobin, ESA Mayabeque (GELMA)	22°48'05.6"N 82°13'30.8"W	Obsolete pesticides	7,623
CU-17	Provincial Storage Cienfuegos (GELMA)	–	Obsolete pesticides	1,401.8
CU-28	UEB Fabrica de Plaguicidas “Juan Luis Rodriguez Gomez”, Artemisa	–	Obsolete pesticides	48,530
CU-07	Empresa Papel – CUBAPEL, Santa Cruz del Norte	23°08'50.1"N 81°55'08.1"W	Other chemicals – pentachlorophenol mixed with soil	80,000

¹ ¹ The colour “black” is used to indicate the sites, where nationally prioritized stockpiles are located, the colour “purple” is used for sites with the optional waste subject to inclusion based on available budget.

CU-01 Almacenes La Coloma, Pinar del Rio (GELMA) **(22°21'56.5"N 83°40'36.0"W)**

The La Coloma store of GELMA, the logistics arm of the Ministry of Agriculture, is the main collection point for obsolete pesticides in Cuba and has been in operation since 1999. It is a guarded pesticide distribution centre on the outskirts of town: the main hall holds active product, while two separate rooms at the back have been set aside for obsolete stock and a third, more separate room holds big bags of contaminated building material recovered from a pesticide warehouse destroyed by a hurricane. The floor of the first obsolete-stock room is partially covered with residue from spills. The second room holds mainly methyl bromide in old cylinders. The endorsed stockpile is 30,634 kg/l of obsolete pesticides, of which 7,806.7 kg/l is compressed fumigant gas in 128 cylinders. The facility is suitable and accessible by truck.

Table 2 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Methyl bromide and other fumigant gases – Mebrom 98, DSBG Metabrom and unbranded cylinders	Poor	128 cylinders	Gas canisters – metal (40–80 l)	7,806.7
Obsolete pesticides	DDT 75 % and bags of likely DDT from the tobacco organisation	Poor to moderate	9 drums, 20 bags	Drums – cardboard (22.7 kg); bags – woven plastic (25 kg)	704.3

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Aluminium phosphide – Weevil-cide and CAMC	Poor	350 drums, 2 boxes	Metal drums (1 kg) and cardboard boxes with aluminium cans	366
Obsolete pesticides	Zinc phosphide – Empresa Alprecoria Cubana	Poor	2	Drums – metal (25 kg)	50
Obsolete pesticides	Maleic hydrazide – ENSA/MINAG/85	Moderate	127	Drums – PE (20 l)	2,540
Obsolete pesticides	Mancozeb – Bayer Ridomil and Ridomil MZ 72 Ciba-Geigy	Poor	1 drum, 40 bags	Metal drum (200 l); bags – woven plastic (30 kg)	1,400
Obsolete pesticides	Polycarbamate	Moderate	4	PE drums (1,500 l) holding 20 cardboard drums of 15 kg	1,200
Obsolete pesticides	Dicofol – Kelthane, Rohm and Haas	Poor	2	Metal drums (200 l) holding cardboard and PE drums of 25 kg	100
Obsolete pesticides	Malathion	Poor	2	Drums – metal (160 l)	320
Obsolete pesticides	Metamidophos	Moderate	3	Drums – PE (20 l)	60

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Unidentified liquids, mostly in 120–220 l metal drums	Poor to moderate	c. 40	Drums – metal and PE (10–220 l)	6,915
Obsolete pesticides	Unidentified solids in drums, boxes and bags	Poor to moderate	c. 30	Metal, PE and cardboard drums, jute and plastic bags	1,485
Other	n-Decanol – Antal	Poor	47	Drums – metal (20 l)	940
Other	Contaminated soil	Moderate	4	Drums – metal (300 kg)	1,200
Other	Fertilisers – Soluppotasse, Zona Industrial Matanzas and unbranded	Poor to moderate	6	PE drums (20 l), woven plastic bags (20 kg), cardboard box	100
Obsolete pesticides – empty packaging	Empty drums and aluminium phosphide cans	Poor	25	Metal and PE drums (20–180 l), aluminium cans	47
Total					25,234.0

Table 3 – Site conditions

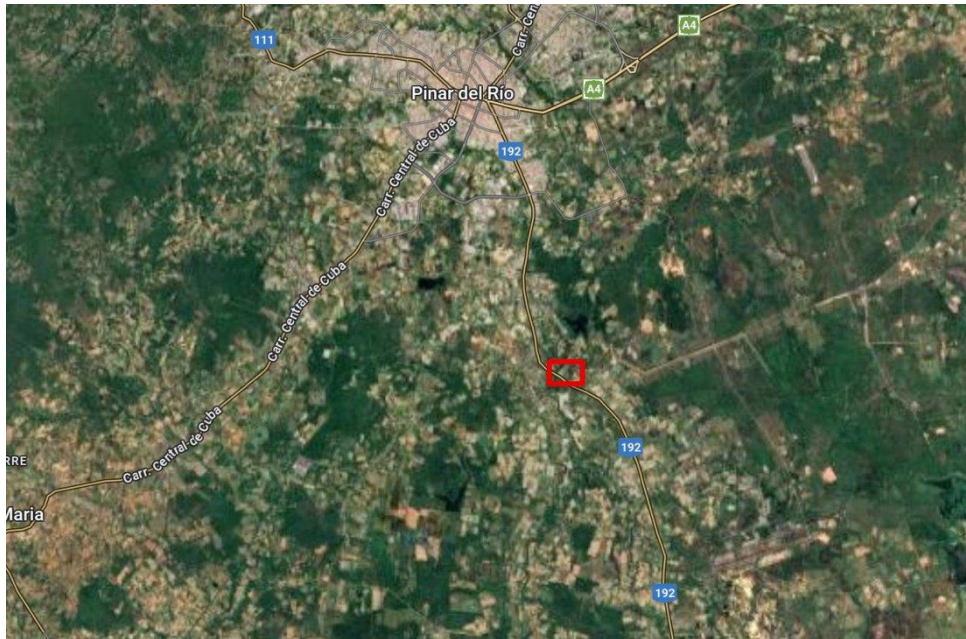
Site conditions	
Status of stored waste	Significant signs of spills
Building conditions	Good, no major signs of damage
Floor conditions	Concrete, good quality
Site control	Yes, (partially) fenced with gates

Site conditions	
Accessibility	Good quality asphalt, suitable for trucks

Table 4 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	Yes, some small houses 50–100 m from the site, outside the fenced area
Proximity of public facilities within 500 m	No
Proximity of groundwater wells within 250 m	The site itself uses the municipal system; groundwater is possibly used outside the site
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	Yes
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 1. Map with Geographical Setting of the site



Site Layout

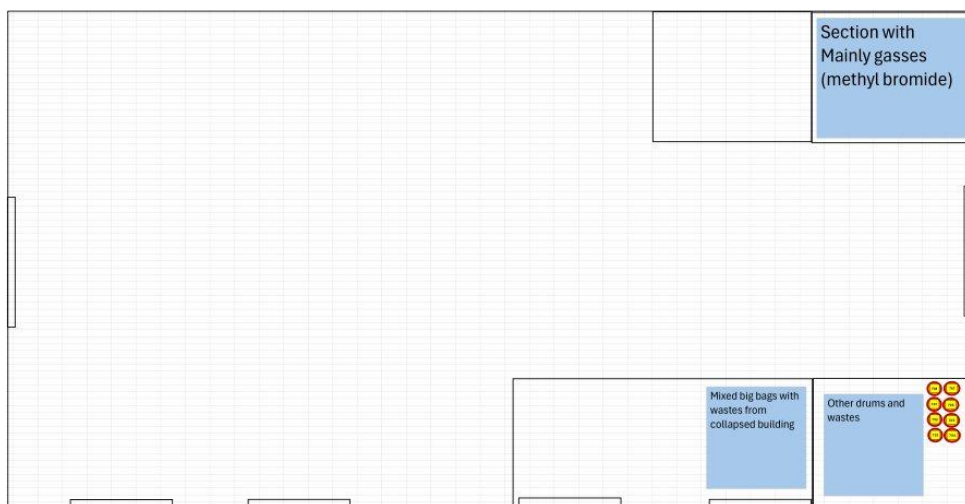
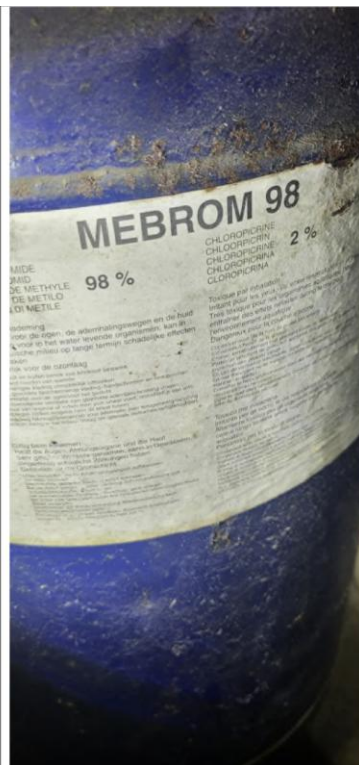


Photo report of the site



Figure 1-1 Main gate







CU-05 Former GELMA storage, now TABACUBA, Pinar del Rio (22°27'36.1"N 83°40'27.7"W)

A former agricultural chemicals store owned by GELMA and no longer in use. Ownership passed to TABACUBA and the waste remained on site after the transfer. The main building collapsed completely under repeated hurricanes and only the front of the facility could be inspected; the remainder is inaccessible. The endorsed stockpile is 5,480 kg of obsolete pesticides: DDT in woven plastic bags, partly already repacked into big bags for shipment to La Coloma, together with aluminium phosphide and other unidentified agrochemicals in a small collapsed building nearby. The DDT lies in the open, is freely accessible and is mixed with soil and construction debris; the site is unfenced.

Table 5 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	DDT, partly repacked into big bags for shipment to La Coloma	Poor	200	Bags – woven plastic (25 kg)	5,000
Obsolete pesticides	Aluminium phosphide – CAMC	Poor	200	Metal containers (1 kg) with aluminium cans	200
Obsolete pesticides	Unidentified solid, probably a pesticide	Poor	14	Drums – cardboard (20 kg)	280
Total					5,480

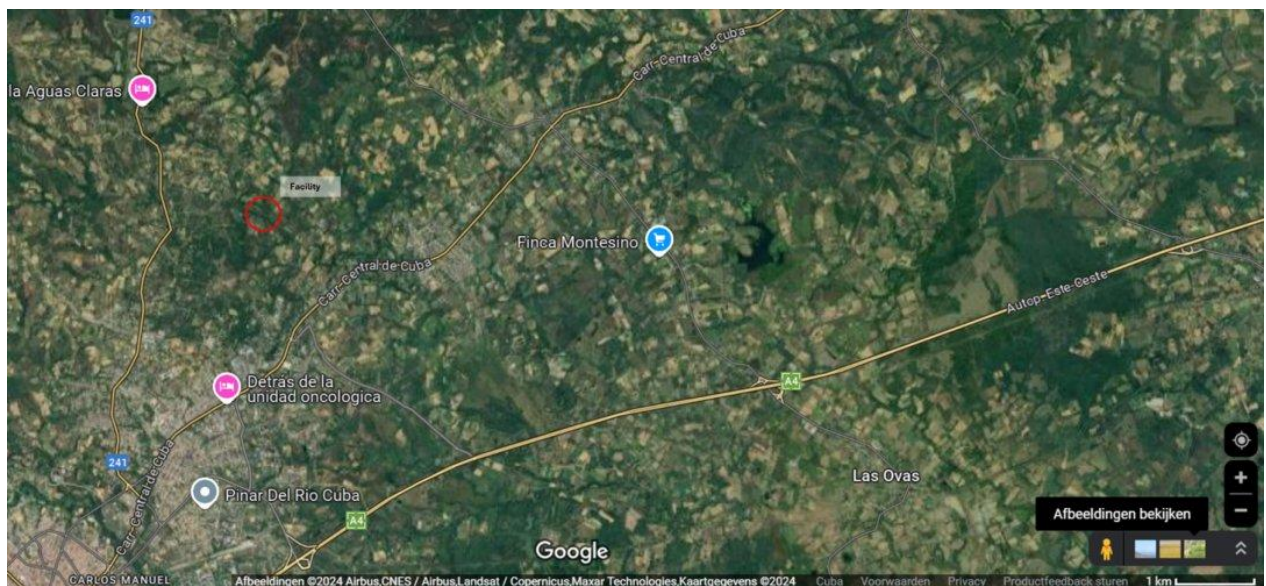
Table 6 – Site conditions

Site conditions	
Status of stored waste	Material has spilled into the surroundings and continues to spread into the environment
Building conditions	No building remains; only the front of the facility could be inspected, the rest having completely collapsed
Floor conditions	None
Site control	None, freely accessible, cattle grazing alongside the site
Accessibility	Gravel road in poor condition, not accessible by truck or normal vehicles, accessible by 4x4

Table 7 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	Nearest houses about 150 m
Proximity of public facilities within 500 m	No
Proximity of groundwater wells within 250 m	Unknown
Proximity of open water within 500 m	River about 100 m to the north
Proximity of crops or pastures within 250 m	The site is in an agricultural area, with cattle running alongside it
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 2. Map with Geographical Setting of the site



Site Layout



Photo report of the site

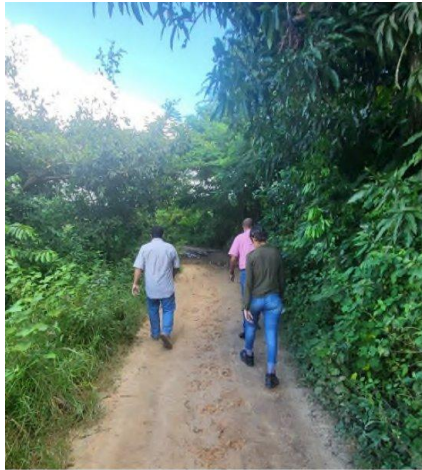


Figura 4-2 Fosforo de aluminio - 735



CU-06 Instituto de Investigaciones Horticolas Liliana Dimitrova, Mayabeque

The Instituto Liliana Dimitrova is an agricultural research institute working on integrated crop management with biocides, active on the site since 1971. It used DDT from the outset until the early 1990s; after the ban the stock was kept in a container and in 2022 it was moved into a small sealed bunker built in an agricultural field at the edge of the complex. The bunker measures approximately 2 x 2 m and is 0.5 m high, with a concrete slab lid sealed with cement and no ventilation. The endorsed stockpile is 200 kg of DDT 75 % in cardboard boxes; it is largely in its original packaging with no signs of significant spillage, and there is room in the bunker to reach it. Expired laboratory reagents are stored in the adjacent container in which the DDT was formerly kept; these are inventoried but not endorsed. Access is by good asphalt road to the edge of the site, then 50–100 m of dirt track not passable by truck.

Table 8 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	DDT 75 %, on site since at least 1984	Poor	8	Boxes – cardboard (25 kg) with plastic bag liners	200
Total				200 endorsed (525 inventoried)	

Table 9 – Site conditions

Site conditions	
Status of stored waste	DDT waste mostly in original packaging, no signs of significant spillage inside the bunker; sufficient room to reach the waste

Site conditions	
Building conditions	Bunker built in 2022, in good condition, approximately 2 x 2 m and 0.5 m high, concrete slab lid sealed with cement, no ventilation
Floor conditions	Good, no signs of damage
Site control	The site is guarded
Accessibility	Good asphalt road to the edge of the site, then 50–100 m of dirt track, not accessible by truck

Table 10 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	No houses in the immediate surroundings
Proximity of public facilities within 500 m	The horticultural facility operates on the site
Proximity of groundwater wells within 250 m	Yes, groundwater is used in the area
Proximity of open water within 500 m	A river nearby, in fact a regional overflow channel
Proximity of crops or pastures within 250 m	The site is in an agricultural area
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

No map of the geographical setting of the site is available; the CU-06 factsheet carries the caption but no image.

Site Layout



Photo report of the site





Figura 4-1 Residuos de DDT - 1373



CU-07 Empresa Papel – CUBAPEL, Santa Cruz del Norte **(23°08'50.1"N 81°55'08.1"W)**

A former cardboard factory which supplied not only Cuba but also Latin America. It opened in 1970, employed more than 600 people and closed in 2001. Inside the building are three IBC tanks, two holding bactericide/biocide and one holding Pentomag, a coal additive; this material has been in place since at least 2001 and is the 2,600 litres endorsed for confirmed disposal. Outside stands a large concrete bunker containing pentachlorophenol mixed with soil. That material was used only in the 1980s, was buried on a neighbouring plot in the early 1990s, was moved back when the plot was sold for use as a food store, was transferred to metal drums in 1999 and was moved into the present bunker around 2020, partly in metal and plastic drums and partly loose. It is estimated at 80 tonnes and is the only optional quantity offered by Cuba.

Table 11 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Other chemicals	Pentomag, coal additive – container not completely full	Poor	1	IBC – PE (1,000 l)	600
Other chemicals	Unidentified bactericide/biocide for paper treatment	Poor	2	IBC – PE (1,000 l)	2,000

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Other chemicals – optional	Pentachlorophenol mixed with soil, owner's estimate; waste body 2.5 x 6.0 x 4.5 m = 67.5 m ³ (ref 751)	Good (bunker)	1 bunker	Concrete bunker, material partly in plastic containers and partly loose	80,000
Total				2,600 endorsed (82,600 including the optional quantity)	

Table 12 – Site conditions

Site conditions	
Status of stored waste	No significant signs of spills
Building conditions	Building in poor condition, especially the floors; the PCB bunker is in better condition, but the neighbouring oil tanks may be leaking
Floor conditions	Poor concrete, many holes
Site control	Guarded and fenced
Accessibility	Good asphalt road

Table 13 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	Adjacent to a former oil store, in an industrial zone
Proximity to residential area	No
Proximity of public facilities within 500 m	No
Proximity of groundwater wells within 250 m	Unknown
Proximity of open water within 500 m	River about 150 m to the west

Site Geographical Setting	
Proximity of crops or pastures within 250 m	None
Proximity of Food or Feedstuff Storage within 250 m	None
Location within Recreational Area or National Park	No

No map of the geographical setting of the site is available

Site Layout



Photo report of the site



Figura 4-1 Búnker - 751



CU-09 Manicaragua Municipal Storage, Villa Clara (MINSAP) **(22°09'54.0"N 79°58'40.8"W)**

A municipal hazardous waste store of the Ministry of Health, in use since 1980 and originally supplied for vector control. The endorsed stockpile is 83 kg of obsolete pesticides held in three containers in a clean and well organised store; mercury-added products are kept in the same room but are not inventoried for this site. The site is fenced and reached by good asphalt suitable for trucks.

Table 14 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Zinc phosphide	Poor	1	Drum – metal (20 kg) with plastic bag liner	41.6
Obsolete pesticides	DDT 75 %, Soviet-era product	Poor	1	Drum – cardboard (20 kg) with plastic bag liner	41.4
Total					83

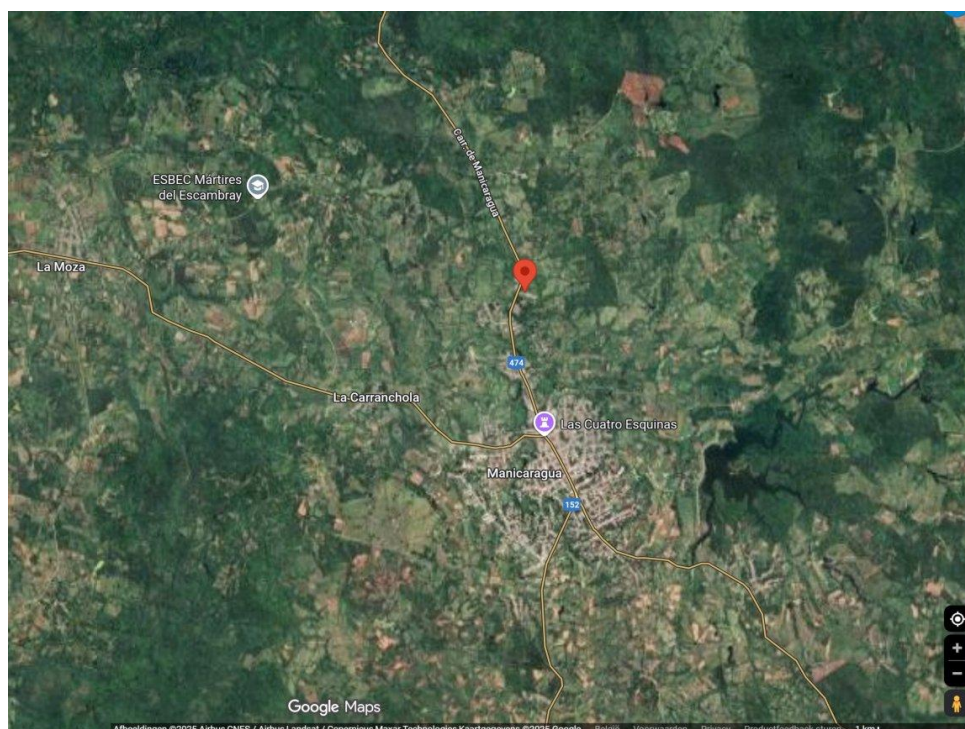
Table 15 – Site conditions

Site conditions	
Status of stored waste	No signs of spills
Building conditions	Good, no major signs of damage
Floor conditions	Concrete, good quality
Site control	Yes, (partially) fenced with gates
Accessibility	Good quality asphalt, suitable for trucks

Table 16 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	No
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	Yes, within 500 m
Proximity of public facilities within 500 m	Army base
Proximity of groundwater wells within 250 m	No
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	No
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 3. Map with Geographical Setting of the site



No site layout drawing is available

Photo report of the site



Figure 1-1 Entrance Road





CU-10 Santa Clara Municipal Storage, Villa Clara (MINSAP) **(22°24'28.8"N 79°57'46.8"W)**

The central municipal store of the Santa Clara municipal hygiene unit, in use since 2019. The waste is kept in the former accountancy department of the building: two PE drums of repacked zinc phosphide and one small box in a closed cupboard. The endorsed stockpile is 48 kg. Cypermethrin is the product currently used for vector control, but none was available at the time of the visit. The store is in good condition with no signs of spills, is inside a residential area and is reached by good asphalt suitable for trucks.

Table 17 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Zinc phosphide, repacked	Moderate	2	Drums – PE (10 kg)	47
Obsolete pesticides	Strychnine – “Estricina”, active ingredient not recorded	Good	1	Box – cardboard (1 kg)	0.81
Total					47.81

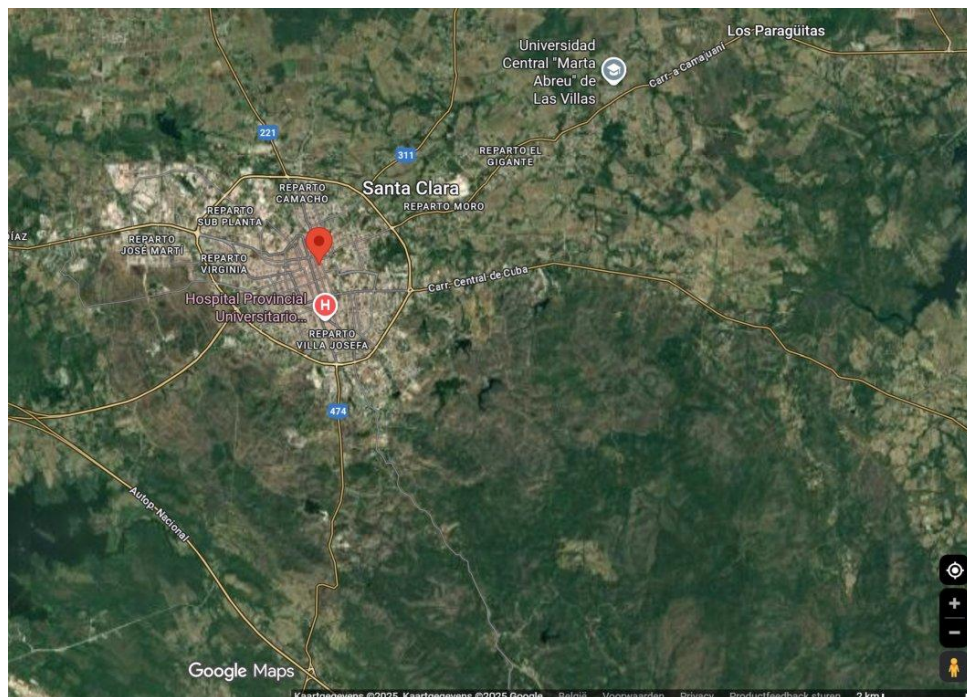
Table 18 – Site conditions

Site conditions	
Status of stored waste	No signs of spills
Building conditions	Good, no major signs of damage
Floor conditions	Concrete, good quality
Site control	Yes, (partially) fenced with gates
Accessibility	Good quality asphalt, suitable for trucks

Table 19 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	No
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	Yes, inside
Proximity of public facilities within 500 m	Church
Proximity of groundwater wells within 250 m	No
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	No
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 4. Map with Geographical Setting of the site



No site layout drawing is available

Photo report of the site



CU-11 Laboratorio de Sanidad Vegetal de Villa Clara, Santa Clara (22°25'51.1"N 79°56'40.9"W)

The waste is held in a closed bunker of about 6 x 2 x 2.5 m on the first floor, divided into two sections. The western section holds mixed pesticide test preparations, residual pesticides, wood, fire extinguishers and other material to a depth of about 60 cm; the second chamber holds only used PPE and empty wooden crates. The endorsed stockpile is an estimated 500 kg. The mixture is expected to include various POPs; no mercury or arsenic pesticides and no zinc or aluminium phosphide are expected. The liquids have leaked, a strong smell comes from the room and all the other material inside is likely to be contaminated. The entrance is reached by a metal stair in moderate to poor condition, unable to carry heavy loads, and is bricked up with thin poor-quality brick.

Table 20 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Unidentified mixture of pesticide test preparations and residual pesticides, likely to include various POPs; estimated from a waste body of 2.5 x 3 x 0.6 m	Poor	1 bunker section	Glass and PE bottles, wood and metal, loose in a closed bunker	500
Total					500

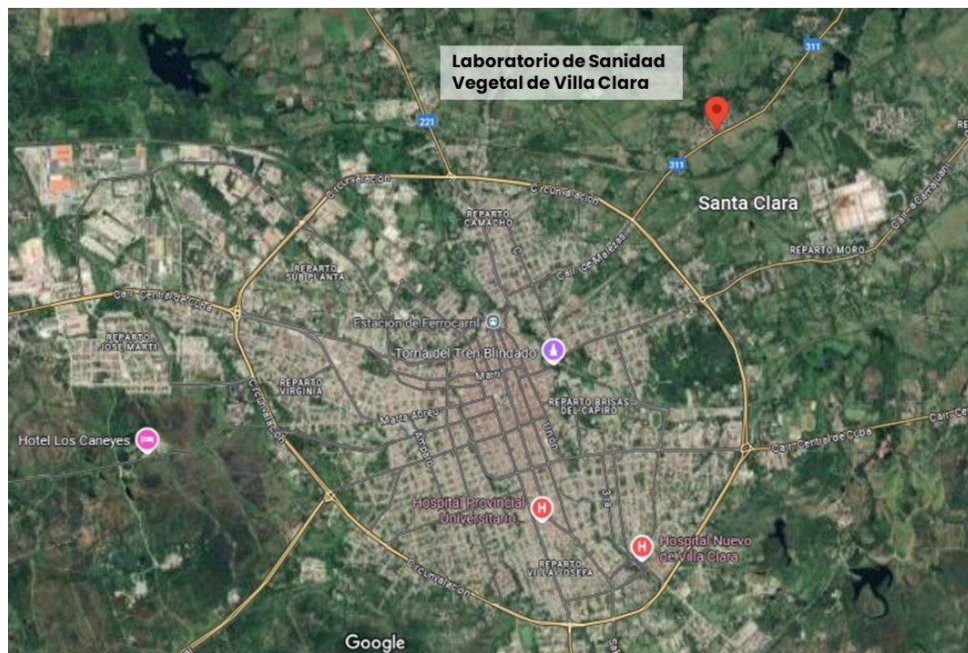
Table 21 – Site conditions

Site conditions	
Status of stored waste	Poor; the various liquid solutions have leaked and a strong smell comes from the room, and all other materials inside are likely contaminated
Building conditions	The waste is on the first floor, reached by a metal stair in moderate to poor condition, unable to carry heavy loads; the entrance is filled in with thin bricks of poor quality; the building itself appears to be in reasonable condition
Floor conditions	Moderate, no indication of large issues
Site control	The site is guarded
Accessibility	Good asphalt road

Table 22 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	No
Proximity of public facilities within 500 m	The Agricultural Institute is on the site
Proximity of groundwater wells within 250 m	No
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	No
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 5. Map with Geographical Setting of the site



Site Layout



Photo report of the site



Figura 2. Site entrance.



Figura 4-1 Contents of left cell



CU-12 UEB Pulpa Cuba, Papelera Pulpa Cuba (21°50'34.4"N 79°51'14.4"W)

Papelera Pulpa Cuba is a paper factory that began production in 1957 and was nationalised after the revolution. It produces mainly from waste paper and is currently running at only 10 % of capacity for lack of raw material. Biocides and bactericides are used to stop the pulp deteriorating between pulp and paper production; pentachlorophenol was formerly used for this purpose. The waste is in a walled-off section of the chemical store, behind walls 2.2 m high: four full IBC tanks of unknown origin, possibly Pentamag, some smaller quantities of bags of white powder that appeared to be a form of bleach, and two layers of drums – a lower layer of 19 unlabelled drums and an upper layer of dyes. The endorsed stockpile is the 3,600 litres in those 19 drums.

Table 23 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Other chemicals	Unidentified liquid, possibly pentachlorophenol; contents not established	Poor	19	Drums – metal (200 l)	3,600
Total					3,600

Table 24 – Site conditions

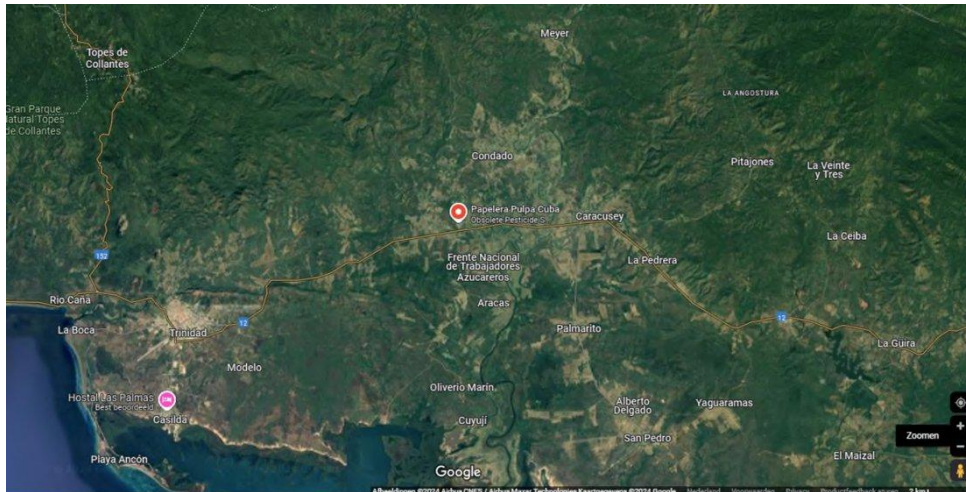
Site conditions	
Status of stored waste	Poor; most of the waste has leaked and the drums are in bad condition. It is very difficult to reach the waste without breaking the walls down, and there is no standing room inside the walls other than on top of some of the IBC units

Site conditions	
Building conditions	The building as a whole is in poor condition, the roofs leak and there is cardboard waste throughout; the chemical store is guarded and secured with a fence
Floor conditions	Moderate, no signs of large-scale damage
Site control	The site is guarded
Accessibility	Good asphalt road; trucks can enter the building and drive very close to the stored waste

Table 25 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	The building is integrated into an operating paper factory with its own fuel depot
Proximity to residential area	Houses approximately 200 m to the east
Proximity of public facilities within 500 m	Paper factory
Proximity of groundwater wells within 250 m	Unknown
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	The site is in an agricultural area
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 6. Map with Geographical Setting of the site



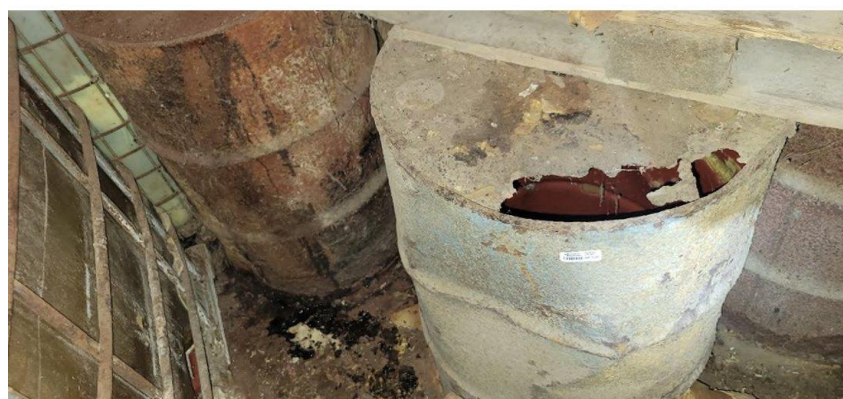
Site Layout



Photo report of the site



Figura 4-1 Unidades IBC y desechos de tinte



CU-13 UEB Cubapel Jatibonico, Sancti Spiritus (21°56'06.0"N 79°09'54.0"W)

A paper factory producing white paper from sugarcane and wood pulp, active on the site since 1983. Pentachlorophenol was used until about 1996, when production stopped; the plant is now used only for cutting and houses an egg-packaging line. The endorsed stockpile is 938.6 kg of pentachlorophenol in cardboard drums on pallets, originally kept in storage facility 01 and moved to the present location, an empty and abandoned building, five years ago. The product is a solid and is still in its original drums with the original labels; there are no or only limited spills.

Table 26 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Other chemicals	Pentachlorophenol – Polaquimica, solid, in original labelled drums	Poor	19	Drums – cardboard (49.4 kg) with plastic bag liners	938.6
Total					938.6

Table 27 – Site conditions

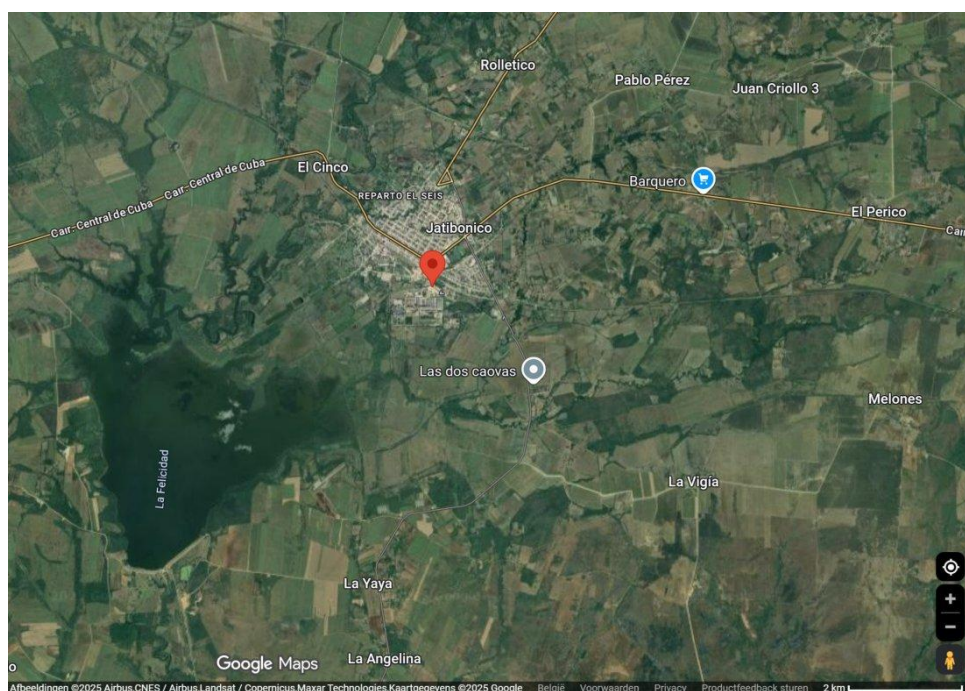
Site conditions	
Status of stored waste	No signs of spills
Building conditions	Poor, needs large upgrade
Floor conditions	Concrete, good quality
Site control	Yes, (partially) fenced with gates
Accessibility	Poor quality asphalt, suitable for trucks

Table 28 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	No

Site Geographical Setting	
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	No
Proximity of public facilities within 500 m	Paper factory
Proximity of groundwater wells within 250 m	No
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	No
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 7. Map with Geographical Setting of the site

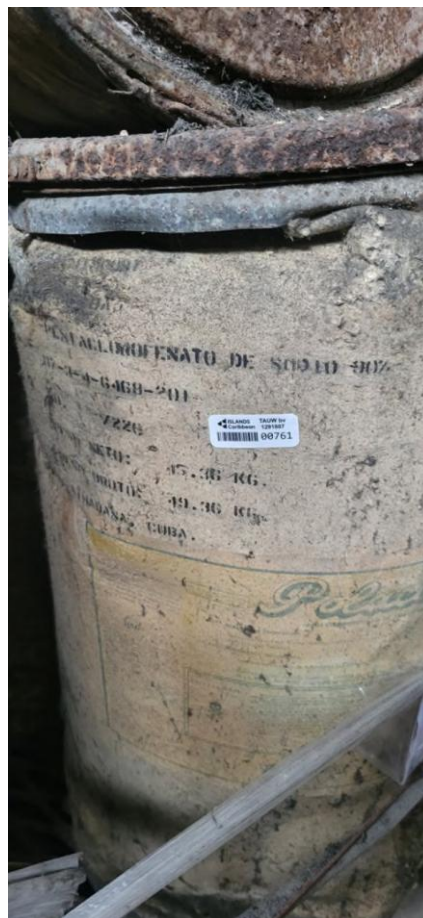


No site layout drawing is available

Photo report of the site



Figure 1-1 Building entrance



CU-14 UEB Almacen Aljobin, ESA Mayabeque (GELMA), Melena del Sur (22°48'05.6"N 82°13'30.8"W)

The provincial store at Finca Aljobin, Melena del Sur, holds the agricultural chemicals used in Mayabeque province and, because procurement and allocation are limited, functions as the central store and distributor for the province. The facility consists of four concrete-walled bays roofed with galvanised steel sheet, well-ventilated and properly organised. The waste is not in the bays but in a roofed 20-foot container at the back of the site, showing visible advanced structural corrosion; site staff state that the material has been in that container for more than twenty years. It holds 36 blue LDPE tanks with POP pesticide residues, presumed DDT of Soviet origin, open and contaminated with rainwater and other products; 32 plastic drums, some full of water and some empty, mostly recovered from a fire at another provincial store; 24 steel canisters each holding about 30 zinc phosphide ampoules; and contaminated cardboard packaging and general cleaning waste. The endorsed stockpile is 7,623 kg/l.

Table 29 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	POP pesticide residues, presumed DDT of Soviet origin; tanks open and contaminated with rainwater and other products	Moderate	36	Tanks – blue LDPE (220 l)	Not recorded

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Unidentified liquid; some drums full of water, others empty, mostly from a fire at another provincial store	Moderate	32	Drums – plastic (20 l)	Not recorded
Obsolete pesticides	Zinc phosphide in sealed aluminium ampoules, approximately 30 ampoules per canister	Moderate	24	Canisters – steel (c. 2 l)	Not recorded
Obsolete pesticides – empty packaging	Contaminated cardboard packaging and general site-cleaning waste	Poor, partly burnt	24	Loose within the container	Not recorded
Total				7,623 endorsed; no quantity recorded in the factsheet	

Table 30 – Site conditions

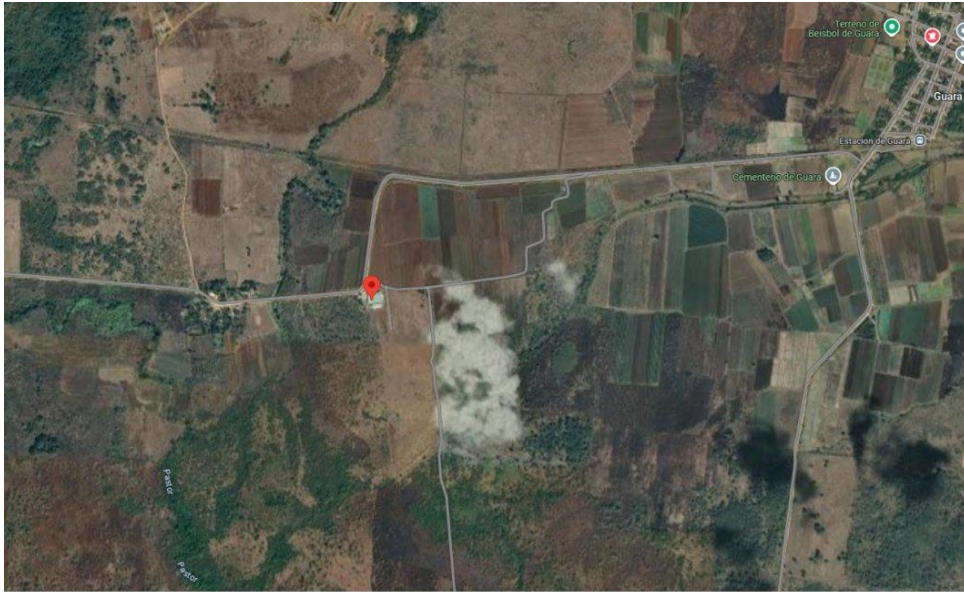
Site conditions	
Status of stored waste	Totally contaminated, badly stacked and in most cases unidentified; the 20-foot container is in very poor condition and heavily corroded
Building conditions	Good; concrete walls and floors with galvanised steel sheet roof
Floor conditions	Level concrete, relatively clean, no product spills observed

Site conditions	
Site control	The area is properly protected, with a perimeter fence and a guard service; the container has two steel doors and is padlocked, and access is controlled by the management of the entity
Accessibility	Main gate reached by an embankment track at the exit of Guara, Melena del Sur; poor access conditions for trucks, trailers or lifting equipment, and probably impassable during heavy rain or extreme hydrometeorological events

Table 31 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes, heavy or locally intense rainfall
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	Yes, some small houses 150–200 m from the site, outside the fenced area
Proximity of public facilities within 500 m	No
Proximity of groundwater wells within 250 m	Water from a nearby well is used
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	Yes
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 8. Map with Geographical Setting of the site



Site Layout



Photo report of the site



CU-28 UEB Fabrica de Plaguicidas “Juan Luis Rodriguez Gomez”, Artemisa

An active pesticide formulation plant on the road to Pueblo Nuevo, Artemisa, created before 1959 as a fertiliser factory. It runs two plants: a dry-powder mixing plant producing herbicides and insecticides used mainly for tobacco, and a liquid plant producing soluble mixtures – partly insecticides, herbicides and fungicides for tobacco, sugarcane and other crops, and partly “light chemistry” such as bleaches, degreasers, descalers and general cleaning products. The waste is held in a separate locked and padlocked room forming part of the warehouse: simazine, an insoluble powder used to make herbicides, in LDPE sacks, and pyridine, a repellent used in pesticide formulation, in a corroded steel drum. Both have been stored since about 1970. The endorsed stockpile is 48,530 kg/l, the largest in the country.

Table 32 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Simazine, insoluble dry powder used for herbicide production, stored since about 1970	Moderate	Not recorded	Sacks – LDPE / nylon (50 kg)	Not recorded
Obsolete pesticides	Pyridine, repellent used in pesticide formulation, stored since about 1970	Poor, risk of rupture when moved	1	Drum – steel (200 l), corroded	Not recorded
Total				48,530 endorsed; no quantity recorded in the factsheet	

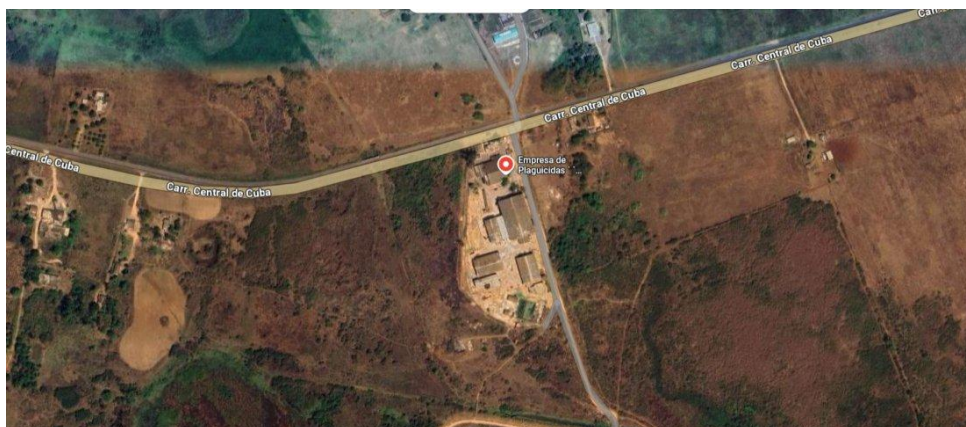
Table 33 – Site conditions

Site conditions	
Status of stored waste	Good storage condition, room closed and padlocked, forming part of the warehouse; protected from rain and possible extreme weather events, and the products classified as waste are correctly identified
Building conditions	Good; concrete walls and floors with galvanised steel sheet roof
Floor conditions	Level concrete, relatively clean, no product spills observed
Site control	The room is properly protected, has steel doors and is padlocked; access is controlled by the management of the entity
Accessibility	Main gate on the road to Pueblo Nuevo, Artemisa; good access conditions for trucks, trailers and lifting equipment

Table 34 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	Yes, some small houses 150–200 m from the site, outside the fenced area
Proximity of public facilities within 500 m	No
Proximity of groundwater wells within 250 m	The site itself uses the municipal system; groundwater may be used outside the site
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	Yes
Proximity of Food or Feedstuff Storage within 250 m	No
Location within Recreational Area or National Park	No

Figure 9. Map with Geographical Setting of the site



Site Layout



Photo report of the site





CU-17 UEB Almacén ESA Cienfuegos (GELMA / MINAGRI)
(22°12'55.7"N 80°24'28.9"W)

The provincial store of ESA Cienfuegos, in the AZUMAT warehouse area, holds the agricultural chemicals used in Cienfuegos province and, because procurement and allocation are limited, functions as the central store and distributor for the province. The facility is a single bay with concrete walls roofed in galvanised steel sheet, well-ventilated and properly organised. The waste is kept in a small closed room in the right-hand corner of the warehouse entrance, where site staff state it has stood for more than thirty years. The endorsed stockpile is 1,401.8 kg/l, made up of 275 kg of zinc phosphide in five steel containers of 53.5 kg, sixteen steel cylinders of gaseous methyl bromide of 67.3 kg gross each, and one empty methyl bromide cylinder of approximately 50 kg. The zinc phosphide containers show advanced corrosion and are recorded as liable to rupture when moved or loaded, while the methyl bromide cylinders are all in good condition. The presence of methyl bromide means that a substantial part of this stockpile is likely to be compressed gas in cylinders, which carries different packaging, transport and export requirements from drummed solids and liquids.

Table 35 – Inventory List of relevant Waste Streams at the Site

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Zinc phosphide (ref 00768)	Poor – advanced corrosion, recorded as liable to rupture when moved or loaded	5	Containers – steel (53.5 kg capacity)	275

Type of waste	Description	Condition of Packaging	No. of packaging	Type of packaging	Quantity (kg/l)
Obsolete pesticides	Methyl bromide, gaseous; active ingredient approximately 16.4–16.9 kg per cylinder (ref 00769)	Good – all cylinders well preserved	16	Cylinders – steel (67.3 kg gross each)	1,076.8
Obsolete pesticides – empty packaging	Methyl bromide cylinder, empty, approximately 1.6 m tall (ref 00770)	Moderate	1	Cylinder – steel (c. 50 kg)	50
Total					1,401.8

Table 36 – Site conditions

Site conditions	
Status of stored waste	Zinc phosphide: containers showing advanced corrosion, liable to rupture when moved or loaded. Methyl bromide: all cylinders in a good state of preservation
Building conditions	Good; concrete walls and floors with galvanised steel sheet roof
Floor conditions	Level concrete, relatively clean; no product spills observed
Site control	The area is properly protected, with a perimeter fence and a guard service; the store has steel entrance doors and is padlocked, and access is controlled by the management of the entity
Accessibility	Main gate reached by paved road; good access conditions for trucks, trailers and lifting equipment

Table 37 – Site Geographical Setting

Site Geographical Setting	
Potential natural disasters	Hurricanes
Proximity to a chemical factory, flammable materials storage or other industrial hazard	No
Proximity to residential area	No
Proximity of public facilities within 500 m	No
Proximity of groundwater wells within 250 m	Water from a nearby well is used
Proximity of open water within 500 m	No
Proximity of crops or pastures within 250 m	No
Proximity of Food or Feedstuff Storage within 250 m	No; the site adjoins the AZUMAT hardware warehouses
Location within Recreational Area or National Park	No

Figure 10. Map with Geographical Setting of the site



Photo report of the site



The five steel containers of zinc phosphide on their pallet (ref 00768), with a methyl bromide cylinder at the right-hand edge.



One of the zinc phosphide containers, carrying the inventory tag 00768, showing the advanced corrosion recorded in the factsheet.



The sixteen steel cylinders of gaseous methyl bromide (ref 00769), which account for 1,076.8 kg of the 1,401.8 kg/l endorsed.



The empty methyl bromide cylinder, approximately 1.6 m tall and 50 kg (ref 00770).