



La Cámara de Comercio de Puerto Rico
y su Comités de Educación y Ambiente, Infraestructura y Permisos presentan:

Seminario:
Concienciación sobre el moho, plomo y asbesto
s para Municipios y Responsables de la Toma de
Decisiones

Plomo
Martha Rivera, MEH











**LEAD SAFE:
LEAD BASED PAINT DISCLOSURE RULE
AND THE RENOVATION, REPAIR AND
PAINTING RULE**

**Caribbean Environmental Protection Division
Environmental Protection Agency
San Juan, Puerto Rico**

OBJECTIVES



Discuss:

-  What lead is
-  How you may be exposed to it
-  How it affects your health
-  How to reduce your risk and the risk of those around you
-  Federal regulations you need to comply with in case of a:
 -  lease or selling transactions
 -  renovation, repair or paint activities; and or
 -  mitigation activities

WHAT IS LEAD?










- 🖌 It is a soft blue-gray metal
- 🖌 It is found in the natural environment
- 🖌 Is flexible, inelastic and melt easily
- 🖌 Was added to paint and gasoline in the past.
(The use of lead as a gasoline additive was banned in the United States in 1996 and lead based paint was banned in 1992).
- 🖌 Lead is also found in pipelines soldered with lead
- 🖌 Still used on consumer products



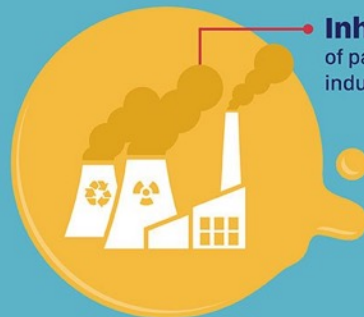
HOW ARE PEOPLE EXPOSED TO LEAD?



-  **Dust, paint and/or soil**
-  **Contaminated food and/or water**
-  **Some imported home remedies**
-  **Ceramic and glass**
-  **Hobbies and jobs**
-  **Candies**
-  **Renovation, repairs and paint jobs perform at homes and child occupied facilities**

LEAD EXPOSURE CAN OCCUR THROUGH...

#BanLeadPaint



Inhalation
of particles released by
industry or recycling



Ingestion
of contaminated soil or dust
from decaying lead paint –
particularly when children
play on the ground and put
toys or fingers in their mouths

**Lead-containing
products**

such as lead-glazed ceramics
and some traditional
medicines or cosmetics



Food or water
contaminated with lead



There is no safe level of lead exposure



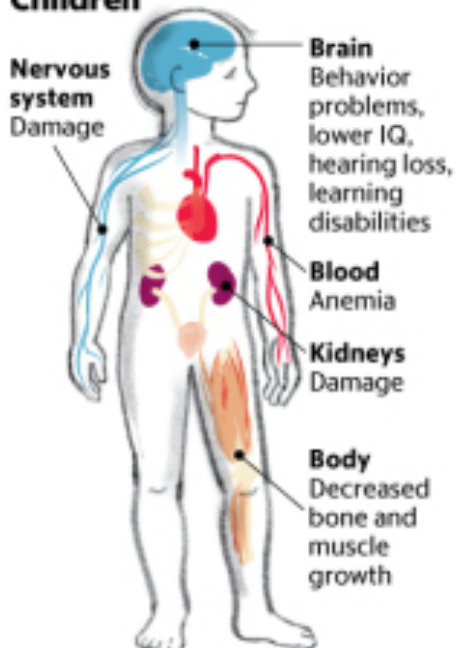
World Health
Organization



Lead exposure

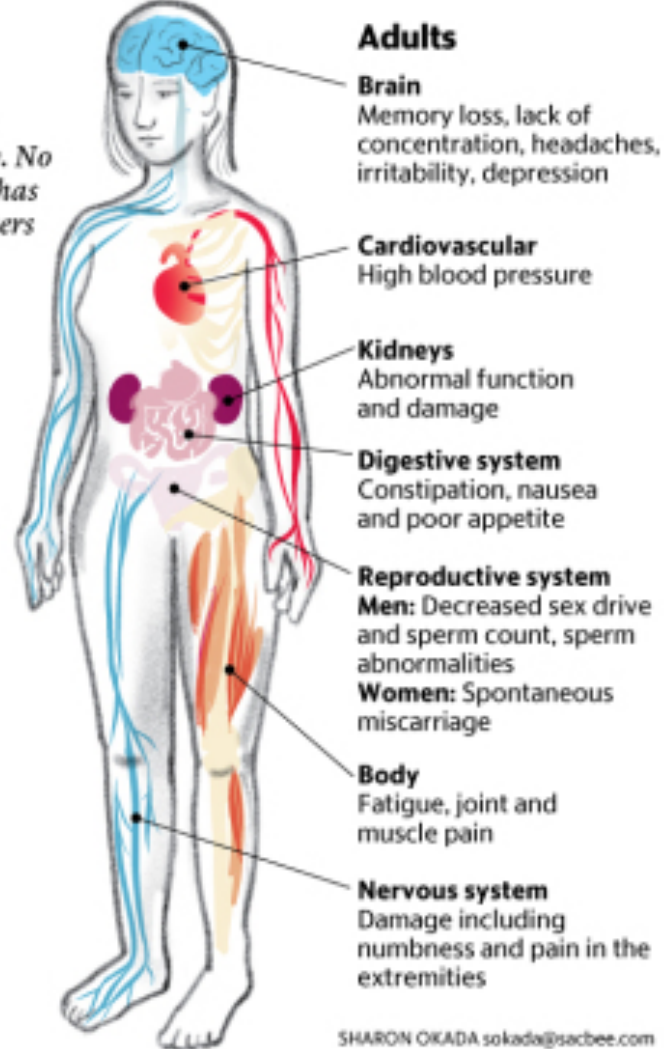
Although often without obvious symptoms, lead exposure can affect nearly every part of the human body. No safe level of lead in the bloodstream has been determined by the federal Centers for Disease Control and Prevention.

Children



Sources: Centers for Disease Control and Prevention; National Institutes of Health

Adults



SHARON OKADA sokada@sacbee.com

#BanLeadPaint

FACT: LEAD IS TOXIC

It is harmful to everyone and

DAMAGES:



BRAIN



KIDNEYS



LIVER



BLOOD



REPRODUCTIVE
SYSTEM

Young children

are most vulnerable. Their nervous systems are still developing and they absorb **4-5 times more than adults**, which can cause:

- intellectual disability
- underperforming at school
- behavioural issues



In adults

lead exposure increases the risk of:

- ischaemic heart disease
- stroke



In pregnant women

lead exposure damages many organs but also affects:

- the developing foetus



There is no safe level of lead exposure



World Health
Organization



Lead poisoning is predictable



So far there is **NO** medical cure

Prevention requires that any renovation, repair and/or paint jobs in regulated homes and regulated structures be performed following the correct procedures before any child or adult be affected by lead.

PREVENTION IS THE ANSWER



LEGAL BASE



Residential Lead-Based Paint Hazard Reduction Act, 42

U.S.C. 4852d - Implemented by the following agencies and regulations:

U.S. Department of Housing and Urban Development (HUD)


24 CFR Part 35—Lead-Based Paint Poisoning Prevention in Certain Residential Structures

U.S. Occupational and Safety and Health Administration

Safety and Health Regulations for Construction -1926 Subpart D

Environmental Protection Agency (EPA)

40 CFR Part 745 Lead-Based Paint Poisoning Prevention in Certain Residential Structures



**Lead is a pollutant regulated by many laws
administered by EPA, including:**

**the Toxic Substances Control Act (TSCA),
Residential Lead-Based Paint Hazard Reduction Act of
1992 (Title X), Clean Air Act (CAA), Clean Water Act (CWA),
Safe Drinking Water Act (SDWA), Resource Conservation
and Recovery Act (RCRA), and Comprehensive Environmental
Response, Compensation, and Liability Act (CERCLA)
among others.**



**40 CFR Part 745 Lead; Subpart F
Requirements for Disclosure of
Known Lead-Based Paint and/o
r
Lead Based Paint Hazards in
Housing; Final**

TYPES OF HOUSING NOT COVERED



- 🔨 **Housing built after 1977**
- 🔨 **Zero-bedroom units, such as efficiencies, lofts and dormitories (“*studio apartment*”)**
- 🔨 **Leases for less than 100 days, such as vacation houses or short-term rentals**
- 🔨 **Housing for the elderly (unless children leaves or visit there)**
- 🔨 **Housing for the handicapped (unless children leaves or visit there)**
- 🔨 **Housing certified as free of lead-based paint**

40 CFR Part 745 Lead; Subpart F - Requirements for Disclosure of Known Lead-Based Paint and/or Lead Based Paint Hazards in Housing



Requires the disclosure of lead based paint in all real estate transactions



Ponce, Puerto Rico



Adjuntas, Puerto Rico



**Proteja
a su
familia
contra el
plomo
en el
hogar**



Agencia de
Protección
Ambiental de los
Estados Unidos (EPA)



Comisión de Seguridad
de Productos del
Consumidor de
Estados Unidos (CPSC)



Departamento
de la Vivienda y de
Desarrollo Urbano de los
Estados Unidos (HUD)

Junio de 2017

**FIRST REQUIREMENT:
Sellers and landlords
must provide a
Lead Based Paint
Disclosure**

DISCLOSURE (EXAMPLE: PROPERTY FOR LEASE)



It has five (5) parts:

 Lead Warning Statement

 Lessor's Disclosure

 Lessee's Acknowledgment

 Agent's Acknowledgment

 Certification of Accuracy

Declaración de Información sobre Pintura a Base de Plomo y/o Peligros de la Pintura a Base de Plomo

Declaración sobre los Peligros del Plomo

Las viviendas construidas antes del año 1978 pueden contener pintura a base de plomo. El plomo de pintura, pedazos de pintura y polvo puede representar peligros para la salud si no se maneja apropiadamente. La exposición al plomo es especialmente dañino para los niños jóvenes y las mujeres embarazadas. Antes de alquilar (rentar) una vivienda construida antes del año 1978, los arrendadores tienen la obligación de informar sobre la presencia de pintura a base de plomo o peligros de pintura a base de plomo conocidos en la vivienda. Los arrendatarios (inquilinos) también deben recibir un folleto aprobado por el Gobierno Federal sobre la prevención del envenenamiento de plomo.

Declaración del Arrendador

(a) Presencia de pintura a base de plomo y/o peligros de pintura a base de plomo (marque (i) ó (ii) abajo):

(i) _____ Confirmado que hay pintura a base de plomo y/o peligro de pintura a base de plomo en la vivienda (explique).

(ii) _____ El arrendador no tiene ningún conocimiento de que haya pintura a base de plomo y/o peligro de pintura a base de plomo en la vivienda.

(b) Archivos e informes disponibles para el vendedor (marque (i) ó (ii) abajo):

(i) _____ El arrendador le ha proporcionado al comprador todos los archivos e informes disponibles relacionados con pintura a base de plomo y/o peligro de pintura a base de plomo en la vivienda (anote los documentos abajo).

(ii) _____ El arrendador no tiene archivos ni informes relacionados con pintura a base de plomo y/o peligro de pintura a base de plomo en la vivienda.

Acuse de Recibo del Arrendatario o Inquilino (inicial)

(c) _____ El arrendatario ha recibido copias de toda la información indicada arriba.

(d) _____ El arrendatario ha recibido el folleto titulado *Proteja a Su Familia del Plomo en Su Casa*.

Acuse de Recibo del Agente (inicial)

(e) _____ El agente le ha informado al arrendador de las obligaciones del arrendador de acuerdo con 42 U.S.C. 4852d y está consciente de su responsabilidad de asegurar su cumplimiento.

Certificación de Exactitud

Las partes siguientes han revisado la información que aparece arriba y certifican que, según su entender, toda la información que han proporcionado es verdadera y exacta.

Arrendador	Fecha	Arrendador	Fecha
Arrendatario	Fecha	Arrendatario	Fecha
Agente	Fecha	Agente	Fecha

SECOND REQUIREMENT




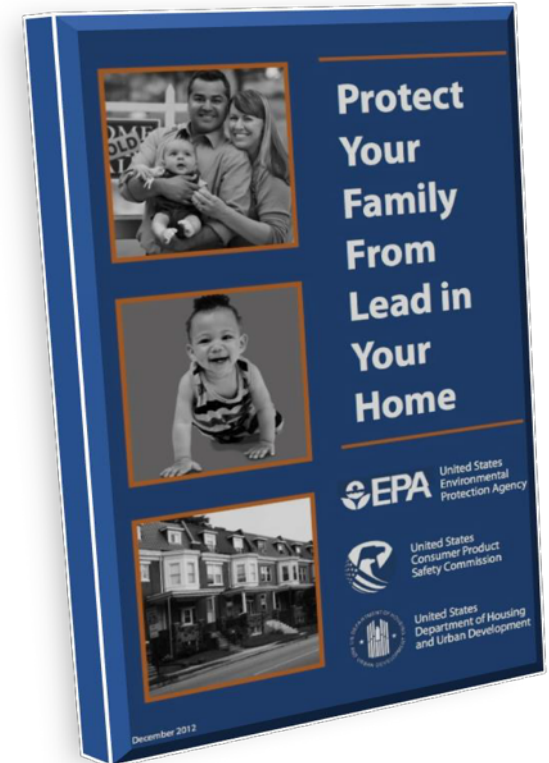
- 🖌️ Owner must provide and/or made available to the realtor, lessee, buyer of any lead study Performed in the property
- 🖌️ Shall kept those documents for at least three years

THIRD REQUIREMENT: RECORDKEEPING





 Disclosure has to be in the same language of the lessee or buyer contract

 Disclosure has to be retain for at least three years of the sale (in the case of a lease, retention is for the duration of the occupancy)



THIS RULE DOES NOT REQUIRE...



-  Any testing or removal of lead-based paint by seller or landlord
-  This rule does not invalidate leasing and sales contracts







40 CFR Part § 745 Subpart E
Residential Property
Renovation (Renovation, Repair,
and Painting Rule “RRP Rule”

40 CFR Part § 745 Subpart E

Residential Property Renovation



The [Lead Renovation, Repair and Painting \(RRP\) Rule](#) establishes:

-  requirements for firms and individuals performing renovations,
-  affects contractors, property managers, and others who disturb painted surfaces.
-  It applies to works performed in houses, apartments, and child-occupied facilities (such as schools and day-care centers) built before 1978.
-  It includes pre-renovation education requirements as well as training, firm certification, and work practice requirements.

ACTIVITIES COVERED BY THE RULE



In general, any activity that disturbs paint in pre-1978 housing and child-occupied facilities is covered, including:

- **Remodeling and repair/maintenance**
- **Electrical work**
- **Plumbing**
- **Painting preparation**
- **Carpentry**
- **Window replacement**



HOUSING AND ACTIVITIES NOT COVERED BY THIS RULE



The following housing or activities are not covered by the rule

- 🏠 Housing built in 1978 or later
- 🏠 Housing specifically for elderly or disabled persons, unless children under six be present in or are expected to reside there
- 🏠 "Zero-bedroom" dwellings (studio apartments, dormitories, etc.)

HOUSING AND ACTIVITIES NOT COVERED BY THIS RULE



Housing or components declared lead-free by a certified inspector or risk assessor. Also, a certified renovator may declare specific components lead-free using an EPA recognized test kit or by collecting paint chip samples for analysis by an EPA recognized laboratory



Minor repair and maintenance activities that disturb **6 square feet or less of paint per room inside, or 20 square feet or less on the exterior** of a home or building.

(Note: Window replacement, and partial and full demolition activities, are always covered regardless of square footage. Activities designated as “prohibited” are prohibited regardless of square footage.)

PAINT TESTING REQUIREMENTS



Paint testing is not required by the regulation, but unless you have documentation that the paint is not lead-based, then the requirements of the renovation regulation apply.

If you or your client chooses to have the paint tested prior to renovation, testing must be done on all surfaces to be affected by the work, by the appropriate qualified professional.

WORK PRACTICE REQUIREMENTS



Work practice requirements include pre-renovation education requirements as well as lead-safe work practice requirements.

Pre-renovation education requirements:

Firms that perform renovations for compensation in residential houses, apartments, and child-occupied facilities built before 1978 are required to distribute EPA's lead hazard information pamphlet "[Renovate Right](#)" before starting renovation work.

The firm must document compliance with this requirement; EPA's [pre-renovation disclosure form](#) may be used for this purpose.

WORK PRACTICE REQUIREMENTS



Training, certification, and work practice requirements:

Firms are required to be certified, their employees must be trained in the use of lead-safe work practices (either as a certified renovator or on-the-job by a certified renovator), and lead-safe work practices that minimize occupants' exposure to lead hazards must be followed.

Examples of lead-safe work practices include:

Work-area containment to prevent dust and debris from leaving the work Area.

Prohibition of certain work practices like open-flame burning and the use of power tools without HEPA exhaust control.

Thorough clean up followed by a verification procedure to minimize exposure to lead-based paint hazards.

RECORDKEEPING



Records required to be on the job site:

- Copies of the certified renovator's initial and most recent refresher course completion certificates.

Records required to be maintained for each job for a period of three years:

- Copies of the certified renovator's initial and most recent refresher course completion certificates
- Non-certified worker training documentation
- Designation of a certified renovator to the job
- Information on and results of use of EPA-recognized test kits or paint chip samples by a certified renovator who acted as the representative of the certified firm at the job site and who conducted testing for the presence of lead-based paint on surfaces to be affected by the renovation

RECORDKEEPING



Records required to be maintained for each job for a period of three years:

- Lead-based paint inspection reports provided by a certified lead inspector or certified lead risk assessor, if applicable
- Proof of owner/occupant pre-renovation education
- Any other signed and dated documents from the owner(s) and/or residents regarding conduct of the renovation and requirements in the EPA RRP Rule
- All reports required from the certified firm and the certified renovator by the EPA RRP Rule.

RENOVATION, REPAIR AND PAINTING PROGRAM: ADDITIONAL INFORMATION



- 🔧 Visit this website:
- 🔧 To apply for a RRP Certification
- 🔧 RRP Information
- 🔧 Renovator Training Information
- 🔧 List of EPA RRP Firms Certified
- 🔧 Lead Based Paint Resources like brochures

<https://www.epa.gov/lead/renovation-repair-and-painting-program-contractors#home%20overview>

RENOVATION, REPAIR AND PAINTING PROGRAM: FIRM CERTIFICATION



Federal law requires all renovation, repair, and painting firms (including sole proprietorships) working in housing, or facilities where children are routinely present, built before 1978, to be certified.

Firm certification is a key requirement to ensure the training of individuals and the use of lead-safe work practices.

Firms must apply to EPA for certification to perform renovations or dust sampling. To apply, a firm must submit a completed application and fee to EPA online.

EPA RRP firm certifications are good for five years.

RENOVATION, REPAIR AND PAINTING PROGRAM: FIRM RESPONSIBILITIES



Firms performing renovations must ensure that:

- 🖌️ All individuals performing activities that disturb painted surfaces on behalf of the firm are either certified renovators or have been trained by a certified renovator.
- 🖌️ A certified renovator is assigned to each renovation and performs all of the certified renovator responsibilities.
- 🖌️ All renovations performed by the firm are performed in accordance with the work practice standards of the Lead-Based Paint Renovation, Repair, and Painting Program.
- 🖌️ Pre-renovation education and lead pamphlet distribution requirements of the Lead-Based Paint Renovation, Repair, and Painting Program are performed.
- 🖌️ The program's recordkeeping requirements are met.



PRE-RENOVATION EDUCATION AND LEAD BROCHURE

HIRE A EPA LEAD SAFE CERTIFIED



Seguridad relacionada

CON EL PLOMO

Renovación, reparación
y pintura



NAT-F119867-1



1-800-424-LEAD

www.epa.gov/lead

Revised 2011



PLAN CONJUNTO DE LA EPA Y DEL HUD



Prácticas seguras para trabajar con el plomo en labores de renovación, reparación y pintura

Módulo 1: Reglamentos

Módulo 2: Uso de kits de prueba reconocidos por la EPA

Módulo 3: Repaso de las prácticas de instalación

Módulo 4: Repaso de prácticas prohibidas, equipos protectores personales y control contra el polvo

Módulo 5: Actividades de limpieza y verificación del trabajo

Módulo 6: Administración de registros

Módulo 7: Capacitación para renovadores no certificados

Renovador certificado modelo
Curso de capacitación de perfeccionamiento

Manual del alumno

EPA-740-R-09-004

Published by
ehaMaterials.com
September 2012

https://cfpub.epa.gov/flpp/pub/index.cfm?do=main.firmResults&Applicant_Type=FIRM&static=true&doSearch=Yes&qLat=&qLong=&programType=RRP%2CCombination&discipline=Reno vation&discipline=Evaluation&TxtLocation=&distance_1=50&state_2=PR&Applicant_Name=&Certificate_number=

OVERVIEW OF TRAINING REQUIREMENTS



Federal law requires that a “certified renovator” be assigned to each job, and that all involved individuals are trained in the use of lead-safe work practices.

- To become a certified renovator, a person must complete a renovator training course accredited by EPA or an EPA authorized program which will teach them how to work lead safe.
- All remaining individuals must also be trained. (They can either be certified renovators (meaning they successfully completed the accredited training) or they can have been trained on the job by a certified renovator (such training must be documented and the documents must be retained)).

OVERVIEW OF TRAINING REQUIREMENTS



Training requirements for certified renovators

Renovators are certified upon completion of an EPA accredited renovator training course.

- Their course completion certificate serves as their certification credential.
- For initial certification, renovators must take an 8-hour training that includes 2 hours of hands-on learning.

OVERVIEW OF TRAINING REQUIREMENTS



Training requirements for certified renovators

To remain certified a renovator must complete a refresher training course before their current certification expires.

- For recertification, renovators must take a 4-hour refresher training that includes hands-on learning every other time they take the refresher course.
- Renovators who take the online refresher training will be certified for three years; renovators who take the hands-on training in the refresher course will be certified for five years.
- If certification expires, the 8-hour course must be taken again to regain certification.

CERTIFIED RENOVATOR RESPONSIBILITIES








Certified renovators must:

- 🖌️ Ensure overall compliance with the Lead-Based Paint Renovation, Repair, and Painting Program's requirements for lead-safe work practices at renovations they are assigned;
- 🖌️ Provide on-the-job training to other workers (who have not taken the certified renovator training course) on the lead safe work practices to be used in performing their assigned tasks.
- 🖌️ Be physically present at the work site when warning signs are posted, while the work-area containment is being established, and while the work-area cleaning is performed.
- 🖌️ Regularly direct work being performed by other individuals to ensure that the work practices are being followed, including maintaining the integrity of the containment barriers and ensuring that dust or debris does not spread beyond the work area.

CERTIFIED RENOVATOR RESPONSIBILITIES



Certified renovators must:

-  When requested by the party contracting for renovation services, must use an EPA-recognized test kit or must collect paint chip samples, submit them to an EPA-recognized laboratory, and obtain test results from the laboratory to determine whether components affected by the renovation contain lead-based paint.
Note: you must assume lead-based paint is present for housing and buildings Covered by this rule, unless testing is done that determines the components affected are lead-free.
-  Be available, either on-site or by telephone, at all times renovations are being conducted.
-  Must perform project cleaning verification.
-  Must have with them at the work site copies of their initial course completion certificate and their most recent refresher course completion certificate.
-  Must prepare required records.

ADDITIONAL REQUIREMENTS WHEN WORKING IN HUD HOUSING



In addition to EPA's Renovation, Repair and Painting regulations, the U.S.. Department of Housing and Urban Development (HUD) requires compliance with its Lead Safe Housing Rule in target housing receiving HUD assistance.

[Read about HUD's requirements.](#)



**40 CFR Part § 745 Lead
Based Paint - Subpart L**

LBP Training and Certifications



This subpart contains:

- procedures and requirements for the accreditation of training programs for lead-based paint activities and renovations;
- procedures and requirements for the certification of individuals and firms engaged in lead-based paint activities, and work practice standards for performing such activities.

RRP CERTIFIED TRAINERS AT PUERTO RICO



Nortol. Environmental & Occupational Safety, Inc.

PO Box 366457

San Juan, Puerto Rico 00936-6457

787.420-0220; 787.761-5527

EMAIL: info@nortol-pr.com;

<http://www.nortol-pr.com>

Contact: Mrs. Norma Torres

AES International Inc.

Puerto Rico

Location

611 Monserrate ST 2nd floor

Santurce, PR 00907

Tel. 787.722.0220; Fax. 787.724.5788

EMAIL: apadan@aesipr.com

<https://www.aesipr.org/training/>

Contact: Mr. Ady Pagán

Coordinators in EPA Region II and Puerto Rico for Lead-Poisoning Prevention Efforts



States: NY, NJ, PR, VI

Regional Contact:

Mrs. Vickie Pane

pane.vickie@epa.gov

U.S. EPA Region 2

MS-225

2890 Woodbridge Ave.

Edison, NJ 08837-3679

(732) 321-6671

USEPA Region 2

Caribbean Environmental

Protection Division, City View Plaza II

#48 Rd 165, km 1.2, STE 7000

Mail Code: STE 7000

Guaynabo, PR 00968-8069

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787-977-5833; lugo.Lizette@epa.gov

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787-977-5890; rivera.martha@epa.gov

PUERTO RICO LEAD REGULATIONS



**The Department of Natural Resources and Environmental is
the Commonwealth agency that manage the:**

**“Reglamento para el Manejo Adecuado de Actividades
de Pintura con Base de Plomo”**

**Reglamento Núm 9098 radicado en el
Departamento de Estado de Puerto Rico el 19 de junio de 2019**

For Information:

Área de Control de Contaminación de Terrenos

Mr. José Roque – Jefe, Division Desperdicios Tóxicos

(787) 767-8181 x-3606, 3602 joseroque@jca.gobierno.pr

**COSTOS ESTIMADOS PARA UN PROYECTO DE RRP EN PUERTO RICO
(REGLAMENTO PARA EL MANEJO ADECUADO DE ACTIVIDADES DE PINTURA CON
BASE DE PLOMO (Reglamento #9098 del 16 de julio de 21019)**

Proyecto de 100 unidades			
Contrato \$100,000.00			
	Requisitos	Costo	Comentarios
Estudio de Plomo - Determinación (Lead Based Paint "LBP")	Realizar estudio LBP, no debe tener más de cinco (5) años de realizado	\$15,000.00	\$150.00/unidad.
Solicitud de Permiso*	Cuota Solicitud Permiso	\$750.00	
Radicación*	Cuota Radicación	\$250.00	
Cargo 2% del Reglamento por costo total del proyecto	Pago de Cargo 2%	\$2,000.00	
Plan de Trabajo	Realizado por Diseñador de Proyectos de Plomo	\$1,100.00	
Plan de Protección	Realizado por Diseñador de Proyectos de Plomo	\$1,100.00	
Costo Laboratorios	(11 muestras/por apartamento) @(\$15/cu)	\$16,500.00	Certificado
Inspector/ Renovador Certificado	Inspector Certificado por DRNA	\$65,250.00	Renovador AA @ \$120/día Inspector Certificado \$250.00/día.
Toxicity Characteristic Leaching Procedure "TCLP"	Realizar estudio de caracterización de escombros	\$500.00	Dependiendo el resultado el material se dispone en PR o en EEUU. La disposición en los Estados Unidos incrementa los costos.
Disposicion Vertedero (Special Waste)	(20 yardas/semana) @ \$40.00	\$41,600.00	Special Waste se dispone en vertedero industrial que sólo hay en Ponce, Humacao, Peñuelas y Fajardo
Contenedor escombros (Special Waste)	\$300.00/mes	\$3,600.00	La compañía que provea este servicio debe contar con permisos especiales.
Acarreo (Special Waste)	1 semanal @ \$900.00	\$46,800.00	La compañía que provea este servicio debe contar con permisos especiales.
Costo Total Aproximado \$295,300.00			

* Costo a base del reglamento anterior; reglamento recién promulgado no incluyó costos revisados.



LEAD PAINT
COMES WITH
A LIFETIME
GUARANTEE.
IT WILL DO
DAMAGE FOR
GENERATIONS.

Find a Lead-Safe
Certified Contractor

**Protect Your Family
Look for the Logo**

epa.gov/lead



Seminario y Taller



Martha Rivera Rosa, MEH

Has a bachelor's degree in biology from the University of Puerto Rico - Rio Piedras Campus

Master's degree in environmental sciences. Since 2010 works in the Caribbean Environmental Division of the Environmental Protection Agency in the Lead Program. Major responsibility is to inspect facilities regulated under the Toxic Substances Control Act – Lead Program. In addition, has more than 30 years of experience with the implementation and enforcement of water and wastewater local and federal Regulations.

THANKS



NATIONAL LEAD INFORMATION CENTER
1-800-424-5323



Gracias

Síguenos en:



www.camarapr.org

[#CamaraEnAccion](https://twitter.com/CamaraEnAccion)