

## CAMEO Workshop – Day 1

### Welcome

People use CAMEO from looking up chemicals to running entire emergency operation centers. Very useful. Wide range of use.

### Participant Introductions

Rural Maine, some still using dial up, want to make sure they can still do what need

Several people very interested in CAMEO training

### CAMEO Project Review – Peter Gattuso

CAMEO Suite

CAMEOfm (file maker) – database of facility and chemical information

CAMEO chemicals – chemical information database, essential info for emergency responders

Reactivity worksheet – what happens when mix chemicals or add water etc.

ALOHA – modeling, highly respected in modeling circles. Short distance releases.

MARPLOT – mapping program, Version 5 just released which uses Google maps or choice of other web mapping

Tier2 Submit – data collection software, for entering and sending in Tier2 reports (submission and collection). Then data gets inputted into CAMEO.

CAMEO has been around for almost 30 years. Has evolved through different technologies, user needs, and regulations.

Sometimes rural counties have no signal for cell service/mobile web access.

Len in New Orleans after Katrina was using MARPLOT and only one who could do mapping because didn't need web. Everyone else trying to use ESRI or something.

MARPLOT 5 uses internet, but can download map tiles for your area beforehand and run without internet.

Guiding principles on Peter's slide – multi platform, no cost, integrated toolkit, operate without internet, innovation.

Roy views CAMEO as planning tool instead of response tool. Planning – usually have internet. Response – might not have internet. Mobile app would be more of a response too.

### CAMEO Implementation in OK – Tom Bergman

3 steps of Tier2 management - Collection, management, distribution

Have to get info out of collection tool and into management tool so can manage. Then have distribution. One driver of distribution is Response, but also Community Right to Know is important.

Said must be DEQ approved software in case didn't want to use Tier2 Submit 3 years from now.

One thing could really use is an extraction tool (take everything out of collection tool and use it). State representatives in room seem to agree.

Can go see name and location of facility. They have another tool for industry (open to public) – can make sure their report is in there and info on facility is accurate. They do not put names, phone numbers, chemical info, on web public accessible. Call public version “chemicals in your community” – radius of 1 – 10 miles pulls up all Tier II reports and shows them as locations flagged on maps. They can fill out form and mail and get entire Tier II report. None of those are responder tools. They distribute to all LEPCs – can use CAMEO or Tier2 or....lots of info, can dump into 911 system. Tom feels should have completely rigid collection system – everyone do it the same way – Tier2 Submit has provided that. Distribution needs to be flexible – lots of users with lots of different needs.

Auditing – make sure info is as accurate and complete as possible. Tier2 submit does not help with that. They go through each year and compare to previous year – who filed last year and didn't this year – some forget or don't or misunderstood process. Then they follow up with them.

All of their info about rail shipment, bridges, flood zones, etc. is all in CAMEO. 1.5 million map objects. Tier2 is one tiny slice of much larger.

Bob Gardner had questions regarding relationships....Collecting info via Tier2 does not foster relationship between LEPCs and industry. (?)

OK and OH pay LEPCs a little money – that improves relationship and have more capacity to do outreach and go talk to people

### **Kim Jennings – EO**

April 2013 West, TX exploded and killed a number of fire fighters. Led to attention at high levels of govt.

Aug 1, 2013 EO signed.

See “areas of effort” on her slide, and “key areas of action” identified in status report (Report released to public June 6, 2014.) List of action items in report to president “EPA Actions to Strengthening Community Planning & Preparedness”.

CAMEO is a planning tool. Not a response tool. If first time look at it is when on way to response, you're probably destined for a disaster. (may be argument against mobile app)

Slide 5 – these are the words, but need participant's help to flesh out and clarify and direct, so meets users' needs and not White House needs.

Tom Bergman – formatting is a mess. ATF for example, format is completely useless and they won't change it. Kim appreciates him mentioning it and want to get into useful format so she will take that back. 50% of facilities didn't check RMP when they are.

Carol Way – 80% of LEPCs had never heard from RMP, difficult to get coordination. Kim – they have heard this loud and clear from State for long time. They’ve heard the opposite from industry. They are considering ways to change regulations to fix that. Rebecca – they are working currently on way to bridge that.

FRS – Facilities Registry System. Collection of basic facility information of all regulated facilities and has links to other systems for other info.

TOM – LEPCs can’t possibly keep up with all that (RMPs), would like if tie into one system like CAMEO. EPA can really help with that.

Carol – helping to prioritize risk. Let big rocks rise to top.

Kim – all stuff they are working on. Prioritizing risk of facilities and helping make that more obvious for users. (which facilities are greatest risk)

### **Mark – Development Issues Overview**

Usually 6 – 12 updates to CAMEO each year. Continuously updating/improving.

Pie analogy – if put resources to one area it takes resources away from another (smaller piece of pie to other areas).

### **Development Issue 1: Data Standard**

Some states use EPlan some use Tier2 Manager. Some states have own system. They try to accommodate that and work with them. Suggest if go to Tier2 Submit online system – that is the data standard and it makes sure meets legal requirements. Is there any other reason why would modify that? Thoughts on using that as the data standard?

Coutoulakis: Fill out facility info, but then the facility tab never populates with the facility phone number. Can it populate with that?

Mark: contacts are complicated database issue. But they might be able to do that specific request automatically, and wouldn’t change data standard.

Dave Davis – increase accuracy at facility level. “Are you subject to/regulated under RMP?” People don’t know. Helping the facility give us accurate information. EHS box right next to chemical name. Change this to “Is this an EHS?”. Anytime you change the data standard, look at facility viewpoint, make it easier for them so that we in turn get what we need. “Are you reporting one of these chemicals, and if so, check the box”.

Mark – data standard clarification. For example Adobe pdf and everything can read that. “Portable document format”. Facility enters Tier2 data and then going to transfer to someone else – everyone agrees this is 100% of data need to meet legal requirements of EPCRA.

Brianne – wants new fields or on a technical level (pdf vs zip for example)?

Mark – a standard way for people to exchange information for anyone who wants to use it no matter what they are using.

Mark: Data standard - How we share data with other systems

Roy: pull info out and provide short set to communities. How export to end user? Mark: going to look at real specific exports from system (separate from data standard). (Kathy did good job capturing in her notes "simple, basic reports...")

Tom: don't use collection piece as management piece. One program that tries to do all 3 is more complicated. Mark: currently collection tool is separate from management tool. Requirement is web accessible CAMEO SUITE. (Do we see integrated or separate collection/management tool moving forward?)

Dave Davis: Kentucky, have had issues with the browsers people using. Chrome and Firefox don't recognize Tier2 Submit file so don't allow it, so they've forced people to use Internet Explorer. Mark: whatever develop will output file that any program can use.

Carol: one of biggest issues in CO: the work around of validation/verification process that can submit without doing that. 2<sup>nd</sup>, facility doesn't have to put in CAS number – tie to CAS number. (Mark, unfortunately that's not possible. EPA – that may require a EPCRA change). We want to require verification/validation before can submit report.

Ian – from planning side if LEPC is printing out facility info that includes facility name contacts and chemicals the reports come out very screwy and you ask LEPCs to take that report and use – has anyone tried printing these and seen if they were useful? Make report of several facilities. Global print out of multiple facilities. Mark – some facilities have incredible lists of chemicals – global report would be gigantic. As we develop new tool we want to make reports as effective as possible – Mark: this is take away.

States point of view is more functionality than technical. Put a note on there that says "this is not a web based reporting tool". They think it automatically gets submitted and it doesn't. Data should cascade downward from state to locals to fire department – increases communication and coordination.

Jacob – verification/validation point, it does let them know they haven't passed validation.

Everyone agrees we should have data standard that allows everyone to share information no matter what that data standard is. Data format will be a data standard.

Kathy captured this last point well and highlighted in yellow.

Jon – some knowledge would be needed by people to implement this data standard (xml file for example).

Resources people would have to expend to modify import mechanism. Both states and other programs – but we work with them regularly. (work with EPLAN etc).

Would continue for some time in legacy export format so people have time to change over.

Has to be a good common data standard to exchange information.

Maine – Users say "I only do this once/year. I get data, don't really know what to do with it." If make it more complex than it is now, people may say "why do I bother?". Mark: data standard should be completely invisible to 90% of users – so they don't even know/deal with it.

Make system more usable and accessible to users. Mark. We just have to get smarter with how to share data.

## **Development Issue 2: Web Accessible Suite:**

### **Beth's presentation – can see her slides**

Follow up on how TERCs reply to SERCs – we don't know the answer to this (per Mark) (Len provided some clarification on this) (Steve Mason – very few tribes have become TERCS, but AZ has about 5 that have). Can follow up with Kim and Sicy Jacob at EPA.

### **Jon Reinsch – Developer perspective**

There are 18 tables in Tier2 Submit with 114 relationships between them. User exports to file, sends it to state, into Tier2 Submit. In server have to make sure user only can change data relevant to them etc.

Healthcare.gov only has to run on Fed servers, but Tier2 Submit would have to run on all kinds of different state servers etc. Need accounts for users. 3,000 facilities = 3,000 accounts or more if more than one person at each place. If you have a web server, someone is going to try to attack it – bring it down or steal passwords. Software needs – log people out after failed tries etc. Would need to provide updates sometimes and states install them. Most submitters would use website once/year – usage would peak, might experience delays. Adding “bells and whistles” may have disadvantages and have to weigh that. May lack resources to add everything we'd like.

Existing models? No federal agency has ever done anything like this – creating a web application that can be “served” by anybody. Google does this sort of thing – hopefully doesn't take a google to do it. No, don't have any models. Actually, there is one – “gid hub” – but no other examples and this one doesn't do a good job – not allowed to install on NOAA server because of security aspects of it.

Beattie – web based resource requirements may make it not possible for states to implement new web accessible stuff.

See vision document as one way/example we could do it.

It worth spending 50% of resources over next 2 years to develop this software? Some say no. (see breakdown of what states use what).

Are you forced to use web if currently use Tier2 Submit, or could keep using existing software?

Web accessible – we either move forward with this or find alternative. Make decision on this path forward in June following NASTPPO.

AZ: They already have own system in place. States will have to make necessary changes – will fall on States and don't want it to create extra work because don't have the resources to do. He already has issue that the last 2 years can't talk to CAMEO because CAMEO made changes and he doesn't have money to change his system. Mark wants to follow up separately on not being able to communicate with CAMEO.

Steve Mason: Can we go back to White House and tell them it's not going to happen? States don't want it and not resources to do it. Kim would say one possible answer is that we push back and say “no”.

Kentucky will probably not do this because they've combined collection of files with a fee. Without being able to have payment function they wouldn't do it. Have they considered hosting it by NOAA and then offering up individual sections to States? Facility could submit to NOAA and then State could come get it? Federal government cannot collect the data – would require change to EPCRA. Can Fed develop the tool to collect it and then give it to States? (see all the challenges from Jon's presentation – it's difficult).

Beattie: How does EPLAN differ from what proposing? Is EPLAN compatible? (Ohio was ready to use that and was working towards it, then EPLAN had a funding issue). EPLAN has a web based reporting system. CAMEO works closely with EPLAN, but they are a private entity. EPLAN is not a governmental program – UTD's property. UTD is collecting data then farming it out to states. If EPLAN can do it why can't Fed government? EPA and DHS don't have money to fund this.

Steve Mason – breakdown of which states using what.

Data quality concerns when passing data between entities.

Tom – will have to go to web based collection eventually. Industry will insist. Would be enormous amount of money for every state to develop own system on own. One of most attractive options is virtual server. Everyone has own security system already. Alternatives don't look very attractive – either spend a lot of money or let someone else run his server.

Vision Jon wrote is one possible vision. Would likely be successful in a majority of situations but not all of them. Vision applies to what was stated in the Executive Order.

Open source – software freely available and unlimited rights to distribute. NOAA would use only open source tools.

Jacob – got 1600 calls last year for stand-alone (CAMEO?) programs.

IT security will only get more complex.

Anything we come up with has to run on variety of servers with no tech support.

Vision – is it a good use of resources? Will take away from other CAMEO development. Could states support it? 22 states currently using Tier2 Submit. Do we leave them out in cold? Will they have to go this way anyway so that it saves them money in long run. Peter G - We would not abandon 22 states using Tier2 Submit – we would have to support 2 systems – web based and desktop.

Maine – spoke to IT people and would have pay \$3,000 to \$6,000/year just for server space, which doesn't include IT support. Would support web based application but.... This is an unfunded mandate from Fed govt. There needs to be Fed funding whether it is annual etc.

Coutoulakas – RI, each one of us needs to lobby senators to revisit ECRA, it's been 30 years, change, introduce policy in ECPRA to have Federal Agency handle this. Let's modify the law to get it where it needs to be.

Steve Mason – at NASTTPO, how many states would support changing the law – ask. Three parts of this – submittal of forms, management, and dissemination. Are we trying to combine into one system or are

we just talking about one submittal? Mark – right now we are just looking at submittal with probability that in long term would look towards whole SUITE web accessible.

Peter G – of 22 states using Tier2 Submit. Facilities send Tier2 Submit files to State and State sends it to EPA – that way fed isn't "collecting". EPA would still have to get ICR for that if collect info from more than 9 sources.

Ohio, would like to see go web based for collection only. Prefer to go web based so state can get info and organize it then send to fire departments – gives communication link between LEPCs and fire departments etc. Just give Ohio web based for reporting then let them work with their local folks.

Ricky – DHS did not want to release info to locals. Problem in Kansas, facilities report to State, report to LEPCs when possible and if possible to fire departments. Tier2 Submit is available but a lot of info is manually entered by State. Idea: Facilities report to central state database, which connects to Fed database, and data sharable to LEPCs too. Tier2 Manager is too expensive – can't use. Anything that can be done web or server based, and sharable with both Fed and local, would be ideal. He has to do things manually with CAMEO – he does and State too. State charges and he cannot. Whatever we can do to help this problem would be great.

Hoyt: they are probably the biggest user of Tier2 Submit. Just under 10,000 (submits?) yearly and over 6,000 facilities in database. They rely almost completely on Tier2 Submit. They require electronic submissions. They can't download software to their machines. They would support an online submission system. If State has the online server. He can't say whether they would support with funds – legislature. Would be helpful not to have to download software every year. \$5M was cost quoted for Tier2 Manager startup cost. They do charge fees for their reports. Bring in enough revenue to cover it.

Len: Not uncommon for EPA to have portals that states maintain but EPA has access to. States are supposed to provide info on DHS (EHS?) facilities by law.

Local/municipality standpoint – a lot are doing online already. What was viewed as the issue that made them say had to be online? It's the data management and sharing of this data that's important. Keep it within the State. If start trying to develop new program it won't work for everyone. Cost associated at local level no matter what we do. Let states identify how they are going to do it.

Ian – Regarding the idea of having EPA host, reporting to EPA is a difficult process.

Mark Howard – currently he gives direct access to Region 9 EPA. They have agreement signed and EPA has own user name and password. Can run reports they want etc. Easy way for EPA to get info wants.

Steve – would still have to change EPCRA (via Congress).

Mark Howard – NASTPO is venue for bringing up changing law.

1. How many submitters do you have? (For a state accepting only Tier2 Submit submissions, this would be the number of .t2s files.)

Jeff OH – they do accept Tier2 Submit but also have option of giving them paper. 8,000 industry reporting facilities, 1/3 .t2s via email or CD. Sometimes get paper submission generated by Tier2 Submit. Fracking – this is like trying to put square peg in round hole with EPCRA reporting – chemicals are only there maybe 25 days. 66,000 oil and gas

TX – 10,000 reporters. That equates to over 76,000 facility reports. Also have oil and gas reporters too. Had 30,000 facilities before Tier2 Submit came out. They have large volume of paper reports sitting in archive library. Now require electronic. Keep a copy of old software on server so can pull up old reports if need to.

AZ: 4,500 facilities. Do not accept Tier2 Submit forms. Occasionally get paper submits – which manually put into electronic database.

OK 50,000 facilities, 2,500 reporters

What Kathy has in notes has been verified by participants.

Ian: 5,000 EPCRA facilities. State does not accept Tier2 reports, however 3 counties who do - that number comes to 150 facilities. Indiana is state who has own system.

CO – 1400 reporters, 11,000 facilities

Rebecca will send other Region 8 states to Kathy.

Len: All 6 New England states use Tier2 Submit, for 2013 47,000 facilities reported combined from all 6 states.

Kentucky: sent to Kathy. 1,680 submissions so far this year. Only accepts electronic. Returns paper checks and forms. Last year sent back 100. This year sent back 5. Some people submitted on their smartphone. About 4,700 facilities reported (some late).

Steve Mason: Region 6, Arkansas 4,000 facilities. LA 15,000, New Mexico 16,000

2. How does the number of submissions you receive per day vary over time? What is the percentage of total submissions that arrive in February? Is there a big rush just before the deadline?

Send answers to Kathy.

OH: Get a few stragglers through end of Jan. Increases into Feb. Last 2 or 3 days see big spike. A few come in after the fact. OH does have filing fee (30 day window to get fees in). If becomes web based there will need to be accommodation for that. Last week is over 50%.

Dave Davis, Kentucky: 945 submissions of total were Feb 15 and March 1 – well over 50% in last 2 weeks. Hopes that web based would have facilities submit Tier2 form then upload (can't time out/log out people because some people have 500 facilities and couldn't put all that in in set amount of time).

Tom Bergman, Oklahoma: 22% in January, 63% in Feb, 13% in March, 3% April, a few come in through rest of year.

Hoyt: 63% Feb (usually last 2 weeks), and then into March.

3. Approximately, how many Tier2 facilities are in your state? How many chemicals in inventory and contacts do they have?

200,000 in inventories (all together in TX), over 30,000 contacts for TX (biggest state probably)

OK: 70,000 chemicals and 10,000 contacts

CO: 2 contacts at least per facility, highly variable in # chemicals

Kentucky – a little over 16,500 chemicals and a little over 5,000 contacts

4. Does your state envision/anticipate needing to continue to accept Tier2Submit stand alone for other systems data?

KY, OH, TX, OK: yes (under current system).

All 6 new England states will continue this way until something else comes along.

Mark – some states may need to do both for some period of time to allow period of transition. Stand alone = not web based.

Not AZ

Beattie – will accept anything that gets him out of data entry business. When get EPLAN have to do data entry.

Revise question: If we do develop online Tier2 Submit, would your state still accept Tier2 stand alone? OH yes, Maine yes, Kentucky yes will use Tier2 Submit stand alone because have linked it with payment function, TX yes until get all bugs out etc., OK always have transition period but the goal would be “no” but that might take a year or two to go to all web based.

Most states say ultimately would like to get out of data entry business and ultimately go to online.

5. Do you currently do anything to verify the identity of the sender of a submission?

Tom, OK: yes, everyone has account with login and password (Oklahoma). A large number of Tier2 reports come from consultant etc. and accounts are set up for the filing community – only get one account.

Kentucky: allow submitter to set up account. He pays someone to manage website and house reports. So that's his contact info to person submitting if needs to contact. They have user names and passwords. Not specific to reporting industry.

Login and password is what they do (above)

Someone?: Actual submission of report has certifying person (name and title of person certifying report) which is different than person submitting with login and password. And he has info of person certifying report.

Jon: would a web app need to do anything special? (like an electronic or digital signature) If not doing anything like that now, then maybe web app wouldn't need to do that. Is it a concern, knowing report is really from who it says it is from?

EPA has electronic signature validation system but states are just accepting the reports currently.

Ian: they get an ink signature – have signature of every user on file – have to do in order to get account. Someone has to certify your entry. 3 types of designations for reporting. Would have to approve every user who gets on website to report.

TX: theirs are all emailed in. No server so no log in. They issue numbers to operators and not much security for that. In a way....email sort of does that for you (Peter).

OH: they don't ask for verifications – just receive CD, email, or paper. Web based would put it at a whole other level. Would have sign on password etc if goes web based.

6. What security controls do you require for web applications that run on your servers?

Beattie – sent to Kathy

David – sent to Kathy

7. Based on the document outline attached, do you have access to IT resources that would make it possible for your state to manage software resources, maintenance, and updates on a state/local level?

Oklahoma – yes

Kentucky – no

Texas – yes

OH – more info needed to decide based on staff and money etc.

AZ: some state resources in IT department, may have to farm out to private. It depends.

Carol – where Tier2 Submit comes in in CO is disconnected from IT resources/silo-ed

IN – it depends

Maine – we don't have good IT. Everything has been centralized to IT department. Several hours to several days to get a result. IT is a problem there.

8. Please address your concerns or ideas regarding the importance/priority of the following:
- a. Electronic signatures
  - b. IT security – running virtual machines, managing log in for facilities
  - c. Access to information – how would LEPCs, fire services, and other emergency responders get access?

Roy – once it gets to state then what? How do local agencies get this info? How do they gain access to it? Is it same user name/password or a different system?

Beattie – believes state should cascade info to states and fire departments via CAMEO. Lots fire departments at all levels (volunteer no computer to full Hazmat). Do we have resources to validate LEPCs and fire departments who have access to web based system? Fire guys want it user friendly, simple – no password, just go to desktop.

- d. Data unique to the state

e. Other concerns/ideas that you state may have with a server-based Tier2 Submit program

David – hopes use Tier2 Submit form and upload. But if not, do you include maintenance of their records so they are not reentering their data every year. Mark: The new system would have to include multiple years of submission. Brianne – this gets complicated....based on facility name or what?

Tom – separate collection from distribution. This group today should be collection only. Mark – the EO is not just collection so we do have to talk about all of it. Online Tier2 Submit does focus on collection.

Kentucky – pays someone to maintain website. They have login and password and can login and go back to last year's file. Important not to forget user name and password.

9. Are there other options in lieu of creating a web accessible suite for CAMEO?

One option – status quo (what Steve said and Mark reminded group). Tell president “no”.

Online Tier2 Submit collection system and the rest of CAMEO stays the same.

Is purpose of web access to make easier access for locals? If yes, then a mobile device CAMEO might fulfill this as well and be another option.

## CAMEO Stakeholders Discussion Questions

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### **Development Issue: Data Standard**

*Is the present Tier2 Submit submission file adequate for your organization's use?*

Automatically populating an emergency facility contact list in CAMEO and Tier2 Submit.

Increase accuracy at facility level: are you subject to RMP? Is this an EHS? Are you subject to 302? Use a simple checkbox, built into Tier2 Submit.

Adding related regulations to enhance the data. Data standard is how we share data with other systems. Interactivity. 1. Additional information/added content/fields. 2. Additional technology – standard format to exchange information.

Export for end user: 1. Simple, basic reports with basic fields if all states agree on fields. 2. Database is very complex.

Collection of data is separate standalone. Develop web-based server. Do we see an integrated management tool or separate/independent tools.

Issues with browsers (IE only). Challenge of having a web accessible product. Develop a data collection tool to output file for all systems with same level of information. Auditing to ensure higher quality data.

Require the verification/validation for submissions. Option in file menu for verification process. It will include a statement that states it has not been verified.

Tie their chemical standard/mixtures to a CAS number. (This would change a requirement in EPCRA)

Facility reports are not easy to read when printed. Make a global report of several facilities. The report is going to be huge when printed. All official data reported by facility will be in printed report. Make reports as appropriate as possible.

Functional vs. technical limitations. "This is not a web-based reporting tool." Cascade information from state to local LEPC/fire dept.

Data standard that everyone can share and use. Develop in next Tier2 Submit a way to validate upload.

Caution that there is some knowledge required to manipulate these files. Modifications/improvements to manipulate the import. Publish the data standard – states comply. Common data standard for sharing information.

Keep from getting too complex in order to accommodate volunteers and others who import/submit. The data standard should be invisible to most submitters. Data standard should not get in the way of retrieval.

Development Issue: Web Accessible Suite:

10. How many submitters do you have? (For a state accepting only Tier2 Submit submissions, this would be the number of .t2s files.)

Every change in CAMEO = financial cost for state to re-code. One option is to just say no, we can't do this. Is an option to web host on server to EPA/CAMEO and state access from this one source. However, the federal government is not able to collect data due to EPCRA. Feds design a collection process, but this is challenging design.

Is e-plan compatible to CAMEO? E-plan is private company. UTD is collecting data (federal cannot collect data) UTD is disseminating it out to local. Some states currently do not charge a fee. E-plan is not a governmental product; UTD property. It has been noted that we are going to have to go to web-based submissions per industry request. [This can be done; but it is not easy process. The alternatives may not be attractive: pay \$\$ or have someone else host server.]

After 30 years now perhaps lobby legislature to assist with the financial needs. How many states would be willing to go to congress to change the law to address collection and funding concerns. Initially the submission process would be first. Then long-term.

Web-based for reporting only.

Facilities report to one source at state which would be shared with EPA.

An example/precedent is EPA hosts water database for states input/output.

Perhaps recommendation for states to upload and share data with EPA.

Caution to report to EPA may be more challenging.

1. How many submitters do you have? (For a state accepting only Tier2Submit submissions, this would be the number of .t2s files.)

OH-8,000 industry reporting facilities; 1/3 will give as .t2s; paper submission as well. Oil and gas state is now reporting 66,000 wells.

TX-10,000 reporters; 76,000 facility reports; oil and gas reporters 70% of facilities; 30,000 facilities (prior to Tier2 Submit; large volume of paper submissions; keep copy of software on servers for reference.

AZ-4,500 facilities; no Tier2 Submit forms.

OK-50,000 facilities; 2,500 reporters.

IN-5,000 facilities; 3 counties (150 facilities) that accept Tier2 Submit; IN has own system.

CO-1,400 reporters with 11,000 facilities.

New England – all 6 states use Tier2 Submit; 47,000 facilities.

KY-1,688 submissions; only accept electronic submissions; 4,700 facilities.

AR – 4,000 facilities

LA-15,000 facilities

NM- 16,000 facilities

TX-49,000 facilities

ME - Maine receives about 2,500 t2s reports

2. How does the number of submissions you receive per day vary over time? What is the percentage of total submissions that arrive in February? Is there a big rush just before the deadline?

Last 2 – 3 days in February for peak of submissions. Filing fee in Ohio – 30 day window to get fees submitted. Greater than 50% submission prior to deadline.

KY - 945 submission – well over 50% submitted in last 2 weeks.

OK- 22% in January; 63% in February; 13% in March; 3% in April.

TX- 60% in Feb comes in last 2 weeks.

3. Approximately, how many Tier2 facilities are in your state? How many chemicals in inventory and contacts do they have?

TX - 200,000 chemicals in inventories; 30,000 contacts

OK – 70,000 chemicals and 10,000 contacts

CO – 2 contacts; highly variable in # chemicals

KY- 16,500 chemicals; 5,000 contacts

ME - Maine has about 6,000 chemicals and about 4,500 contacts

4. Does your state envision/anticipate needing to continue to accept Tier2Submit stand alone for other systems data?

KY, OH, TX, OK and all 6 New England states would continue with Tier2 Submit.

If develop online Tier2 Submit would state still accept Tier2 Submit stand alone? Most states ultimately would like to get out of data entry, but there must be a transition.

OH – wants to get out of data entry business YES

ME – yes, no data entry. Must be easy and \$\$

KY – yes

TX – yes, especially after all bugs are out

OK – no, need a transition period of couple years to accept both

5. Do you currently do anything to verify the identity of the sender of a submission? If you get a submission from XYZ company what do you do to verify that is indeed XYZ company. How would a web-app accept/verify this information (i.e., electronic signature)?

OK- yes, everyone has an account and login password; large number of consultants (consultant does not have an account) who file for the company

KY – allow submitter to set up account.

Person who does certification has login as well as submitter.

If submissions are not currently verifying identity of sender, then web app does not need to do this.

Signature on file in order to get login; facility proves that person/consultant is reporting on their behalf.

TX – all emailed in, no login, issued a number to owner/operator, no special identifier.

Email address is a level of identification.

OH-no verification. Web-based would put us in another security level. Would require some type of login and signature if Ohio takes web-based.

6. What security controls do you require for web applications that run on your servers?
7. Based on the document outline attached, do you have access to IT resources that would make it possible for your state to manage software resources, maintenance, and updates on a state/local level?

OK – Yes

KY – No

TX – Yes

OH – it depends

AZ – it depends

CO – it depends

IN – it depends

ME – centralized IT department; \$\$ ORT with several days to get results

8. Please address your concerns or ideas regarding the importance/priority of the following:
  - f. Electronic signatures
  - g. IT security – running virtual machines, managing log in for facilities
  - h. Access to information – how would LEPCs, fire services, and other emergency responders get access?

How do local agencies gain access from state data? Is it the same username/password? Or does LEPC have access?

Have the collection done at state level and distribution by the state to all of the fire departments/LEPC via CAMEO. Keep simple, user –friendly to have on desktop with no password.

- i. Data unique to the state
- j. Other concerns/ideas that you state may have with a server-based Tier2 Submit program

KY – does vision include maintenance of records? Not resubmitting data every year.

Multiple years of submission

KY – facility uploads through username and password; if they maintain that same username and password to update info the next year. However, if they lose that form of identification then they must re-enter new every year. This is bad.

9. Are there other options in lieu of creating a web accessible suite for CAMEO?

Status quo

Online Tier2 Submit online submission; rest of CAMEO stays the same.

Is a mobile device CAMEO another option to web-based submission? The mobile device opens up other issues.

Is easier access the most important aspect vs. data entry?

## CAMEO Day 1 – Take Home Messages

### Data Standard

- General consensus a data standard makes sense.
- Tier2 Submit will be starting point.
- Needs to “play nice” with existing proprietary and state programs.
  - Keep lines of communication open
  - Make it transparent

### Online Tier2 Submit

- There is interest in online Tier2 Submit with a transition period (less interest in full CAMEO suite)
- There is no consensus that states have IT support or funding resources

### Feedback

- Are there low hanging fruits vs. limited resources (prioritization)?
  - Improve Validation/Verification – online or desktop
  - Just in time Documentation (links to “help”) – online or desktop
  - Get more feedback at NASTTPO – CRRC can assist with logistics of collecting info

### Notes from Summary Discussion

- Data standard
  - Data Standard good idea – it is a good idea to be able to share data as easily as possible
  - Agreement that we captured Data Standard take-away messages.
- Tier2 Submit
  - When asked Resources question, Got 10 “depends” and one or two yes’s and no’s
  - Tom and Jeff: wouldn’t say there was less interest in full CAMEO Suite, just was focused on Tier2 Submit. Discuss Web Accessible full CAMEO Suite tomorrow.
- Feedback
  - People should write down specific validation checks might want

## CAMEO Workshop – Day 2

### Name one change you would most like to see with respect to CAMEO as a result of this EO:

David Davis, Kentucky – built in report generators into system so can pick and choose what info we give and who we give it to (click on boxes....list of what could include and choose what want to include, hit one button to generate, pick categories within data)

Hillary – received input in Travis County TX who asked for same thing David described. Her idea: Be able to receive an electronic .t2s file (instead of paper).

Steve Mason – EPA – make sure every congressman and every person in administration knows what kind of tool we've developed to help locals out. (Nancy will mention CAMEO in her talk)

Beth Bosecker EPA – same thing as Steve. Get the word out about CAMEO to Congress and show how many lives we've saved using this amazing tool.

Peter Gattuso EPA – Better tools for local responders or better access to existing tools – make it more known to people and make it easier to use and access (whether that's web based or tablet version etc).

Mark Miller NOAA – Adequate national training system (program been around 30 years and still don't have). Training gets towards the awareness thing. Mark wants to get the word out to people

Brianne NOAA – agrees with improved training. Also like to do short term low hanging fruit on CAMEO Chemicals.

Jacob – training is important, user support for software, people using it – little awareness of how system works. States be proactive about reaching out and providing training. Make them aware of all functionalities.

Beatty OH – make reports a lot easier to come out of CAMEO. Make reports more user friendly. Import output from Tier2 Submit to CAMEO. Take data from CAMEO and put it back into Tier2 Submit.

Hoyt – training and more exposure. They have a lot of turnover in LEPCs (mostly unpaid positions). More training opportunities (online is what interested in).

Mark Howard AZ: a more universal application that can work with other systems. When changes made in CAMEO it doesn't always work with their system. It costs states that have their own system to make the necessary changes. Be able to interface with majority type of operating systems. Also online web based training (as opposed to physically sending to classes). Want cost assistance for fixing programs in State when CAMEO changes are made.

Tom Bergman OK – Training. Have to be very careful about online training. Be careful that training meets the needs of audience (lots of different audiences which need different kinds of training). Would have liked to see fully funded position for trainer who gives class to every state and doesn't have any other jobs – dedicated. This position would also provide support. 24/7 support for people responding to event.

Ian Indiana – Agrees with Mark cause has own system for reporting – universal interface with CAMEO would help them and help with cost. And able to get CAMEO data into their system and vice versa. Would be great if all info entered into CAMEO, wishes there was a page in CAMEO that says something

like “Comprehensive Plan on TierII Facilities” where have checks for what substances and proximity to vulnerable populations etc. Have CAMEO be intelligent and print out what you call for in Response Plan. Then LEPCs are just managers of CAMEO. “tease people about CAMEO”

Kevin Smith – “teasing people about CAMEO” – monthly email sent out to registered CAMEO users saying “here’s a unique way you can use CAMEO....something haven’t done before....telling what CAMEO can do” Keeps CAMEO fresh in their mind. Also, put out on CAMEO website listings of “here’s where CAMEO classes are available” and email people about classes occurring (if open to others or closed to only your people). Also, MARPLOT 5 is fantastic, little addressing issue with MapQuest search on addresses – Stefan showed him was to get lat/long really easily....Kevin will write it up and send it to Brianne (?) in case others want to use this workaround for now.

Bob Bradley CT: have been asking for long time for national CAMEO training standard. “if you want to be considered CAMEO trained...” Some people do 2 hour class and some do 40 hour class – different capabilities. Have national standards already for other kinds of response. This is what you need to know for a particular training level. Adopt this. If you take CAMEO training in FL vs Idaho you still get the same skill set.

Len: See one plan concept incorporated into CAMEO system. Already been laid out electronically and shouldn’t be too hard to incorporate. Already been developed but “left in dust”.

Stefan: Planning side – incorporate one plan or ability for facilities or LEPCs to develop a plan in a different module. As you populate it it would populate in this module plan. Firefighters seeing concepts of NIMS and ICS – if one module could do that and be prepopulated. Go in and modify what you need and “boom” generate it. Agrees with Len that if incorporated, more businesses would embrace it. Also, administrative features to protect info (password protected).

Roy – being able to access the data, what does that look like. Currently they have data on network. Currently their data is on their server. Their IT department did work around where their Health Department can access their data. Make it more network friendly. Allow multiple users to access at same time. Also, EMAC similar which can register for online training. Develop a website that would have that training component there and have it set up where “here’s your chemicals and here’s your mapping” – create and do an actual scenario test run as part of training. Run scenarios similar to Emergency Management Assistance Compact website.

Rebecca – states mentioned they don’t use Tier2 and thus don’t use CAMEO. Good if other data sources work in CAMEO and make it more user friendly.

Carol Way CO – agrees with - easy access to reports, specifically to community right to know. Also, Import other kml files (can export already) and have it populate in CAMEO and would make hazards analysis process easy.

Jon – Idea of what might be a flaw in design: chemicals in inventory have storage location (means you can look at your chlorine record and see locations where it is stored but you cannot directly determine what the chemicals are at a particular storage location – you could if we had designed it if facilities had storage locations. This is inherited from Tier2 form – transitioning to this would not be easy. But if people think this is a serious problem we need to address then let him know.

Robert Maine – wants to echo data exchanges across limited networks

### Development Issue: Training and Outreach

#### Steve Mason:

Used to do LEPC workshops, but funding got cut. But then got some and held 32 workshops (last summer?). 3 per week for 11 weeks. Total of 1,350 attendees. 72% of LEPCs. 5 states in Region 6 – Arkansas, LA, NM, OK, TX. Got lots of feedback too.

Two largest issues brought up at workshops by local officials:

- Ensure first responders and local officials have info on chemical properties, hazards, and response tactics – not just chemicals on site. They often know what chemicals are, but don't know how to respond to them properly. Response tactics!
- Ensure first responders have appropriate HAZWOPER training for response actions taken, do not take actions not trained for.

Putting out LEPC newsletter for 28 years. About 4 times/year. Of 108 issues, 36 had an article about CAMEO in it. Goes to over 3,000 people in region – tribes, RMP facility, LEPCs. Every person who came to workshop gets newsletter too. Tom writes things for newsletter too.

They have a LEPC handbook they put out (only Region that does this?).

Do Hot Zone training – 1 week long for first responders. Tom and Bradley teach there- teaching HAZMAT folks about CAMEO.

LEPCS said what could help most (see slide for more details “Other Suggestions”)

- Free online CAMEO training
- Develop an app for CAMEO Chemicals
- Develop an ICS module for CAMEO
- Update CAMEO Companion and share
- Create CAMEO Orientation or 101

They decided in Region 6 to develop a PowerPoint for a CAMEO orientation. Will be on their website so anyone can run through it. (Topics 1 through 8 on his slide show what will be in it). Mark – how transportable is this? It is a success, how do we use this? Hope to have it done by summer so can post it.

Little symbol who can ‘talk’ – NEFy – cute

Stefen – does he have a copy of a template of how he put it to together they could use?

<http://\rrt6.org> Lots of handbooks are on there. In pdf format. Can send his word version.

Mark – we plan to develop a standalone mobile app don't need cell signal for. There is currently a mobile optimized website.

Steve – they will be doing same workshops again this summer and will ask for feedback again.

Dave Davis – how are these workshops getting funded? Would like to have them but no funding. Steve – they did it very cheaply. \$6,000 total for 11 trips. Didn't pay for any locations. Drove vehicle that came out of overhead (no travel cost for that). No outreach – just emailed. What percent was public attendees? About 40 – 50% government and 50 – 60 % industry. On rare occasion a citizen's group representative came.

His CAMEO presentation will be whole CAMEO Suite.

Mark Howard – AZ, they put out monthly newsletter out of SERC they send to 3,600 people – they put out articles of interest.

Steve – heard big theme of outreach and training from people this morning. People at his workshops were adamant that web based is great but also have to still have stand-alone (when tornado comes through no web service for a few days).

How transferable is Region 6 stuff to other regions? Chemical Emergency Preparedness and Prevention (CEPP) "cepo". They used to have dedicated people to this. (listen to audio, missed some) Transferability – some regions where it would be hard pressed to find people doing LEPC work – they might not be interested. Are materials transferrable? Yes, but would still have to have someone to do the work.

Carol – as Region 8 user of Region 6 info, it is very transferrable, just have to adjust it a bit.

Steve – CAMEO presentation developing will not be Region 6 but will be nationwide.

#### **Kevin Smith presentation:**

Distribution of CAMEO instructors is not evenly distributed across country – one challenge to getting training. He created online classes for this reason. CAMEO 1 – cameo chemicals and Aloha. CAMEO 2 – requires you've completed CAMEO 1 or have that experience, then move to MARPLOT and CAMEOfm database. Last part (2 or 3?) have use all 4 programs at once in a very interesting simulation – large earthquake with multiple hazmat spills – scenarios come fast and furious. Take classes at your own speed anytime you want. Take quizzes that are instantly graded. Final exam. Students can email at any time with questions and they also have his phone number. How long takes is up to individual. Planned as 13 week course (one quarter). Fastest ever was 12 hours and 46 minutes for advanced class and he got an A. There is a deadline for end of course. Good for firefighters to do when available. \$395 per class through University. They subsidize it to keep it down, using grant through National Institute of Health NIEHS. Davis University is part of consortium (5 schools?). Training tribes too. Handout he gave provides info. Feel free to call him at any time. They keep up with the latest in CAMEO so training is up to date. They use latest software available when course starts and adjust training materials accordingly.

It's in course catalog for UC Davis Extension. Other schools are aware of it, and gets students from all over. As many as 20 in class and as few as 2. Knows of no scholarships for students for this.

Tom and Kevin are only 2 online CAMEO trainers that they know of. About \$330 tuition for 3 hours of college credit. They have an Associates in Hazardous Materials Management where Tom teaches. Mostly military and gets students from all over (Afghanistan). They get scholarships. Both students get college credit (Kevin and Toms). Toms is not 2 tiered – it's a 3 credit hour class.

Tom agrees the most key element to the online training is they are in constant contact with the students.

### **Tom Bergman, CAMEO Companion Presentation:**

#### 1) What is current status us training around

Intro to CAMEO class by Bob and Stefen – in person. 20 – 25 classes this year. Not enough to meet demand. See participants and classes on slide – 1891 and 113 in 37 states. The reason there is less now is due to less funding not necessarily less interest. There used to be 75 classes/year.

Bob, Stefen, Tom – did 26 last year. 20 by Tom. One indirect class by someone else other than them.

Robert does several classes a year in Maine. They go to sites. Train 125 to 135 people a year. (his point is what Tom is saying is only one small set of what may be going on). Tom – this is national, but there is some going on from states and from online training. Some areas are very active and some aren't.

Indirect deliveries can be requested, HMEP funding can be used.

Steve Mason – regional management thinks it's a good idea to update CAMEO Companion. But before Region 6 has to pay for it themselves, they are looking into other sources of funding.

HMEP funds – could states use these funds to pay for update together? Mark Howard AZ will check and bring up at NASTTPO if can do it. (Mark wanted to flag this)

People doing local training – there is a page on EPA webpage where they currently list trainings.

HMEP just closed out for this year for applications. Maine would probably commit some of their money towards it (the update?) with understanding that that goes toward purchase of it later.

David Davis – problem with CAMEO training is it's big and long and hard for people to go. Doing it on his own is tough. Agrees with Tom we need a national standard. In person training is great, but really need online now too.

3 steps: Refresher course/recertification, 30 – 60 minute modules that are content specific (how do I do "this"), 1 – 2 page pdf fact sheets "you can do this" "this is what you can do with CAMEO" (build a library). Mini trainings – this is not offered anywhere. (Mark flagged)

Tom's is designed for 1-2 hour sessions.

Tom - Everyone does need to practice. Tom has website where they post CAMEO exercises to practice. Can't force them. It's free.

Brianne – if find themselves constantly saying/explaining same thing to users, let her know so can get ideas for new topics to add to "help". They want to know.

### **Len Wallace – Region 1 training**

Most of the instructors started in New England.

Customize training to different users

Steve – see Kathy notes. Average volunteer fire department completely rotates every 5 years. If people don't have money to take classes then they need to go to upper management and fix that.

### **General Discussion**

Mark - CAMEO use has increased a lot over last 5 years, but we have a patch-work training approach. Want to capture best practice training approaches that each person talks about and come up with plan. Capture national gaps and come up with a regional approach for how to address this. Solution will have to be all levels. Not a top down issue.

Are we teaching someone how to use the software (or be a first responder etc)? Analogy: teaching someone how to use MS Word doesn't make them a writer. Need to know how to do more than push a button and put on map – need to know how to make decisions based on this, what this info means to them and what to do it etc, and that changes based on your role (planner vs emergency responder etc).

Stefen – after they do iCAMEO program. Biggest concern is after do 20 hour training – how work with them. They are assigning credit hours as an incentive for their refresher training. Get stakeholders to work together in short exercises. Tom's 100's of exercises walks them through what they should do. In Durham NC police, and NH, and \_\_\_\_ are doing this – using these exercises. Every fire department required to do annual training – as long as Stefen sits down with them before they get credit hours towards this.

Tom – all this classes are certified through fire service training or law enforcement or emergency management office – no matter who comes to class they can receive CEUs for it.

Mark – goal for national program would be to try to ensure we have CEUs. (be sure to include law enforcement – Tom)

Beattie – modular training would be a big plus in OH from LEPC perspective. His boss wanted him to introduce these training modules – would like USEPA to maintain numerous professional looking videos on how to use. Can be used within TRI. Wants USEPA look at some training modules under TRI and perhaps we could use some. (Kathy got good notes, see “Tri me web”)

Ricky Shellenbarger – people were requesting simplified for responders – needs to be a two button process. The module training is very important/vital. There are some CAMEO videos on YouTube that can be used. Need to tier/tailor training based on who audience is. Quick and dirty for some vs. detailed for “power users”. Is it possible to partner with Emergency management Institute (EMI) for training?

Roy – have had annual training in past, dwindled off but restarting. A course doesn't make you an expert. Need local state champions. He will be in CO. How do we partner at local level? And how move up chain and work with Federal partners?

Carol – 2 important things she heard. Divide into data managers, responders, planners- and have a tailored refresher for each. 2) Some great best practices through country. They created some – facility action plans created, etc. How get all those captured in one place and build off of each other's work?

Bob – potential financial issue, previously held CAMEO workshop annually, internationally for sharing/collaborating opportunities. Does EO offer funding for training/outreach? (see Kathy's notes)

Nancy – could funding be provided by EPA penalties imposed? Also, partnerships with industry organizations and perhaps they would help fund.

Steve – LEPC conferences did originally were paid for through penalties and someone said it is illegal. (was one person's opinion)

Maybe this is a higher priority now with EO and could get funding.

Jeff OH – remarketing CAMEO program to reintroduce it to states and locals. Note why it is important.

Kevin – likes idea of remarketing CAMEO. MARPLOT 5 has some amazing capabilities. Make some presentations at emergency response organizations in CA and show people what it can do. And reignite some interest in classroom training.

### **More Notes on Discussion of Issue 3 – Training**

Len Wallace – customize training to different users

Are we committed to having CAMEO around?

Can the average person learn how to use CAMEO on their own?

If answer is no, then we must have a training program.

What we are doing now, is that meeting the need at national level for training? (i.e., volunteer fire department/high turnover)

We have to have a national free online training.

As CAMEO use has increased, we have a patchwork of training. Goal of this topic is to capture the best practices from this discussion and come up with a plan. The training needs to span a range: one page plan/cheat sheets to full online course. Capture national gaps and potential solutions at all levels.

Qualified trainees (i.e., teach word doesn't make a writer); planner, data manager, responder = training for appropriate audience.

Post training refreshers for first responders, professional development emergency responders (all hazards); planning and exercises. Use appropriate screen shots; Hazmat teams, police, etc.

CEU credit? Every fire department operation/technician must get professional development.

For OK courses are certified through several agencies (FEMA, etc.)

Goal: national training program gains certification qualifications

Modular training would be a plus in Ohio for LEPC audience. Use CAMEO for mapping and inventory.

Tri me web>> example of training modules for possible CAMEO training.

Module training is vital. YouTube CAMEO videos are available for refreshers. Tailoring for different audience. Fire departments need quick, refresher training. Need to have easy buttons to access. Is it possible to partner with Emergency Management Institute?

Work with state training officers to champion the CAMEO program. Glean from other states training activities. Partner on local level as well as with state and other local partners.

Dividing into data managers, responders, planners. Best practices such as facility action plans, into one place for collaboration and sharing.

Potential financial issue – but previously held CAMEO workshop annually, internationally for sharing/collaborating opportunities. Opportunity to learn from developers. Provided regular feedback. Does EO offer funding for training/outreach?

Can funding for this be from chemical spills fines/penalties? [illegal??]

Partnerships with industry for training.

EPA management decided to no longer sponsor workshop/meeting. But now this may be a higher priority.

Re-market CAMEO program to reintroduce it to management. Note why it is so important; improve “marketing” (states may not be able to do this in the field).

Presentations on new MARPLOT 5 etc. Learn tool to envision the possibilities. See the need for basic CAMEO training.

Outreach and Training Ideas that resonated:

- Renewing a marketing campaign (good time with new MARPLOT)
- Ownership of CAMEO at national level
- Training specific to intended audience – planners, responders, etc.
- Standard certificate nationally for training
- Better internal training within our own organizations
- A place to put all the best practices (create new page of best practices on EPA CAMEO website – it needs to point to a source and person) Needs to stay up to date.
- Online training component – designed and supported at national level to meet standards (related to both ownership and certificate)
- Determine end goals and objectives of training and performance.
- Keep training costs affordable, especially because there is no requirement. (show value, find funding)
- Refresher training for the trainers irrespective of their certification
- Refresher training with specific modules for the roles users play (HMEP funding is approved for this)
- Have more interactions/partnerships between federal agencies and national and state associations (sheriff’s associations etc.)
- National standard broken down into various types of users and how people will use it (awareness vs operational vs advanced level). Look at how NFPA has set up their programs/standards as example.
- Training module how to handle information from Tier2 Submit

- Single point person for CAMEO at federal level (push, promote, administer, and work with regional offices)
- CAMEO training – basic, intermediate, expert (3 part)
- CAMEO User Guide (exists as CAMEO Companion)
- National CAMEO program, national CAMEO sponsor
- Do this work ourselves
- Make use of the existing fabulous training foundation
- Promotional CAMEO fact sheet (short term small bites)
- PowerPoints for small training segments (easy to maintain/update)

### **Mark's presentation CAMEO Mobile Apps**

Who would be user of mobile app for CAMEO Suite? Emergency responders, emergency planners

The number one requested app is for CAMEO Chemicals. Would be full stand-alone mobile app that doesn't require cell signal. EPA and NOAA are committed to developing this.

Guiding principle: platform neutrality (android and iOS)

Mobile app for EPCRA data viewing – a possibility for future. Simple way to obtain data from CAMEO and view on your mobile app. Will look at map visualization possibility and location services. Would be an EPCRA data viewer. (not to enter data)

To clarify: two separate apps (cameo chemicals and EPCRA data viewer)

What is state's role in assisting or managing these apps? The assumption is that we have a source of TierII data....however it is managed in local area. The source of data would feed that application. Download app, and then load the local data up. (have to do that before go out in the field)

Any talk of integrating WISER with CAMEO Chemicals? Would WISER talk to Cameo Chemicals? No. If there is a particular piece of WISER want to see incorporated, might be able to do this.

One of reasons wanted to interface with WISER is (per Bob) mapping visualization.

Mark likes isolation distances and protective action distances – something to consider that could possibly be part of cameo chemicals someday.

Mobile app would carry data only from facility data (EPCRA data).

CAMEO Chemicals app would have all functionality currently existing in CAMEO Chemicals. But have to reprogram it from ground up, so would have to see. Goal would be to have all functionality, but can't use any of existing, have to reprogram from ground up.

CAMEO Chemicals app would be done first 12 months (12 months from time get developer in office, interviewing next week). And similar hopefully for EPCRA viewer.

Assumption: people most likely to use mobile app is a responder, but anybody could use.

Could also be big help for inspections in field (but they wouldn't be able to edit anything).

### **Is there anything else that would benefit the responders as a CAMEO mobile app?**

- Mapping capabilities (want to look at facility going to, but also facilities around it as a responder). Some places link Tier2 to 911 system, and this could replace that.
- Export things so can import into desktop. Won't be able to. Take notes in field and save.
- Take commodity flow information real time in the field, have data in kml file, bring it back and put it into system. (commodity of flow study is done by paper and look at placard of trucks as go by – a mobile app would geolocate you and self-populate for options of types of trucks going by – gives planners and responders info about hazardous materials in area). Could tie this to CAMEO.
- Include other (not just EPCRA) data in mobile app (such as TierII). Things need to be in one place – too hard to look at multiple data bases and compare. Peter – the EO does talk about combining multiple data sources together. Combining data and potentially could all be available. Mark – excellent comment.
- First responder needs immediate quick information. How do I understand the risk (i.e. evacuation)? What is the hazard? How can CAMEO better represent this? Via multiple application systems/multiple platforms (i.e. tablets). (see Kathy notes “responders understand how CAMEO helps them understand the response”)
- Stefen – having to load CAMEO copy onto all MA Trooper vehicles because they are first responder. Specific contact information may not always be tied to TierII reports and the troopers need this. A mobile app would be a better option for this (Kathy got good notes).
- Build in a “notes” screen into the app so can take notes on it.
- One stop shop capability of multiple databases and mapping capability (already said).
- Mark – not many mobile apps have complexity of CAMEO database. Would only be EPCRA TierII facilities....need to make this simplification to make it happen.
- Mark - Goal is to come from CAMEO side so might be able to include site plans etc but can't promise.
- From responder point of view – on phone a map and prediction of plume and where to direct evacuations etc. Kevin – will look into if can bring kml or Aloha file into google maps on phone.
- Site plans available through mobile app would be nice. All contact phone numbers would be good.
- Tablet version of Aloha would be nice...but may be way down road. ERG threat zone functionality would be great. Have EPCRA chemical reporting info.
- Wants mobile app to include site plan.
- Would like more of the CAMEO modules to be included into an app. May require more than one app. Special locations would be the most important one.

### **More Notes on Discussion of Issue 4 – Mobile App**

Is there anything else that would benefit the responders as a CAMEO mobile app?

Mapping capabilities. View surrounding facilities; connect Tier 2 to 911.

Exportable to desktop? One-way flow from desktop to app only. In the field, take notes and save them.

Real time information in kml file to upload to system; Commodity flow – device that marks down placard number and counting trucks as they go by. (vs. DOT paper form). Need silhouette of truck, type of truck, and number of trucks = gives planners and responders the location, number and type of traffic of chemical. (i.e., escat). Tie this to CAMEO.

Include others, not just EPCRA, variety of databases to include. EO suggests integration of federal databases.

First responder needs immediate, quick information. How do I understand the risk (i.e., evacuation)? Via multiple application platforms (i.e., tablets).

“What is the hazard?” How can CAMEO better represent the hazard? Planning is important for adequate information, responder understand how CAMEO helps them understand the risk. What else is there other than what they visually see?

Stefan is loading up trooper vehicles with CAMEO because the patrol is first responder. This may not always be tied to TierII’s contact information. Specific contact information may not be tied to TierII report and troopers need this because they will always be on-scene first.

Information from CAMEO facility (TierII EPCRA data). Adding RMP etc. data could be included? Unsure how this would be visualized-keep it simple.

Facility may not submit a site plan/map but from CAMEO side they should submit. The goal would be to come from CAMEO. The mobile app would include the site plan.

Google maps on the phone – ability to show specific area and where to direct evacuations, etc. Currently can export kml into google maps/earth.

All contact phone numbers.

Tablet version of ALOHA, ERG threat zone functionality, EPCRA has chemical reporting information.

CAMEO modules imported into a mobile app. Special locations.

End of Mobile App discussion

### **Web based CAMEO Suite**

The question: Established have CAMEO Chemicals and web based and app, are there other CAMEO components that would be important to have web based?

- Mark wants a web based Aloha (in addition to web based CAMEO Chemicals)
- 10 attendees want a web based Aloha (good response from people that responders would like to use this)
- Can have different levels of user access. Different users have different access/edit capabilities.
- App that auto syncs with data would be helpful. Even if don’t have latest (when cant sync) it is still better than no data. (Bob)
- Web based good, but still need to download for times when don’t have internet.
- USCG needs are covered by web based CAMEO Chemicals and Aloha (good cause they can’t serve/host things)

- If state/local want web based MARPLOT and CAMEOfm then state/local has to host.

We got a lot of feedback on this. Not everyone understands it.

### **CAMEO Day 2 - Next Steps**

- Produce summary of this workshop to be available as NASTTPO
- Continue dialog at NASTTPO using refined questions based on this meeting
- Develop a white paper after NASTTPO consolidating inputs and next steps
- Releasing new versions of ALOHA and CAMEO Chemicals
  - Railcar
  - CFATS
- New page on EPA CAMEO site with training and outreach resources
  - Homework: please send in resources to share (to Brienne)
- Hire mobile app programmers
  - Start working on mobile apps for CAMEO Chemicals and EPCRA data viewer