

# EN2017

### EPCRA MOBILE APP

David Sage, Washington State Department of Ecology

#### **2017 Exchange Network National Meeting**

Innovation and Partnership

May 15-18, 2017
Sheraton Philadelphia Society Hill Hotel
Philadelphia, Pennsylvania
#EN2017
http://www.exchangenetwork.net/en2017

### **ABSTRACT**

Washington State's first iOS/Android smart phone app for emergency responders. The user friendly app quickly provides key information about location, chemical and storage data to emergency responders. Meet the developer behind it, how the app works, how it was used in Washington's recent wildfires, and how a small team of three, built and published this life saving tool!

### **EPCRA**

(Emergency Planning and Community Right to Know Act)



### Mobile App Android and iPhone





Washington State Emergency Response Commission

David Sage ITS5 Senior Application Developer Hazard Waste & Toxic Reduction Washington State Department of Ecology



2016 ECOS Innovation Award

#### What is EPCRA

(Emergency Planning and Community Right to Know Act)

Ecology receives EPCRA reports and manages EPCRA data on behalf of the Washington State Emergency Response Commission (SERC)

#### Reports:

- Facility Data
- Emergency contacts
- Chemicals stored

#### Data is used by:

- SERC, Emergency Responders
- Local Emergency Planning Committees (LEPC)
- Fire Departments

# Why an EPCRA App

- Data available offline
- Mapping
- Facility emergency contacts
- Instant Access to Chemical and Storage information

# Sleepy Hollow Wildfire June 2015





"It's all about safety and being as prepared as possible."

- Chief Bill Whealan,

Washington Emergency Response Commission

"This is a game-changer for us.

Having this paid off for us, improving the safety of responders and the public."

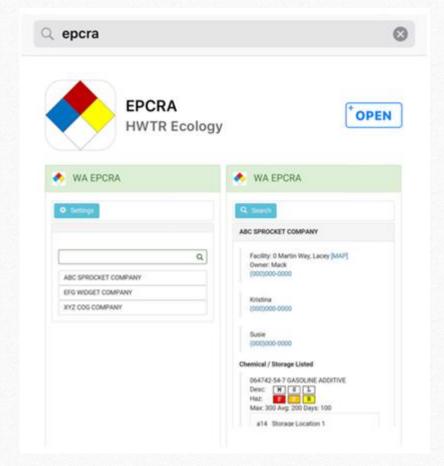
– Dave Byers, Spills response manager

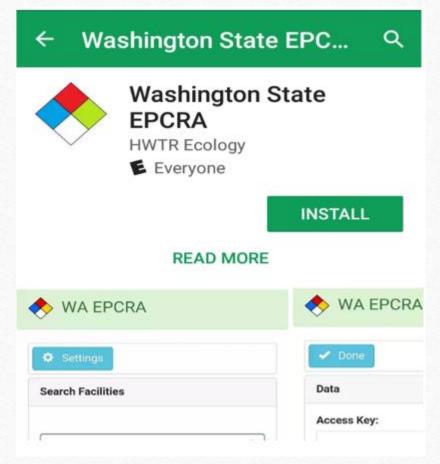
Live Demo



## App Store







### App Setup

Software Agreement

Software Agreement

Service requires an Access key

**HWTR Ecology Contact:** 

hwtrecology@gmail.com

www.ecy.wa.gov/epcra

Ver 2

Agree Decline

SERC Use of Data Agreement

THIS SOFTWARE PRODUCT IS PROVIDED BY
THE WASHINGTON STATE EMERGENCY
RESPONSE COMMISSION AND DEPARTMENT

Download Data

Download Data

Service requires an Access key

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Ver 2

Access Key:

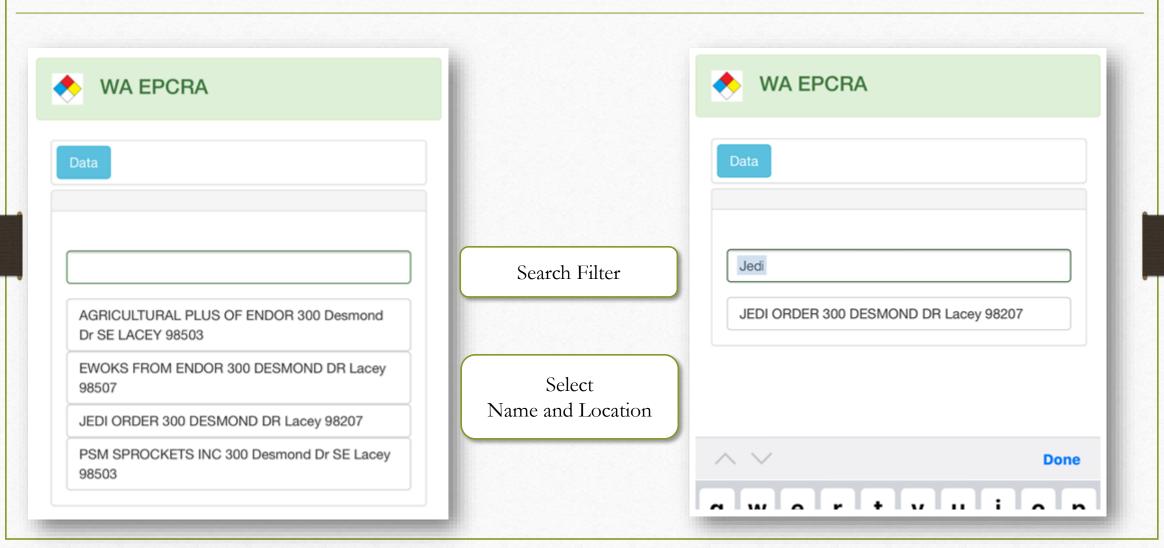
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Local Emergency
Planning Committees:

THURSTON

Download

#### Search Screen

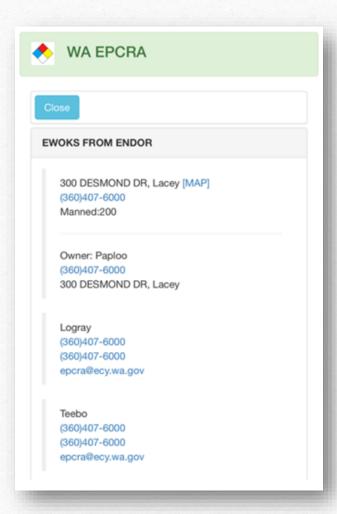


#### Detail Screen

Location

Owner

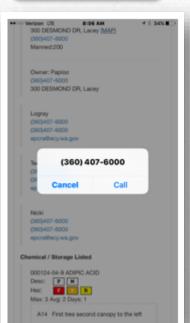
Emergency Contacts



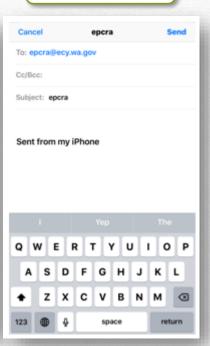
Map



Phone



Email



### Detail Chemical Storage Screen

CAS / Name

Description

- P Pure
- M Mix
- ន Solid
- L Liquid
- G Gas
- E EHS -

Physical Heath Hazard

- F Fire
- Pressure
- R Reactive
- A Acute
- c Chronic

Chemical / Storage Listed

000124-04-9 ADIPIC ACID

Desc: Haz:

P M

P R

R

Max: 3 Avg: 2 Days: 1

A14 First tree second canopy to the left

002921-88-2 LORSBAN

Desc:

M S

Haz:

AC

Max: 500 Avg: 500 Days: 120

J14 Third tree right of main entrance

Storage

A Above ground tank

B Below ground tank

c Tank inside building

D Steel drum

E Plastic or non-metallic drum

F Can

G Carboy

н Silo

I Fiber drum

J Bag

к Вох

**L** Cylinder

м Glass bottles or jugs

N Plastic bottles or jugs

o Tote bin

P Tank wagon

Q Rail car

R Other

s Sulfuric acid in batteries only

Temperature

4 Ambient temperature

5 Greater than ambient temperature

6 Less than ambient temperature but not cryogenic

7 Cryogenic conditions

Pressure

1 Ambient Pressure

2 Greater than ambient pressure

3 Less than ambient ambient pressure

Comments

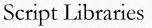
# Technologies Used



Visual Studio IDE C Sharp Programing Language Team Foundation Server



SQL Server DMS





Bootstrap



**j**Query



AngularJS



IIS Web Server



Mobile Framework



Cordova

# Ending Thoughts

Simple design helps with maintaining the final product.

Developers familiar with Mac, Windows and publishing mobile apps

State Infrastructure, Retention and Resources

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Hazard Waste & Toxic Reduction
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Architecture, Business, and Software Development

Mobile and Desktop Applications

Languages: JAVA, C#, VB.NET, C++, SQL, VBA and JavaScript

Platforms: iOS, Android, Windows, and MAC.

Development Environments - Visual Studio, Eclipse, and Xcode.