Multi-location, Multi-Program Exercise - case study

Industry Sponsored Exercise
Kent State Stark, Canton, OH
August 13-15, 2013
Background

- Marathon Petroleum has been moving toward ever more complex exercises
- With DWH and Enbridge-Marshall releases, the bar had been raised a magnitude, or more. It also opened up opportunities to practice Unified Command
- Some past lessons learned identified a low involvement from Security/Intel Officers
- Annual drill meets PREP requirement, provides training through practice opportunity, and allows Marathon Petroleum to measure itself against the global response community
History – Yearly Top Tier Team Tabletop

- Earthquake Drill, Robinson, IL 2006
- SONS 07, Evansville Venue sponsor 2007
- Houston, Hurricane Drill 2008
- Multi-region Nexus, Huntington, WV 2009
- Offshore Blowout, Lafayette, LA 2010
- Multi-location Drill, Tampa & New Orleans 2011
- Multi-business Unit Drill, Galveston, TX 2012
- Security/Cyber/Spill Exercise, Canton, OH 2013
Exercise Overview

- Multi-location, Multi-incident, Multi-program
  - Multiple releases, caused by “IED & Cyber” attacks
    - Light Utica crude oil mixture from refinery tank overflowed into flood plain
    - Heavy Dilbit mixture from a pipeline leaked into state scenic waterway
- Tier two teams briefed larger Unified team in a transition meeting
- Two full planning cycles in objectives; only one completed
- Law enforcement integrated with Security/Intel/IT section
- Organization and section specific goals
- One press briefing meeting
Planning the Exercise

- HSEEP lite – More meetings, more overlap in agenda

- Planning meetings held at Refinery, Kent State Stark University Center and Township FD training building.

- Incorporating special design elements
  - Cyber attack on process controls
  - Exploded and unexploded IED’s
  - Forced manual planning efforts
  - Agreed on one ICP for two events
  - Minor boom deployment
Planning, continued

- USEPA
- OEMA
- OEPA
- Stark Co. EMA
- Stark Co. Sheriff
- Stark Co. LEPC
- FBI
- OSRO – Clean Harbors
- Marathon Refinery
- Marathon Pipeline
- MPC Corporate
Exercise Scenario

- Canton refinery
  - Crude tank overflows when indicating 85% full
  - Crude follows drainage to Hurford Run, Nimishillen Creek, Sandy Creek
- Tuscarawas River
  - IED ruptures crude oil pipeline
  - 2nd IED found at upstream block valve.
The Timeline

- T-1 day: Network infection shuts down offsite internet
- T+0: Leak at Pipeline and Refinery
- T+0 to T+4 hrs: Local response teams manage event
- T+4 hrs: Turnover to larger IMT
- T+8 hrs: Internet restored, virus discovered in tank level controller
- T+12 hrs: Former employee and contractor discovered to be felons with false identity
- T+16 hrs: Press Conference
- T+20 hrs: IAP delivered EndEx
- T+22 hrs: Critique/Hotwash
IMT Objectives

- Annual Tier 3 IMT Exercise is practice for an all volunteer team
- Involve Team(s) at a higher level of Unified Command
- Push Unified Command (Unity of Response) down into sections
- Work one complete planning cycle
- Involve Federal, State, Local, NGO and private in UC
- Major focus on Security/Terrorism
Artificialities

- 24-hour broken daylight

- Size of the IMT
  - Budget concerns allow only one exercise per year
  - Two shifts – rotate leads

- Tier 2 teams partially integrated

- Marathon Petroleum filled lead roles in sections.

- No weather effects
Practice makes perfect – Wax on, Wax off....
Things that Went Well

- Locations/Facilities
- Good agency participation
- Focus on manual planning
- Training pays dividends
- Embedding PDU
- Balance of stress and simulation is close
- Two phase press conference
Opportunities for Improvement

- Keep pushing the training
- Embed SimCell players and provide them more direction
  - Enhance air monitoring presentation
- Recruit local public responders to play at a high level
- Keep local talent engaged through entire drill
- Keep focus on timeliness of Info to Sit Stat board
- Create Turnover Template for tier 2 teams
Improvement continued

- Keep pushing NIMS savviness higher
- Premeeting coordination between planning and UC
- Reliance on WebIAP as tool instead of knowing process
- Bolster understanding of non player roles
## The Long List of Opportunities for Improvement

### Improvement Opportunities of The Long List

1. Embed environmental in OPS works
2. 209 forms don't portray wildlife metrics very well
3. Provide a point man for Notifications
4. Environmental Finance Consent order was not known in a timely fashion
5. Legal was underutilized
6. Comm with Security and PIO greatly improved
7. Consider including phone bank in drills w/ talking points.
8. PIO/JIC Raise awareness on resource requests specificity and Data entry to Webiap
9. Logistics Need to expand the Safety Section Toolbox
10. Safety wasn't involved in 215 process
11. Safety was weak at the site map. Detailing safety zones and data
12. PDU printer works great
13. RUL needs bigger table and note board
14. Continuous projection of maps worked well
15. RUL got conflicting guidance from MPC, TRG, EMSI, Simcell*
16. Planning section chiefs did not update the SUL on meeting schedules
17. Transition meeting planning was not advertised very well
18. Planning/Situation Unit/Resource Unit? DUL/PDU
19. UC and planning chief should meet prior to meetings to hammer out the tone and expectations of meetings
20. Remember Unified command means one message from all! (USEPA)
21. Inc DoCS/Unified Command ICS Sections
22. Need colored vests and to use them** (but not dark blue)***
23. Dep of Health under Safety or Planning
24. AMT under Safety or Environmental or OPS
25. Marathon sets the bar in Stark Co.
26. Ensure action items get assigned to a section/unit
27. Some goals should focus on compliance. Think SMART for regulatory violations
28. did not include state in decision making early
29. Identify Incident name and objectives sooner (from SUL)
30. Some old IMH are still being used
31. Additional training needed for sections (from PDU)
32. All groups need to go through SUL for maps
33. Area of operations not clearly communicated to SUL and maps  borrowed too frequently
34. Training Consider a 48 hr drill with 12 hr shifts
35. OPS needs a projector
36. Include volunteer issues into drill design***
37. continue inviting PR firms and Piers rep
38. Transition from paper to WebIAP was smooth
39. SIMCELL map lacked detail
40. Complexity was value added*
41. Local talent and tools were missing*
42. Lack of software forced basics*
43. Presence of and Coordination with agencies**
44. Lag in air monitoring results
45. Need to Embed simcell players**
46. Keep Tier 2 teams separate from higher level players
47. Explain role of Controllers simcell and introduce them
48. Drill Mechanics
49. -
50. -
51. University center is Benchmark**
52. 234 flow and content**
53. Critique Item
54. ICS Section.
55. RUL Drill 2013 Exercise Debrief
56. -
57. 1500ft square meeting rooms plus 4 small confernce 700, revise checklist
The Exercise Stats

- 6 planning meetings in 3 locations with 28 planners
- Two-and-one-half days spent in exercise
- 204 participants representing 27 organizations
- 1 Full planning cycle
- 5000 feet of Cat5 cable
- 100 feet of boom deployed
Summary

- Drill planning process B
  - Need more engagement by locals

- Marathon IMT A-
  - Improving through higher level training
  - Continue Training to a higher savviness in national response system

- Unified Command, OPS, Environmental A+
  - Major step up by planning

- Turnover meeting improving
Marathon Petroleum thanks:

- FBI
- USEPA
- OSHA
- OEPA
- Stark EMA
- Stark LEPC
- Canton Twp FD
- Canton FD
- Canton Ambulance
- Colonial Pipeline
- Tristate Bird Rescue

- Wipro
- RENTSYS
- Clean Harbors
- EMSI
- WPNT
- The Response Group
- GRS
- URS
- Arcadis
- CTEH
- Blackbox
Questions?

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