



Integrated Data Planning For Emergency Response

An Overview

Outline

- Plans
- Communication
- Dashboard
- Forest & Trees
- Tracking & Integration

Introduction to ICS

- Created in 1970 in response to a series of wildfires (California, USA)
- Allows different kinds of agencies and/or multiple jurisdictions of similar agencies to work together effectively in response to an incident
- Provides a common organizational structure and language to simplify communication among responders to an incident.
- Establishes clear lines of authority and command.

ICS Hierarchy

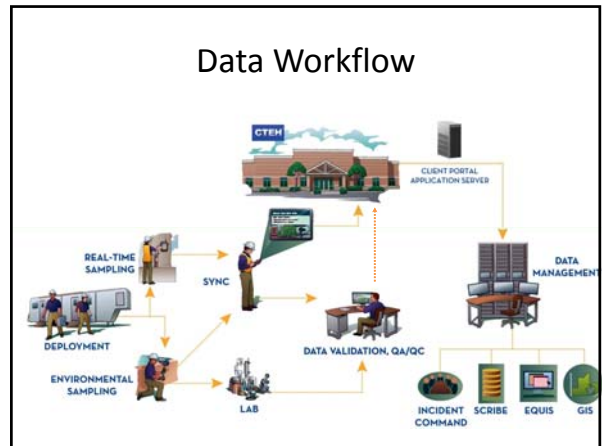
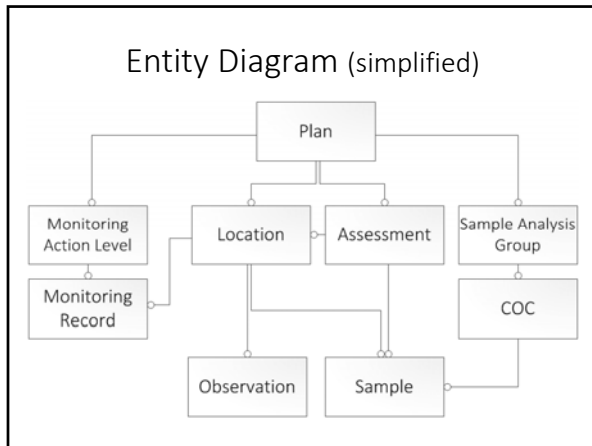


Planning Section



Plans

- Main unit of data organization
- Tie pieces of data together
- Common Plan elements:
 - Purpose, rationale, scope, location, frequency, duration, methodology & analysis, etc
- Emergency Response Examples:
 - Sampling & Analysis Plan (air, water, sediment, soil, etc)
 - Waste Management Plan
 - Data Management Plan
 - Quality Assurance Project Plan



Plan Dashboard

Plan Dashboard

Navigation

Plan Dashboard

Map

Plan Dashboard

Contacts

Plan Dashboard

The screenshot shows the 'Plan Dashboard' for a 'Residential Soil Sampling Plan'. A red box highlights the 'Recent Photos' section, which displays a grid of photos with their respective dates and descriptions.

Plan Dashboard

The screenshot shows the 'Plan Dashboard' for a 'Residential Soil Sampling Plan'. A red box highlights the 'Plan Elements' section, which displays a grid of photos with their respective dates and descriptions.

Plan Dashboard

The screenshot shows the 'Plan Dashboard' for a 'Residential Soil Sampling Plan'. A red box highlights the 'Current Status' section, which displays a grid of photos with their respective dates and descriptions.

Pushing Data to the Field

- Locations
- Monitoring Action Levels
- Assessments
- COCs with Sample IDs

Pushing Data to the Field Monitoring Action Level

The screenshot shows the mobile application interface for editing monitoring action levels. It includes fields for Matrix, Instrument, Analyte, Detection limit, Units, Level 1 & Action, Level 2 & Action, and Field Guidance. A 'Save' button is visible at the bottom.

Pushing Data to the Field Locations

The screenshot shows the mobile application interface for editing location details. It includes fields for Project, Plan, Location type, Sampling Schedule, Location code, Location Description, Status, Latitude, Longitude, Region, Location category, Indoor or outdoor, Location Desc., and Address.

Pushing Data to the Field Samples

CTEH Company Plans Analytical Samples

Sample Data Group

Plan: Work Area Monitoring

CDIC Name: LWLA009H5

Logis number: L29726

Collected from: 2013/08/09

Collected to: 2013/08/09

Lab: Galton Labs

Description: H2S - NOSH 603

Planned Samples for NOSH 603:

- LWLA009H5001
- LWLA009H5002
- LWLA009H5003
- LWLA009H5004
- LWLA009H5005
- LWLA009H5006
- LWLA009H5007
- LWLA009H5008

Details

SIERA Type: Sample-Deployment

SIERA subtype: H2S Air

Select COC: Select COC

Planned Sample: LWLA009H5001 - L29726 Galton Labs (L...

Touch Sample ID from Primary Identifier

Primary Identifier: L29726

Secondary Identifier:

Sample Type: Tap to set

Sample Time (or start time): Tap to set

Sample Stop: Tap to set

Comments:

Data Integration at Entry Point

- Data elements are 'attached' to a
 - Plan
 - Assessment
 - Location
 - COC
 - Action Level
- At the time of data entry

Finish Previous Page Next Page

S.I.E.R.A. 3

Date Time: 2013-08-16 12:19:48

Project: 40355 Braithwaite LA 2012/08/31

Plan: Residential Soil Sampling

Assessment: ATRID1247 208 Oak Dr Braithwaite, LA 7...

Location Options: Fixed Station

Fixed Station:

Region:

Location Description:

Initials:

Cross-Platform Workflow

Python

Microsoft .NET

Mobile Data Studio

iPhone

Windows Mobile

EPA SCRIBE

ArcGIS

Microsoft SQL Server

Tableau

Forest and Trees Real Time Dashboard

CTEH Company Plans Analytical Samples Property Assessments Realtime Dashboard S.I.E.R.A. 3 MOSE

Community Area

Category	Level of Detection	Level of Action	Level of Alert	Highest Concentration
H2S (ppm)	120	0	0	0
SO2 (ppm)	650	650	20,000.0%	21,000.0%
PM10 (ug/m3)	7	7	0.247,000.0%	0.250,000.0%
PM2.5 (ug/m3)	69	69	0.227,000.0%	0.200,000.0%
Lead (Chloride) (ppm)	14	0	0.000,000%	0.000,000%
VOC (ppm)	1200	0	0.000,000%	0.000,000%

Residential Area

Category	Level of Detection	Level of Action	Level of Alert	Highest Concentration
H2S (ppm)	120	0	0	0
SO2 (ppm)	650	650	20,000.0%	21,000.0%
PM10 (ug/m3)	7	7	0.247,000.0%	0.250,000.0%
PM2.5 (ug/m3)	69	69	0.227,000.0%	0.200,000.0%
Lead (Chloride) (ppm)	14	0	0.000,000%	0.000,000%
VOC (ppm)	1200	0	0.000,000%	0.000,000%

Work Area Area

Category	Level of Detection	Level of Action	Level of Alert	Highest Concentration
H2S (ppm)	120	0	0	0
SO2 (ppm)	650	650	20,000.0%	21,000.0%
PM10 (ug/m3)	7	7	0.247,000.0%	0.250,000.0%
PM2.5 (ug/m3)	69	69	0.227,000.0%	0.200,000.0%
Lead (Chloride) (ppm)	14	0	0.000,000%	0.000,000%
VOC (ppm)	1200	0	0.000,000%	0.000,000%

Assessing Area

Category	Level of Detection	Level of Action	Level of Alert	Highest Concentration
H2S (ppm)	120	0	0	0
SO2 (ppm)	650	650	20,000.0%	21,000.0%
PM10 (ug/m3)	7	7	0.247,000.0%	0.250,000.0%
PM2.5 (ug/m3)	69	69	0.227,000.0%	0.200,000.0%
Lead (Chloride) (ppm)	14	0	0.000,000%	0.000,000%
VOC (ppm)	1200	0	0.000,000%	0.000,000%

Forest and Trees Real Time Dashboard

CTEH Company Plans Analytical Samples Property Assessments Realtime Dashboard S.I.E.R.A. 3 MOSE

Data Summary By Area

Number of Readings Collected

Number of Detections

Max Detection

Average of Detections

Analyte of Interest

Forest and Trees Real Time Dashboard

CTEH Company Plans Analytical Samples Property Assessments Realtime Dashboard S.I.E.R.A. 3 MOSE

Detail View

Monitoring Locations Mapped

Concentration over time

Scroll through time

Data Portability

Download various formats straight from the portal

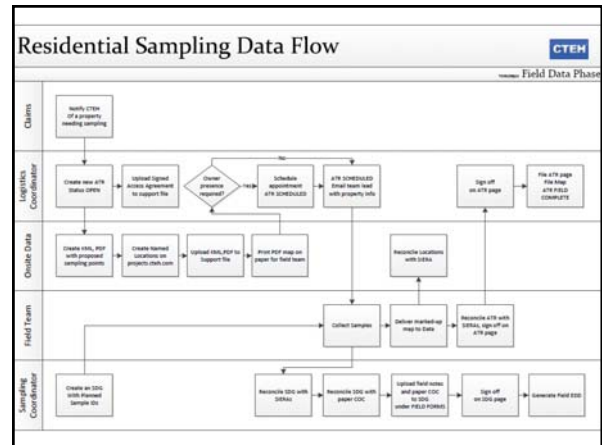
Including EPA SCRIBE

Data Portability

Import into Scribe

Interacting with the Community

- Data Integration is critical
- Responsiveness is key to making a good impression
- Consistent, timely, cohesive interaction with community helps lower litigation costs
- Requires Teamwork
 - Call Center/Responsible Party
 - Claims
 - Sampling Teams
 - Laboratories
 - Data Management
 - Data Validators
 - Data Interpretation (e.g., Risk Assessors and Toxicologists)



Assessment Tracker

Assessment Tracker

Everything in one place

Map

Contact info

Important Notes

Map

Sampling Locations

Assessment Tracker

Everything in one place

Report No.	Asset Date	Category	Name	Assessment	Attachment
1	2012/10/09 22:05	2 Map	Sub	208 Oak St	2 Map
2	2012/10/09 22:09	10 HMA	Sub	208 Oak St	10 HMA
3	2013/01/14 04:34	12 Postage	Sub	208 Oak St	12 Postage
4	2013/10/13 20:38	13 Property Access Agreement	Other	13 Property Access Agreement	

