

# PCB'S IN LUZ DEL SUR

2024





## Luz del Sur S.A.A.

Electric Utility (Distribution and Transmission)  
South part of Lima

- Number of customers: 1'303.354
- Concession área: 3.692 km<sup>2</sup>
- Number of workers: 814
- Number of operational transformers: 8786



# GEOGRAPHICAL LOCATION OF LUZ DEL SUR

## Metropolitan Area of Lima







# MANAGEMENT OF PCB'S WASTES IN LUZ DEL SUR



# ACTIVITIES TO ELIMINATE PCB'S



# PROCESS IN THE LIFE CYCLE OF DIELECTRIC OIL AND TRANSFORMERS

PURCHASE  
STANDARDS

STORAGE

MAINTENANCE

FINAL DISPOSAL

TRANSPORTATION

ACCIDENTAL  
SPILLS

# CONTROLS ON EACH PROCESS

PURCHASE  
STANDARDS

Free of PCB's

STORAGE  
Labeling  
Containment system:  
-Secondary containment  
-Trays

MANTENIMIENTO

PCB's Sampling

DISPOSICION  
FINAL

Dechlorination  
Exports of PCB's

TRANSPORTE

Authorized Vehicles

EMERGENCIA  
AMBIENTAL

PCB's Sampling  
Contingency Plan for spills



# STORAGE - REQUIREMENTS

- Restricted access
- Oilproofed floor
- Ceiling for all the area
- Secondary containment and gutters
- Proper ventilation
- Properly inspect, label and seal all drums and transformers
- Contingency Kit for spills
- Fire extinguisher
- Loading and unloading operations áreas, and ensure enough aisle space.





# STORAGE OF CONTAMINATED DRUMS AND TRANSFORMERS



ALL DRUMS USING TRAYS Y LABELED



# PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE for:

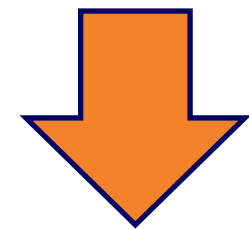
- Sampling
- Handling contaminated oil and transformers
- Handling leaks and spills
- Soil Remediation
- Dechlorination
- Export's activities



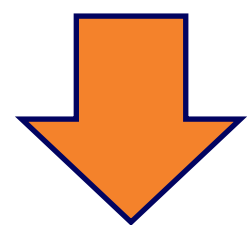


# DECHLORINATION WITH SODIUM

Reduces PCB's concentration on contaminated oil



Through the chemical reaction of chlorine and sodium, PCB's are broken, the result are salt and a polymer



Our goal: To achieve concentration of less than 50 ppm of PCB's





# EXPORTS OF PCB'S



PROPER STORAGE OF CONTAMINATED OIL AND TRANSFORMERS



# EXPORTS OF PCB'S

TRANSPORTATION OF  
CONTAMINATED OIL AND  
TRANSFORMERS AND A  
UNIT FOR CONTINGENCY



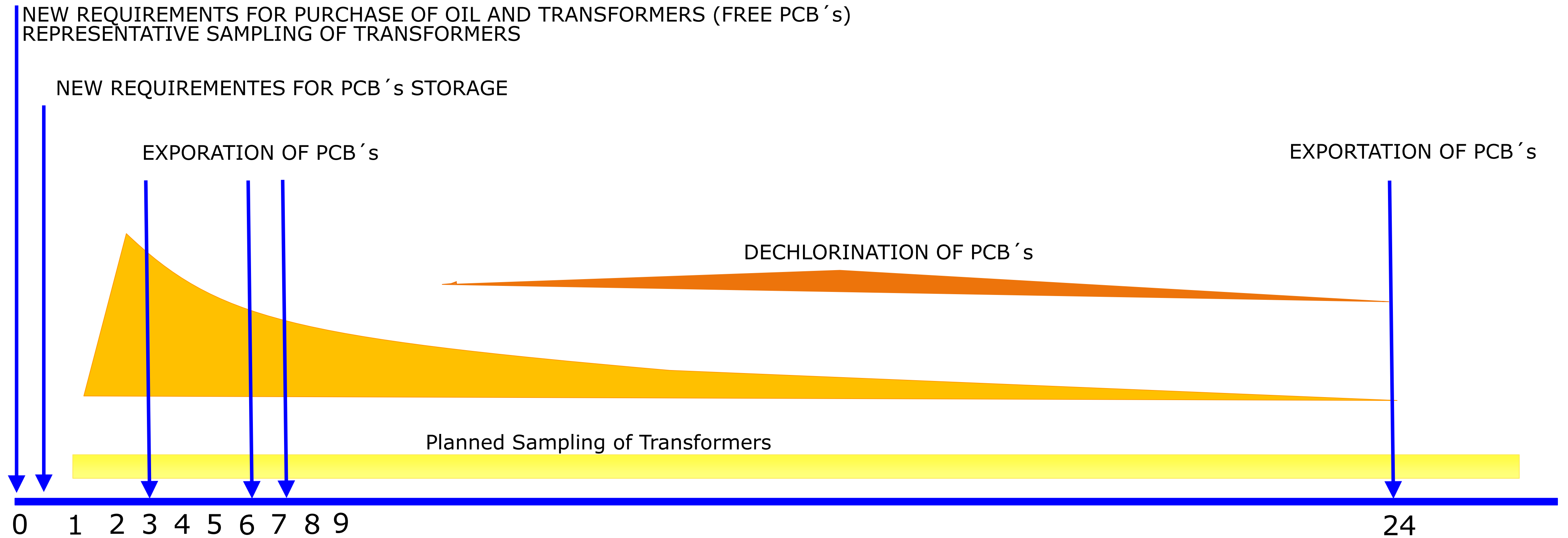


# EXPORTS OF PCB'S

AÑO	TRANSFORMERS (Tn)	OIL (Tn)	TOTAL (Tn)	MUS\$
2003	16.8	14.2	31.0	125.7
2006	0.0	23.3	23.3	93.5
2007	19.7	9.4	29.1	116.9
<b>TOTAL</b>	<b>36.5</b>	<b>46.9</b>	<b>83.4</b>	<b>336.2</b>

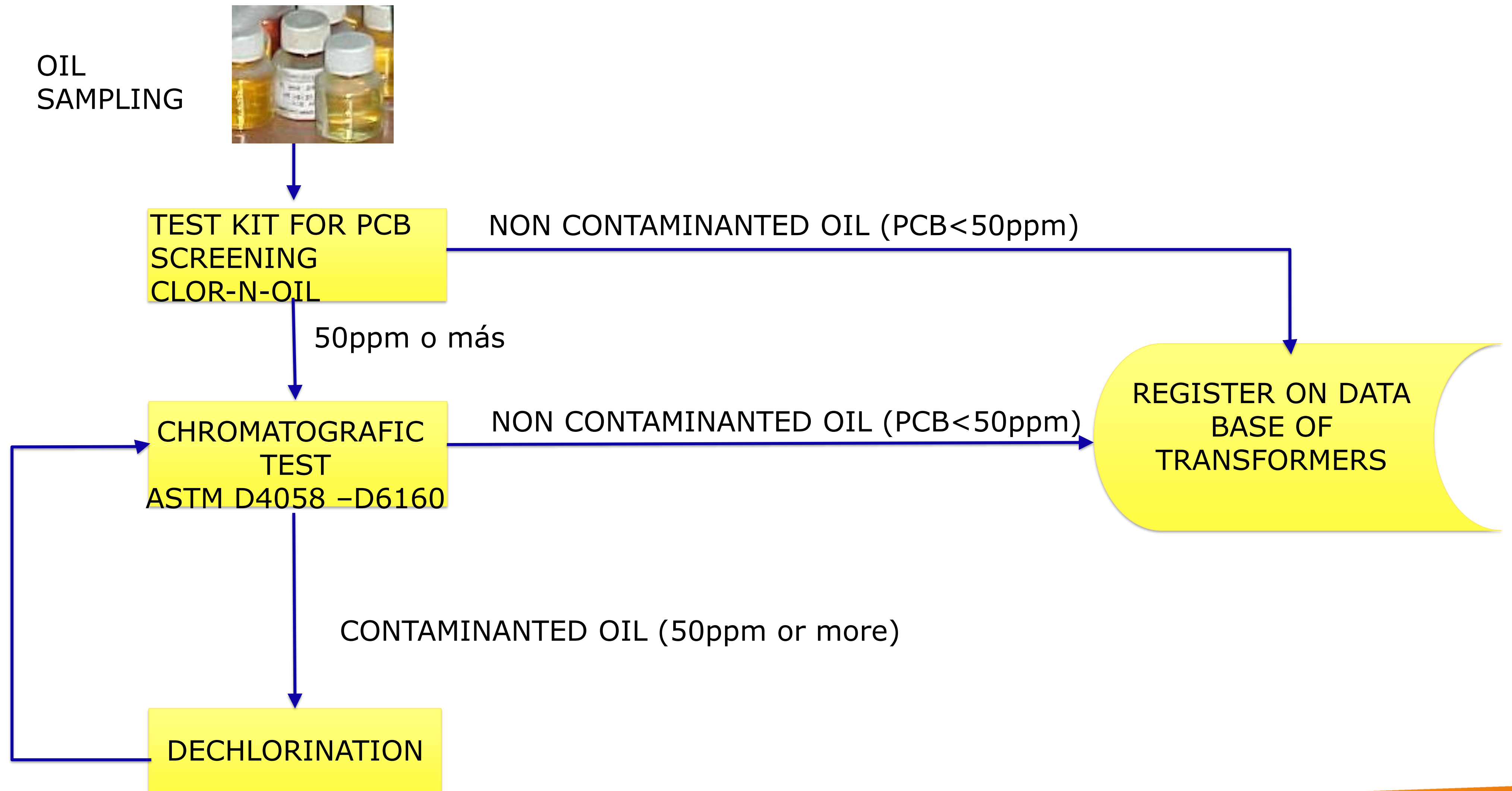


# TIME OF LINE OF ALL ACTIVITIES REGARDING PCB'S





# DIELECTRIC OIL SAMPLING FLOW





# ALL THE ACTIVITIES ON PCB'S

## IDENTIFICATION

1. REPRESENTATIVE SAMPLING OF TRANSFORMERS
2. PLANNING SAMPLING OF TRANSFORMERS
3. INVENTORY: NEW DATA BASE OF PCB'S TESTS

## CONTROLS PREVENTION

1. NEW REQUIREMENTS FOR PURCHASING OIL, TRANSFORMERS (FREE PCB'S)
2. NEW REQUIREMENTS ON MAINTENANCE: PCB'S TEST
3. NEW REQUIREMENTS FOR FINAL DISPOSAL: PCB'S TEST
4. NEW PROCEDURES:
  - OIL SAMPLING, SOIL SAMPLING
  - NEW CONTROL ON OILS
  - NEW STORAGE REQUIREMENTS FOR PCB'S
  - NEW REQUIREMENTS ON TRANSPORTATION OF PCB'S
  - FINAL DISPOSICIÓN FOR PCB'S
5. CONTINGENCY PLAN FOR LEAKS AND SPILLS
6. TRAINING OF WORKERS ON PCB'S

## ELIMINACION

1. DECHLORINATION
2. PCB'S EXPORTS



An aerial night view of a city, likely Buenos Aires, showing a dense urban landscape with numerous illuminated buildings. In the foreground, a large sports field is visible, featuring a checkered pattern and several yellow light installations shaped like birds or abstract figures. The word "Thanks" is overlaid in the center of the image.

# Thanks