



Emergency Response & Radiological Services 101

Peter Ricca

Daniel Lambert

**Emergency and Radiological Services Division
Louisiana Department of Environmental Quality**



Office Organizational Chart



ENVIRONMENTAL SERVICES

WATER PERMITS

WASTE PERMITS

AIR PERMITS

PERMITS SUPPORT DIVISION

ENVIRONMENTAL COMPLIANCE

SURVEILLANCE

ENFORCEMENT

EMERGENCY RESPONSE & RADIOLOGICAL SERVICES

ENVIRONMENTAL ASSESSMENT

AIR QUALITY ASSESSMENT

WATER QUALITY ASSESSMENT

TECHNOLOGY

REMEDATION

LABORATORY SERVICES

UNDERGROUND STORAGE TANK

MANAGEMENT & FINANCE

FINANCIAL SERVICES

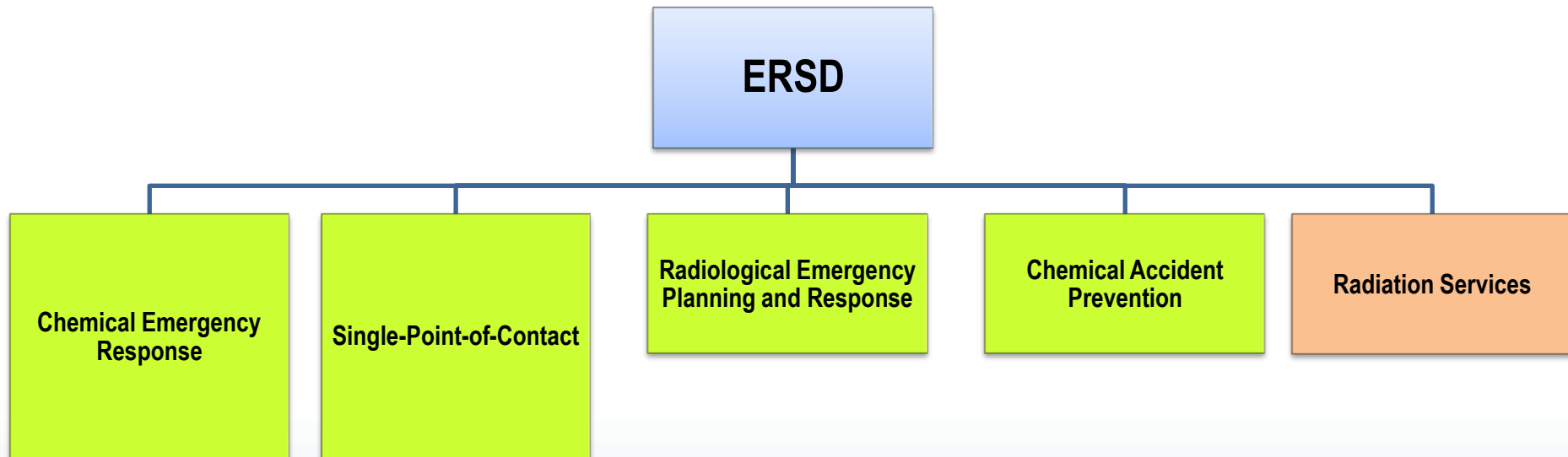
INFORMATION SERVICES

GENERAL SERVICES

HUMAN RESOURCES



Emergency and Radiological Services Division





ENVIRONMENTAL QUALITY



Division Role

- Address Chemical and Radiological Emergencies
- Facility Accident Prevention Oversight
- Accept Notification of Spills, Releases and Complaints
- Ensure Compliance with State Radiation Regulations



What We Will Cover Today



What is an “Emergency”

**Who to contact in an
emergency**

What is a “Complaint”

How to file a complaint

**How to find out “What
Happened”**



Emergency Condition



ERC 33:I.3905, which states

“any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property”





Incident Discussion





KSP 29215

A50X 296022
EQUIP. 08/27/1987



ABD	LUB
ABOW	NO

LINING HEMPEL HEMPAU
MAREK 5-2008



23R-723

DANGER
PERILOUS

Responsible Care
A Public Commitment





Emergency vs. Complaint



- Emergency Condition Exists
- There is Required Notification to State Police by Responsible Party (verbal and written)
- Call LSP Hotline (225) 925 -6595
- Non-emergency Condition Exists
- Examples of Non-Emergency Complaints
 - Sewage Releases
 - Open Burning
 - Trash
- Contact SPOC



Making a Complaint



SPOC

Single-Point-of-Contact

Takes complaints statewide

Maintains response data



Complaints




Louisiana Department of Environmental Quality > HOME - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Copy Paste Bluetooth

Address <http://www.deq.louisiana.gov/portal/> Go Links



A clean state of mind, for all your environments.

HOME DIVISIONS PROGRAMS SERVICES **ONLINE SERVICES** NEWS ABOUT

SEARCH:

» **Living wall is hands on teaching at The Academy in Plaquemine**
A group of Penn State students and their advisors spent their spring break helping middle school students from the Academy School for Math, Science and the Arts in Plaquemine build a living wall. The Academy students got hands-on experience in how to use basic material to clean and filter stormwater runoff. [Download Complete Article](#)

DEQ HOTLINES

LIVING GREEN

WHAT'S NEW:

- ▶ Ozone Forecast
- ▶ DEQ Employee Directory
- ▶ Debris Site Interactive Map
- ▶ Annual Report
- ▶ Discover DEQ [e-newsletter](#)
- ▶ Subscribe to EnviroFlash
- ▶ Statewide Ozone Steering Committee
- ▶ Red-Tagged UST Facilities
- ▶ Asbestos and Lead

Latest News

DEQ to participate in Household Hazardous Materials Day
DEQ Communications - 7 hours ago
The Greater Baton Rouge Household Hazardous Materials Collection Day and Paint Swap will be held on Saturday, May 23. Citizens can bring household hazardous materials and leftover paint to Memorial Stadium any time between 9 a.m. and 1 p.m. Entrance to the drop off site is from Scenic Highway at Foss Street in Baton Rouge.
[For more information](#)

DEQ responds to well blowout
DEQ Communications - 7 days ago
DEQ emergency responders took air samples at a weekend gas well blowout.

Brownfields grants awarded by EPA
DEQ Communications - 12 days ago
The U.S. Environmental Protection Agency awarded approximately \$1.6 million in

BE THE SOLUTION

GUSTAV & IKE INFORMATION

ON AIR CURRENT AQI DATA

ENVIRUSCHOOL

Done Internet

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Complaints





Incident Report Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites

Address <http://www.deq.louisiana.gov/apps/forms/irf/forms/> Go Links



Incident Report Form

Type of Report

- Anonymous Complaint
- Citizen Complaint
- Spill Incident/Release

Internet

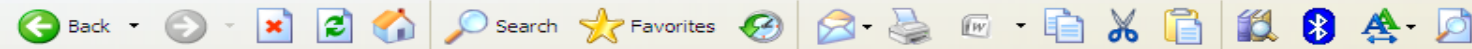
start In... En... D... Pr... In... 100% 4:26 PM

Complaints



Incident Report Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help



Address <http://www.deq.louisiana.gov/apps/forms/irf/forms/anonymous/AnonymousForm.asp?Complaint=3&agree=>



Incident Report Form

DEQ will not be able to report their finding to you if you remain anonymous

* = Required Field

Caller Information

Date/Time Reported: 5/20/2009 4:01:12 PM

Type of Complaint: Anonymous

Site Information

Alleged Violator:

Physical Location/Address:

City: * State: * Zip: *

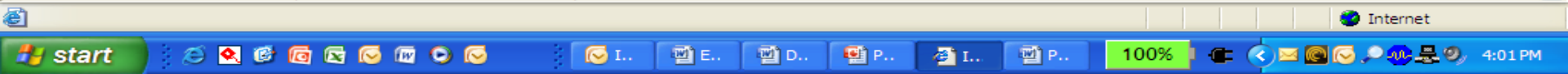
Date of Discharge:

Time Noticed: Began: Ended:

Parish: (of occurrence) *

Media Affected: *

If water, name of nearest water body:



Single Point of Contact (SPOC)



- 888-763-5424 (Toll Free in LA)
- 225-342-1234
- 225-219-3640

(If no answer please leave a detailed message on the Voicemail)

- www.deq.louisiana.gov



When Making a Complaint



DETAILS – DETAILS – DETAILS

1. Location – address, miles from main road, etc.
2. Time/Date (recurring or one time?)
3. Any other information
 - » Drums
 - » Spills
 - » Piles of waste
 - » Etc.



When Making a Complaint



If you leave your name and contact information

- ALL information you leave is a Public Record (anyone can access the information)
- Investigators can contact complainant for additional info (this helps DEQ provide the best quality response to the complainant)
- Complainant can request a follow up call from the DEQ investigator assigned to the complaint



When Making a Complaint



If you make an anonymous complaint

- You will not be contacted by investigator
- Without access to additional information the complaint investigation may be unproductive
- Investigation procedures are the same for all complaints anonymous or known



What Happened?



To find out what happened
Call SPOC to Obtain

1. Complaint Report Number
2. Inspector Name/Contact Info.



Radiological Emergency Planning and Response



- Develops plans to address radioactive material emergencies including waste transported through Louisiana
- Conducts and participates in drills at three (3) nuclear power plants in or near Louisiana



Chemical Accident Planning Program (CAPP)



- Created as a result of the methylisocyanate gas release in Bhopal, India (1984)
- 8 – 10,000 dead in 72 hours; 25,000 dead overall
- Reviews Risk Management Plans



Review of Today's Information



- **What is an “Emergency”**
- **Who to contact in an emergency**
- **What is a “Complaint”**
- **How to make a complaint**
- **How to find out what happened**





Questions?



DEQ in 2009

Office & Division Contact Information



- **Emergency & Radiological Services Division**
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Baton Rouge, LA 70821-4312

- **Division Administrator**
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DEQ in 2009

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Resources



- <http://www.deq.louisiana.gov/portal/tabid/279/Default.aspx> - (Single-Point-of-Contact)
- <http://www.deq.louisiana.gov/portal/tabid/1617/Default.aspx> - (Complaints)
- <http://www.deq.louisiana.gov/apps/forms/irf/forms/> - (online reporting)
- **24 hr. Hotline 225-765-0160 (Radiation only)**
- **State Police Hotline 225-925-6595 (Emergencies)**





Emergency Response & Radiological Services 101

Judith Schuerman

Emergency and Radiological Services Division
Louisiana Department of Environmental Quality





RADIOLOGICAL SERVICES



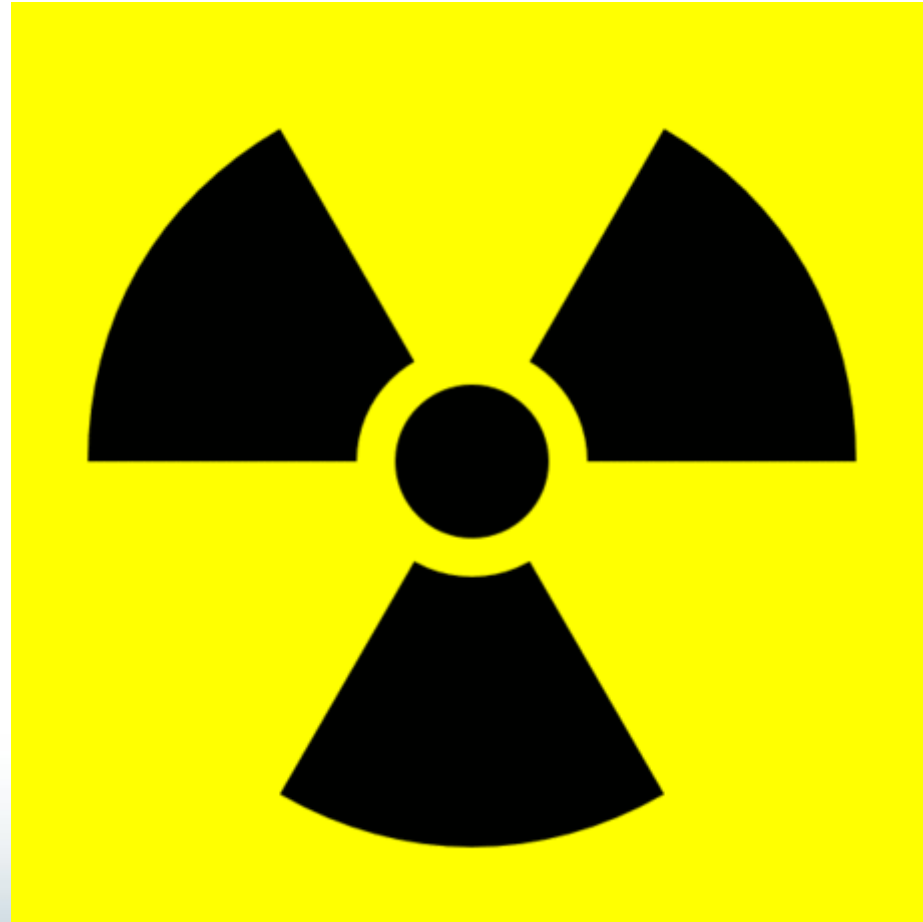
Radiation Basics



- Radiation is
 - a form of energy
 - All around us as natural or background radiation
 - Also man-made, as in x-rays, color TVs, smoke detectors



Radiation Warning Symbol



History of X-Rays



- X-RAYS or “Wonder Rays” were discovered 11/8/1895
 - By Wilhelm Conrad Roentgen
 - By accident
 - First x-ray of his wife’s hand
 - Received first Nobel Prize in Physics in 1901



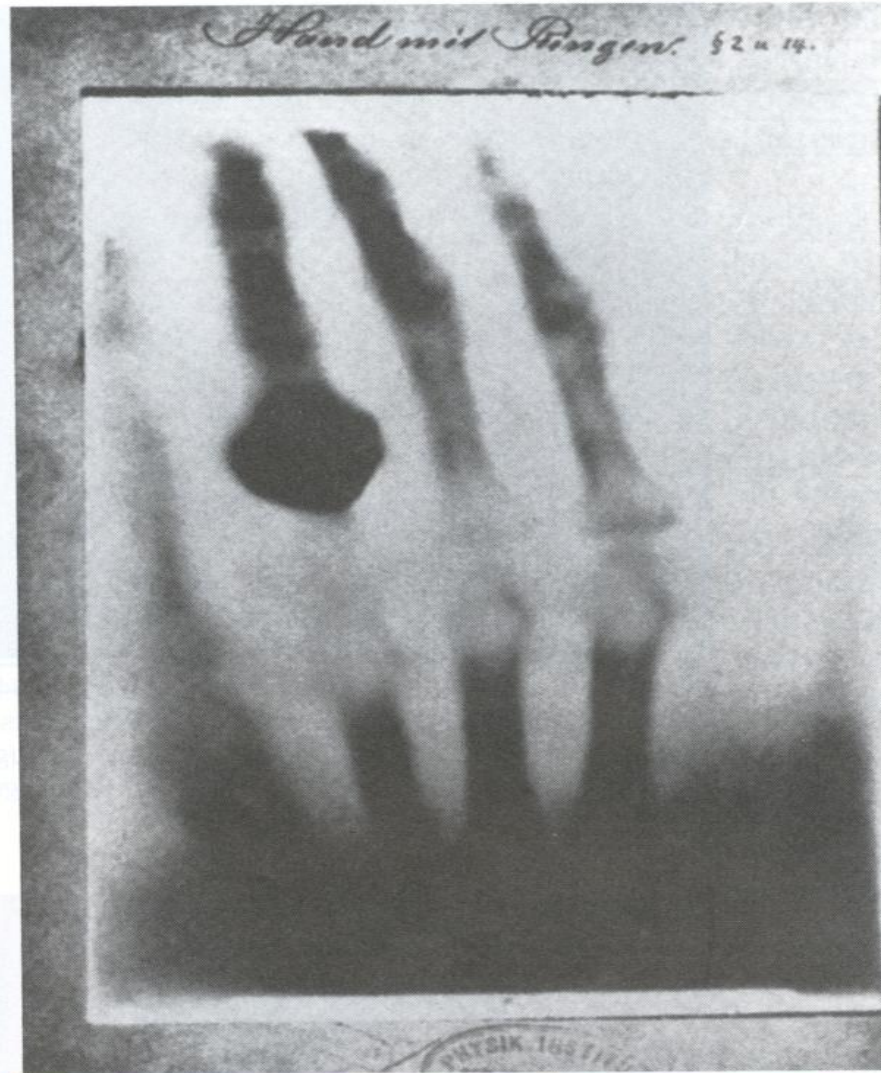


FIG. 3-3. First x-ray picture on film, Mrs. Roentgen's hand. (From Glasser O: *William Conrad Roentgen and the early history of the roentgen rays*, London, 1933, John Bale, Sons, and Danielsson, Ltd.)



ENVIROSCHOOL

FOR COMMUNITIES

LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Radiation Protection



- The definition of Radiation Protection is
 - Measure employed by radiation workers to safeguard the public, the patient, and the radiation worker from unnecessary exposure to ionizing radiation.
 - ALARA - "as low as reasonably achievable"
- How can we do this?
 - Time – shorten a person's exposure times
 - Distance – farther from source, lower the exposure
 - Shielding – anything placed between source and you



Radiation Licensing, Surveillance, and Enforcement Section



- 24 Employees
- Our job is
 - to regulate the sources of radiation in Louisiana
 - to maintain adequately trained radiological response personnel through education, training, and drills
 - To maintain equipment and on-call personnel for 24-hour response capabilities



Radiation Licensing Unit...



- Radioactive Material Licensing
 - 548 Licensees in LA
- Registrations for different X-ray Devices
 - Dental Units, Hospitals, Chiropractics, Industrial
 - Schools – Colleges and Universities
 - Cancer Treatment Centers
 - 13,653 X-Ray devices registered in LA
- Certifications for Industrial Radiographers
 - 991 certified in 2008; renew every 5 years



Federal Tax ID

**Department of Environmental
Emergency & Radiological Services Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Phone: (225) 219-3041 Fax: (225) 219-3154**

**APPLICATION
FOR RADIOACTIVE
MATERIAL LICENSE**
DRC 11 (Rev. 1/1/06)

OFFICE USE ONLY	
License #	
AI #	
Amendment #	
Date Issued	
Date Received	



1. NAME OF APPLICANT		2. <input type="checkbox"/> New License Application <input type="checkbox"/> Renewal <input type="checkbox"/> Amendment Request	
MAILING ADDRESS		LICENSE NUMBER:	
ZIP CODE:		3. DEPARTMENT, LOCATION OR ADDRESSES AT WHICH USED AND/OR STORED <input type="checkbox"/> Check if same as Item 1 only	
AREA CODE	TELEPHONE NO.	<input type="checkbox"/> Temporary Job Sites in LA <input type="checkbox"/> Offshore <input type="checkbox"/> Out of State (List States)	
AREA CODE	FAX NO.	EMAIL:	

4. RADIATION PROGRAM PERSONNEL	TITLE OR FUNCTION	RESUME	
		ATTACHMENT	PAGE OR ITEM
PERSON RESPONSIBLE FOR RADIATION PROTECTION (RSO)			
INDIVIDUAL(S) OR COMMITTEE RESPONSIBLE FOR USE	<input type="checkbox"/> Committee Chairman		
COMMITTEE TITLE	NO. OF ADDITIONAL COMMITTEE MEMBERS OR INDIVIDUALS		

5. PERSONNEL MONITORING		NOT APP.	ATTACHMENT	PAGE OR ITEM
a. Personnel Dosimetry	Name of Supplier:	RADIATION DETECTED		
	Exchange Period:	<input type="checkbox"/> Alpha	<input type="checkbox"/> Beta	<input type="checkbox"/> Gamma
	Where Worn:	<input type="checkbox"/> Neutron	<input type="checkbox"/> X-Ray	<input type="checkbox"/> Radon
b. Pocket Chamber or Dosimeter	Manufacturer:	RADIATION DETECTED		
	Model: Max. Range:	<input type="checkbox"/> Alpha	<input type="checkbox"/> Beta	<input type="checkbox"/> Gamma
	<input type="checkbox"/> Direct Reading	<input type="checkbox"/> Neutron	<input type="checkbox"/> X-Ray	<input type="checkbox"/> Radon
c. Bio-	Laboratory:			

Radiation Licensing Unit...



- Reciprocity
 - Recognition of Radioactive Material Licenses from other agreement states and the Nuclear Regulatory Commission
- NORM – Naturally Occurring Radioactive Material
 - Found in oil exploration activities



LDEQ Regional Districts



LDEQ Disclaimer: The Louisiana Department of Environmental Quality (LDEQ) has made every effort to make this map as accurate as possible. However, the map is not a warranty, representation, or guarantee of accuracy. LDEQ is not responsible for any errors or omissions, whether caused by negligence or otherwise, in the use of this map or data set, and shall not be held liable for any consequences of its use.

Date: 04/22/2009
 Map Projection: UTM Zone 18N
 Map Source: 2009 LDEQ Districts
 2009 LDEQ Field Office: 1899 LDEQ Regional Districts
 Vector Labels Digitized from 1:100,000 USGS D500



Radiation Surveillance Unit...



- 12 Inspectors throughout 6 Regions of the state
- Perform inspections anyplace that has radioactive materials or X-rays
- Strict Radiation Protection rules must be followed - both our regulations and Nuclear Regulatory Commission's (NRC) rules



Radiation Enforcement Unit...



- Staff of 1 Enforcement Writer
 - Issues all Compliance Orders and Notices of Potential Penalties





Questions?



DEQ in 2009

Speaker Contact Information



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